SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

SELF ASSESSMENT REPORT(TIER - I) FOR Computer Science & Engg.

Part A : Institutional Information

1 Name and Address of the Institution

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY,
SUGUNAPURAM KUNIAMUTHUR POST

2 Name and Address of Affiliating University

Anna University, Chennai

3 Year of establishment of the Institution:

1998

4 Type of the Institution:

○ Institute of National Infortance	⦿ Autonomous
○ University	○ Any other(please specify)
○ Deemed University	

5 Ownership Status:

○ Central Government	☑ Trust
○ State Government	☐ Society
○ Government Aided	☐ Section 25 Company
⦿ Self financing	☐ Any Other(Please Specify)

6 Other Academic Institutions of the Trust/Society/Company etc., if any

Name of Institutions	Year of Establishment	Programs of Study	Location

7 Details of all the programs being offered by the Institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
B.E Computer Science and Engineering	UG	1998	1998	40	Yes	207	Granted accreditation for 3 years for the period (specify period)	2020	2023	Yes	4
Sanctioned Intake for Last Five Years for the B.E Computer Science and Engineering											
Academic Year						**Sanctioned Intake**					
2022-23						207					
2021-22						180					
2020-21						180					
2019-20						180					
2018-19						180					
2017-18						180					
M.E Computer Science and Engineering	PG	2004	2004	18	Yes	24	Eligible but not applied	--	--	No	2
Sanctioned Intake for Last Five Years for the M.E Computer Science and Engineering											
Academic Year						**Sanctioned Intake**					
2022-23						24					
2021-22						24					
2020-21						24					
2019-20						24					
2018-19						24					
2017-18						24					
M.E Software Engineering	PG	2011	2011	18	Yes	9	Eligible but not applied	--	--	No	2
Sanctioned Intake for Last Five Years for the M.E Software Engineering											
Academic Year						**Sanctioned Intake**					
2022-23						9					
2021-22						9					
2020-21						9					
2019-20						18					
2018-19						18					
2017-18						18					
B.E Electronics and Communication Engineering	UG	1998	1998	40	Yes	207	Granted accreditation for 3 years for the period (specify period)	2020	2023	0	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Sanctioned Intake for Last Five Years for the B.E Electronics and Communication Engineering											
Academic Year						**Sanctioned Intake**					
2022-23						207					
2021-22						180					
2020-21						180					
2019-20						180					
2018-19						180					
2017-18						180					
M.E Communication Systems	PG	2004	2004	18	No	18	Eligible but not applied	--	--	0	2
M.E Applied Electronics	PG	2011	2011	18	No	18	Eligible but not applied	--	--	0	2
B.Tech Information Technology	UG	1998	1998	40	Yes	207	Granted accreditation for 3 years for the period (specify period)	2020	2023	0	4
Sanctioned Intake for Last Five Years for the B.Tech Information Technology											
Academic Year						**Sanctioned Intake**					
2022-23						207					
2021-22						180					
2020-21						180					
2019-20						180					
2018-19						180					
2017-18						180					
M.Tech Computer Science and Engineering	UG	2019	2019	60	No	60	Not eligible for accreditation	--	--	0	5
B.Tech Artificial Intelligence and Data Science	UG	2020	2020	60	Yes	69	Not eligible for accreditation	--	--	0	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Sanctioned Intake for Last Five Years for the B.Tech Artificial Intelligence and Data Science											
Academic Year					**Sanctioned Intake**						
2022-23					69						
2021-22					60						
2020-21					60						
2019-20					0						
2018-19					0						
2017-18					0						
B.E Computer Science and Design	UG	2022	2022	60	No	60	Not eligible for accreditation	--	--	0	4
B.E Computer Science and Engineering (Cyber Security)	UG	2022	2022	60	No	60	Not eligible for accreditation	--	--	0	4
B.E. Civil Engineering	UG	2012	2012	60	Yes	69	Granted accreditation for 3 years for the period (specify period)	2023	2026	No	4
Sanctioned Intake for Last Five Years for the B.E. Civil Engineering											
Academic Year					**Sanctioned Intake**						
2022-23					69						
2021-22					60						
2020-21					60						
2019-20					60						
2018-19					60						
2017-18					60						
B. E Mechatronics Engineering	UG	2000	2000	30	Yes	138	Granted accreditation for 3 years for the period (specify period)	2022	2025	0	4
Sanctioned Intake for Last Five Years for the B. E Mechatronics Engineering											
Academic Year					**Sanctioned Intake**						
2022-23					138						
2021-22					120						
2020-21					120						
2019-20					120						
2018-19					120						
2017-18					120						

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
B.E. Electrical and Electronics Engineering	UG	2001	2001	40	Yes	138	Granted accreditation for 3 years for the period (specify period)	2023	2026	No	4

Sanctioned Intake for Last Five Years for the B.E. Electrical and Electronics Engineering	
Academic Year	**Sanctioned Intake**
2022-23	138
2021-22	120
2020-21	120
2019-20	180
2018-19	180
2017-18	180

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
M.E. Power Electronics and Drives	PG	2012	2012	24	Yes	12	Eligible but not applied	--	--	0	2

Sanctioned Intake for Last Five Years for the M.E. Power Electronics and Drives	
Academic Year	**Sanctioned Intake**
2022-23	12
2021-22	12
2020-21	12
2019-20	24
2018-19	24
2017-18	24

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
B.Tech Computer Science and Business Systems	UG	2019	2019	60	Yes	69	Not eligible for accreditation	--	--	0	4

Sanctioned Intake for Last Five Years for the B.Tech Computer Science and Business Systems	
Academic Year	**Sanctioned Intake**
2022-23	69
2021-22	60
2020-21	60
2019-20	60
2018-19	0
2017-18	0

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
B.E Mechanical Engineering	UG	1998	1998	60	Yes	138	Granted accreditation for 3 years for the period (specify period)	2020	2023	No	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Sanctioned Intake for Last Five Years for the B.E Mechanical Engineering											
Academic Year							**Sanctioned Intake**				
2022-23							138				
2021-22							120				
2020-21							180				
2019-20							180				
2018-19							180				
2017-18							180				
M.E CAD/CAM	PG	2004	2004	18	Yes	9	Eligible but not applied	--	--	0	2
Sanctioned Intake for Last Five Years for the M.E CAD/CAM											
Academic Year							**Sanctioned Intake**				
2022-23							9				
2021-22							9				
2020-21							9				
2019-20							18				
2018-19							18				
2017-18							18				
M.E Engineering Design	PG	2012	2012	18	No	18	Eligible but not applied	--	--	0	2
Master of Business Administration	PG	2001	2001	60	Yes	120	Eligible but not applied	--	--	0	2

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Computer Science & Engg.
2	Under Graduate	Engineering & Technology	Electronics & Communication Engg.
3	Under Graduate	Engineering & Technology	Information Technology
4	Under Graduate	Engineering & Technology	Mechanical Engg.

9 Total number of employees

A. Regular* Employees (Faculty and Staff):

Items	2022-23		2021-22		2020-21	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	125	125	139	139	134	134
Faculty in Engineering (Female)	138	138	134	134	130	130
Faculty in Maths, Science & Humanities teaching in engineering program (Male)	19	19	14	14	17	17
Faculty in Maths, Science & Humanities teaching in engineering program (Female)	41	41	44	44	44	44
Non-teaching staff (Male)	20	20	18	18	18	18
Non-teaching staff (Female)	17	17	19	19	18	18

B. Contractual* Employees (Faculty and Staff):

Items	2022-23		2021-22		2020-21	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	0	0	0	0	0	0
Faculty in Engineering (Female)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities teaching in engineering Programs (Male)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities teaching in engineering Programs (Female)	0	0	0	0	0	0
Non-teaching staff (Male)	0	0	0	0	0	0
Non-teaching staff (Female)	0	0	0	0	0	0

10   Total number of Engineering students:

Engineering and Technology- UG	☑ Shift1	☐ Shift2
Engineering and Technology- PG	☑ Shift1	☐ Shift2
Engineering and Technology- Polytechnic	☐ Shift1	☐ Shift2
MBA	☑ Shift1	☐ Shift2
MCA	☐ Shift1	☐ Shift2

Engineering and Technology- UG Shift-1

Course Name	2022-23	2021-22	2020-21
Total no. of Boys	3737	3497	3514
Total no. of Girls	1287	1126	1087
Total	**5024**	**4623**	**4601**

Engineering and Technology- PG Shift-1

Course Name	2022-23	2021-22	2020-21
Total no. of Boys	31	24	19
Total no. of Girls	9	16	15
Total	**40**	**40**	**34**

Engineering and Technology- MBA Shift-1

Course Name	2022-23	2021-22	2020-21
Total no. of Boys	148	150	138
Total no. of Girls	91	90	100
Total	**239**	**240**	**238**

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11   Vision of the Institution:

To Produce Globally competitive Engineers with High Ethical Values and Social Responsibilities.

....

12   Mission of the Institution:

- To impart highest quality state-of-the-art technical education by providing impetus to innovation, Research and Development and empowering students with Entrepreneurship skills.

- To instill ethical values, imbibe a sense of social responsibility and strive for societal wellbeing.

- To identify needs of society and offer sustainable solutions through outreach programs.

13   Contact Information of the Head of the Institution and NBA coordinator, if designated:

Head of the Institution	
Name	Dr. J. Janet
Designation	Principal
Mobile No.	9952966826
Email ID	principal@skcet.ac.in

☑**NBA Coordinator, If Designated**

Name	Dr.M.Sujaritha
Designation	Professor
Mobile No.	9524969345
Email ID	sujaritham@skcet.ac.in

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	50	50.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	100	100.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	175	175.00
4	STUDENTS' PERFORMANCE	100	93.49
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	191.96
6	FACILITIES AND TECHNICAL SUPPORT	80	80.00
7	CONTINUOUS IMPROVEMENT	75	75.00
8	FIRST YEAR ACADEMICS	50	46.58
9	STUDENT SUPPORT SYSTEMS	50	50.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	120.00
	Total	**1000**	**982**

Part B : Criteria Summary

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (50)

Total Marks 50.00

1.1 State the Vision and Mission of the Department and Institute (5)

Total Marks 5.00

Institute Marks : 5.00

Vision of the institute	To Produce Globally competitive Engineers with High Ethical Values and Social Responsibilities.
Mission of the institute	- To impart highest quality state-of-the-art technical education by providing impetus to innovation, Research and Development and empowering students with Entrepreneurship skills. - To instill ethical values, imbibe a sense of social responsibility and strive for societal wellbeing. - To identify needs of society and offer sustainable solutions through outreach programs.
Vision of the Department	To prepare professionals with high technical, research and entrepreneurial skills as well as ethical values who will contribute to the computational world.
Mission of the Department	<table><tr><th>Mission No.</th><th>Mission Statements</th></tr><tr><td>M1</td><td>Develop human resources with the ability and attitude to adapt to emerging technological changes through academic and research oriented events</td></tr><tr><td>M2</td><td>Identify current socio, economic problems of national and international significance and provide solutions through competency centers.</td></tr><tr><td>M3</td><td>Impart ethics, social responsibilities and necessary professional, entrepreneurial and leadership skills through student lead activities.</td></tr></table>

1.2 State the Program Educational Objectives (PEOs) (5)

Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	Be successful in their career in industries associated with Computer Science and Engineering.
PEO2	Comprehend, analyze, design, and create novel products and solutions for the real life problems.
PEO3	Possess professional and ethical attitude, effective communication skills, team working skills, multi-disciplinary approach, and an ability to relate engineering issues to broader social context.
PEO4	Exhibit leadership qualities and progress through life-long learning.

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (15)

Total Marks 15.00

Institute Marks : 15.00

Department Vision, Mission and PEOs are published and widely disseminated in the prominent places as mentioned in **Table 1.1** for internal and external stakeholders and s**ample publications given in Figure 1.1- 1.7.** Dissemination is done in a way that all the stakeholders (internal &external) are aware of the programme Vision, Mission, and PEOs.

Table 1.1 Locations where the Vision, Mission, PEOs and PSOs are published and disseminated

S.No	Modes of Dissemination Publishing(P) / Dissemination(D)	Institute		Department				Stakeholders
		Vision	Mission	Vision	Mission	PEO	PSO	
1.	**Institute Website** **https://www.skcet.ac.in/** (https://www.skcet.ac.in/) **(P)**	√	√					Faculty, Alumni, Students, Parents, Industry Experts
2.	**Principal Office (P)**	√	√					Faculty, Alumni, Students, Parents, Industry Experts
3.	**Controller of Examination office (P)**	√	√					Faculty, Students
4.	**Dean (Student affairs) Office** **Dean (R&D and accreditation and Ranking) Office (P)**	√	√					Faculty, Alumni, Students, Parents, Industry Experts
5.	**Administrative block (P)**	√	√					Faculty, Alumni, Students, Parents, Industry Experts
6.	**IQAC Office(P)**	√	√					Faculty, Alumni, Students, Parents, Industry experts
7.	**Conference Room (P)**	√	√					Faculty, Alumni, Students, Parents, Industry Experts, Management
8.	**Entrepreneurship Development Cell (P)**	√	√					Faculty, Alumni, Students, Industry Experts
9.	**Food court (P)**	√	√					Faculty, Alumni, Students, Industry Experts

10.	Central Library(P)	√	√					Faculty, Alumni, Students, Parents, Industry Experts, Management
11.	HOD Office(P)	√	√	√	√	√	√	Faculty, Alumni, Students, Parents, Industry Experts
12.	Staff Room (P)	√	√	√	√	√	√	Faculty, Alumni, Students, Parents
13.	Department Corridor (P)	√	√	√	√	√	√	Faculty, Alumni, Students, Parents, Industry Experts
14.	Department Conference Room (P)	√	√	√	√	√	√	Faculty, Alumni, Students, Parents, Industry Experts
15.	Department Webpage **https://www.skcet.ac.in /cse.html** (https://www.skcet.ac.in /cse.html) **(P)**			√	√	√	√	Faculty, Alumni, Students, Parents, Industry Experts
16.	Department News Letter & Magazine (P)	√	√	√	√	√	√	Faculty, Alumni, Students, Parents, Industry Experts
17.	Department Notice Board (P)			√	√	√	√	Faculty, Alumni, Students, Parents, Industry Experts
18.	Curriculum and Syllabi Book (P)			√	√	√	√	Faculty, Students
19.	Google classroom (P)			√	√	√	√	Faculty, Students
20.	Course file (P)			√	√	√	√	Faculty, Students
21.	Lab Manual / Record note books (P)			√	√	√	√	Faculty, Students
22.	Conference, Workshop Brochures (P)	√	√	√	√			Faculty, Alumni, Students, Parents, Industry Experts
23.	Department Meetings (D)			√	√	√	√	Faculty

24.	Students orientation meetings (D)	√	√	√	√	√	√	Faculty, Students
25.	Class committee meetings, Tutor ward meetings			√	√	√	√	
26.	Faculty Orientation Meeting (D)	√	√	√	√	√	√	Faculty
27.	Academic Review Meeting with Parents (D)	√	√	√	√	√	√	Faculty, Students, Parents
28.	Association activities (D)			√	√	√	√	Faculty, Students
29.	BOS, PAC and PEC meetings (D)	√	√	√	√	√	√	Faculty, Alumni, Students, Industry Experts
30.	Alumni Meetings (D)	√	√	√	√	√	√	Alumni
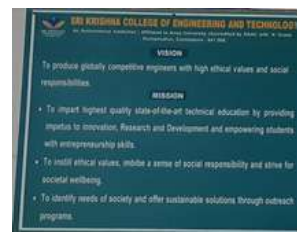
Figure 1.1 Institute Vision and Mission displayed in Administrative block

Figure 1.2 Institute Vision and Mission displayed in SKCET Website

Figure 1.3 Department Vision and Mission displayed in CSE web page @SKCET Website

Figure 1.4 Vision, Mission, PEOs published in Newsletter

Figure 1.5 Department Vision, Mission, PEOs & PSOs published at HOD office

Figure 1.6 Institute Vision and Mission displayed in Class Room Block – I

Figure 1.7 Department Vision and Mission displayed at Class Room Block – I

Figure 1.8 Department Vision, Mission, PEOs,POs and PSOs displayed at Laboratory premises

The Vision and Mission of the Department are disseminated during:

- Faculty Orientation Meetings.
- Minutes of Department Faculty Meeting.
- Students Meetings (Orientation Programme, Class Committee, Tutor ward etc).).
- Workshops, Technical Symposium, Seminars, Conferences, etc.,
- Academic Review Meeting with parents.
- Alumni Meetings.
- Board of Studies, Programme Advisory Committee and Programme Evaluation Committee Meetings
- IQAC Meetings.

The stake holders are made aware of the Vision, Mission and PEOs as follows:

- The Principal creates awareness of Institute Vision and Mission among the newly joined students and parents during the orientation programme.
- The Principal and HoD elaborate the Vision, Mission, PEOs, POs and PSOs to the newly joined faculty members during the faculty induction programme.
- At the beginning of every semester, HOD explains the Vision, Mission, PEOs, POs and PSOs to the students during orientation.
- Faculty members discuss the Vision, Mission, PEOs, POs and PSOs during the class committee meetings, tutor ward meetings and first session of their classes during each semester.
- Alumni are informed about the Vision, Mission, PEOs, POs and PSOs during the Alumni Meet Interaction and whenever they visit the campus.
- Parents are informed about the Vision, Mission, PEOs and POs during the Academic Review Meeting.
- Professional bodies and Industrial people are conveyed through event brochures and communication.

- The Vision, Mission, PEOs, POs and PSOs are disseminated during the meetings such as Programme Advisory Committee Meetings, Board of Studies Meetings and Programme Evaluation Committee meetings.

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (15)   Total Marks 15.00

Institute Marks : 15.00

Process of defining Vision and Mission of the Department:

The process of arriving the Vision and Mission is by involving the stakeholders of the Department, considering the future development for the Department as well as to improve social responsibilities. The Vision, Mission and the Program Educational Objectives (PEOs) of the Department have been finalized in view of the **ever-growing technical requirement and need in the field of Computer Science and Engineering.**

The process involved in defining Vision and Mission of the Department is given as flowchart as given in **Figure 1.9**
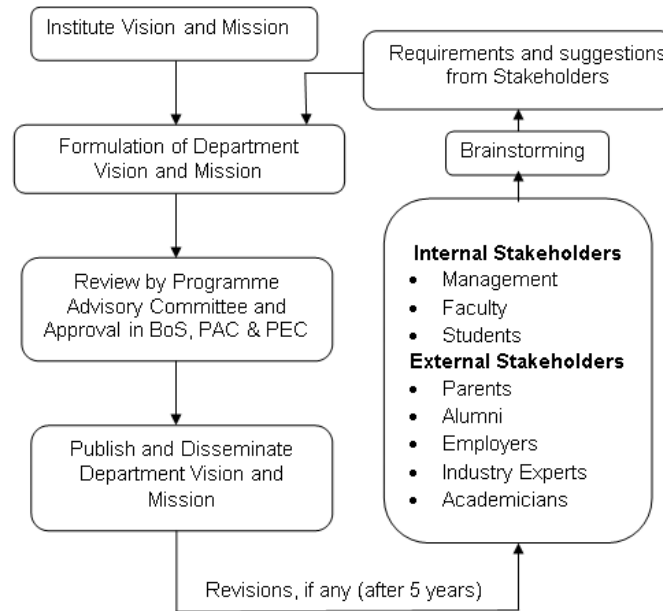
Figure 1.9 Description of process involved in defining the Vision and Mission of the Department

- Considering the industrial, academia and societal requirements and future scope of the programme, Department's Mission and Vision are formulated aligning with the Institution's Vision and Mission.
- **Suggestions:** Suggestions are received from various stake-holders of the programme such as alumni, students, parents, academic experts, industry experts etc. The collected suggestions are analyzed through brainstorming sessions by the faculty members.
- **Vision and Mission drafting:** The collected suggestions are analyzed through brainstorming by faculty members and the draft of Department vision and mission are formulated. The formulated vision and mission are reviewed, analyzed and finalized by the PAC, PEC.
- **Approval:** The finalized vision and mission statements are approved by Board of Studies.
- **Dissemination:** Vision and Mission statements are published and disseminated as mentioned in Table 1.1. Further it is reviewed after 5 years.

Process of defining the PEOs

PEOs are broad statements that describe the attributes of Computer Science and Engineering graduates are expected to accomplish within a few years of graduation. PEOs reflect the career and professional accomplishments of graduates. To fulfill the Mission and Vision of the Computer Science and Engineering Program, Educational Objectives have been developed considering future trends, Program outcomes, NBA guidelines. Process of establishing the PEOs is shown in the **Figure 1.10.**
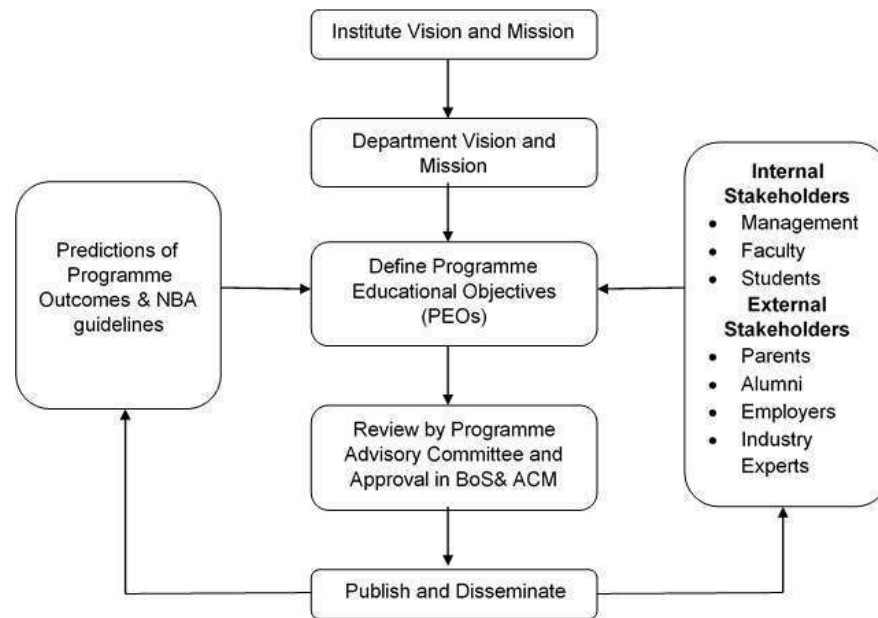
Figure 1.10 Description of process involved in defining the PEOs of the Department

- Program Educational Objectives (PEOs) of the program are drafted in correlation with Department vision and mission and from the stakeholders' input.
- The Program Educational Objectives are reviewed, assessed for their relevancy and finalized in Programme Advisory Committee (PAC) Meeting.
- After approval from Board of Studies, PEO statements are published and disseminated as in Table 1.1. Further it is reviewed after 5 years

1.5 Establish consistency of PEOs with Mission of the Department (10)   Total Marks 10.00

Institute Marks : 10.00

Table 1.2 Matrix of PEOs and elements of Mission statements

PEO Statement	Justification
PEO #1: Be successful in their career in industries associated with Computer Science and Engineering.	**M1: Substantial -** ensures to work and be successful in their career by providing appropriate problem solving and computing skills **M2: Substantial: -** ensures to work and be successful in the IT Industry, by imparting necessary professional skills in them. **M3: Moderate -** ensures to work and be successful in their career by inculcating ethical values in them
PEO #2: Comprehend, analyze, design, and create novel products and solutions for the real life problems.	**M1 & M2: Substantial -** ensures the graduates are able to create novel products and solutions for the societal problems by providing strong fundamental knowledge. **M3: Moderate -** ensure the graduates can provide solutions to the real life problems through their professional skills and ethical values.
PEO #3: Possess professional and ethical attitude, effective communication skills, team working skills, multi-disciplinary approach, and an ability to relate engineering issues to broader social context.	**M1 &M2: Moderate -** ensures that the graduates can attain the professional attitude and team working skills by conducting student enrichment programmes. **M3: Substantial -** ensures that the graduates can relate the engineering issues to social context and work as a team to give solutions though their strong computing skills and ethical values.
PEO #4: Exhibit leadership qualities and progress through life-long learning.	**M1 & M2: Moderate -** ensures the graduates are given with the managerial skills to apply their knowledge in engineering with the awareness of their habitat and inhabitants at the most. **M3: Substantiate -** ensures the activities related to Interpersonal skills and social acquaintance supports the students for their overall development to takeup leadership.

Table 1.3 Matrix of PEOs and elements of Mission statements

PEO Statement	Justification

PEO #1: Be successful in their career in industries associated with Computer Science and Engineering.	**M1: Substantial -** ensures to work and be successful in their career by providing appropriate problem solving and computing skills **M2: Substantial: -** ensures to work and be successful in the IT Industry, by imparting necessary professional skills in them. **M3: Moderate -** ensures to work and be successful in their career by inculcating ethical values in them
PEO #2: Comprehend, analyze, design, and create novel products and solutions for the real life problems.	**M1 & M2: Substantial -** ensures the graduates are able to create novel products and solutions for the societal problems by providing strong fundamental knowledge. **M3: Moderate -** ensure the graduates can provide solutions to the real life problems through their professional skills and ethical values.
PEO #3: Possess professional and ethical attitude, effective communication skills, team working skills, multi-disciplinary approach, and an ability to relate engineering issues to broader social context.	**M1 &M2: Moderate -** ensures that the graduates can attain the professional attitude and team working skills by conducting student enrichment programmes. **M3: Substantial -** ensures that the graduates can relate the engineering issues to social context and work as a team to give solutions though their strong computing skills and ethical values.
PEO #4: Exhibit leadership qualities and progress through life-long learning.	**M1 & M2: Moderate -** ensures the graduates are given with the managerial skills to apply their knowledge in engineering with the awareness of their habitat and inhabitants at the most. **M3: Substantial -** ensures the activities related to Interpersonal skills and social acquaintance supports the students for their overall development to takeup leadership.

Table 1.4 Appropriateness/Relevance of the Mission Statements

Department Mission	Appropriateness / Relevance of the Mission Statements

Mission #1 Develop human resources with the ability and attitude to adapt to **emerging technological changes** through academic and research oriented events.	The following activities are implemented in our Department to adapt **emerging technology changes:** ○ Industry drafted curriculum with CBCS ○ Special / emerging elective courses ○ Block teaching ○ Project Based Learning ○ Participations in Hackathons ○ Smart Class Room Facilities / blended Classrooms ○ E Learning (MOOC and other certifications) ○ Placement Training ○ Internships, Industrial Visit ○ Case Studies ○ Value Added Courses ○ Research publications ○ Technical Seminars, Workshops
Mission #2 Identify current socio, economic problems of national and international significance and **provide solutions through competency centers.**	The following activities are conducted/encouraged to **develop the problem solving skills** : ○ Industrial MoUs and Centre of Excellence ○ State of the art laboratories ○ National/International Hackathons ○ Project Based Learning ○ Club Activities ○ Mini Projects, Case Studies ○ Project Expo
Mission #3 Impart **ethics, social responsibilities and necessary professional, entrepreneurial and leadership skills** through student lead activities.	The following activities are organized in our Department to **impart ethical, social responsibilities, entrepreneurial and leadership skills**: ○ Entrepreneurship Development Activities through EDC ○ Industrial Visit, Internships ○ Club activities ○ Soft Skills Development ○ Project based learning ○ Product development ○ Patents published ○ NSS Activities ○ CSR Activities ○ Observing days of National importance ○ Saturday Activities ○ Organizing Hackathons/ Ideathons ○ Hackathon participations
Vision	**Achieve through the Mission of** • Adapting emerging technologies • Developing the problem solving skills • Imparting ethical, social responsibilities, entrepreneurial and leadership skills

Table 1.5 Consistency of the Department Vision with the Institute Vision

Institute Vision vs Department Vision	**To prepare professionals with high technical, research and entrepreneurial skills as well as ethical values who will contribute to the computational world.**

To produce **Globally Competitive Engineers with high Ethical values** and Social Responsibilities.	**Preparing professionals with high technical and research skills, who will contribute to the computational world**	**Imparting entrepreneurial skills and Ethical values**
Globally Competitive Engineers	√	
High Ethical values and Social Responsibilities		√

- G**lobally competitive Engineers** mentioned in Institute Vision is relevant to **"prepare professionals with high technical and research skills, who will contribute to the computational world"** mentioned in Department Vision.
- **High Ethical Values and Social Responsibilities** referred in Institute Vision is equivalent to **"imparting Entrepreneurial skills and Ethical values"** referred in department vision**.**

Table 1.6 Consistency of the Department Mission with the Institute Mission

Institute Mission Vs Department Mission	Develop human resources with the ability and attitude to **adapt to emerging technological changes through academic and research oriented events**.	Identify current socio, **economic problems of national and international significance and provide solutions through competency centers**.	**Impart ethics, social responsibilities** and necessary professional, **entrepreneurial and leadership skills** through student lead activities.
To impart highest quality **state-of-the-art technical education** by providing impetus to innovation, Research and Development and empowering students with **Entrepreneurship skills**.	√	√	√
To instill **ethical values**, imbibe a sense of **social responsibility** and strive for societal wellbeing.		√	√
To identify needs of society and offer **sustainable solutions** through outreach programs.			√

- Institute mission insists to **impart high quality of technical education by means of research and development and nurtures innovation.** Similarly, **Department mission insists to develop attitude to adapt to emerging technological changes through research oriented events.**
- Institute mission nurtures **to provide sustainable solutions based on the needs of society.** Similarly, Department mission nurtures **to provide innovative solutions to the identified socio, economic problems.**
- Institute mission insists to embed **ethical values, social responsibility and social wellbeing** to attain progress and prosperity in both personal and social life. Similarly, Department mission insists to impart **ethics, social responsibilities** and **necessary professional**, **entrepreneurial & leadership skills.**

PEO Statements	M1	M2	M3
Be successful in their career in industries associated with Computer Science and Engineering.	3	3	2
Comprehend, analyze, design, and create novel products and solutions for the real life problems.	3	3	2
Possess professional and ethical attitude, effective communication skills, team working skills, multi-disciplinary approach, and an ability to relate engineering issues to broader social context.	2	2	3
Exhibit leadership qualities and progress through life-long learning.	2	2	3

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (100)   Total Marks 100.00

2.1 Program Curriculum (30)   Total Marks 30.00

2.1.1 State the process for designing the program curriculum (10)

Institute Marks : 10.00

Sri Krishna College of Engineering and Technology is an autonomous Institution affiliated to Anna University, Chennai and approved by AICTE. The College has been granted autonomy status since the year 2011.Our Department Curriculum maintains **a balance in the composition of Basic Science, Engineering Sciences, Humanities and Social Sciences, Program Core, Program Electives, Open Electives, Projects Work and Employability Enhancement**. The feedback from the Alumni, Faculty, Students, Employers and industry experts are taken for the design of curriculum.

To accomplish the **Vision and Mission of the Department and Institution**, the program curriculum is framed. The curriculum contains various course component streams including **industry-oriented subjects** along with core subjects and elective subjects of Computing science stream. The program curriculum is designed in adherence with the **credit distribution recommended by AICTE**.

The overall process followed in designing Program Curriculum and syllabus is depicted in Figure 2.1:
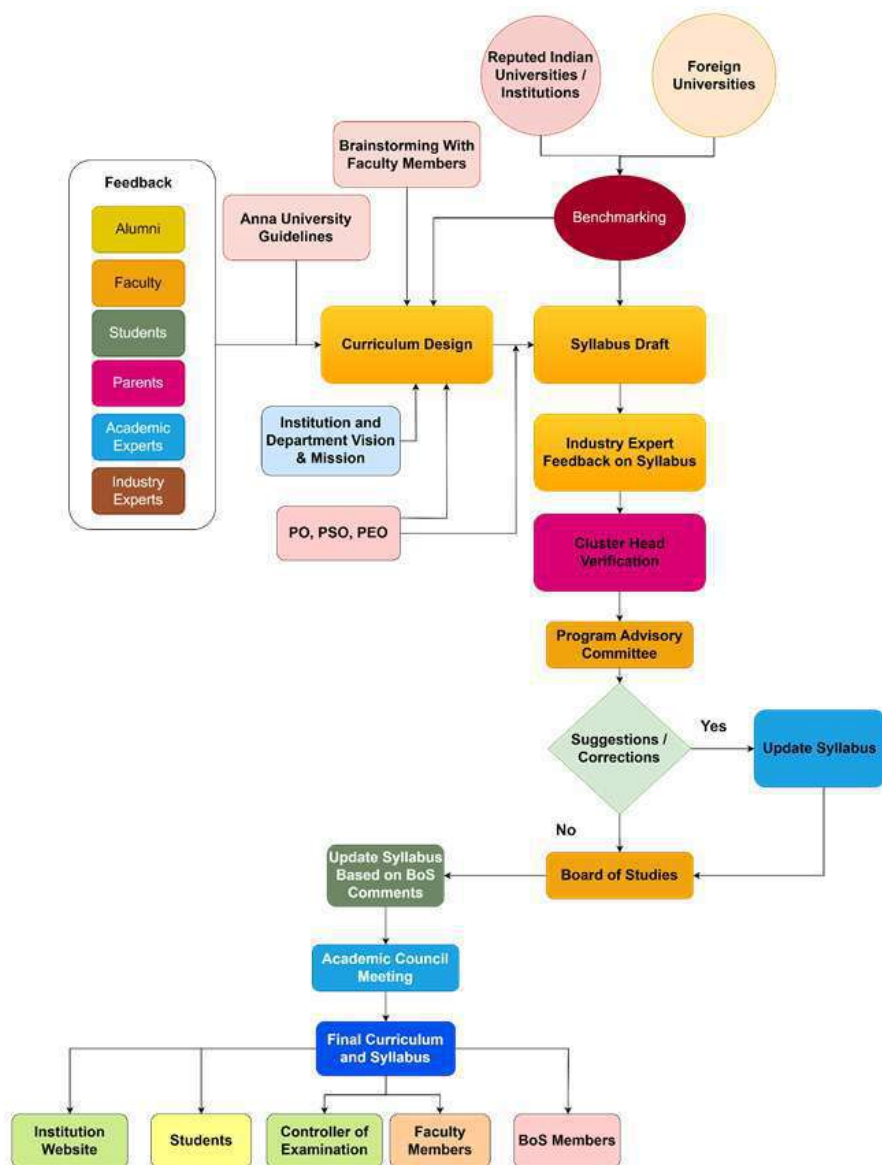
Figure 2.1 Program Curriculum Design Process

The process flow and steps followed in Curriculum and Syllabus Design are as follows:

Curriculum Design:

- With reference to **Vision and Mission statements of Institution and Department**, Program Outcomes (PO) Program Educational Objectives (PEO) and Program Specific Outcomes (PSO), the curriculum is designed.
- The framework of the curriculum follows **the norms of AICTE, UGC, Anna University**. Also, the **curriculum of premier Institutions** like NITs, IITs and various foreign universities are benchmarked in the curriculum designing process.
- The **feedback from various stakeholders** such as Alumni, faculty members, Students, Parents, Academic Experts and Industry experts are considered for designing the program curriculum as shown in Figure 2.2.

Syllabus Design:

- The faculty members who are experts in the course domains are assigned for framing the syllabus for the corresponding courses.
- The **Course Objectives and Course Outcomes (COs)** for all the courses of the curriculum are derived according to the **POs, PSOs and Bloom's Taxonomy levels** and verified by the cluster heads.
- **Brainstorming sessions** are held with all faculty members to calibrate the curriculum and syllabus design and suggestions are incorporated.
- The designed curriculum and syllabus are sent **to industry experts** to obtain their view and suggestions on improving the same.

Figure 2.2 Syllabus Feedback sample from Industry Expert

Program Advisory Committee:

- A Program Advisory Committee (PAC) is constituted with Head of the Department as the chairman, an industry expert, an alumni member, a parent member, Eight internal members, One external academic member and three student members.
- The syllabus is designed and submitted to PAC and **suggestions and corrections are given by PAC members.**
- The corrections and suggestions given by the PAC members are incorporated and the curriculum and syllabi are submitted to the Board of Studies (BOS).

Figure 2.3 PAC meeting minutes

Board of Studies and Academic Council

- BOS members include Head of the Department, Anna University Nominee, Two Subject Experts from outside the Institution, Industrial Expert, Alumni member and Senior faculty members of the Department.
- The recommendations and modifications suggested by BOS members are incorporated in curriculum and syllabi.
- The curriculum and syllabi are then passed for approval to the Academic Council (AC) in the Academic Council Meeting (ACM) and the curriculum and syllabi are finalized.
- The approved version of the curriculum and syllabi are then communicated to BoS members and Controller of Examination office. Also, it is disseminated to the Institution website, Faculty members and Students of the program.

Once in six months, a BOS meeting is held and the same process is followed for amendments or revision in syllabi and new curriculum design according to the need of the industry.

In Figure 2.4, members and minutes of a BOS meeting is shown.

Following suggestions were given:

Curriculum and Syllabus: Regulation 2020 B.E Computer Science and Engineering
1. Compiler Design: Latest edition text book can be included.
2. Cryptography and Network Security: Latest algorithms based on public key encryption can be included.
3. Artificial Intelligence: Machine learning module can be removed and AI topics can be extended as Module 3.
4. User Experience Design: UI Design with Failure Models can also be added as Case study.
5. Performance Engineering of Software Systems: More Storage Concepts can be added in Module 1.
6. Selenium Automated Testing : More Hands on Topic can be included.
7. Serverless Computing: Module Contents can be made generic and AWS can be made as case study.
8. Fundamentals of Java (Open Elective): Multithreading Basics, Frameworks, Templates, Springboot Concepts can be added and inner class, nested class, Synchronization concepts can be removed.
9. Mini project -2: Guidelines and Templates should be given.

Curriculum and Syllabus: Regulation 2020 B.E Computer Science and Engineering (Batch: 2021-2025)
1. More number of Choices can be given in each stream of Professional Elective.
2. Software Engineering Subject can be moved from Elective to Core.
3. Core Java Programming: Design Pattern Concepts can be included and Design Pattern in Java may be included as Text Book. Syllabus content may be generalized.
4. Managing Data using RDBMS: Module 2 must be revamped by adding topics like Query Analysis, Query Processing, Parallel QP, Indexing, etc.

Curriculum and Syllabus: Regulation 2022 B.E Computer Science and Engineering (From Batch 2020-2026)
1. Computer Architecture can be moved to 3rd semester and Operating System can be moved to 4th semester.
2. Multicore Architecture and Parallel Computing concepts can be included in any of the relevant subjects.
3. Block Chain Technology and Secure Software System can be moved to Networks and Security Stream. Video Analytics, Stream Analytics, Cognitive Systems, Computer Vision, R for Data Science can be added in Data Science and Computational Intelligence Stream.

Curriculum and Syllabus: Regulation 2022 B.E CSE(Cyber Security)
1. Random Variables and Statistics and Mathematical Structures can be swapped.
2. Cyber Security Essentials can be moved to Semester 3.
3. Computer Networks can be moved to earlier semester.
4. Cognitive Science can be renamed as Cognitive Systems.

Curriculum and Syllabus: Regulation 2022 B.E Computer Science and Design
1. Design Thinking can be moved to Semester 3.
2. To ensure the topics like Transforms related concepts, Linear Algebra, Fourier Series, Integral Calculus is included in Mathematics Subjects.

General Remarks
1. CO-PO Mapping levels and relevance must be checked for all the subjects.
2. Blooms Taxonomy Level can be upto create level for practical subjects.

Dr.K.Sasi Kala Rani,
(BOS – Chairman)

Dr. K. SASIKALA RANI, M.E.,Ph.D.,
Professor & Head
Dept. of Computer Science & Engg.
Sri Krishna College of Engineering and Technology
Coimbatore - 641 008

Figure 2.4. BoS Members and Minutes

Fig. 2.5 Action Taken report

Figure 2.5 shows action taken report that is formally communicated to the BOS members after the suggestions are carried out. Also, Syllabus design with Industry Expert feedback and Benchmarking Universities sample document is shown in Figure 2.6.

21CS502	Computer Networks
Industry Expert	Arjun Chandrasekaran System Engineer Tata Consultancy Services, Kochi
Feedback	I am here to say that the Computer Networks Syllabus is crisp and short. My suggestion towards this syllabus is to add " Congestion control in TCP, Techniques to improve QoS. ". Additionally, Data center networking case study can be added for making it interesting.

21CS502	Computer Networks	3/0/2/4
Nature of Course:	F (Theory Programming)	
Pre requisites:	Nil	

Course Objectives:

1	To express the concepts of data communications and functionalities of different layers of ISO/OSI reference architecture.
2	To illustrate the channelization, flow and error control methods.
3	To practice the concepts of addressing, subnetting and routing mechanisms.
4	To describe the process to process delivery and protocols used for it.
5	To identify the suitable protocols for different applications.

Course Outcomes

Upon completion of the course, students shall have ability to

C502.1	Indicate the fundamentals of data communications, topologies and functions of physical layer.	[U]
C502.2	Describe data link layer functionalities and discuss the flow control and error control mechanisms.	[U]
C502.3	Categorize the logical addressing schemes and routing protocols.	[A]
C502.4	Illustrate the process-to-process delivery models, protocols and congestion control principles.	[AP]
C302.5	Articulate the services of application layer protocols and emerging networking technologies.	[AP]

BENCHMARK: IIT BOMBAY, Nanyang Technological University - NTU Singapore.

Course Contents:

MODULE I Data Communication and Physical Layer   **15 Hours**

Components of data communication - Data Representation - Dataflow - Physical Structures - Categories of Networks - Protocols and Standards - Layers in OSI Model - TCP / IP protocol suite – Addressing - Performance Metrics. Transmission media – Transmission Impairment. Encoding: NRZ – NRZI –Manchester - 4B/5B. Connecting Devices: Repeaters - Hubs – Bridges – Switches - Routers and Gateways.

MODULE II Data Link and Network Layer   **15 Hours**

Data Link Layer: ALOHA, CSMA, CSMA/CD, CSMA/CA - FDMA, TDMA, CDMA. Block Coding - Cyclic Codes – Checksum. Stop-and-Wait ARQ - Go-Back-N ARQ - Selective Repeat ARQ-Piggybacking. Ethernet – IEEE 802.11 – Bluetooth. Network Layer: IPv4: Addresses, Datagram. IPv6: Addresses - Advantages, Packet Format. Routing: Distance Vector Routing – Link State Routing. ARP – RARP – DHCP - ICMP.

MODULE III Transport and Application Layer   **15 Hours**

Transport Layer: Process to Process delivery- UDP - TCP - Congestion - Congestion control in TCP. QoS – Techniques to improve QoS. Application Layer: Domain Name System – Electronic Mail – FTP – WWW - HTTP - SNMP - Firewalls. Case Study: Software Defined Networking, Data Center Networking.

	Total Hours:	45 Hours

Figure 2.6. Syllabus design with Industry Expert and Benchmarking Universities

2.1.2 Structure of the Curriculum (5)   Institute Marks : 5.00

ID	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	Theory Credits	Practical Credits	Total Credits
1	18MA102	Mathematics I	3	1	0	4	4	0	4
2	18MA103	Probability and Statistics	3	1	0	4	4	0	4
3	18EE111	Principles of Electrical Engineering	3	0	2	5	3	1	4
4	18CS101	Fundamentals of Computer Science	3	0	2	5	3	1	4
5	18PH103	Physics for Computing Science	3	0	2	5	3	1	4
6	18EN101	Business Communication and Value Science I	2	0	2	4	2	1	3
7	18MA202	Linear Algebra	3	1	0	4	4	0	4
8	18CS201	Python Programming	3	0	0	3	3	0	3
9	18CH101	Engineering Chemistry	3	0	3	6	3	1.5	4.5
10	18EC212	Electron Devices and Circuits	3	0	2	5	3	1	4
11	18ME111	Engineering Graphics	2	0	2	4	2	1	3
12	18CS202	Python Programming Laboratory	0	0	3	3	0	1.5	1.5
13	18MA307	Mathematical logic, graph and number theory	3	1	0	4	4	0	4
14	18CS312	Computer Organization and Architecture	3	0	0	3	3	0	3
15	18IT301	Data Structures	3	0	0	3	3	0	3
16	18IT303	Object Oriented Programming using Java	3	0	2	5	3	1	4
17	18EC311	Digital Principles and System Design	3	0	2	5	3	1	4
18	18IT601	Software Engineering and Management	3	0	2	5	3	1	4
19	18IT304	Data Structures Laboratory	0	0	3	3	0	1.5	1.5
20	18CS401	Web Technology	3	0	0	3	3	0	3
21	18MA407	Transforms and Computational Methods	3	1	0	4	4	0	4
22	18CS411	Database Management Systems	3	0	0	3	3	0	3
23	18IT401	Design and analysis of algorithms	3	0	2	5	3	1	4

24	18CS415	Operating Systems	3	0	2	5	3	1	4
25	18CS416	Database Management Systems Laboratory	0	0	3	3	0	1.5	1.5
26	18CS402	Web Technology Laboratory	0	0	3	3	0	1.5	1.5
27	18CS501	Theory of Computation	3	0	0	3	3	0	3
28	18IT501	Data Communications and Computer Networks	3	0	0	3	3	0	3
29	18MCXXX	Mandatory Course - I	2	0	0	2	0	0	0
30	18MCXXX	Mandatory Course - II	2	0	0	2	0	0	0
31	18MCXXX	Mandatory Course - III	2	0	0	2	0	0	0
32	18XXXXX	Mandatory Course - IV	2	0	0	2	0	0	0
33	18XXXXX	Professional Elective - I	3	0	0	3	3	0	3
34	18XXXXX	Professional Elective - II	3	0	0	3	3	0	3
35	18CS502	Artificial Intelligence and Expert Systems	3	0	2	5	3	1	4
36	18EC571	Microcontrollers & Embedded Systems	3	0	2	5	3	1	4
37	18IT503	Computer Networks Laboratory	0	0	3	3	0	1.5	1.5
38	18CS504	Mini Project	0	0	4	4	0	2	2
39	18CS601	Principles of Compiler Design	3	0	0	3	3	0	3
40	18XXXXX	Open Elective - I	3	0	0	3	3	0	3
41	18XXXXX	Professional Elective - III	3	0	0	3	3	0	3
42	18XXXXX	Professional Elective - IV	3	0	0	3	3	0	3
43	18CS602	Data Analytics	3	0	2	5	3	1	4
44	18CS603	Virtualization and Cloud	3	0	2	5	3	1	4
45	18CS604	Compiler Design Laboratory	0	0	3	3	0	1.5	1.5
46	18CS701	Computational Biology	3	0	0	3	3	0	3
47	18XXXXX	Open Elective - II	3	0	0	3	3	0	3
48	18XXXXX	Open Elective - III	3	0	0	3	3	0	3

49	18XXXXX	Professional Elective - V	3	0	0	3	3	0	3
50	18XXXXX	Professional Elective - Vi	3	0	0	3	3	0	3
51	18IT602	Internet of Things	3	0	2	5	3	1	4
52	18CS801	Project	0	0	24	24	0	12	12
53	18XXXX	Employability Skills	0	0	3	3	0	1.5	1.5
		Total	**126**	**5**	**84**	**215**	**123**	**42.0**	**165.0**

2.1.3 State the components of the curriculum (5)   Institute Marks : 5.00

Course Components	Curriculum Content (% of total number of credits of the program)	Total number of contact hours	Total number of credits
Basic Sciences	17.30	31.00	28
Engineering Sciences	15.7	32.00	27
Humanities and Social S	4.1	9.00	7
Program Core	37	77.00	61
Program Electives	10.9	18.00	18
Open Electives	5.5	9.00	9
Project(s)	8.5	28.00	14
Internships/Seminars	1	3.00	1
Any other (Please speci	0	0.00	0
Total number of Credits			**165**

2.1.4 State the process used to identify extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I (10)   Institute Marks : 10.00

Our Department curriculum has differnet course compomemts such as Humanities and Management, Basic Science, Engineering Science, Professional Core, Professional Elective, Open Electives, Projects and Employablity Enhancement skills. These courses are designed with four to six outcomes. The process for identifying extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes is depicted below:
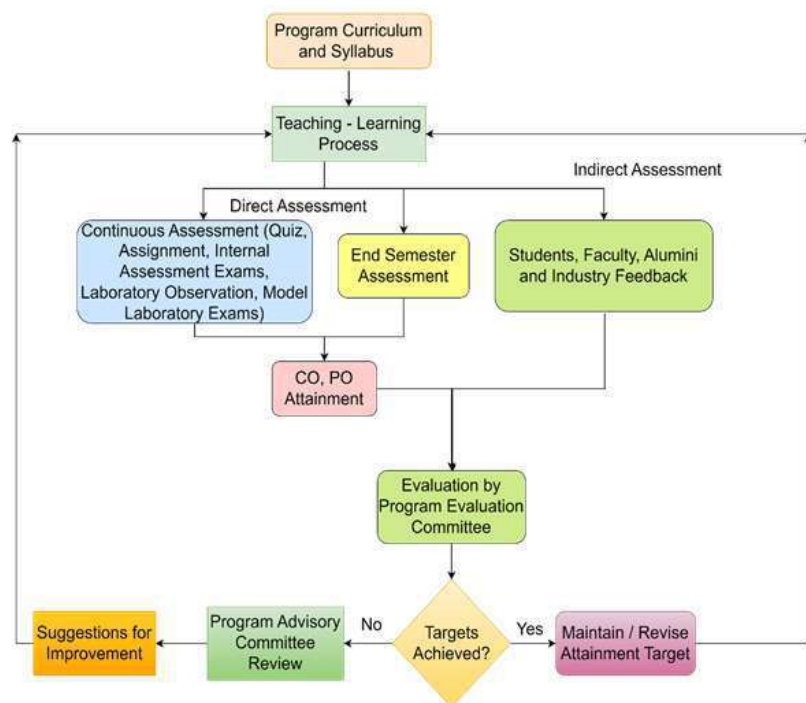
Figure 2.7 Process to identify extent of compliance of the curriculum for attaining POs and PSOs.

In Figure 2.7, the process flow diagram for identifying extent of compliance of the curriculum for attaining the POs and PSOs is depicted. The detailed steps followed in the process is explained below.

Compliance with POs and PSOs

- The program curriculum along with COs of individual courses are submitted to the PAC for analysing the extent of compliance of the curriculum for attaining POs and PSOs.
- With reference to the prescribed program curriculum and syllabus, the subjects are taught in the classroom with the teaching aids such as smart boards, tutorial videos and interactive teaching pedagogies.

Assessment Process

- The outcome of the teaching learning process is assessed by both direct and indirect assessment tools as shown in Figure 2.7.
- **Direct assessment methods:** Based on the Continuous Internal Assessment, internal components such as technical quizzes, assignments, group projects, seminars etc., laboratory observation, Model Laboratory Examination and End semester examination, the students are assessed.
- **Indirect assessment methods:** Feedback is collected from students, faculty, Alumni and Industry experts at end of the course and end of the program.
- Direct assessment tools are used to analyse the CO and PO attainment of the course at end of every semester.

Program Evaluation Committee

- Indirect assessment tools are used to collect the feedback from various stakeholders as mentioned above and the obtained feedback is analysed by Program Evaluation Committee (PEC).
- PEC is headed by Head of the Department and constituted with an Industry Expert, an External Academic Expert, an Alumni member and Internal

Academic Experts.

- The assessment report obtained from both direct and Indirect assessment tools are evaluated by PEC.
- If the targets are achieved, then the board recommends for maintaining or revision of attainment. Otherwise, the attainment analysed by PAC suggestions are given for improvement.
- The suggestions would be incorporated in the subsequent revisions in curriculum or adapted teaching methodologies.

Figure 2.8. Program Evaluation Committee members and minutes

2.2 Teaching-Learning Processes (70)   Total Marks 70.00

2.2.1 Describe Processes followed to improve quality of Teaching & Learning (15)

Institute Marks : 15.00

In the Department of Computer Science and Engineering, the process of teaching and learning is given utmost significance. A well-defined system of academic components and procedures are followed to achieve quality development in teaching and learning. These academic components and procedures are depicted in Figure 2.9.
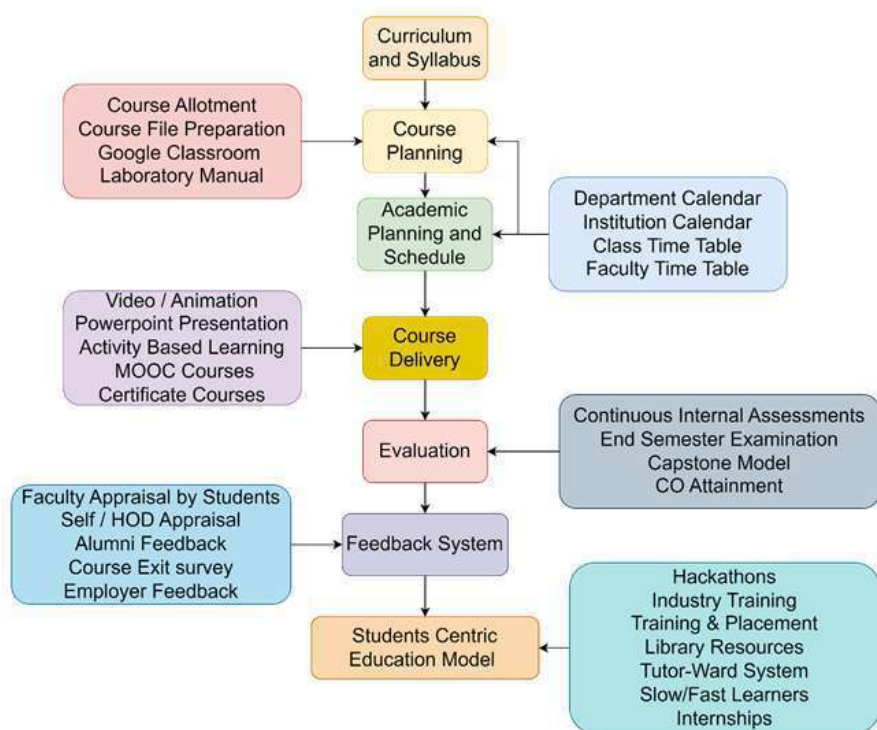
Figure 2.9. Teaching-Learning Process

A. Adherence to Academic Calendar

Well ahead of each semester, the academic calendar is planned at the institute level. The same is displayed on the college website and communicated to all stakeholders. It constitutes of the activities that are scheduled to take place during the semester. These activities include the Internal Assessment and Academic review sessions and technical events such as webinars, guest lectures etc. Based on the Institution level academic calendar, Department events are planned and incorporated in the Department level academic calendar. The academic calendar for the year 2022-23 Even Semester is shown below.

Figure 2.10. Academic Calendar

All Departmental academic and non-academic activities are planned as per the Institution's calendar. Time table is prepared in such a way that the day orders are followed as per the academic calendar. This planner is very useful in planning all the activities for the Department and strictly adhered to the planned schedule. The continuous improvement assessments are also planned well in advance, so that the faculty members handling the courses can very well plan the progress of their subjects.

B. Various instructional methods and pedagogical initiatives

1. Smart Classroom

     All the classrooms in our Department are equipped with smart boards and LCD projectors or smart TVs. Smart boards are more flexible compared to the white boards as it facilitates explanation of the concepts in a lucid manner to the students with the help of pictures and videos. It makes the **learning environment more interactive.** In the classroom teaching learning process, **flipped classroom model** is followed. Smart boards allow integration of various technologies in order to improve the learning experience. The classroom activities are recorded with the smartboard and the recorded sessions are available to the students.

Figure 2.11. Smart Classroom

The classroom smartboard is enriched to integrate the interactive learning tools with a wide range of software applications. The entire lecture delivery through the smart board can be recorded and saved as PDF. The saved format could be sent to students for their reference and therefore it would benefit the

absentees as well provision to play. Tutorial videos and simulation videos help the students in understanding complex topics.

2. Flipped Classroom

For every course, a Google Classroom is created and communicated to the students. Faculty members add all students to it before commencement of every semester for every course.

The Google Classroom of our courses provide the students with the following features:

1. Course Description
2. Syllabus
3. Course Information
4. Subject Module with presentation, quiz, high-order thinking questions and relevant videos
5. Internal marks and attendance details
6. Higher Education perspectives of the subjects including Jobs and Studies
7. Assignment questions with CO-PO mapping
8. Research perspectives with information on Journals and Conference for further study
9. Details on Virtual Labs, Certification courses, Competitive Exam Question Banks
10. Class recordings, Simulation tools and Animations.

Multi activity Management

The platform integrates with Googles other tools like Docs, Drive, Forms, Meet, and Calendar, hence there are many built-in "shortcuts" for classroom-management tasks. It easily manages classes, post announcements, task or question during the lecture and getting feedback on the topics.
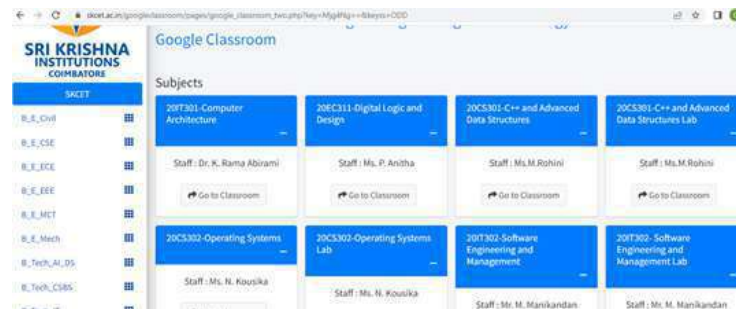
Extensive Materials:

Digitally organize, distribute course materials from various sources like Websites, PDF files, YouTube videos, Link, Surveys from Google forms which provides students with easy access.
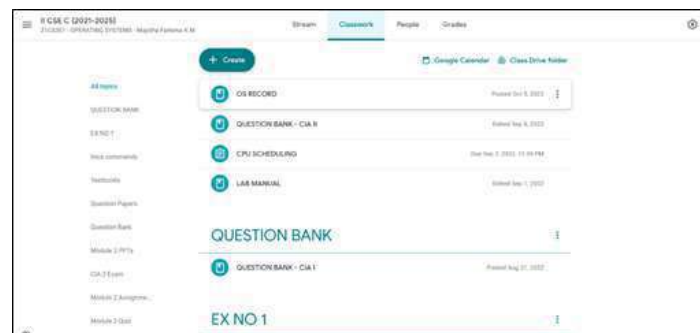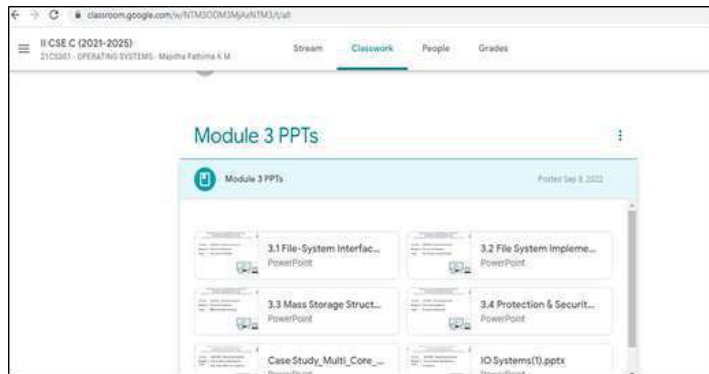
Grading:

Allows teachers to correct Assignments, Quizzes, Case studies and issue grades and comments to the evaluated works that will help in analyzing and motivating the students individually.

Online Laboratory tools:

Students are enabled to work with online open source tools that will enhance students understanding in real time.
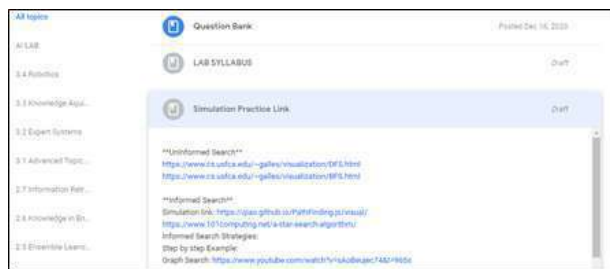
Figure 2.12. Usage of Google Classroom

3. Snap Talk Sessions

Faculty members conduct 5 minutes snap talk in the middle of their lecture hour and review it to help students to make a self-analysis of themselves. Snap talk is a technique that helps the students to improve their communication and overcome stage fear. Snap talk videos are recorded in the respective students' mobile phones. The students are allowed to choose their own topic or topic given by the faculty members for their snap talk sessions. Both technical and non-technical topics are chosen and effectively delivered in the classroom that enhances the students' skill development and learning.

Figure 2.13. Snap talk Sessions

4. Students Presentation

Technical topics and syllabus topics are presented by the students to help them improve their presentation and public speaking skills. The students are permitted to select the technical topic, prepare PPT and deliver a presentation to the faculty and students. This event takes place once in every week.

Figure 2.14. Students presentation

5. E-Learning / Self Learning initiatives

Faculty and Students are encouraged to register for at least one online course from online learning portals such as NASSCOM, ICT academy courses, Udemy, Coursera, Edx and NPTEL. The participation of faculty members and students in NPTEL and other online courses is enhancing their self-learning capabilities. These enable them to enrich their subject knowledge with current trends, and also helps in equipping themselves with inter-domain subjects. It is also considered as a key for lifelong learning.

Figure 2.15. Certificates under various E-learning platforms by Faculty and Students

6. Mentoring Hackathons

A hackathon, also known as a codefest, is a social coding event that brings students together to improve upon or build a new software program. Hackathons mainly focus on application of technology, primarily coding to **accomplish an objective or solve a problem**. Students participating in Hackathons solve some of the pressing problems and inculcate a culture of product innovation and a mindset of problem solving. Our students are motivated to take part in Codeathons and hackathons as much as possible. This enables the students' **ability to work as a team, problem solving capabilities and programming skills.** Our faculty members are mentoring the student teams and have received many prizes in hackathons. Winning hackathons enriches the students profile to **get job offers from leading tech giants and admissions in reputed Universities for higher studies.**

Figure 2.16. Hackathon winning moments

Figure 2.17. Hackathon Mentor Certificate

Internal Hackathon is one of the best practices followed in the Department where our students would get expertise in tools which they use in various hackathons like Smart India hackathon, Harvard hackathon to develop their product to create dynamic web pages with good UI/UX.

7. Outside Classroom Learning

Hands-on learning has its own importance in the career of a student pursuing a professional degree. We organize industrial visits to provide students an insight regarding internal working of companies.

Figure 2.18. Industry Visit

8. Project based Courses and Mandatory Internship

Project based courses are introduced in the curriculum where students have to complete a mini project and a main project during the program. As learning is not complete unless the students understand the requirements of industry, 21 days mandatory internship is also prescribed in the curriculum.

Figure 2.19. Project presentation by Students

Figure 2.20. Appreciation certificate from Ministry of Education for SIH Portal Development project

Figure 2.21. Internship certificates

9. Lab Component in Theory

Our Curriculum contains theory cum lab subjects, which enable the students to get hands on experience on the theoretical concepts they are learning. Labs allow students to **reinforce their understanding of theoretical concepts through hands-on experimentation and observation**. This helps them better comprehend complex theories and apply them in practical scenarios. Lab components offer opportunities for students to develop practical skills such as data analysis, research methodology, experimental design, and critical thinking. These skills and expertise in latest software tools are important in various fields and are highly sought after by employers. We follow Block teaching methodologies, that focus on hands on experience for the students along with the technical knowledge they are getting while learning a course.

Figure 2.22. Lab Component in Theory

10. Online Coding platforms

Our students are motivated to practice their coding skills in various online coding platforms. Online coding platforms like HackerEarth, HackerRank etc. offer a vast collection of coding challenges and problems that students can solve. This can help students to improve their coding skills and problem-solving abilities. Online coding platforms provide instant feedback to students on their coding solutions. This can help students to identify their mistakes and learn from them quickly. HackerEarth and other online coding platforms often include coding problems that are similar to those encountered in the industry. This can help students to become more familiar with industry standards and best practices. Many online coding platforms like HackerEarth offer coding contests and challenges that students can participate in. This can help students to compete with others, learn from their peers, and improve their coding skills. Online coding platforms like HackerEarth can be accessed from anywhere, at any time.

11. Research based Learning

Our final year students are publishing their project work and outcomes as research articles in refereed journals and conferences. With this practice, we are motivating the students to develop and publish their project work in a research perspective. As their articles are published in Scopus indexed research journals such as IEEE Xplore and Springer, they get more exposure to research based learning.
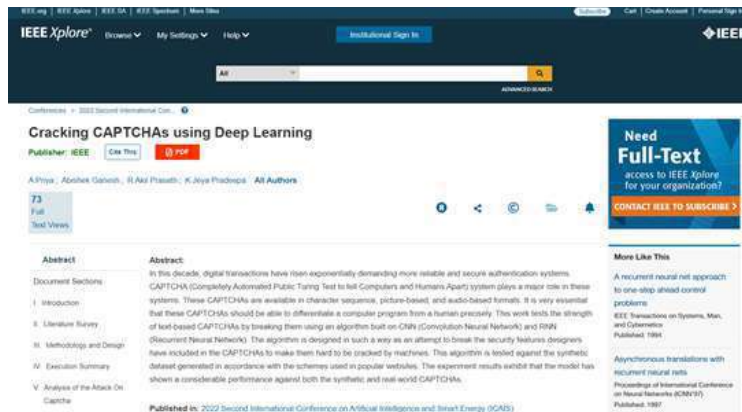
Figure 2.23. Research paper publication by students

12. Seminars and Workshops

Seminars and workshops provide students with exposure to new and emerging topics that are not covered in their regular curriculum. This helps to broaden their horizons and give them a better understanding of the latest developments in the field. Seminars and workshops provide a platform for students to interact with professionals and experts in their field of study. This networking opportunity can lead to potential collaborations, internships, and job opportunities.
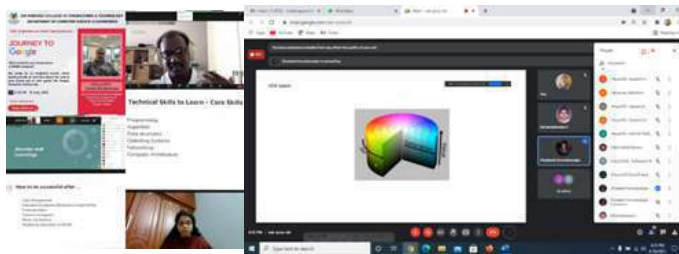
Figure. 2.24. Workshops and Seminars from Industry experts

Workshops often provide hands-on experience that allows students to put their theoretical knowledge into practice. This helps to reinforce their understanding of the concepts they have learnt in the classroom and develop their practical skills. Emerging topics are often associated with new technologies, tools, and techniques.

Attending seminars and workshops can help students to develop new skills and stay up-to-date with the latest developments in their field. Exposure to new and exciting topics can motivate students to pursue further education or research in the field. This can help to cultivate a passion for their chosen field of study and encourage them to become lifelong learners.

13. Industry Based Training

Our program curriculum and syllabus are partially developed by **industry experts**.Industry-based training provides students with practical experience and exposes them to real-world scenarios. This helps them understand how **theoretical concepts are applied in actual practice**, which enhances their understanding of the subject. We have MOUs with various Industries such as **Wipro, Infosys, Aspire Systems, Capgemini, Robert Bosch, Hexaware, Virtusa, TCS**etc., who are providing training to our students. Our Faculty members are also undergoing industry training based on **Train the Trainer programme.**

Students get the opportunity to learn from these experts and Industry trained faculty members and gain **insights into the latest technologies, tools, and techniques used in the industry**. Industry-based training programs help students gain hands-on experience with the latest technologies, which can **improve their employability.**

With these training programs, it is possible to **bridge the gap between academia and industry**.

14. Entrepreneurship Initiatives

The Entrepreneurship Development cell of Sri Krishna College of Engineering and Technology is actively organizing various activities every year to inculcate Entrepreneurship culture among students. The following events are regularly organized by the cell under the aegis of Department of Science and Technology, Entrepreneurship Development Institute, India and Tamil Nadu:

    i. Entrepreneurship Awareness Camp
    ii. Design thinking Workshops
    iii. Idea Contest
    iv. Software and Hardware Hackathons

      v. Project Contest
     vi. Webinars
    vii. Industry visits and Field visits
  viii. Interaction with successful Entrepreneurs

The following funded programmes have been successfully implemented in the campus. The details are tabulated below:

S.No	Programme	Amount in (Rs.)	No. of Camps	Programme Coordinators	Period
1	DST NIMAT Project-(2017-18)/ Entrepreneurship Awareness Camp	80,000	4	Dr.J.Janet Dr. M.Sujaritha	2017-18
2	DST NIMAT Project-(2018-19)/ Entrepreneurship Awareness Camp	40,000	2	Dr.J.Janet Dr. M.Sujaritha	2018-19
3	DST NIMAT Project-(2018-19)/ Entrepreneurship Awareness Camp	60,000	3	Dr.J.Janet Dr. M.Sujaritha	2019-20
4	EDII-TN Promotional Activities on Entrepreneurship under IEDP 2021-2022	10,000	5	Dr.J.Janet Dr.P.Thamaraiselvi Dr. M.Sujaritha	2021-2022
5	Innovation Voucher Programme	5,000	1	Dr.J.Janet Dr. M.Sujaritha	2022-2023

Ecell of SKCET comprises of a student team playing roles such as CEO, Secretary, Treasurer, Event Manager and Magazine Editor. This team inspires the students by conducting Contests such as Ideation, Design thinking and marketing. They also organize seminars and webinars to the Entrepreneurship interested students and involve in social networking. The Ideas selected in the contests will be submitted for hackathons, NIDHI schemes and other funding schemes offered by incubators.

Figure 2.25. Entrepreneurship Initiatives

15. Effective Communication Systems

The important communications are sent through institutional mail ids given to the students. Also, to keep the students updated and make them receive communications swiftly, we create WhatsApp groups for students and faculty members. With this, the faculty and students are always connected. The communication system we follow enable our students to collaborate on projects, assignments, and class discussions. Students can share notes, ask questions, and get feedback from their peers and faculty, which can improve their understanding of the subject matter and enhance their learning experience. All the circulars, notifications, study materials, important announcements are communicated through Email and WhatsApp.
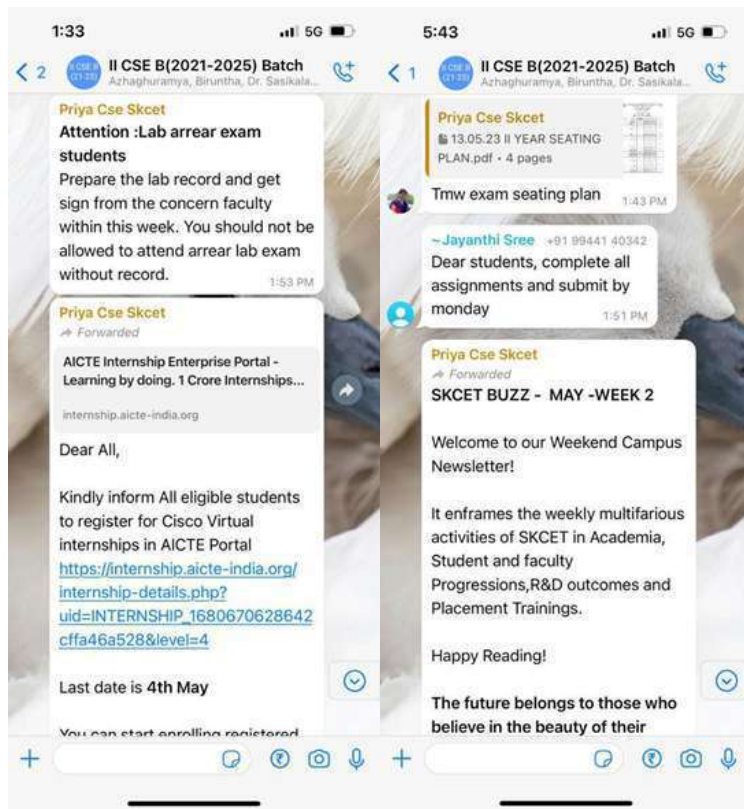
Figure 2.26. Internal Communication through WhatsApp groups

16. Students Induction Program

The main aim of Student Induction Programme is to welcome, motivate, inspire and engage the new students and make them feel comfortable in the new environment; inculcated in them the ethos and culture of the institution, helped them build bonds with other students and faculty members, and exposed them to a sense of larger purpose and self-exploration. CSE class advisor along with the tutor explain College rules and regulations to the students. First year subjects along with its course outcomes and its programme outcomes are explained. Various events are organised under the induction program such as communication skill development, placement awareness, Content writing, Hackathon awareness, mind management, fun events etc.

Figure 2.27. Students Induction Programme

17. Business English Course and Foreign Languages

A business English course is conducted for our students that can help them improve their communication skills in the workplace, including speaking, writing, and listening skills. This can lead to more effective communication with colleagues, clients, and customers, and can help individuals express their ideas and opinions more clearly and confidently. By improving their language skills, our students can demonstrate their competence and expertise in their field, and can present themselves and their ideas in a more polished and professional manner. Many businesses require employees who can communicate effectively in English, and a business English course can help our students to meet this requirement. Also, foreign languages such as Japanese and German are taught for the students who are interested in learning them.

Figure 2.28. Business English Course

C. Methodologies to support weak students and encourage bright students

We follow an efficient and systematic tutor-ward system that helps in the teaching learning process to reach new heights. Each Faculty member is a tutor. Each Tutor is allotted with 15-20 students. Every activity of the assigned wards is closely monitored by the corresponding tutors. This helps the students in improving their academic capabilities and extra-curricular developments. Daily attendance of the students is maintained and monitored by the respective tutors.

The students **who secure below 50% marks** in their Continuous Internal Assessment and having more than three arrears are identified and considered as academically weak students. Students who **secure above 75% marks** in their Continuous Internal Assessment in all subjects are considered as

academically bright students. Weak students are given counselling for their career guidance. Bright students are encouraged to take up new challenges. Bridge courses are conducted for the lateral entry students. Also, for the students having struggle with English language, vernacular teaching is followed.
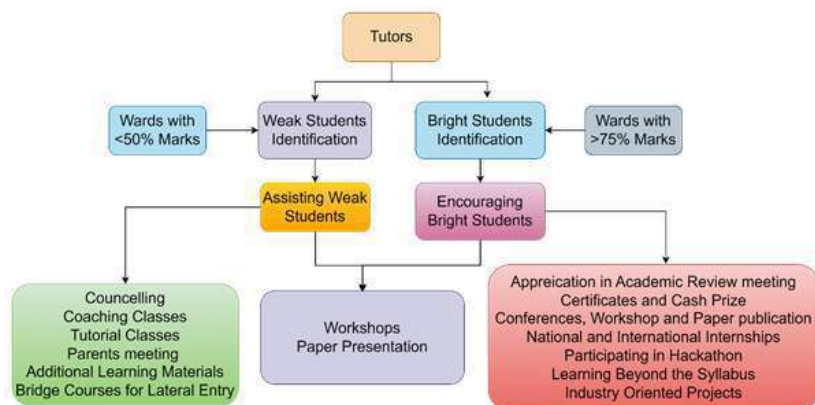
Figure 2.29. Supporting Weak students and Encouraging Bright Students

Assistance for weak students:

- **Tutors regularly follow their progress** and counsel them to attend the classes, and also check their course notes periodically.
- Subject handling Faculty members **conduct special coaching classes**. During academic review meetings, the parents meet their ward's tutor and discusses the steps and actions that needs to be taken to improve the performance.
- **Tutorial Classes and Bridge courses** are conducted for Lateral Entry students to cope up with the syllabus.

Encouraging bright students:

- Top three students in continuous internal assessment for each class are identified and **awarded in Academic Review Meeting.**
- Students securing First and Second rank in end semester examination are awarded **with certificate and cash prize in college day function.**
- Students are motivated to participate in **competitive examinations and Hackathons**.
- Students are motivated for attending workshops, seminars, paper presentation and paper publications in national and international conferences in premier Institutions like IITs, NITs, and BITS etc.
- Students are encouraged to undergo **International and National level Internships.**

Figure 2.30. Toppers Felicitation in Academic Review Meeting

D. Quality of classroom teaching

Quality of teaching is a very important factor for quality learning. The following aspects are considered to ensure a good quality classroom teaching:

- The Department has **well equipped, hassle free classrooms** which are spacious, with good air circulation and a pleasant environment for the students to learn. The ambience of the classroom enhances the classroom teaching to a greater extent.
- Classroom ambience is made interactive. **Smart boards or Smart TVs** are established in all the classrooms for effective delivery. Smart boards allow for integration of various technologies and interaction in order to improve the learning experience. This platform enriches the students to demonstrate their grasp of the subject through touching, drawing, and writing.
- Smart board software helps Faculty members to bring lessons to life with rich, powerful activities that grab students attention, blending real time assessment and real-world experience into the learning process.
- **Syllabus coverage** of every course is ensured as per course plan prepared and is followed up by cluster heads and Head of the Department.
- Active learning in class rooms is ensured by **organizing quiz, seminars, case studies, tutorials etc.**
- Faculty members make the students to engage and participate **in possible group activities** during the lecture session.
- Cluster Heads are assigned with **class monitoring** and the reports will be verified by the HOD every week.
- **Class committee meetings** are conducted in order to monitor and evaluate the quality of class room teaching. Syllabus coverage and difficulties faced by the students in the academic issues are discussed and steps are taken to resolve the issues.

- **Feedback from students** are collected twice a semester to monitor the effectiveness of the teaching – learning process.
- **Course File, Course attendance and assessment records** are maintained by each faculty member and are periodically reviewed by Head of the Department and Principal.
- **E-Learning materials** are prepared and uploaded in the Google Classroom and students can access them at anytime, anywhere.
- **Special Coaching Classes** are conducted for the weak students to help them to clarify their doubts and improve their knowledge.
- **For the lateral entry students, a bridge course** is conducted to help them in adapting to new courses.
- Students are motivated to present a topic of their own with five minutes **Snap talk d**uring class hours.
- **Faculty Competency Enhancement programs** ensure that the faculty is delevering their best in the classroom teaching.

Real time examples are cited in the form of videos and the concepts are explained to the students in a clear way by the faculty. Complex tutorial problems are solved in the class rooms by the Faculty and students together.

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Class Time Table – 2022-23 – ODD SEMESTER

CLASS/SEM: III CSE C / V SEM   W.E.F- 18.7.22   CLASS ROOM NO: C1-16

DAY	1 8.45-9:40 am	2 9:40-10:35 am	BREAK 10:35-11:00 am	3 11:00-11:55 am	4 11:55-12:50 pm	Lunch 12.50-1.50pm	5 1.50-2.45pm	6 2.45-3.35pm	7 3.35-4.30pm
DAY 1	OE1	MC		OOAD	WAJ/OSS		CN	OOAD	MP&MC
DAY 2	WAJ/OSS	<-		OOAD LAB	->		MP&MC	DS	OOAD
DAY 3	DS	WAJ/OSS		CN	OE1		CN	MP&MC	OOAD
DAY 4	WAJ/OSS	<-		MP&MC LAB	->		MINI	MINI	MC
DAY 5	OE1	<-		CN LAB	->		MP&MC	CN	DS

HEORY/PRACTICAL

ABB	COURSE	NAME	CREDITS	HOURS	NAME OF FACULTY	DEPT	CATEGORY
OOAD	20CS501	Object Oriented Analysis and Design	4	4	Mr.A.Arun Kumar	CSE	PCC
CN	20CS502	Computer Networks	4	4	Mr.R.Yasir Abdullah	CSE	PCC
MP&MC	20EC511	Microcontrollers and Embedded Systems	4	4	Dr.J.Rejina Parvin	ECE	ESC
WAJ	20IT922	Web Applications Using Java	3	4	Ms.G.Renugadevi	CSE	PEC
OSS	20IT923	Open Source Systems	3	4	Ms.N.Kousika	CSE	PEC
DS	20IT902	Distributed Systems	3	3	Ms. A.Adlin	CSE	PEC
OE1	20ME003	Total Quality Management	3	3	Mr.Ramachandiran	MECH	OEC
OOAD LAB	20CS501	Object Oriented Analysis and Design Lab	-	3	Mr.A.Arun Kumar Dr.A.Pushpalath Ms. V.R. Azhaguramyaa Mr.J.Daniel Francis Selvaraj	CSE	PCC
CN LAB	20CS502	Computer Networks Lab	-	3	Ms.RamaRanjani Mr.R.Yasir Abdul Ms. B. Sophia Ms. N. Kousika	CSE	PCC
MP&MC LAB	20EC511	Microcontrollers and Embedded Systems Lab	-	3	Dr.J.Rejina Parvin	ECE	ESC
MINI PROJ	20CS503	Mini Project	1	2	Dr.V.Vijeya Kaveri Mr. S.Palani Ms.G.Renugadevi	CSE	PW
MC	20MC104	Modern Technologies	-	2	Ms.G.Renugadevi Ms.A.Banu	CSE	MC

Tutor 1	Tutor 2	Tutor 3
Dr.V.Vijeya Kaveri	Ms.G.Renugadevi	Ms.S.Biruntha
Year Coordinator:Dr.A.Sajeev Ram		

HOD   PRINCIPAL

Figure 2.31. Class Time Table

E. Conduct of Experiments in Laboratory

The laboratories are well-equipped and give the students a hands-on experience on the concepts they learnt theoretically. Students are trained in recent programming languages and tools to conduct their experiments. Laboratory manuals are distributed to the students at the start of every semester that will help them in doing their experiments. Students will complete the experiment and the outcomes are recorded in the laboratory observation. The observation is evaluated by the faculty member at end of each laboratory session based on the lab rubrics.

Figure 2.32. Students doing Experiments in Laboratory

F. Continuous Assessment in Laboratory

Students are instructed to maintain individual Laboratory manual. These Manuals are checked and verified by Faculty member before the commencement of each experiment. Viva voce is conducted for the students in order to test their knowledge in the experiment.

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COIMBATORE – 641008

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

20CS501 – OBJECT ORIENTED ANALYSIS AND DESIGN LABORATORY

Record of laboratory work

ODD SEMESTER - 2022-2023

Name of the Faculties	Mr. M.VENGATESHWARAN
	Dr.V.K.RESHMA
	Dr.V.VIJEYA KAVERI

CONTINUOUS EVALUATION SHEET
REFERENCES RUBRICS TABLE

| Criteria | Range of Marks | | | |
	Excellent	Good	Average	Below Average
Objective, Algorithm description with sample data (20)	18-20	17-18	15-16	0-14
Flowchart / Coding (30)	27-30	21-26	15-20	0-14
Execution and Result (30)	27-30	21-26	15-20	0-14
Documentation (10)	9-10	7-8	5-6	0-4
Viva (10)	9-10	7-8	5-6	0-4
Overall Marks	90-100	70-89	50-69	0-49

Figure 2.33. Lab Observation and Record Evaluation

The Laboratory assessment is performed on the basis of rubrics such as, submission of laboratory records, participation in performing the experiment, analysis and interpretation of experiments. The final mark is based on the Continuous assessment, final laboratory and viva voce examination. Also, in project-based laboratories, students evolve a new project based on the experience and knowledge gained in the regular laboratory classes. The new project is evaluated by the faculty and a mark is awarded.

G. Students feedback of teaching learning process and action taken

To improve the teaching learning process, the feedback from the student is obtained once in a month through Google forms. Class committee meeting is also conducted twice a semester for the above purpose. One senior faculty member outside the Department acts as the chairperson of the class committee and interacts with the students. The chairperson gives constructive comments based on the students' feedback to the Faculty member concerned to improve the quality of teaching and learning process. Also, Tutor-Ward meetings are conducted twice a month to understand the problems of the wards and help them.

2.34. Class Committee Meeting, Minutes and Action Taken

Students feedback on Faculty member is collected on the basis of ten criteria. The Questionnaire includes teacher's communication skill, smart board usage, doubt clarification in classrooms, punctuality to the class etc. If any of the faculty members score less than 75% in any criteria, counselling will be given for the faculty member or any relevant corrective measures are taken according to the least scored criteria. Based on feedback, Faculty members can improve the way of teaching methodology. This helps to enhance the student learning.

2.2.2 Quality of end semester examination, internal semester question papers, assignments and evaluation (15)

Institute Marks : 15.00

A. Process for Internal Semester Question Paper setting and evaluation and effective process implementation
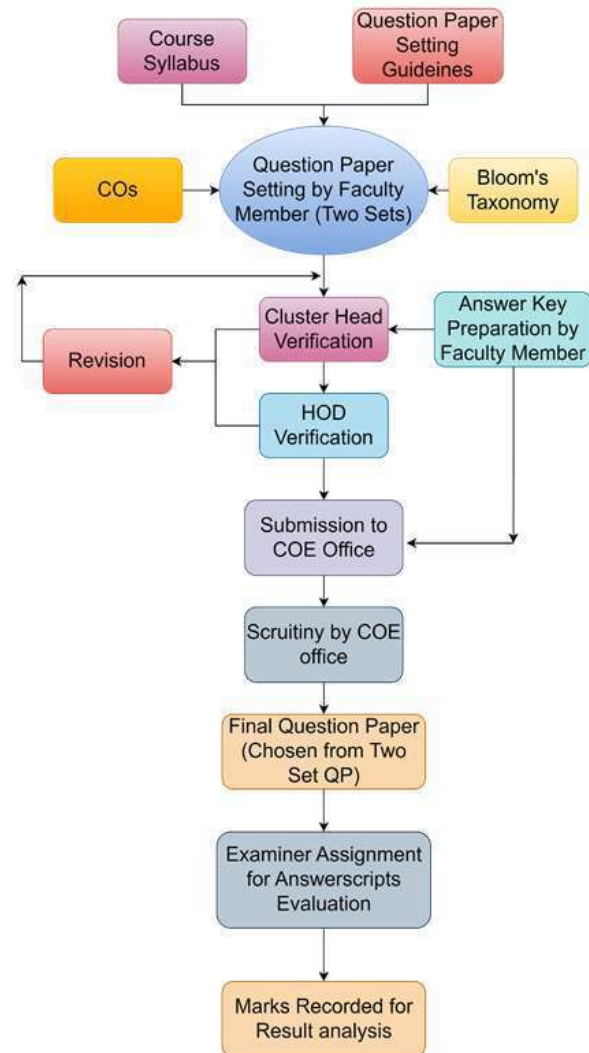
Figure 2.35. Process for Internal Semester Question paper setting and Evaluation

- The quality of Internal Question paper, Assignments and evaluation is ensured by following a definite process of question paper setting and strategy for evaluations.
- Two (R2021, R2022) or Three (R2018, R2020) Continuous Internal Assessments are conducted for each subject per semester. Each of the tests consists of descriptive, quantitative and analytical questions.
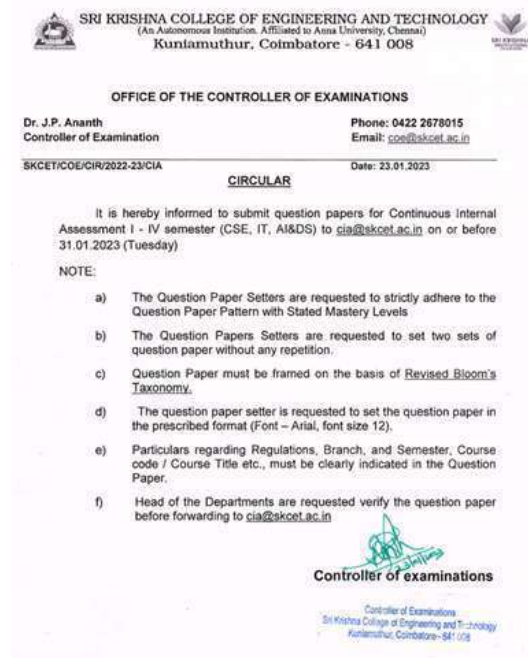
Figure 2.36. Internal Assessment question paper setting procedure

- For each course, two sets of question papers are prepared based on course outcomes as specified in the syllabus by the subject handling faculty members.
- The question papers contain higher order thinking questions and questions of different Bloom's taxonomy levels. (Remember, Apply Analysis etc.)
- The question papers are verified by the cluster head who is a subject expert and a senior Faculty member for ensuring the incorporation of above said standards and it is followed by the verification by the HOD and relevant corrections are made.
- Following HOD's approval, the question paper sets are submitted to Controller of Examination (COE) office for further processing.
- The question papers undergoscrutiny by subject experts assigned by COE office and one set is chosen for examination, and the whole process is carried out confidentially.

The internal Question Paper pattern for Regulation 2021 and Regulation 2022 are as follows:

Table 2.3 Internal Assessment Question paper pattern

Regulation	Part A	Part B	Total
R2021 & R2022	10*2=20(No Choice)	5*16=80 (Either Or Type)	100 marks
R2018 & R2020	9*2=18 (No Choice)	2*16=32 (No Choice)	50 marks

- The answer scripts are centrally evaluated by the subject experts assigned by the Controller of Examinations.

Figure 2.37. Internal Assessment Evaluation Schedule

- Scheme of evaluation is prepared by the faculty members and submitted to the COE for evaluating the answer scripts.

Quality of evaluation

The evaluation quality is ensured by the course coordinator of each course by checking the evaluated answer sheets randomly. The samples of answer sheets are maintained in course file. The examiner is provided with a scheme of valuation for evaluating the answer scripts.

End Semester Question Paper Setting

- The End semester examination question papers are set by the panel of expert members comprising of 50% of Internal and 50% of External examiners who are nominated by Controller of Examinations.
- The panel of examiners should have minimum five years of experience and they should have handled or must be currently handling the respective course.
- The scrutiny of question papers is done by the course expert at Controller of Examinations office.
- The scrutinizing procedure verifies the adherence to the syllabus, uniform distribution of marks, question paper pattern, mark split up for sub-division and course outcomes.
- After end semester examination, the course faculty prepares the scheme of valuation and answer key.
- The answer scripts are evaluated through Central Valuation by Internal Examiners/External Examiners appointed by the COE.
- After the valuation is over, the result passing board meeting is held with university representative, Principal, Controller of Examiner and Head of the Department and then the results are published in the website.

 Students shall apply for transparency/revaluation of his / her semester examination answer script in a theory course within a stipulated time from the declaration of results.

B. Process to ensure questions from outcomes/learning level perspectives

Each question in internal test is mapped with COs of that particular course. Students who answered to the particular questions are taken into consideration and average of all students' marks is considered for calculating CO-PO attainments. The cluster head verifies the CO assigned for each question in the question paper and insist the faculty member to make corrections if any. Also, based on the revised Bloom's taxonomy level, the questions are set.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

18CS312 – COMPUTER ORGANIZATION AND ARCHITECTURE

CONTINUOUS INTERNAL ASSESSMENT – III

Date   :   03 - 10 - 2019
Duration :   1.30 Hours

Semester   : 03
Max. Marks : 50 Marks

COURSE OUTCOMES	
CO1	To recognize the basic structure of a digital computer and representation of non-numeric data.
CO2	To learn different arithmetic operations and organization of control unit.
CO3	To study memory organization, different ways of communication with I/O devices and parallel processors.
CO4	To understand the concept of pipelining and its impact in processor design.

ANSWER ALL QUESTIONS

PART A	(9x 2 Marks = 18 Marks)	BT	CO	MARKS
1.	Differentiate Static RAM and Dynamic RAM.	U	CO3	2
2.	Outline the typical functions of I/O interface.	U	CO3	2
3.	Define Interrupt.	R	CO3	2
4.	Give the comparison of memory mapped I/O and I/O mapped I/O.	A	CO3	2
5.	List the types of exceptions in I/O organization.	U	CO3	2
6.	Examine the concept cycle stealing in DMA transfer.	AP	CO3	2
7.	Give the advantages of pipelining.	A	CO4	2
8.	State the need to implement memory as a hierarchy.	AP	CO3	2
9.	Define HIT ratio.	R	CO4	2

PART B (2 X 16 Marks = 32 Marks)			BT	CO	MARKS
10		Draw the typical diagram of a DMA controller and explain how it is used for direct data transfer between memory and peripherals?	U	CO3	16
11	i)	Explain the different types of pipelining hazards with suitable examples.	AP	CO4	10
	ii)	Define Cache Memory? Discuss the various Mapping Techniques associated with cache memories.	AP	CO4	6

Signature of Faculty   Cluster Head   HOD

Figure 2.38.Internal Assessment Question Paper

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

18CS312 –COMPUTER ORGANIZATION AND ARCHITECTURE

CONTINUOUS INTERNAL ASSESSMENT – III- SCHEME OF EVALUATION

	PART A(9x 2 Marks = 18 Marks)	MARKS
1.	Differentiate Static RAM and Dynamic RAM. Any four differences - 4*0.5	2
2.	Outline the typical functions of I/O interface. Any two Functions - 2*1	2
3.	Define Interrupt. Definition - 2	2
4.	Give the comparison of memory mapped I/O and I/O mapped I/O. Any four differences - 4*0.5	2
5.	List the types of exceptions in I/O organization. • Trace mode - 1 • Breakpoints - 1	2
6.	Examine the concept cycle stealing in DMA transfer. Cycle stealing - 2	2
7.	Give the advantages of pipelining. Two advantages - 2*1	2
8.	State the need to implement memory as a hierarchy. - 2	2
9.	Define HIT ratio. Definition - 1 Equation - 1	2
	PART B (2 X 16 Marks = 32 Marks)	MARKS
10	Draw the typical diagram of a DMA controller and explain how it is used for direct data transfer between memory and peripherals? • DMA Controller Diagram - 6 • Working of DMA Controller - 4 • Data transfer process - 6	16
11 i)	Explain the different types of pipelining hazards with suitable examples. Types of Hazards - 2 Explanation of pipeline Hazards - 6 Examples - 2	10
ii)	Define Cache Memory? Discuss the various Mapping Techniques associated with cache memories. Cache Memory - Definition - 2 Types of Cache Memory - 2 Mapping Techniques - 2	6

Signature of Faculty   Cluster Head   HOD

Figure 2.39. Scheme of Evaluation for Internal Assessment

Assessment Procedure

In our curriculum, we have different kind of courses such as Theory courses. Practical Courses and Theory cum Practical courses. The sample assessment procedure followed in R2018 are as follows:

Theory Cum Practical Courses

Summative Assessment based on Continuous and End Semester Examination					
Bloom's Level	Continuous Assessment				End Semester Examination [40 Marks]
	CIA-1 [10 Marks]	CIA-2 [10 Marks]	CIA-3 [10 Marks]	Practical Rubric Based CIA [30 Marks]	
Remember	50	30	30	20	30
Understand	50	50	30	30	30
Apply	-	20	40	50	40
Analyze	-	-	-	-	-
Evaluate	-	-	-	-	-
Create	-	-	-	-	-

Practical Courses

Assessment Methods & Levels (based on Bloom's Taxonomy)		
Summative assessment based on Continuous and End Semester Examination		
Bloom's Level	Rubric based Continuous Assessment [60 marks] (in %)	End Semester Examination [40 Marks] (in %)
Remember	-	-
Understand	-	-
Apply	40	40
Analyse	30	30
Evaluate	20	20
Create	10	10

Theory Courses

Summative assessment based on Continuous and End Semester Examination				
Bloom's Level	Continuous Assessment(30)			End Semester Examination (50)
	CIA1	CIA2	CIA3	
Remember	50	50	20	30
Understand	50	50	40	40
Apply	-	-	40	30
Analyse	-	-	-	-
Evaluate	-	-	-	-
Create	-	-	-	-

Formative Assessment	Summative Assessment		Total
	Continuous Assessment	End Semester Examination	
20	30	50	100

C. Evidence of COs Coverage in Continuous Internal Assessments

Internal assessment question papers are set and COs are mapped for each of the questions. Individual student's answer script is evaluated and question answered by student is mapped with COs, POs and PSOs. The CO-PO attainment is then assessed and maintained in course file.

Sample CIA questions illustrating CO coverage:

The table shows the CO coverage for a sample subject 20CS603 – Artificial Intelligence.

Continuous Internal Assessment	Course Outcomes				
	C603.1	C603.2	C603.3	C603.4	C603.5
CIA - I	24%	76%	-	-	-
CIA - II	-	-	44%	56%	-
CIA – III	-	-	-	48%	52%

The following figures show the CIA question papers of 20CS603 – Artificial Intelligence for all the three CIAs conducted.

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY
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Kuniamuthur, Coimbatore - 641 008

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CONTINUOUS INTERNAL ASSESSMENT - I
20CS603 – Artificial Intelligence

Semester : VI
Duration : 1.30 Hours   Max. Marks : 50 Marks

COURSE OUTCOMES

C603.1	Discuss the structure of an Intelligent Agent. [U]
C603.2	Demonstrate Searching techniques in a simple and complex environment. [AP]
C603.3	Apply adversarial search on a multi - agent environment. [AP]
C603.4	Develop an inference engine that applies logical rules to the knowledge base to deduce new information. [AP]
C603.5	Design an expert system for a real time problem. [A]

ANSWER ALL QUESTIONS

PART A (9 x 2 Marks = 18 Marks)		BT	CO	MARKS
1.	Mention some applications of AI.	U	C603.1	2
2.	List the components of learning agent and state which component is consider as important element.	U	C603.1	2
3.	 List the percept sequence and action tabulation for the vacuum-cleaner world.	AP	C603.1	2
4.	Compare and contrast Uninformed Search and Informed Search strategies.	U	C603.2	2
5.	Compute the space and time complexity of iterative deepening depth-first search and bidirectional search(values: b=10,d=5)	AP	C603.2	2
6.	Formulate the cross over operation for the given state space 32752411 24748552	AP	C603.2	2
7.	Construct the constraint hypergraph for the following crypt arithmetic problem. TWO TWO+ -------- FOUR	AP	C603.2	2
8.	How do you avoid ridge and plateau in hill climbing? Justify.	U	C603.2	2
9.	Identify initial state, Successor function, goal test for CSP	U	C603.2	2

PART B (2 x 16 Marks = 32 Marks)		BT	CO	MARKS
10.	(i) For each of the following activities, give a PEAS description of the task environment and characterize it in terms of the properties.	U	C603.1	6

- Interactive English tutor
- Assembling machine robot
- Medical diagnosis system

(ii)	Suppose you have the following search space:	AP	C603.2	10

State	next	cost
A	B	4
A	C	1
B	D	3
B	E	8
C	C	0
C	D	2
C	F	6
D	C	2
D	E	4
E	G	2
F	G	8

a) Draw the state space of this problem.
b) Assume that the initial state is A and the goal state is G. Show how each of the following search strategies would create a search tree to find a path from the initial state to the goal state:
    I. Breadth-first search
    II. Depth-first search
    III. Uniform cost search
    IV. Iterative deepening search

11.	(i) With the heuristic information given below show the expansion of nodes in A* to obtain the goal," A" is the initial node and "L" is the goal node.	AP	C603.2	16

Nodes	h(n)
A	8.0
B	6.3
C	6.3
D	5.0
E	4.0
F	5.1
G	5.0
H	4.5
I	2.8
J	2.2
K	3.6
L	0.0

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CONTINUOUS INTERNAL ASSESSMENT - II
20CS603 – Artificial Intelligence

Date :
Duration : 1.30 Hours   Semester : VI
    Max. Marks : 50

COURSE OUTCOMES

C603.1	Discuss the structure of an Intelligent Agent. [U]
C603.2	Demonstrate Searching techniques in a simple and complex environment. [AP]
C603.3	Apply adversarial search on a multi - agent environment. [AP]
C603.4	Develop an inference engine that applies logical rules to the knowledge base to deduce new information. [AP]
C603.5	Design an expert system for a real time problem. [A]

ANSWER ALL QUESTIONS

PART A (9 x 2 Marks = 18 Marks)		BT	CO	MARKS
1.	Differentiate single agent and multi agent environment based on its functionality. Write example for single agent and multi agent	U	C603.3	2
2.	Find and write the time complexity and space complexity for MINMAX (MINIMAX) algorithm.	U	C603.3	2
3.	Summarize the advantages and disadvantages of Monte-Carlo tree search	AP	C603.3	2
4.	Logical connectives are used to convert the simple sentence into a complex sentence. Justify the statement.	AP	C603.4	2
5.	A model containing the objects are represented below. From the model, Identify and write at least four objects.	AP	C603.4	2
6.	Construct the First-order logic representation for the below statement. "All kings are persons"	AP	C603.4	2
7.	Identify the steps in knowledge engineering process.	U	C603.4	2
8.	Define Unification.	R	C603.4	2
9.	Differentiate forward chaining and backward chaining.	U	C603.4	2

PART B (2 x 16 Marks = 32 Marks)		BT	CO	MARKS
10.	(i) Perform Alpha-Beta pruning for the below tree. Explain the pruning process and write the Pseudo-code.	AP	C603.3	10
	(ii) Explain backward chaining algorithm for first order knowledge base.	U	C603.3	6
11.	(i) Consider the following Knowledge base.	AP	C603.4	10

- John likes all kinds of food.
- Apples are food.
- Chicken is food.
- Anything anyone eats and isn't killed by is food.
- Bill eats peanuts and is still alive.
- Sue eats everything Bill eats.

1. Translate these sentences into formulas in FOL.
2. Convert the formulas into clause form.
3. Use resolution to prove that John likes peanuts.

(ii)	Construct the seven-step process of knowledge engineering for electronics circuit domain.	AP	C603.4	6

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CONTINUOUS INTERNAL ASSESSMENT – III
20CS603– ARTIFICIAL INTELLIGENCE

Semester : VI
Duration : 1.30 Hours   Max. Marks : 50 Marks

COURSE OUTCOMES

C603.1	Discuss the structure of an Intelligent Agent. [U]
C603.2	Demonstrate Searching techniques in a simple and complex environment. [AP]
C603.3	Apply adversarial search on a multi - agent environment [AP]
C603.4	Develop an inference engine that applies logical rules to the knowledge base to deduce new information. [AP]
C603.5	Design an expert system for a real time problem. [A]

ANSWER ALL QUESTIONS

PART A (9 x 2 Marks = 18 Marks)		BT	CO	MARKS
1.	Formulate Information gain in decision making system.	U	C603.4	2
2.	Differentiate Supervised and Unsupervised learning.	AP	C603.4	2
3.	Compare and contrast between inductive learning from deductive learning with an example.	AP	C603.4	2
4.	Infer the role of Meta Knowledge and Heuristics in Knowledge Acquisition.	AP	C603.4	2
5.	Illustrate the steps involved in knowledge acquisition process.	U	C603.5	2
6.	Which component is the brain of expert systems and illustrates its role in knowledge base?	U	C603.5	2
7.	Sketch the components of Expert system.	AP	C603.5	2
8.	Compare and contrast between expert system and software system	AP	C603.5	2
9.	List some the application of Expert system.	U	C603.5	2

PART B (2 x 16 Marks = 32 Marks)		BT	CO	MARKS
10.	i) Consider the example of waiting in a restaurant. Explain how decision trees could be used for inductive learning. Infer how the agent can learn from the examples to decide Wait/ Not wait.	AP	C603.4	8

(ii)	Explain the concept of Ensemble learning with suitable example	U	C603.4	8
11.	i) Elaborate on expert system architecture and its characteristic features with neat sketch.	AP	C603.5	10
	ii) Illustrate the roles of individuals who interact with the Expert system with suitable example.	AP	C603.5	6

QP CODE : 222079

Reg. No.

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END SEMESTER EXAMINATIONS - APRIL/MAY 2023

Regulation - 2020

Programme (s)	Semester	Course Code	Course Title
B.E COMPUTER SCIENCE AND ENGINEERING	VI	20CS603	ARTIFICIAL INTELLIGENCE

Maximum Marks : 100 Marks

No. of Pages : 03

Duration : Three hours

COURSE OUTCOMES	
C603.1	Discuss the structure of an intelligent Agent.
C603.2	Demonstrate Searching techniques in a simple and complex environment.
C603.3	Apply adversarial search on a multi - agent environment.
C603.4	Develop an inference engine that applies logical rules to the knowledge base to deduce new information.
C603.5	Design an expert system for a real time problem.

ANSWER ALL QUESTIONS

PART A (10 x 2 Marks = 20 Marks)

		BT	CO	MARKS
1.	Differentiate an agent function and an agent program.	U	C603.1	2
2.	List the steps involved in simple problem solving agent.	R	C603.1	2
3.	Define Constraint satisfaction problem	U	C603.2	2
4.	Define local search algorithm? Give an example	U	C603.2	2
5.	Define Formal Definition of Game	U	C603.3	2
6.	List the issues in knowledge representation.	R	C603.3	2
7.	What is unification algorithm?	U	C603.4	2
8.	Convert the following sentence into predicate logic "Everyone who loves all animals is loved by someone"	AP	C603.4	2
9.	Comment on the stages in the development of expert system tools.	U	C603.5	2
10.	List the different types of machine learning	R	C603.5	2

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ANSWER ALL QUESTIONS

PART B (5 x 16 Marks = 80 Marks)

		BT	CO	MARKS
11.	Explain in detail about different types of Intelligent Agents with suitable their architecture diagrams.	U	C603.1	16
	OR			
12.	Explain the following uninformed search strategies with examples. a) Breadth First Search b) Uniform Cost Search c) Depth First Search d) Depth Limited Search	U	C603.2	16
13.	Discuss the progress of Map Coloring search with Forward Checking using CSP	U	C603.2	16
	OR			
14.	Describe Alpha-Beta pruning and give the other modifications to the monte-carlo procedure to improve performance.	U	C603.3	16

15.	Consider the following sentences
	• John likes all kinds of food
	• Apples are food.
	• Chicken is food.
	• Anything anyone isn't killed by is food.
	• Bill eats peanuts and is still alive
	• Sue eats everything bill eats
	  a) Translate these sentences into formulas in predicate logic.
	  b) Convert the formulas of a part into clause form
	  c) Prove that john likes peanuts using resolution
		AP	C603.4	16

	OR			
16.	Explain the forward chaining and backward chaining algorithms with an example	U	C603.4	16
17. i)	Trace the operation of the unification algorithm on each of the following pairs of literals. a) f(Marcus) and f(Caesar) b) f(x) and f(g(y)) c) f(Marcus, g(x,y)) and f(x,g(Caesar, Marcus))	U	C603.4	8
ii)	Illustrate down the steps involved in conversion of FOL to Canonical Normal Form (CNF)	U	C603.4	8
	OR			

Page 2 of 3

18. i) Explain the process of inducing decision trees from examples.   U   C603.5   8

    ii) Consider the following sentences   U   C603.4   8
        a) Peter like all kinds of food.
        b) Apples are food.
        c) Chicken is food.
        d) Anything anyone eats and is not killed by is food.
        e) Bill eats peanuts and is still alive
        f) Sue eats everything Bill eats.
        Translate these sentences into formulas in predicate logic.

19. Define Expert system. Explain the architecture of an expert   U   C603.5   16
    system in detail with a neat diagram and an example.

                                OR

20. Write notes on expert systems MYCIN, DART and XCON and   U   C603.5   16
    how it works? Explain

Figure 2.40. Internal Assessment & End semester Question papers for 20CS603 – Artificial Intelligence

Learning Outcomes	Marks Allotted (Total - 150 marks)	Distribution (%)
C603.1	12	8
C603.2	38	25
C603.3	22	15
C603.4	52	35
C603.5	26	17
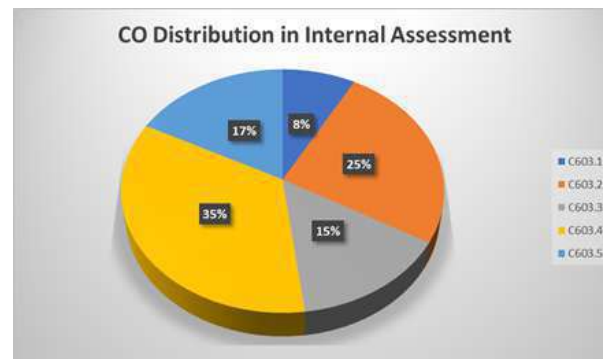
Figure 2.41. CO distribution in Internal Assessment Question Papers

D. Quality of Assignment and its relevance to COs

Assignment is one of the assessment components in each subject which can be group or individual assignment based on the nature of the subject. Assignment questions include real time and complex analytical problems. Before an assignment is uploaded in Google classroom, it is verified by the cluster head. The questions are framed in such a way to encourage self learning and higher order thinking. Also, it ensures that students must refer different sources to answer the questions. Each assignment question for the course is mapped with a CO of that course.

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ASSIGNMENT – II

20CS302 - OPERATING SYSTEMS

Q. No.	Questions	CO	PO
1	Consider the following table of arrival time and burst time for three processes P0, P1 and P2. Process Arrival time Burst Time P0 0 ms 9 ms P1 1 ms 4 ms P2 2 ms 9 ms The pre-emptive shortest job first scheduling algorithm is used. Scheduling is carried out only at arrival or completion of processes. What is the average waiting time for the three processes?	C302.2	PO2, PO3
2	Consider the following set of processes, with the arrival times and the CPU-burst times given in milliseconds. Process Arrival Time Burst Time P1 0 5 P3 2 3 P4 4 1 What is the average turnaround time for these processes with the preemptive shortest remaining processing time first (SRPT) algorithm?	C302.2	PO2, PO3
3	Consider the following set of processes, with the arrival times and the CPU-burst times given in milliseconds. Process Arrival Time Burst Time P1 0 5 P2 1 3 P4 4 1 What is the average turnaround time for these processes with the preemptive shortest remaining processing time first (SRPT) algorithm?	C302.2	PO2, PO3
4	Find the average wating time and average turnaround time using round robin algorithm.	C302.2	PO2, PO3

Process	Duration	Order	Arriv
P1	3	1	0
P2	4	2	6
P3	3	3	0

Suppose time quantum is 1 unit.

5	Five batch jobs A through E arrive at a computer center at almost the same time. They have estimated running times of 8, 3, 4, 2, 6 minutes. Their estimated priorities are 3, 1, 4, 2, 5 respectively: with 1 being the highest priority for each of the following scheduling algorithms. Determine the Average Waiting time and Average turnaround time. Each job gets its fair share of CPU for 2 minute when Round Robin scheduling is used. Demonstrate a) FCFS b) SJF c) Non preemptive Priority d) Round Robin Which of the schedulers' results in the minimal average waiting time (Overall processes)?	C302.2	PO2, PO3
6	Processes A, B, C, D and E require CPU burst of 3, 5, 2, 5 and 5 units respectively. Their arrival times in the system are 0, 1, 3, 9 and 12 respectively. Draw the Gantt chart and Calculate the average waiting time and turnaround time of these processes for the Shortest Remaining Time First (SRTF) scheduling algorithms.	C302.2	PO2, PO3

Figure 2.42. Assignment Questions

2.2.3 Quality of student projects (20)

Institute Marks : 20.00

As a part of the curriculum, the students are required to work on a technical project and submit a report. It can be carried out as an individual project or a teamwork of (2/3/4) students. Student's projects are selected in line with Department Vision, Mission and Programme outcomes. The processes related to project identification, allotment, continuous monitoring, evaluation including demonstration of working prototypes and enhancing the relevance of projects is explained in Fig 2.43.
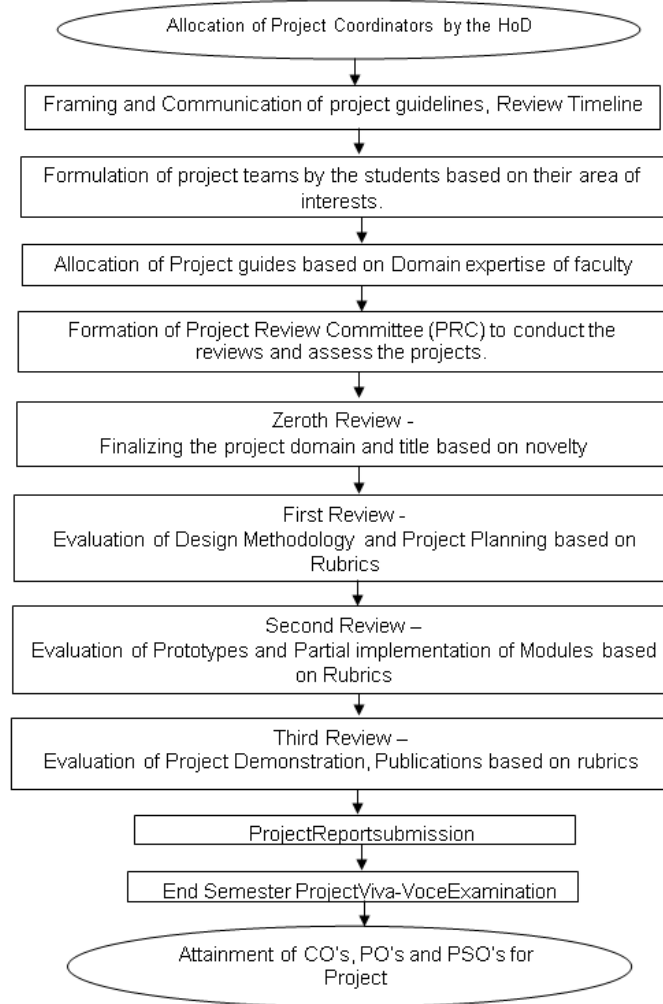
Fig 2.43. Process for Identification of project works, guide allocation, monitoring and allocation

A. Identification of projects and allocation methodology to Faculty Members

Appointment of Project coordinators:

- Project coordinators are identified by Head of the Department to carry out the process of student project work.
- Project guidelines and Review schedule is prepared and communicated to the students well in advance.
- Project Guidelines and Review schedule for 2018-2022 batch is mentioned in Fig 2.44.
- Tutors communicate the Project Review Schedule to the students well in advance. Sample communication mentioned in Fig 2.45.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SCHEDULE FOR THE ACADEMIC YEAR 2021-2022 (VIII SEMESTER)

REOPENING FOR 8TH SEMESTER: 23.02.2022

IV CSE B

SCHEDULE FOR THE PROJECT REVIEW

Dates	Zeroth Review	First Review	Second Review	Third Review
	25.02.2022	11.03.2022	25.03.2022	01.04.2022

Note:

1. Journal Publication to be done by March 30th 2022.
2. All students must be present in the given review dates, if not marks will not be awarded.
3. Project Batches : 3 students per team
4. During Zeroth review, confirm the project domain and title.
5. During Review-1, 40% of the project should be done and reviewed by the panel.
6. During Review-2, 70% of the project should be done and reviewed by the panel.
7. During Review-3, 100% of the project should be shown with a demo along with the documentation, which will be reviewed by the panel members.
8. Students must meet the project guide once in a week to show the project progress and get signature in the project dairy(every week Wednesday).
9. The students should meet their guides regularly.
10. During the project review, every student should have a file containing base paper, the relevant papers referenced so far and a hard copy of their presentation with guide signature.

PROJECT COORDINATOR

HOD/CSE

Dr. K. SASI KALA RANI, M.E.,Ph.D.,
Professor & Head
Dept. of Computer Science & Engg.
Sri Krishna College of Engineering and Technology
Coimbatore - 641 008.

Fig 2.44 – Project Guidelines and Tentative Schedule
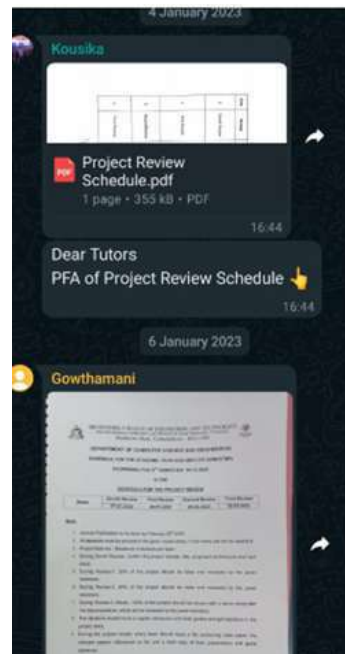
Fig. 2.45 - Project Review Schedule Dissemination in Student Group

Students Batch formation:

- Project coordinators instruct the students to form batches according to their area of interest with maximum of four students in each batch.
- Name of the students, batch wise along with domain interest is submitted to the project coordinators.

Project Guide allocation:

- Professional Competence of the faculty members is received from each faculty.
- Faculty wise Domain specialization is consolidated.
- Allocation of project will be done based on their domain specialization.
- Project coordinators along with Head of the Department appoint the project guides to the batches.

Initiatives:

- Students upon consultation with their allotted guide will explore ideas for selecting the project work in a particular domain or area of interest.
- Copies of previous year projects are placed in the Department library which encourages students to improve the previous works and also ensure no repetition of previous works.

The faculty members encourage the students:

- To carry out in-house projects by utilizing the available facilities in the Department.
- To participate in project exhibitions by creating a platform to exhibit their innovations and works.
- To publish their work in journals/conferences.

B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs

- All Academic projects are mapped to POs and PSOs
- Each project is evaluated with internal marks and graded according to their project quality and their contribution attainment of POs.
- A Sample mapping of projects with their relevance and POs/PSOs has been given below for 2018-2022 batch of students mentioned in table 2.5.

Project Types:

The project works carried out by the students are categorized on the basis of objectives and outcomes, such as

- Application/Industry based projects
- Research based projects

Table 2.4. Project Types

2018 - 2022 Batch Projects	
Application/Industry based projects	22
Research based projects	41
Total	**63**

Table 2.5. Project Mapping with POs & PSOs for 2018-2022 batch

Batch	Register No	Name	Project Title	Mapping with PO,PSO
A1	18eucs001	Abishek Ganesh	Cracking captcha using deep learning	PO1-PO12, PSO1-PSO3
	18eucs008	AkilPrasath R		
	18eucs051	JeyaPradeepa K		
A2	18eucs032	Divyasri K	Automatic Bug Categorization and Prioritization Using NLP and Machine Learning	PO1-PO12, PSO1-PSO3
	18eucs040	Hariharan R		

	18eucs058	Keerthi Raajan K M	Algorithms	
A3	18eucs043	Hasanthi M M	Customer Segmentation Based on Sentimental Analysis	PO1-PO12, PSO1-PSO3
	18eucs045	Infant Rashmi E		
	18eucs033	Elakkiya R		
A4	18eucs013	Arun Bharath S	Decentralized Crowdfunding Platform using Smart Contracts	PO1-PO12, PSO1-PSO3
	18eucs041	Hariharan S		
	18eucs044	Inderajith K		
A5	18eucs030	S.Dhivya	A Novel Prediction for Chronic Kidney Disease Prediction using Machine Learning	PO1-PO12, PSO1-PSO3
	18eucs031	S.Divya Bharathi		
	18eucs037	A.Harikrishna		
A6	18eucs009	Akshayavarshini P	Reliable electronic voting utilizing adjusted blockchain technology	PO1-PO12, PSO1-PSO3
	18eucs010	Ananth S		
	18eucs056	Kavyashree B		
A7	18eucs049	Jegan K K	Agricultural Crop Yield Prediction Using Ml	PO1-PO12, PSO1-PSO3
	18eucs052	Kaarthikeyan K		
	18eucs060	Kowshik K		
A8	18eucs050	Jeganprakash B	Intelligent Customer Segmentation Saas Application	PO1-PO12, PSO1-PSO3
	18eucs020	Aswin AR		
	18eucs061	KowsikPirabhu S R		
A9	18eucs003	Ajaay Krishna P	Early Prediction of Disease using Expert Systems	PO1-PO12, PSO1-PSO3
	18eucs007	Akhilesh R		
	18eucs011	Aravind CJ		
A10	18eucs012	Arul Ganeshan S	Distinguishing Reviews Through Sentiment Analysis Using Machine Learning Techniques	PO1-PO12, PSO1-PSO3
	18eucs018	Ashwin B		
	19eucs506	Padmasankar K S		
A11	18eucs036	Gowtham M S	On-Kart Decentralized E-commerce Application through Blockchain	PO1-PO12, PSO1-PSO3
	18eucs047	Jawahar P M M		
	18eucs054	Kartheesan E		
A12	18eucs023	BalaVigesh C	Secured Retrieval of Encrypted data in Cloud	PO1-PO12, PSO1-PSO3
	18eucs024	Balamuruga M		
	18uccs046	Janani S		
A13	18eucs055	Kausik M	Privacy Assured Clinical data	PO1-PO12,

	18eucs065	Logeshwaran R R	findings in Blockchain	PSO1-PSO3
	19eucs505	Mohamed Kamarudeen S		
A14	18eucs019	Ashwin Kumar L	Web-Based Music Genre Classification For Timeline Song Visualization And Analysis	PO1-PO12, PSO1-PSO3
	18eucs029	DheepKanishk SV		
	18eucs034	Gokula Krishnan N		
A15	18eucs053	Kanisha R	Predictive Analytics of Crime Data using Supervised and Ensemble Learning Methods	PO1-PO12, PSO1-PSO3
	18eucs064	Lavanya R		
	18eucs068	Madhurusha G		
A16	18eucs002	Adithya Menon S	Survival Analysis of Breast Cancer Using Machine Learning	PO1-PO12, PSO1-PSO3
	18eucs038	Hari Varsha		
	18eucs042	Harish Sanmugam J		
A17	18eucs025	Bavin kumar R	Sentiment Analysis on Book Reviews Using Machine Learning Techniques	PO1-PO12, PSO1-PSO3
	18eucs028	Dhanush		
	18eucs039	Hari Vishal J		
A18	18eucs016	Arunkumar K	Blockchain based government tender allocation in cloud	PO1-PO12, PSO1-PSO3
	18eucs022	Balakrishnan S		
	18eucs066	Madhavan G R		
A19	18eucs059	Kishan S	Stock Market Prognosticate using Machine Learning	PO1-PO12, PSO1-PSO3
	18eucs005	Akash S M		
	18eucs062	Krupa Sugumaran		
A20	18eucs015	Arunaa G T	Identification of Cyber Attack Detection Using D-V Hop Localization	PO1-PO12, PSO1-PSO3
	19eucs503	Gokilavani K		
	19eucs507	Parkavi R		
A21	18eucs014	Arunkumar K	Left Ventrice Segmentation in Cardiac MR Images using Fully Convolutional Network	PO1-PO12, PSO1-PSO3
	18eucs017	Arunkumar L		
	18eucs027	Deepakkumar		
A22	18eucs067	Madhu Bala	Optimal algorithm for Credit Card Fraud detection system	PO1-PO12, PSO1-PSO3
	18eucs021	Avinash S		
	18eucs026	Bhavikk		
A23	19eucs501	Akilan	EEG Based Stress Detection System Using Neural Network	PO1-PO12, PSO1-PSO3
	19eucs502	Aravind S		
	19eucs511	Shriraam R		

A24	18eucs035	Gowtham L	Detecting the security level of various cryptosystems using Machine Models	PO1-PO12, PSO1-PSO3
	18eucs006	Akhil S		
	18eucs801	Sujith Chowdary D		
B1	18EUCS084	PREETHI S	A Standalone Application for Effective Education	PO1-PO12, PSO1-PSO3
	18EUCS121	THEOPHILA VAIZ R		
	18EUCS165	ROSHAN RAM R		
B2	19eucs513	Srinath C	Asthenopia Eye Detection using Machine Learning	PO1-PO12, PSO1-PSO3
	18eucs122	Thinesh kumar S		
	19eucs510	Shreeja K		
B3	18EUCS072	Nandhakumar B	A Survey on the Current Security Landscape of Intelligent Transportation System	PO1-PO12, PSO1-PSO3
	18EUCS105	Sethumadhavan S		
	18EUCS116	Sudharshan S		
B4	18eucs057	Keerthana K	E-ticket generator using Bot	PO1-PO12, PSO1-PSO3
	18eucs080	Pranesh M		
	18eucs082	Prasath T		
B5	18EUCS107	Shaaran Kumar S	Integrating Cloud and IoT for tracking smart remote-control car	PO1-PO12, PSO1-PSO3
	18EUCS110	Shanmugapriyan S B		
	18EUCS129	Yaswant S		
B6	18EUCS074	Nithish S	Accurate Detection of Fake News through web scraping	PO1-PO12, PSO1-PSO3
	18EUCS077	Ponswarnalaya R		
	18EUCS088	Rahul Raghavender S		
B7	18EUCS076	Nivitha Shree R H	House price prediction	PO1-PO12, PSO1-PSO3
	18EUCS078	Poojaa R		
	18EUCS093	Rithick Roshan		

	18EUCS109	ShameerB		
B8	18EUCS118	Sukumar E	Unified health care system using web frameworks	PO1-PO12, PSO1-PSO3
	19EUCS509	RakulV M		
	18EUCS100	Saravanan V		
B9	18EUCS131	Yogeshwar BK	OWASP Attack Prevention	PO1-PO12, PSO1-PSO3
	18EUCS125	Vasanth t		
	18EUCS114	Sruthi AR		
B10	19EUCS512	SibiSarath K	Alzheimer Disease Prediction	PO1-PO12, PSO1-PSO3
	18EUCS117	SudirKrishnaa RS		
	18EUCS101	Sarnithasree RK		
B11	18EUCS103	Sathyapraba G	Alert Monitoring dashboard	PO1-PO12, PSO1-PSO3
	18EUCS120	Swetha S		
	18EUCS097	SARANYA		
B12	18EUCS089	RAMYAA R	Leaf Disease Identification	PO1-PO12, PSO1-PSO3
	18EUCS092	Rithani		
B13	18EUCS104	Senthilvasudevan	Multilingual Reader for Visually Impaired People	PO1-PO12, PSO1-PSO3
	18EUCS123	UlfathFarhan.H		
	18EUCS085	Priya Dharshini M		
B14	18EUCS086	Priyalakshmi R	NORMALIZATION OF IDENTICAL RECORDS FROM MULTIPLE SOURCES	PO1-PO12, PSO1-PSO3
	18EUCS095	Sanjayan		
B15	18eucs124	Vasanth M	Short term rainfall forecasting	PO1-PO12,

	18eucs113	Sowmiya B S	using multi layer perceptron	PSO1-PSO3
	18eucs126	Subashri R		
B16	18EUCS112	Sobigha B	Performance prediction for students using machine learning models	PO1-PO12, PSO1-PSO3
	18EUCS083	Prathisha M		
	18EUCS094	Rithvikk A		
B17	18EUCS073	S Nithish Kumar	Alpha numeric and mathematical captcha solver	PO1-PO12, PSO1-PSO3
	18EUCS127	R Vishal Srivalsan		
	18EUCS128	Vishvak V		
B18	18EUCS132	Yokesh MP	Time Series Analysis Based Tamilnadu Monsoon Rainfall Prediction Using LSTM	PO1-PO12, PSO1-PSO3
	18EUCS087	Ragul MN		
	18EUCS126	Vignesh L		
B19	18EUCS102	Sarulatha R	Heart disease prediction using Machine learning	PO1-PO12, PSO1-PSO3
	18EUCS075	Nithya Sri M		
	18EUCS108	Shahan Shamsudin		
B20	18EUCS091	Ranjith kumar P	COVID-19 Future Forecasting Using Supervised Machine Learning Models	PO1-PO12, PSO1-PSO3
	18EUCS096	Santhiya R		
	18EUCS119	Surya S		
B21	18EUCS098	Sarathgopal G	Social Distancing Analyzer and Mask detection	PO1-PO12, PSO1-PSO3
	18EUCS099	Saravanan M		
	18EUCS106	Sethuraman S		
B22	19EUCS508	Parthiban S	Smartblock-SDN: An optimized blockchain-SDN	PO1-PO12, PSO1-PSO3

	18EUCS069	MaheshKumar R	Framework for Resource Management in IoT	
	18EUCS071	Mike gladson		
B23	18eucs130	Yogesh S	Cryptocurrency Price Prediction	PO1-PO12, PSO1-PSO3
	18EUCS111	Shyam B		
	19eucs504	Kavinraj P		
B24	18EUCS079	Pranav Y	Implementation of linear support vector machine for chronic kidney disease analysis	PO1-PO12, PSO1-PSO3
	18EUCS090	Ranganayagi P		
	18EUCS081	Prasad L		
C1	18EUCS144	Kabilan S	VPN Usage prevention by using Content Restriction Protocol on TCP stack	PO1-PO12, PSO1-PSO3
	18EUCS148	Mohammed Nousath Yusuf J		
	18EUCS180	Yogeshwaran R		
C2	18EUCS170	SivasanjayRaahul M	Visual Speech Recognition using Connectionist Temporal Classification	PO1-PO12, PSO1-PSO3
	18EUCS174	Suriya Prakash S		
	18EUCS156	Nivas S		
C3	18EUCS162	Ramkumar	Using Block Chain for Electronic Health Records	PO1-PO12, PSO1-PSO3
	18EUCS157	ParithiAhil K S		
	18EUCS146	Lakshmi Narayanan		
C4	18EUCS171	Siva Shankar R	AI Based Vociferation Chatbot for Emergency Health Assistance	PO1-PO12, PSO1-PSO3
	18EUCS158	Parvathy Nathan S		
	18EUCS172	Sri Jayanth P		
C5	18EUCS177	Venkateshan A P	Student Assessment Platform using Text-to-Image Synthesis	PO1-PO12, PSO1-PSO3

	18EUCS137	Dharika P		
	18EUCS179	Vishnu Sarath S		
C6	18EUCS164	Rohith T	Online Management Complaint System using Image Recognition	PO1-PO12, PSO1-PSO3
	18EUCS166	Sakthivel R		
	18EUCS169	Sanjaiy kumar T N		
C7	18EUCS150	Nandha Kumar	A Novel Approach for Prediction of Heart Disease using Machine Learning Algorithms	PO1-PO12, PSO1-PSO3
	18EUCS140	Harshan J		
	18EUCS176	Tharshan Kumar R G		
C8	18EUCS149	Mokesh Anand Kumar G	AI-Powered Mobility Educational application for enhancing Students learning	PO1-PO12, PSO1-PSO3
	18EUCS167	Sanchita T		
	18EUCS151	Sandhya A		
C9	18EUCS135	Catherine Chandralekha T	Sentiment Analysis with Recommendation System	PO1-PO12, PSO1-PSO3
	18EUCS138	Dharshini R M		
	18EUCS142	Hemadharsini P		
C10	18EUCS139	Hariharan V C	AI powered Emergency Intimation System	PO1-PO12, PSO1-PSO3
	18EUCS153	Nithin K M		
	18EUCS175	Swetha V		
	18EUCS178	Vijayaalayan A		

	18EUCS145	Kiran Subramanian S	A Novel Approach on Recognizing Sign Language for Deaf-Mute People Using Image-Based Hand Recognition.	PO1-PO12, PSO1-PSO3
C11	18EUCS151	Naveen Kumar B		
	18EUCS155	Nithiskumar R		
	18EUCS152	Nishit M	Eye Tracking and Assistance with Cloud Integration for Paralysed.	PO1-PO12, PSO1-PSO3
C12	18EUCS143	Imron Khan S		
	18EUCS134	Bhavik Kumar N		
	18EUCS160	Praveen Chandar P	A Novel System for diagnosing chronic kidney diseases using Machine Learning methodology	PO1-PO12, PSO1-PSO3
C13	18EUCS159	Pavithran M		
	18EUCS163	Ravishankar V		
	18EUCS133	Apsara S K	Effective Visualization and Trend Forecasting of Crime data Through Big Data Analytics and Mining	PO1-PO12, PSO1-PSO3
C14	18EUCS141	Harshitha V		
	18EUCS154	Nithish S		
	18EUCS147	Manoshree J	Robust Mobile Application To Find The Lost Person Using Thematic Mapping	PO1-PO12, PSO1-PSO3
C15	18EUCS136	Dhanishta K R		
	18EUCS173	Surendar Raj G		

C. Project related to Industry

- The students are insisted to take up industrial projects that help them to be Industry ready.
- The training and exposure they get in industrial projects create an industrial exposure to our students where they can groom themselves as an equipped engineer.
- The lists of students who have undergone industrial projects are detailed in table 2.6

Table 2.7 Industry Projects

Sl. No	Reg. No.	Name	Project Title	Industry Name
1	18eucs016	Arunkumar K	Blockchain based	EMURGO Learning

	18eucs022	Balakrishnan S	government tender allocation in cloud	Solutions Private Limited, Bangalore.
	18eucs066	Madhavan G R		
2	18eucs036	Gowtham M S	On-Kart Decentralized E-commerce Application through Blockchain	EMURGO Learning Solutions Private Limited, Bangalore.
	18eucs047	Jawahar P M M		
	18eucs054	Kartheesan E		
3	18eucs013	Arun Bharath S	Decentralized Crowdfunding Platform using Smart Contracts	EMURGO Learning Solutions Private Limited, Bangalore.
	18eucs041	Hariharan S		
	18eucs044	Inderajith K		
4	18eucs050	Jeganprakash B	Intelligent Customer Segmentation SaasApplication	Striim Engineering Services India Pvt Ltd, Chennai.
	18eucs020	Aswin AR		
	18eucs061	KowsikPirabhu S R		
5	18eucs057	Keerthana K	E-ticket generator using Bot	Sirius Computer Solutions, Chennai.
	18eucs080	Pranesh M		
	18eucs082	Prasath T		
6	18EUCS101	Sarnithasree RK	Alert Monitoring dashboard	Planful, Hyderabad
	18EUCS103	Sathyapraba G		
	18EUCS120	Swetha S		
7	18EUCS073	S Nithish Kumar	Alpha numeric and mathematical captcha solver	Appin Technology, Coimbatore
	18EUCS127	R Vishal Srivalsan		
	18EUCS128	Vishvak V		
8	18EUCS098	Sarathgopal G	Social Distancing Analyzer and Mask detection	CodeBind Technologies, Chennai
	18EUCS099	Saravanan M		
	18EUCS106	Sethuraman S		

9	18EUCS171	Siva Shankar R	AI Based Vociferation Chatbot for Emergency Health Assistance	TCS, Kolkatta
	18EUCS158	Parvathy Nathan S		
	18EUCS172	Sri Jayanth P		
10	18EUCS139	Hariharan V C	AI powered Emergency Intimation System	TCS, Kolkatta
	18EUCS153	Nithin K M		
	18EUCS175	Swetha V		
	18EUCS178	Vijayaalayan A		
11	18EUCS145	Kiran Subramanian S	A Novel Approach on Recognizing Sign Language for Deaf-Mute People Using Image-Based Hand Recognition.	TCS, Kolkatta
	18EUCS151	Naveen Kumar B		
	18EUCS155	Nithiskumar R		
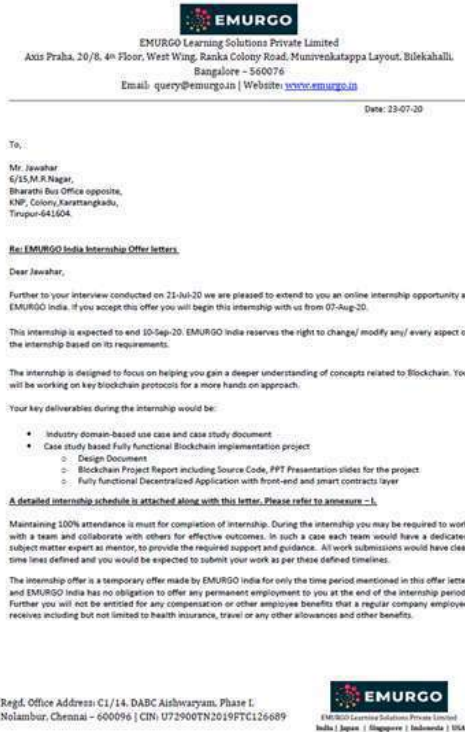
Fig 2.46. Sample Internship & Project Certificate from EMURGO

Naalaiya Tiran – Project Based Learning

Naalaiya Tiran, an experiential project-based learning initiative, launched by Anna University in collaboration with the Tamil Nadu government aims at equipping students with improved professional and technical skills. This program is mapped with the Professional Readiness for Innovation, Employability and Entrepreneurship course. Students earn the credit in the 7th semester on completion of this course as a professional elective. This course is offered online by IBM. It is introduced to give the students hands-on experience in emerging technologies with real-world use cases for the end-to-end problem-solving journey. By the end of this course, the student understands the approach to solve a problem and develop a project with team collaboration. Online training was provided by IBM and student teams are mentored by Industry experts and faculty members. The progress of the project is monitored by the mentors and finally evaluated by both Industry Evaluators and Internal Evaluators.

IBM Naalaiya Tiran project Details:

Number of Students: 188

Number of Teams: 47

Number of Mentors: 7

Number of Evaluators: 7

Mentors and Evaluators

Mentors

Sl. No.	Name of the Mentor	Number of Teams
1	Dr. Rohini.M	6
2	Dr. Kousika N	7
3	Dr. M Sujaritha	7
4	Mr. M.Vengateshwaran	6
5	Ms. Majidha Fathima K M	7
6	Ms. N.Pooranam	7
7	Ms. Gowthamani.R	7

Evaluators

Sl. No.	Name of the Evaluator	Number of Teams
1	Ms.A.Priya	6
2	Dr. G. Vijaya	7
3	Dr.K.Ramesh	7
4	Dr.V.Vijeya Kaveri	7
5	Ms.V.R.Azhaghuramyaa	7
6	Dr.D. Rasi	6
7	Dr.T.LathaMaheswari	7

Sl. No.	Team ID	Team Leader Name	Team Members	Project Problem Statement
1	PNT2022TMID02819	Srinath K	SHANKAR	Nutrition Assistant Application
			SHIYAMABHISAK	
			Sharn Prasad	
2	PNT2022TMID02748	Martina Romisha	KAVYA	Smart Solutions For Railways
			SANDHIYA	
			Kokila P S	

Tech Showcase:

ICT Academy organized Tech Showcase exclusively for the students who participated under the Naan Mudhalvan initiative. Tech Showcase is a project presentation contest, conducted in six regions across Tamil Nadu. Tech Showcase received around 7000 applications. From the applications received, they have shortlisted the top 25 teams for the Regional Finale. Two Teams from Sri Krishna College of Engineering and Technology have been selected among the

top 25 teams for the Regional Finals (Coimbatore Region). Both the teams are from Computer Science and Engineering Department. They received 99.8 and 99.775 scores respectively out of 100 in overall project evaluation, which helped them get selected for this contest. Tech Showcase Contest held on 3rd March 2023 at Hindusthan College of Engineering & Technology.

Figure 2.47. Nalaya Thiran TechShowcase 23 Regional Finals

D. Process for monitoring and evaluation

Monitoring the Final Year Project Work:

- Project allotment and Choice of topic / area are assisted by project guide.
- Project students meet their respective guides every day and explain their progress with the project work.
- Students' progress will be recorded in project diary which will be maintained by students.
- Project diary is a record of the progress of the work which must be produced during each review.
- Project Guides will help in students to obtain industry support to complete their projects.

Project Work Evaluation:

- A **Project Review Committee** (PRC) is formed by the Department comprising of senior faculty members, to conduct the reviews to assess the projects in terms of quality and social relevance and provide necessary inputs to the students. Committee for Academic year 2022-2023 mentioned in Fig 2.48. Sample Project Review conducted in department is mentioned in Fig 2.49.

Academic Year 2021-2022:

Department of Computer Science Engineering

IV CSE (2018-2022)

Project Review Schedule

S.No	Review	ReviewPanel Members for A sec	Review Panel Members for B sec	Review Panel Members for C sec
1	Zeroth Review	1. Dr. T. Latha Maheswari 2. Dr. V. Vijeya Kaveri 3. Dr. A. Pushpalatha	1. Dr. M. Sujaritha 2. Dr. P. Mohan Kumar 3. Dr. K. Senathipathi	1. Dr. V. Arulkumar 2. Dr. S. Oswalt Manoj 3. Dr. D.Prabha
2	First Review	1. Dr. T. Latha Maheswari 2. Dr. V. Vijeya Kaveri 3. Dr. A. Pushpalatha	1. Dr. M. Sujaritha 2. Dr. P. Mohan Kumar 3. Dr. K. Senathipathi	1. Dr. V. Arulkumar 2. Dr. S. Oswalt Manoj 3. Dr. D.Prabha
3	Second Review	1. Dr. T. Latha Maheswari 2. Dr. V. Vijeya Kaveri 3. Dr. A. Pushpalatha	1. Dr. M. Sujaritha 2. Dr. P. Mohan Kumar 3. Dr. K. Senathipathi	1. Dr. V. Arulkumar 2. Dr. S. Oswalt Manoj 3. Dr. D.Prabha
4	Third Review	1. Dr. T. Latha Maheswari 2. Dr. V. Vijeya Kaveri 3. Dr. A. Pushpalatha	1. Dr. M. Sujaritha 2. Dr. P. Mohan Kumar 3. Dr. K. Senathipathi	1. Dr. V. Arulkumar 2. Dr. S. Oswalt Manoj 3. Dr. D.Prabha

Fig 2.48. Project Review Committee 2021-2022
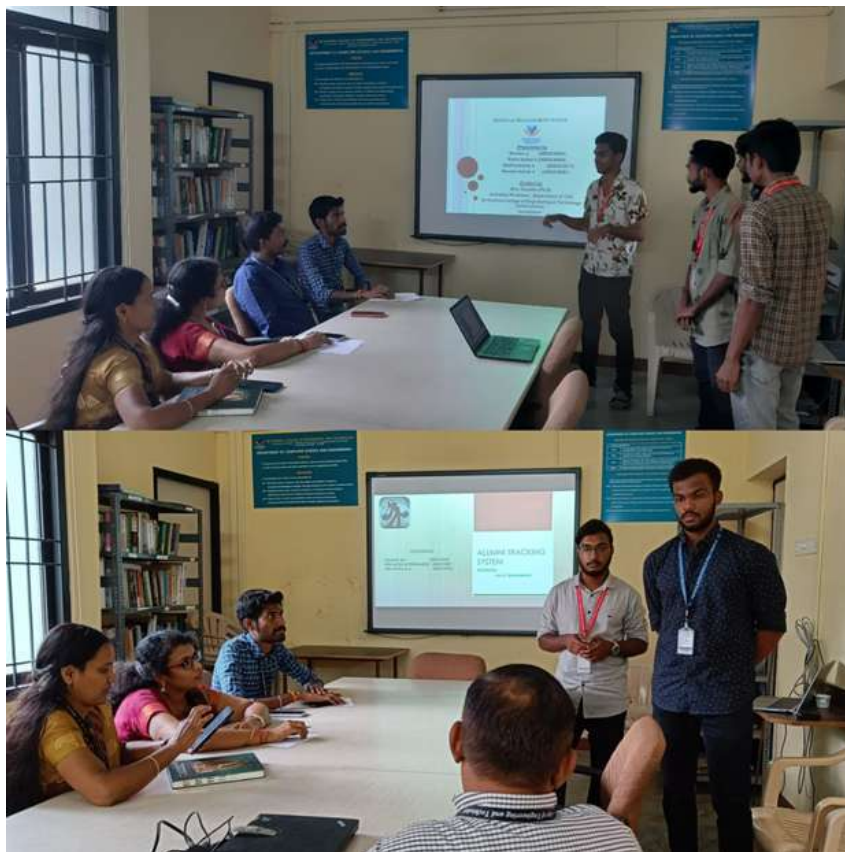
Fig 2.49 Project Review

On successful completion of all the reviews, satisfactory performance and evaluation report of the PRC committee, the students are permitted to write their project report in prescribed format.

- The report is corrected by the respective guides for genuineness of the information and the structure of the report.
- On successful completion and of the corrections of report, they are permitted for binding the report.
- The students defend their project in the presence of the external examiner for the award of the degree.

Rubrics for project:

Review	Rubrics	Excellent	Good	Average	Below Average
Review – 0	Identification of Problem Domain (20 Marks)	Detailed and Extensive explanation of the purpose and need of the project	Good explanation of the purpose and need of the project	Average explanation of the purpose and need of the project	Minimal explanation of the purpose and need of the project

	Study of the Existing system and feasibility of the project proposed (40 Marks)	Detailed and Extensive explanation of the specifications and limitations of the existing systems.	Good study of the existing systems.	Moderate study of the existing systems, collects some basic information.	Minimal explanation of the specifications and limitations of the existing systems. Incomplete information.
	Problem Definition (40 Marks)	Clearly Defined the problem Statement	Problem Statement was identified and not well formulated.	Incomplete problem statement.	Problem statement not identified.
Review – 1	Design Methodology (30 Marks)	Division of problem into modules and excellent selection of appropriate design methodology	Division of problem into modules and good selection of appropriate design methodology.	Division of problem into modules and but design methodology not defined.	Modular approach is adopted.
	Planning of Project Work (30 Marks)	Time frame is properly specified and being followed.	Time frame is properly specified and being followed partly.	Time Frame is properly specified but not being followed.	Time frame is not properly specified
	Data Collection - Preliminary work (40 Marks)	Formulates a systematic plan of data gathering to attain a stated objective.	Develops a simplistic plan of data gathering, but not followed it correctly.	Develops a simplistic plan of data gathering, does not recognize entire scope of study.	No systematic plan of data gathering

Revie w – 2	Incorporation of Suggestions (30 Marks)	Changes are made as per modifications suggested during 1st Review and new innovations added	All major changes are made as per modifications suggested during 1st review.	Few changes are made as per modifications suggested during 1st review.	Suggestions during 1st Review are not incorporated.
	Description of Concepts and Technical Details (40 Marks)	Complete explanation of the key concepts and strong description of the technical requirements of the project	Incomplete explanation of the key concepts and in-sufficient description of the technical requirements of the project	Inappropriate explanation of the key concepts but neat description of the technical requirements of the project.	Inappropriate explanation of the key concepts and poor description of the technical requirements of the project.
	Partial Implementation (30 Marks)	Partial implementation is properly done and met the objectives.	Partial implementation is done but partly met the objectives.	Partial implementation is done but not met the objectives.	Irrelevant implementation.
Revie w – 3	Project Demonstration (25 Marks)	All defined objectives are achieved. Each module working well and properly demonstrated	All defined objectives are achieved. Modules are working well in isolation and properly demonstrated.	Only some of the defined objectives are achieved. Modules are not in proper working form that further leads to failure of integrated system	Incomplete and improper demonstration.

Integration and report preparation (25 Marks)	Efficient integration of all the project data and a good report preparation	Efficient integration of all the project data and a moderate report preparation.	Less Efficient integration of all the project data and an average report preparation.	Improper integration and report preparation
Presentation (25 Marks)	Contents of presentations are appropriate and well delivered.	Contents of presentations are appropriate but not well delivered.	Contents of presentation s are not appropriate but well delivered.	Contents of presentations are not appropriate and not well delivered.
Self-contribution (25 Marks)	Very High	High	Moderate	Low

Zeroth Review: Project Domain Selection and problem Identification in the selected domain by the team.The team gives a detailed presentation on the problems identified based on the literature survey. The proposed system will be analysed with the existing system for feasibility of the project implementation.

First Review: List of modules and the work plan will be discussed. The team gives a detailed presentation on the modules identified and the collected data.

Second Review: The team is expected to present the technical stack, partial implementation of the project work along with the changes suggested in first review.

Third Review: The team gives the entire project presentation with documentation. The team is expected to demonstrate the project to the panel members with conclusion and future work, if any.

Internal assessment mark for the project is awarded based on the evaluated scores obtained from reviews. End semester Examination mark is based on the evaluation in the final review (Viva-voce) by both internal and external examiners.

Sample Evaluation Report

Sri Krishna College of Engineering and Technology

Department of Computer Science and Engineering

Evaluation Score Sheet

IV CSE A (2018-2022) PROJECT - REVIEW 0

Sl. No	Reg. No	Name	Project Title	Domain Knowledge (20)	Literature Survey (40)	Problem Definition (40)	Total (100)
1	18eucs001	Abishek Ganesh	Cracking captcha using deep learning	19	38	39	96
	18eucs008	Akil Prasath R		19	39	39	97
	18eucs051	Jeya Pradeepa K		18	39	39	96
2	18eucs032	Divyasri K	Automatic Bug Categorization and Prioritization Using NLP and Machine Learning Algorithms	19	38	32	89
	18eucs040	Hariharan R		17	36	36	89
	18eucs058	Keerthi Raajan K M		19	40	36	95
3	18eucs043	Hasanthi M M	Customer Segmentation Based on Sentimental Analysis	17	34	36	87
	18eucs045	Infant Rashmi E		19	36	32	87
	18eucs033	Elakkiya R		19	38	36	93
4	18eucs013	Arun Bharath S	Decentralized Crowdfunding Platform using Smart Contracts	18	34	36	88
	18eucs041	Hariharan S		17	36	28	81
	18eucs044	Inderajith K		19	34	36	89
5	18eucs030	S.Dhivya	A Novel Prediction for Chronic Kidney Disease Prediction using Machine Learning	18	38	36	92
	18eucs031	S.Divya Bharathi		17	36	28	81
	18eucs037	A.Hari krishna		18	36	24	78
6	18eucs009	Akshayavarshini P	Reliable electronic voting utilizing adjusted blockchain technology	19	34	32	85
	18eucs010	Ananth S		18	36	36	90
	18eucs056	Kavyashree B		17	34	28	79
7	18eucs049	Jegan K K	Agricultural Crop Yield Prediction Using Ml	19	38	36	93
	18eucs052	Kaarthikeyan K		19	36	24	79
	18eucs060	Kowshik K		18	36	36	90
8	18eucs050	Jeganprakash B	Intelligent Customer Segmentation Saas Application	17	36	32	85
	18eucs020	Aswin AR		19	34	28	81
	18eucs061	Kowsik Pirabhu S R		19	36	36	91
9	18eucs003	Ajaay Krishna P	Early Prediction of Disease using Expert Systems	17	38	36	91
	18eucs007	Akhilesh R		19	38	32	89
	18eucs011	Aravind CJ		18	36	24	78
10	18eucs012	Arul Ganeshan S	Distinguishing Reviews Through Sentiment Analysis Using Machine Learning Techniques	18	36	36	90
	18eucs018	Ashwin B		19	36	32	87
	19eucs506	Padmasankar K S		17	36	36	89
11	18eucs036	Gowtham M S	On-Kart Decentralized E-commerce Application through Blockchain	18	36	20	74
	18eucs047	Jawahar P M M		17	36	28	81
	18eucs054	Kartheesan E		18	36	36	90
12	18eucs023	Bala Vigesh C	Secured Retrieval of Encrypted data in Cloud	17	36	28	81
	18eucs024	Balamuruga M		18	36	36	90
	18ucs046	Janani S		18	36	36	90
13	18eucs055	Kausik M	Privacy Assured Clinical data findings in Blockchain	17	36	28	81
	18eucs065	Logeshwaran R R		18	36	36	90
	19eucs505	Mohamed Kamarudeen S		18	36	32	86
14	18eucs019	Ashwin Kumar L	Web-Based Music Genre Classification For Timeline Song Visualization And Analysis	18	36	36	90
	18eucs029	Dheep Kanishk SV		18	36	36	90
	18eucs034	Gokula Krishnan N		18	36	36	90
15	18eucs053	Kanisha R	Predictive Analytics of Crime Data using Supervised and Ensemble Learning Methods	18	36	32	86
	18eucs064	Lavanya R		18	36	28	82
	18eucs068	Madhurusha G		18	36	36	90
16	18eucs002	Adithya Menon S	Survival Analysis of Breast Cancer Using Machine Learning	18	36	24	78
	18eucs038	Hari Varsha		18	36	36	90
	18eucs042	Harish Sanmugam J		18	36	28	82
17	18eucs025	Bavin kumar R	Sentiment Analysis on Book Reviews Using Machine Learning Techniques	18	36	36	90
	18eucs028	Dhanush		18	36	36	90
	18eucs039	Hari Vishal J		18	36	32	86
18	18eucs016	Arunkumar K	Blockchain based government tender allocation in cloud	18	36	36	90
	18eucs022	Balakrishnan S		18	36	36	90
	18eucs066	Madhavan G R		18	36	36	90
19	18eucs059	Kishan S	Stock Market Prognosticate using Machine Learning	18	36	32	86
	18eucs005	Akash S M		18	36	36	90
	18eucs062	Krupa Sugumaran		18	36	36	90
20	18eucs015	Arunaa G T	Identification of Cyber Attack Detection Using D-V Hop Localization	18	36	28	82
	19eucs503	Gokilavani K		18	36	36	90
	19eucs507	Parkavi R		18	36	36	90

21	18eucs014	Arunkumar K.	Identification of Cyber Attack Detection Using D-V Hop Localization	18	36	36	90
	18eucs017	Arunkumar L.		18	36	24	78
	18eucs027	Deepakkumar		18	36	36	90
22	18eucs067	Madhu Bala	Optimal algorithm for Credit Card Fraud detection system	18	36	28	82
	18eucs021	Avinash S		18	36	36	90
	18eucs026	Bhavikk		18	36	32	86
23	19eucs501	Akilan	EEG Based Stress Detection System Using Neural Network	18	36	28	82
	19eucs502	Aravind S		18	36	36	90
	19eucs511	Shrirram R		18	36	36	90
24	18eucs035	Gowtham L	Detecting the security level of various cryptosystems using Machine Models	18	36	32	86
	18eucs006	Akhil S		18	36	32	86
	18eucs801	Sujith Chowdary D		18	36	36	90

Project Coordinator   Head of the Department

Figure 2.50. Sample Project Evaluation

E. Process to assess individual and team performance

Individual:

Performance of the individual team members of the project is assessed at the time of presentation in reviews by considering the following criterions:

· Communication

· Confidence in the project work

· Attainment of individual scope of work

· Overall contribution for the project accomplishment

Team:

Performance of the project team is assessed by considering the following criterions:

· Knowledge of the other members contribution towards the project

· Coordination in consolidating work

· Time management

F. Quality of student projects/Working prototypes

Quality of student projects is evaluated based on the following criteria on Project Rubrics.

- Depth in fundamentals
- Problem identification
- Literature review
- Methodology adopted
- Modern tool usage
- Impact on societal needs as useful products/processes
- Results and Future scope of the work
- Novelty of work
- Team work
- Cost effectiveness and project management
- Employability
- Documentation and Presentation skills
- Publication
- Ability to answer questions.

Best Project Evaluation scheme:

Best Projects of the Department are awarded to the students that outshine well in all the mentioned parameters in the reviews and End semester Examination as well.

Sample Best Projects:

The best projects selected for the Department are shown below:

Academic Year 2021-2022:

Table 2.8 – Best Projects

Sl. No.	Reg. No.	Name	Title
1	18EUCS001	Abishek Ganesh	Cracking captcha using deep learning
	18EUCS008	AkilPrasath R	
	18EUCS051	JeyaPradeepa K	
2	18EUCS084	PREETHI S	A Standalone Application for Effective Education
	18EUCS121	THEOPHILA VAIZ R	
	18EUCS165	ROSHAN RAM R	
3	18EUCS171	Siva Shankar R	AI Based Vociferation Chatbot for Emergency Health Assistance
	18EUCS158	Parvathy Nathan S	
	18EUCS172	Sri Jayanth P	

G. Evidences of papers published / Awards received by projects etc.

Academic Year 2021-2022:

Table 2.8 – Sample Papers Published

Sl. No	Reg. No	Name	Project Title	Conference Name
1	18eucs043	Hasanthi M M	Customer Segmentation Based on Sentimental Analysis	2022 International Conference on Advanced Computing Technologies and Applications (ICACTA)
	18eucs045	Infant Rashmi E		
	18eucs033	Elakkiya R		

2	19eucs513	Srinath C	Asthenopia Eye Detection using Machine Learning Algorithm	2022 Second International Conference on Artificial Intelligence and Smart Energy (ICAIS)
	18eucs122	Thinesh kumar S		
	19eucs510	Shreeja K		
3	19eucs501	Akilan	EEG Based Stress Detection System Using Neural Network	2022 Second International Conference on Artificial Intelligence and Smart Energy (ICAIS)
	19eucs502	Aravind S		
	19eucs511	Shriraam R		

Table 2.9. Project Paper Presentation in Conferences

Sl. No.	Batch	Total Teams	Teams Presented Papers in Conferences	Percentage
1	2017-2021	69	51	73.9%
2	2018-2022	63	47	74.6%
3	2019-2023	48	40	83.3%

Fig 2.51 Paper Publication sample

2.2.4 Initiatives related to industry interaction (10)   Institute Marks : 10.00

To promote Industry Institute Interaction, the following initiatives are being undertaken.

A. Industry supported laboratories

- Signing the Memorandum of Understanding with industries to bring the two sides strategically closer.

- The interaction with Industries has also led to the extension of their support to various laboratories in the development of the Department. Inauguration of Aspire Systems - Centre of Excellence Lab mentioned in Fig 2.52.

- The Institution has MOUs with Aspire Systems, CISCO, Infosys, TCS, Wipro, Pega Systems, etc. to strengthen the relationship with industry. A list of MoUs with the industries are detailed in Table 2.10.

Fig 2.52. Inauguration of Aspire Systems - Centre of Excellence Lab

Table 2.10. List of MoU's

Sl. No.	Active MoU - Industry Name	Benefits
1	Hexaware	- MoU has been signed and Centre of Excellence for JAVA
2	TalentSprint	- Provide exposure to college students on the emerging industry needs.
3	Infosys Springboard	- Enhance the digital skill quotient of students and faculty.
4	Robert Bosch Engineering and Business Solutions Pvt Limited	- For research and innovations on healthcare, energy, etc., - Developing prototypes and setting up laboratories - Empowering Youths.
5	Vuram Technology Solutions Private Limited	- Train students in Full stack automation tool and recruit the eligible students after training.

6	Aspire Systems	• MoU has been signed and Centre of Excellence for JAVA and Dotnet Full Stack development has been launched. • Faculty members are trained under FEED program. • Offering Internship and Full-time employment opportunities to our students
7	Pega Systems	• Gives training in a powerful low-code platform that empowers the worlds leading enterprises to Build for Change. • Provide job opportunities for the students who have successfully trained in their platform.
8	Intain Technologies Pvt Ltd	• MoU has been signed for Blockchain and Data Analytics Offered students will be trained in Blockchain and Data Analytics for providing AI based solutions.
9	Virtusa	• MoU has been signed and Centre of Excellence for JAVA Full Stack development has been launched. • Empower the 5 year integrated Programme M.Tech Computer Science. • Faculty members are trained under TTT (Train The Trainer) program.
10	EYGBS (India) LLP	• Training in Cyber Security Courses.
11	Amphisoft Technologies Pvt. Ltd.	• Faculty Train the Trainer (TTT) program • Improve the quality of hire with high end talent assessment technologies.
12	CloudBull	• Partnered for Training and placement in cloud services.

Students benefitted through MoU with Industries:

• Students are benefitted in terms of internship, industry ready courses, Placement Training and Placement offers mentioned in Table 2.11.

Table 2.11. Student benefitted through MoUs

Industry Name	No. of Students Benefitted

Wipro PRP	278
Virtusa	113
Aspire	86
Hexaware	58
Intain	76
Pega	84
Amphisoft	152
Cloudbull	127
EYGBS (India) LLP	61
Vuram	89
Robert Bosch	79
TalentSprint	93
Iamneo	203

Industry Certification:

- The Department is an active member of Infosys Campus Connect programme and Wipro Talent Next and Future Skills Programme. Certificate for the facultyafter attending the training program is mentioned in Fig. 2.53.

Fig 2.53 Faculty Certificate - Industry Training

- Faculty members are continuously participating in faculty development programs and train the trainer programs conducted by NASSCOM, ICT academy, Wipro, TCS, Infosys and other premier industries. Trained faculty details are given in the below table.

Table 2.12 Trained Faculty Details

S.No	Name of the Faculty	Name of the Program	Certified by
1	Dr. M. Sujaritha	Business Strategy	TCS

2	Dr.K.Senathipathi	Advanced Technology Program-AI/ML	Wipro
3	Dr.M.Kavitha	Java Full Stack Development	Virtusa
		Java Full Stack	Wipro
		Java, SQL and Web Programming	Hexaware
4	Dr.A.Pushpalatha	WIPRO PRP	Wipro
5	Dr.M.Rohini	Java Full Stack Development	Virtusa
		Machine Learning Foundations	AWS Academy
		Cloud Foundations	AWS Academy
6	Ms.S.Nagajothi	Red Hat Certified System Adminstrator I	RedHat
		Python Programming	Infosys
		Train the Trainer Programme (Computer Organization and Architecture)	TCS
		Database management systems	Infosys
7	Ms. A. Priya	TCS - Train the Trainer Programme (Software Design with UML)	TCS
		InfyTQ Python	Infosys
		Principal Component Analysis using Python	TCS
		Train the Trainer Programme (Computational Statistics)	TCS
8	Ms.J.Boopala	Infosys Campus Connect - Agile Methodology	Infosys
		Database management systems	Infosys
9	Dr.N.Kousika	Object Oriented Programming Systems	TCS
		Java Full Stack Development	Virtusa

10.	Ms. Biruntha S	Cloud Foundations	AWS Academy
		Machine Learning Foundations	AWS Academy
11.	Dr. D. Prabha	Machine Learning Foundations	AWS Academy
		Cloud Foundations	AWS Academy

Outcome of Industry supported laboratories:

Industry-supported laboratories encourage collaboration, innovation, and information sharing to close the gap between academia and industry.

The following are the outcomes of Industry supported laboratories:

1. The industry supported laboratories are acting as a centre for innovation, where fresh ideas and cutting-edge techniques are developed and introduced. They assist in commercializing cutting-edge inventions through prototyping and testing the patents, which will benefit both Industry and academia. Patent details mentioned in the following table.

Table 2.13. Patent Details

Academic Year	Count
2022-2023	17
2021-2022	16
2020-2021	9

2. Industry supported laboratories are helping the students in participating in various hackathons. They are extremely important in helping to train and build a highly trained workforce. They improve the practical skills and knowledge of students and making them more employable in the industry by giving them hands-on experience and exposure to industry-relevant projects.

3. Workshops, conferences, and seminars are frequently organized to bring together industry experts, researchers. These events foster knowledge sharing, cooperation, and networking, resulting in the exchange of ideas and the formation of new relationships.

B. Industry involvement in the program design and Curriculum

- Our curriculum and design is as per industry standards based on feedbacks from various stake holders including industry experts and our employers.

- The elective subjects of our curriculum are designed based upon the industry requirement. Expert members from Industry are participating in curriculum development and syllabus design. Industry people involved in curriculum and syllabi design is mentioned in Table 2.14.

Fig 2.54. CSE Department BoS Meeting – 21.12.2022

The below table 2.14 shows the list of industrial experts contacted for revamping curriculum and syllabus of the Department to increase the employability skills of the students in the industries.

Table 2.14. Sample Industrial Experts involved in Curriculum and Syllabi Design

Sl. No	Name	Designation of the Expert	Feedback
1.	20CS902 – Cloud Services and Integration	Mr. Vignesh Jayaraj, Senior Lead - Quality Engineering, Rently. Coimbatore.	• The syllabus seems Interesting and of a good standard. • The syllabus could be delivered to students through practice lab sessions.

2.	21CS603 – Artificial Intelligence	Dr. Karthikeyan Narayanasamy, Software Engineer, Infobell IT Solutions Pvt., Ltd, Bangalore-560045	• Overall, the syllabus, split up into modules and covering the contents of both syllabuses, is really good and well structured. • Case study topics were good and impressive. • In 21CS605, it covers all the topics of AI and ML-based exercises, which are useful for the students to update their skills to meet the companys expectations.
3.	21CS915 – Knowledge Management Systems	Mr. S R Karthinivash, Quality Analyst, Thoughtworks Technologies.	• I think that the syllabus is well-organized and clearly outlines the expectations, goals, and objectives of the course. • I especially appreciate the detailed breakdown of the course topics, assessments, which will help students to stay on track and understand what is expected of them throughout the semester.
4.	22CY401 – Cyber Law and Ethical Hacking	Dr.S.Dhivya, Sr.Data Scientist, Analytics Team, Dun and Bradstreet, Hyderabad.	• Syllabus is comprehensive and well organised, • Covering wide range of important topics.

5.	21CS502 - Computer Networks	Pramila Sekar Integration Manager ATCI.	• The syllabus is well framed. • I suggest adding the topic "Voice and Video over IP" in network layer module.
6.	21CS010 - Serverless Computing	Mr. Vignesh Jayaraj, Senior Lead - Quality Engineering, Rently. Coimbatore.	• The course content and case study topics are good and there are more possible ways to learn and explore.
7.	22CS401 – Theory of Computation	Kakani Jaya Rohith SDE 2, Amazon, Chennai.	• The document that you sent has the good basics that are required in the current market.

C. Industry involvement in partial delivery of any regular courses for students

- Our Department has organized and is continuing to organize several events like workshops, webinars and guest lectures by industry experts for the benefit of the students.

- Using these events, students come to know about the recent trends in industries and other industrial practises.

- These events help the students to bridge the gap between the theory they learn in the classroom and industrial practises.

- A list of events conducted by industrial experts in academic year 2021-2022 is detailed in below table 2.15.

Table 2.15 Sample of events organized in CSE Department

S.No	Title of program	Category	Date	Resource Person	Subject Mapping	Relevance to POs and PSOs
1	Innovation in Computer Vision	Seminar	26.06.2021	Mr.Dhyakesh S, Machine Learning Engineer, Optisol Datalabs, Coimbatore	Artificial Intelligence and Expert Systems	PO 1 to 12 PSO 1 to 3
2	Innovative Applications in Big Data	Seminar	29.06.2021	Ms. Sharadha Murugappan, Senior Software Engineer, Robert Bosch, Coimbatore	Data Ware housing and Data Mining	PO 1 to 6,8,12 PSO 1 to 3

3	Innovation in Cyber Security Domain	Seminar	03.07.2021	Mr. Thulasi Das G, Senior Software Developer, Securden, Inc., Chennai	Data Communication and Networks	PO 1 to 7,12 PSO 1 to 3
4	MERN Stack Development	Seminar	18.09.2021	Mr.M.Manoj Kumar, Zoho Corp, Chennai	Software Engineering and Management	PO 1 to 12 PSO 1 to 3
5	Innovation in Technology – The Drive for a new kind of Data Warehousing	Seminar	14.02.2022	Mr. Balaji S, Data Engineer, Freo, Bengaluru	Data Analytics	PO 1 to 8, 10 to 12 PSO 1 to 3
6	Role of Creative minds in industries as an Innovators	Seminar	14.02.2022	Mr.Sanjaydeep G Software Development Engineer, Blackboard Inc, Chennai	Design and Analysis of Algorithms	PO 1 to 6, 8 to 12 PSO 1 to 3
7	Innovation in Technology -Codeless Data Science	Seminar	05.03.2022	Dr. D.Sudharson, Data Engineer, Forge, Coimbatore	Data base Management Systems	PO 1 to 3,5,6,12 PSO 1 to 3
8	Innovation in Technology - Spring Boot Framework	Seminar	05.03.2022	Ms. S. Subhasri, Senior Software Engineer, Rakuten, Bangalore	Web Technology	PO 1 to 7,12 PSO 1,3
9	Recent Trends & Innovation in Natural Language Processing	Seminar	13.05.2022	Dr.S.Dhivya, Senior Data Scientist, Dun & Bradstreet Technologies, Chennai	Theory of Computation	PO 1 to 6,12 PSO 1 to 3
10	Web 3.0 Metaverse Innovations and new Digital Economy	Seminar	19.5.2022	Mr.S.Thineshkumar, Software Development Engineer, Sirius	Virtualization and Cloud	PO 1 to 12 PSO 1 to 3

- Industry personnel mentoring the student teams who are competing in any national or worldwide hackathons like Smart India Hackathon, UNESCO INDIA AFRICA Hackathon, HACK HARVARD etc.

Table 2.16. Sample Industry Mentor Details

Sl. No.	Hackathon Mentors	Hackathon
1.	Mr.B.Shameer Odessa technologies Bangalore	Smart India Hackathon 2022, Electhon 23, Smart Pune Health Hackathon, Impractical Hackers 2 Hackathon, Tech-a-Thon 2.0
2.	Mr.Praveen T Software Engineer Trimble Chennai	Script4her Hackathon, Smart India Hackathon 2019, Kurinji Hacks
3.	Mr.Abhishek Ganesh Software engineer Mr.Cooper Chennai	Smart India Hackathon 2022
4.	Mr.Arul Ganeshan Software engineer Accenture Chennai	Smart India Hackathon 2022
5.	Mr. Suganth Phonitags, Coimbatore	Smart India Hackathon 2022
6.	Mr. Aditya Menon, Cyber Security Specialist, University of Maryland	Darkathon 2022, Smart India Hackathon 2022
7.	Mr. Harish Shunmugam Data Science Specialist, Saama Technologies, Chennai.	Taiwan Presidential Hackathon
8	Mr. J.Pechimuthu, Software Engineer, Fourkites, Chennai	Smart India Hackathon 2022

	Mr. K. M. Keerthi Raajan,	
9	Zoho, Chennai.	Reva Hacks

- Industry experts are delivering course contents using block teaching approach which integrates theretical and practical learning of the course. A block teaching environment is shown in Figure 2.55.

Fig. 2.55. Block teaching Approach

D. Impact analysis of industry institute interaction and actions taken thereof

Organizing workshops, conferences with joint participation of the Department and the industries enabled strong relationship and good technical skills.

- MOU signed with industries have resulted in the increase of the following entities mentioned in Table 2.17:
    - Internship
    - MoU
    - Faculty Development Programme
    - Workshops for students

Table 2.17 Impact Analysis

Sl. No	Type of Interaction	Total (2020-2023)	Impact
1	Expert Lectures (Events)	103	- Exposed to various new technologies in the field of computer science and help students in selecting their area for doing industry projects

2	MoU (Companies)	12	• Industry driven curriculum is framed. • Internships and Placements • Received Projects and Consultancy. • Faculty trained in industry environment.
3	Industrial Projects (Batches)	41	• Solutions to real time applications. • Offered job Opportunities • Internships offered • Exposed to industry work environment • Team management skill is improved
4	Industry Connect (Faculty)	132	• Train the Trainer Program • Contact with industry experts to design curriculum and inviting them to give guest lectures • Industry Certification
5	Curriculum Revamping	86	Industry professionals ensure that the curriculum is appropriate, effective, and in compliance with the POs, PSOs and requirements of the students, society, and the ever-evolving industry standards.
6	Hackathon Guidance	12	Industry personnel guide the students teams for participating in various hackathons.

2.2.5 Initiatives related to industry internship/summer training (10)

Institute Marks : 10.00

A.1. Industrial training/tours for students

As a part of the educational curriculum, students are encouraged to identify and arrange industrial visits based on their core subject of interest for the selection of companies. They are done with proper guidance from faculty members and the procedures for applying for permission are arranged by the college. Once the permission is obtained, the initiative process for visiting industries is executed. After completing the industrial visit, all students are expected to submit a detailed report on their learning obtained from the outcomes of the industrial visit.

Table 2.18 Industrial visit by Students

AY 2021-2022				
Class	**Industry Visited**	**Date of visit**	**Subject Mapping**	**Relevance to POs and PSOs**
III CSE A, B & C	ITI Limited, Bangalore	08.04.2022	Data Communications and Computer Networks	PO 1 to 7,12 PSO 1 to 3
II CSE A, B & C	ATS Global Techsoft Pvt Ltd.	24.02.2022	Software Engineering and Management	PO 1 to 12 PSO 1 to 3

AY 2022-2023				
Class	**Industry Visited**	**Date of visit**	**Subject Mapping**	**Relevance to POs and PSOs**
II CSE A, B & C	Payoda Technologies, Coimbatore	03.11.2022	Web Development using React	PO 1 to 7, 9 to 12 PSO 1 to 3
III CSE A, B & C (Entrepreneurship Awareness Camp)	Best Engineers Pumps, Coimbatore.	14.10.2022	Microcontrollers and Embedded Systems.	PO 1 to 3, 5 to 12 PSO 1 to 3

Fig 2.56 Snapshots of Industrial Visits

- Emurgo is a blockchain company that focuses on the adoption and integration of blockchain technology. A total of 36 students received training from Emurgo. It covered all aspects of blockchain development, deployment, and management. Hands-on projects and assessments are included in this training. Successfully trained students are offered internship opportunities in Emurgo.
- "Tech for All" is an initiative of the Cognizant Foundation, which is a commendable program that focuses on promoting digital literacy, skill development, and inclusivity in technology, specifically for women. The partnership with ICT Academy and the support from the Cognizant Foundation contribute to the offering of free certificate programs.
- Microsoft Azure AI and Microsoft Data Analyst Associate are valuable certificate programs in the field of technology. These programs equip female students with the necessary skills and knowledge to excel in the industry. By fully sponsoring these certificate programs, the Cognizant Foundation is making them accessible to women students who may not have had the financial means to pursue such training otherwise. Also, the program aims to provide opportunities for employment and career advancement in the technology sector. This further strengthens the programs objective of empowering women and facilitating their entry into the tech industry. A total of 55 students have benefited from this training program.

Name of the Training	Industry	Count
Emurgo Blockchain Training	EMURGO Learning Solutions Private Limited	11
Microsoft Azure AI Solution	Cognizant Foundation	32
Microsoft Data Analyst Associate	Cognizant Foundation	23

Table 2.19. Inplant Training

Sl. No.	Batch	Number of Inplant Training
1	2017-2021	200
2	2018-2022	190
3	2019-2023	188

A.2. Internship

- The students are encouraged to take up internship/industrial training programs during their semester break. Also, some of the final year students are encouraged to do their project works along with internship in eighth semester.

- Faculty members help the students by providing the students with recommendation letters, interacting with the industrial experts, and other necessary supports.

Sl. No.	Academic Year	Number of Internship/Inplant Training
1	2020-2021	135
2	2021-2022	223
3	2022-2023	256

Table 2.20. Internship with Stipend

Sl. No.	Batch	Number of Internship with Stipend
1	2017-2021	34
2	2018-2022	51
3	2019-2023	98

Following Table presents the details of students' internships for the Academic Year 2022-2023.

S. No	Name of the Student	Register Number	Company	Intern Stipend	Duration/Starting Date
1	Deepika T	727721EUCS023	Amazon	35K	12.06.2023 - 04.08.2023
2	ASWATHY H	20EUCS019	AICTE	5K	13.06.2022 - 30.09.2022
3	JEBA REGAN RAJ B	19EUCS053	Striim	40K	04.04.2022 to 31.03.2023
4	BINESH J	19EUCS024	Striim	40K	04.04.2022 to 31.03.2023
5	JAYANTH C R	19EUCS049	Informatica	15K	07.04.2022 - May 2022
6	ACHYUTH PRAMOD	19EUCS003	IBM	15K	07.04.2022 - May 2022
7	DHARUN S	19EUCS029	Zoho	15K	07.04.2022 - May 2022
8	HARI PRASATH P	19EUCS180	Zoho	15K	07.04.2022 - May 2022
9	NIVETHIDHA R V	19EUCS102	Zoho	15K	Apr 2022 - May 2022
10	RENUGA DEVI V	19EUCS115	Quinbay	31K	Apr 2022 - May 2022
11	MADHIVADHANAN B R	19EUCS076	Zoho /TCS Ninja	15K	Apr 2022 - May 2022
12	MOHAMMED SAFWAN S	19EUCS088	Zoho	15K	Apr 2022 - May 2022
13	Harini M	19EUCS039	Inai	25k	July 2022 -one yr
14	HARESHVAR A R	19EUCS037	Purchasing Power	25k	July 2022-one yr
15	DARWESH FAZIL A	19EUCS026	Super ops	25K	May - one yr
16	AVINASH SANTHOSH	19EUCS019	Super ops	20k	May - one yr
17	HEMAHARINI S M	19EUCS045	QuinBay	31K	July - 10 months
18	Harish S	19EUCS042	DOCPROS	USD$200	25.04.22-25.10.22
20	KISHORE RAJ D	19EUCS065	Zoho	15K	Apr 2022 - May 2022
21	PRANESH S	19EUCS107	Hewlett Packard Enterprise	30K	01-07-2022
22	RAAJEEV CHANDRAN S	19EUCS112	Hewlett Packard Enterprise	30K	01-07-2022
23	SAMUEL WYCLIFFE J	19EUCS117	Hewlett Packard Enterprise	30K	01-07-2022
24	Mohamed Afsal S	19EUCS086	Quinbay	31K	01-07-2022
25	Madhumitha N	19EUCS077	Open Text	15K	6 months
26	MARTINA ROMISHA D	19EUCS081	Open Text	15K	4th july 2022
27	Mohanapriya R	19EUCS092	Open Text	15K	4th july 2022
28	Muthukumaran M	19EUCS096	Open Text	15K	4th july 2022

Industry Visited by faculty:

- Department has cordial collaborations with industries for internship and summer training.
- Faculty members frequently have visited the industries for the same
- A list of some industrial units/companies visited by faculty membersis given in Fig. 2.45.

Fig 2.57 Industry Connect - Interaction of our respected Chairperson madam and Dr. J.Janet, Principal, SKCET, With Prof. Anil Sahasrabudhe, AICTE Chairman along with Shri. Madhavan Seshadri, Senior Vice President, Virtusa Corp and Shri. Krithivasan S, HR Team, Lead India Campus Hiring, Virtuasa Corp on formulation of Industry powered programme.

Fig 2.58 Industry Connect - Prolific Corporate Connect was spearheaded by our Principal Madam Dr.J.Janet at the corporate premises of Matrix Telecom & Security company, Vadodara, Gujarat. Along with Dr. J.P. Ananth CoE, Dr. JayasudhaSubburaj, Placement Officer. Principal Madam presented the Institutional highlights and strongly showcased the unique talent pool of SKCET.

Fig 2.59 Industry Visited by Faculty - Dr. JayasudhaSubburaj, Placement Officer and Dr. K. Senathipathi, Associate Professor, CSE visited WIPRO Bangalore regarding Wipro PRP and Future Skills programme.

B. Industrial /internship /summer training of more than two weeks and post training Assessment

Process for Internship/Inplant Training:
- Students are notified about internship and industrial training opportunities via email or WhatsApp group and encouraged to apply.
- Once a student secures an internship or industry training offer, they seek approval from the department. This involves submitting the following details, such as the duration, mode of internship, location and responsibilities.
- During the internship or training period, students are expected to perform their duties and learn from the experience.
- After completing training, industrial training or internship reports are produced and presented in college for mapping to the employability course in the curriculum.

Fwd: List of Selected Student Team Members for attending the IDE Bootcamp: 22 June,2023 -26 June ,2023

1 message

Majidha Fathima K M <majidhafathimakm@skcet.ac.in>   Fri, May 12, 2023 at 9:18 AM
To: Mohan Kumar P <mohankumarp@skcet.ac.in>

pfa sir

---------- Forwarded message ---------
From: **All India Council for Technical Education(no-reply)** <admin@aicte-india.org>
Date: Thu, 11 May 2023 at 22:49
Subject: List of Selected Student Team Members for attending the IDE Bootcamp: 22 June,2023 -26 June ,2023
To: <majidhafathimakm@skcet.ac.in>

Dear Sir/Madam

PFA the list of selected student team members along with the allocated center for attending the Innovation design and Entrepreneurship (IDE) bootcamp ,which is rescheduled to **22 June,2023 -26 June ,2023** .The participants should preferably report to the venue on **21st June evening** so that bootcamp can be started with in scheduled time on **22nd June**.The detailed schedule is also attached for your reference.Only those persons whose name in the attached list will be allowed to participate. Accommodation(with food) will be provided to all the participants on a double sharing basis at the venue's Hostel/Guest House as per the availability.Please carry proper Identity Card with you.

Note:
We still have few seats left for the student teams for the IIT Guwahati Center.The selected participants should motivate their fellow students(Team Leaders) who are interested to join the bootcamp for the IIT Guwahati Location .These candidates(If selected) will be informed separately(Last date to apply :16 May,2023 at the link given below)

https://forms.gle/SzVQWgenPzknVKof8

PFA: https://drive.google.com/file/d/1O4ZuqABdbg2Rg_FAGqKw288OAyirHzms/view?usp=share_link

PFA: https://drive.google.com/file/d/1G6gh_kPa7pfZPA7b77M-km7_nfU3wJ_L/view?usp=share_link

with regards
IDE Boot Camp Coordination Team
MoE's Innovation Cell (MIC)

16	Priyadarshini U	Female	TIED-UP	SRI KRISHNA COLLEGE OF ENGINEERING AND TECH
17	Naveen M	Male	TIED-UP	SRI KRISHNA COLLEGE OF ENGINEERING AND TECH
18	Prithika Andrea Angelina F	Female	ADxMARK	Sri Krishna College of Engineering and Technology
19	Sakthivel J K	Male	Team Persistent	Sri Krishna College of Engineering and Technology
20	Muthuvel S	Male	MECHLORDS	Sri Krishna College of Engineering and Technology
21	Nagasundar N	Male	ADxMARK	Sri Krishna College of Engineering and Technology
22	Saran S A	Male	Team Persistent	Sri krishna College of engineering and technology
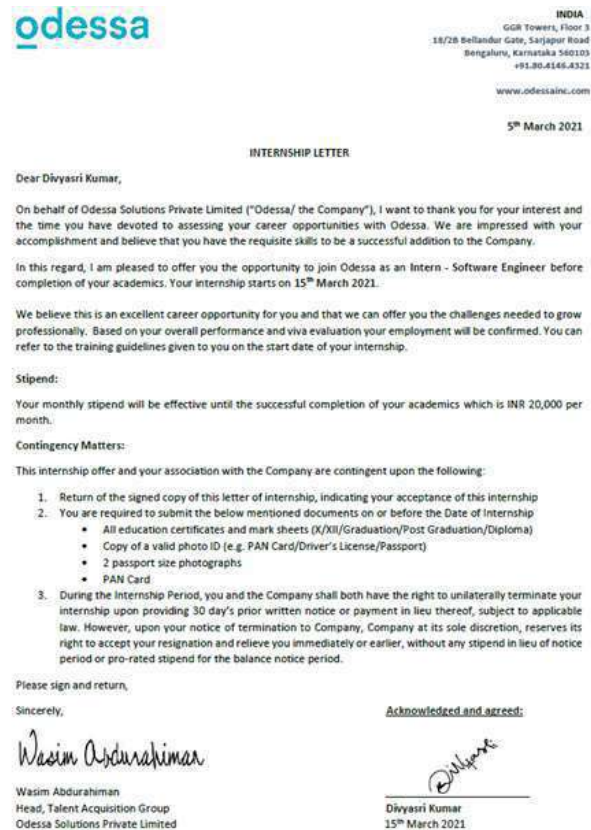
Fig 2.60. Sample Internship Certificate

C. Impact analysis of industrial training

The following are the impact analysis observed on industrial visit by faculty members and internship undergone by students:

- The faculty members' visit to Industry has increased internship opportunities and placement for the students.
- Students understand the industrial practices and organizational hierarchy during industrial visits.
- Industrial training provides opportunities for active/interactive learning experiences outside classroom environment in addition to casual classroom learning.
- Student's exposure to the latest hardware and software in Industry enriches their knowledge and project development skills like leadership quality, time management and team work.
- After the completion of the Internship, students give a talk on Industrial ambience and practical knowledge which motivates the fellow students to undergo an internship.

D. Student feedback on initiative

- After industrial training, every student submits feedback about their training program and internships.
- The feedbacks obtained from the students are used effectively in strengthening the industrial relations of the Department and serves as a guideline for the junior students.
- Feedback on the courses provided is discussed in tutor ward meetings, class committee meetings, and course end surveys for further improvement.
- After every event, including guest lectures, seminars, and workshops, feedback is gathered to improve the quality of future events.
- Sample feedback cited in Fig 2.61.

Fig 2.61 Sample Feedback

Table 2.21 Impact Analysis

Sl. No.	Type of Interaction	Total (2020-2023)	Impact

1	Industrial Visits	423 Students	• Mapped with the courses to have practical knowledge on the process • Industry real time exposure • Understood engineer's responsibility in the industry environments like time management, Industry hierarchy structure, responsibility and corporate culture.
2	Industrial Projects	41 Batches	• Solutions to Real-time applications • Offered job opportunities • Internship offered • Exposed to industry work environment • Team management skill is improved.
3	Internships/ Inplant Training	761 Students	• Real-time training related to their course • Exposed to current technological innovation • Improved Higher order thinking
4	Hackathons	169 Teams	Help the students to win the national and international hackathons.

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (175)   Total Marks 175.00

Define the Program specific outcomes

:

PSO1	Apply the fundamental knowledge for problem solving and analysis as well as conduct investigations in computer science and engineering for sustainable development
PSO2	Design and develop the solutions for real time problems and implement them by using modern software tools in lieu of deploying them in the society for its growth.
PSO3	Communicate effectively, adopt ethics and engage in life-long learning.

3.1 Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (25)   Total Marks 25.00

Institute Marks : 25.00

No. of Core Courses : 6	C2 : 3	C3 : 2	C4 : 1

Note : Number of Outcomes for a Course is expected to be around 6.

Course Name :	C2 01	Course Year :	2019-2020

Course Name	Statements
C2 01.1	Examine the basic features of Object Oriented programming paradigm such as classes, objects, and constructors
C2 01.2	Illustrate the arrays, strings, access specifier and static member concepts
C2 01.3	Employ overloading, over riding and inheritance in real time applications
C2 01.4	Administer packages, exception handling and file handling in Java
C2 01.5	Operate multithreading and database connectivity

Course Name :	C2 02	Course Year :	2019-2020

Course Name	Statements
C2 02.1	Describe data models and DBMS architecture
C2 02.2	Demonstrate relational query languages and SQL using open source and commercial databases
C2 02.3	Illustrate different normal forms to design the relational database
C2 02.4	Illustrate query processing, query optimization techniques and basic database storage structures
C2 02.5	Analyze transaction management system, database security and the basics of advanced databases.

Course Name :	C2 03	Course Year :	2019-2020

Course Name	Statements
C2 03.1	Estimate the time and space complexities of recursive, non-recursive and brute force algorithms
C2 03.2	Illustrate the efficiency of decrease and conquer & divide and conquer algorithms
C2 03.3	Apply the dynamic programming and greedy approaches to solve computing problems.
C2 03.4	Interpret backtracking, branch and bound and approximation algorithms
C2 03.5	Write efficient algorithms for solving various problems

Course Name :	C3 01	Course Year :	2020-2021

Course Name	Statements
C3 01.1	Construct a Finite Automata and Regular expression for a Regular language
C3 01.2	Construct a Grammar and Push Down Automata for a Context Free language

C3 01.3	Apply pumping lemma to Regular Languages and Context Free Languages
C3 01.4	Interpret the properties of Regular Languages and Context Free Languages
C3 01.5	Construct a Turing Machine for a recursive language

Course Name :	**C3 02**	**Course Year :**	**2020-2021**

Course Name	Statements
C3 02.1	Describe the characteristics of cloud infrastructure and Virtualization
C3 02.2	Demonstrate the virtual data center's functionalities and cloud computing.
C3 02.3	Apply configuration procedures to implement virtual data center environment
C3 02.4	Interpret cloud infrastructure management services, storage and security policies.
C3 02.5	Deduce the Next generation technologies and Cloud API.

Course Name :	**C4 01**	**Course Year :**	**2021-2022**

Course Name	Statements
C4 01.1	Build IoT systems using Raspberry Pi, Arduino, Node MCU on Embedded Platform.
C4 01.2	Relate the market perspectives on Internet of Things
C4 01.3	Examine the application of IoT in Industrial Automation and identify the Real-World Design Constraints.
C4 01.4	Demonstrate the integration of next generation technologies with IOT
C4 01.5	Design IoT applications in different domains and analyze their performance

Course Articulation Matrix :

1 . course name : C201

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201.1	Examine th	3	-	-	-	-	-	-	-	-	-	-	-
C201.2	Illustrate the	3	-	-	-	-	-	-	-	-	-	-	-
C201.3	Employ ove	3	3	3	2	2	2	1	-	1	2	-	2
C201.4	Administer	3	-	-	-	-	-	-	-	-	-	-	2
C201.5	Operate mu	3	-	2	-	-	2	1	-	1	2	-	2
Average		**3.00**	**3.00**	**2.50**	**2.00**	**2.00**	**2.00**	**1.00**	**0.00**	**1.00**	**2.00**	**0.00**	**2.00**

2 . course name : C202

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C202.1	Describe da	3	2	2	-	-	-	-	-	-	-	-	2
C202.2	Demonstrat	3	2	2	-	-	-	-	-	-	-	-	2
C202.3	Illustrate dif	3	2	3	-	-	-	-	-	-	-	-	2
C202.4	Illustrate qu	3	2	3	-	2	2	-	-	-	-	-	2
C202.5	Analyze tra	3	2	2	-	2	2	-	-	-	-	-	2
Average		**3.00**	**2.00**	**2.40**	**0.00**	**2.00**	**2.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.00**

3 . course name : C203

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C203.1	Estimate th	3	2	2	-	-	-	-	-	-	-	-	2
C203.2	Illustrate the	3	2	3	-	-	-	-	-	-	-	-	2
C203.3	Apply the d	3	3	3	3	3	2	-	-	-	-	-	2
C203.4	Interpret ba	3	2	3	2	2	-	-	-	-	-	-	2
C203.5	Write efficie	3	3	3	3	3	2	-	2	3	3	2	3
Average		**3.00**	**2.40**	**2.80**	**2.67**	**2.67**	**2.00**	**0.00**	**2.00**	**3.00**	**3.00**	**2.00**	**2.20**

4 . course name : C301

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C301.1	Construct a	3	3	3	-	2	2	-	-	-	-	-	2

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C301.2	Construct a	3	3	3	-	2	2	-	-	-	-	-	2
C301.3	Apply pump	3	3	3	-	-	-	-	-	-	-	-	2
C301.4	Interpret the	3	3	3	-	2	2	-	-	-	-	-	3
C301.5	Construct a	3	3	3	-	2	2	-	-	-	-	-	3
Average		3.00	3.00	3.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	2.40

5 . course name : C302

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C302.1	Describe th	3	2	-	-	-	-	-	1	2	2	-	2
C302.2	Demonstrat	3	3	3	-	-	-	-	-	-	-	-	-
C302.3	Apply config	3	3	3	3	3	3	2	1	2	2	-	3
C302.4	Interpret clo	-	-	-	-	-	-	-	1	2	2	2	2
C302.5	Deduce the	2	3	3	-	3	-	-	1	2	2	-	2
Average		2.75	2.75	3.00	3.00	3.00	3.00	2.00	1.00	2.00	2.00	2.00	2.25

6 . course name : C401

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C401.1	Build IoT sy	3	3	3	3	3	1	2	-	-	1	-	2
C401.2	Relate the r	1	2	1	1	2	-	1	-	1	-	2	2
C401.3	Examine th	1	2	3	3	2	2	2	2	-	1	-	1
C401.4	Demonstrat	3	3	3	3	3	-	2	-	2	1	-	2
C401.5	Design IoT	3	3	3	3	3	-	1	2	2	1	-	1
Average		2.20	2.60	2.60	2.60	2.60	1.50	1.60	2.00	1.67	1.00	2.00	1.60

1 . Course Name : C201

Course	PSO1	PSO2	PSO3
C201.1	1	-	-
C201.2	1	-	-
C201.3	3	1	2
C201.4	1	-	1
C201.5	2	1	2
Average	**1.60**	**1.00**	**1.67**

2 . Course Name : C202

Course	PSO1	PSO2	PSO3
C202.1	2	-	2
C202.2	2	-	2
C202.3	3	-	2
C202.4	2	-	2
C202.5	3	2	2
Average	**2.40**	**2.00**	**2.00**

3 . Course Name : C203

Course	PSO1	PSO2	PSO3
C203.1	3	-	1
C203.2	3	2	-
C203.3	3	2	-
C203.4	3	2	2
C203.5	3	2	2
Average	**3.00**	**2.00**	**1.67**

4 . Course Name : C301

Course	PSO1	PSO2	PSO3
C301.1	3	2	2

C301.2	3	2	2
C301.3	3	-	2
C301.4	3	2	2
C301.5	3	2	3
Average	**3.00**	**2.00**	**2.20**

5 . Course Name : C302

Course	PSO1	PSO2	PSO3
C302.1	3	-	3
C302.2	3	-	2
C302.3	2	3	3
C302.4	2	-	2
C302.5	2	-	2
Average	**2.40**	**3.00**	**2.40**

6 . Course Name : C401

Course	PSO1	PSO2	PSO3
C401.1	3	3	3
C401.2	1	1	-
C401.3	2	3	2
C401.4	2	3	2
C401.5	2	3	2
Average	**2.00**	**2.60**	**2.25**

Program Articulation Matrix   :

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Mathemat	3	3	3	0	0	0	0	0	2	0	0	1
Probability	3	3	3	0	0	1	0	0	2	0	0	2
Principles	2	2	2	0	0	0	0	0	0	0	0	0
Fundamer	3	3	3	0	0	2	0	0	0	2	0	2
Physics fo	2	2	2	0	0	0	0	0	0	0	0	0
Business (	0	0	0	0	0	0	0	2	0	3	0	2
Mandatory	0	0	0	0	0	0	0	0	1	1	0	1
Linear Alg	3	3	2	0	0	0	0	0	2	0	0	2
Python Pro	3	3	3	0	0	0	0	0	1	2	0	2
Engineerir	2	1	1	0	0	2	3	0	1	0	0	0
Electron D	3	3	3	0	0	0	0	0	2	2	0	2
Engineerir	3	2	3	0	2	0	0	0	0	0	0	0
Python Pro	3	3	3	0	2	2	0	1	2	2	0	2
Mandatory	0	0	0	0	0	0	3	0	0	0	0	0
Mathemat	3	2	3	0	0	0	0	0	2	2	0	2
Computer	3	2	3	0	0	0	0	1	2	0	0	2
Data Struc	3	3	3	3	2	2	0	0	0	0	0	2
Object Ori	3	3	3	2	2	2	1	0	1	2	0	2
Digital Prir	3	2	3	0	2	0	0	0	0	0	0	2
Software E	3	2	3	2	3	2	2	2	2	3	3	2
Data Struc	3	3	3	3	3	2	0	0	2	3	2	3
Mandatory	0	0	0	0	0	0	0	0	0	0	0	2
Web Tech	3	3	3	1	2	1	1	0	0	0	0	2
Transform	3	3	3	0	0	0	0	0	2	0	0	2
Database	3	2	3	0	2	2	0	0	0	0	0	2
Design an	3	3	3	3	3	2	0	2	3	3	2	3
Operating	3	3	3	2	2	2	2	2	2	2	0	3
Database	3	3	3	0	3	2	0	2	2	2	2	3
Web Tech	3	3	3	2	3	2	2	2	3	3	2	3
Mandatory	0	0	0	0	0	0	0	0	0	0	0	2
Theory of	3	3	3	0	2	2	0	0	0	0	0	3

Course											
Data Com	3	2	1	1	2	2	2	0	0	0	0	2
Artificial In	3	3	3	3	3	2	2	2	2	1	2	2
Micro cont	3	3	3	0	3	2	2	2	2	2	2	3
Profession	3	3	2	2	1	2	0	1	0	0	0	2
Profession	3	3	2	2	1	2	0	1	0	0	0	2
Computer	3	3	3	3	3	2	2	2	2	2	0	3
Mini Proje	3	3	3	1	3	3	3	3	3	3	2	3
Principles	3	3	3	0	2	0	0	0	0	0	0	3
Data Analy	3	3	3	3	3	3	2	1	0	2	2	3
Virtualizati	3	3	3	3	3	3	2	1	2	2	2	3
Profession	3	3	2	2	1	2	0	1	0	0	0	2
Profession	3	3	2	2	1	2	0	1	0	0	0	2
Open Elec	2	2	2	2	0	2	0	2	1	2	1	2
Compiler I	3	3	3	0	3	2	1	2	3	3	0	3
Computati	2	2	1	2	0	0	0	0	0	0	0	3
Internet of	3	3	3	3	3	2	2	2	2	1	2	2
Profession	3	3	2	2	1	2	0	1	0	0	0	2
Profession	3	3	2	2	1	2	0	1	0	0	0	2
Open Elec	2	2	2	2	0	2	0	2	1	2	1	2
Open Elec	2	2	2	2	0	2	0	2	1	2	1	2
Employab	2	2	3	3	1	1	1	1	3	3	3	3
Project	3	3	3	3	3	3	3	3	3	3	3	3

Course	PSO1	PSO2	PSO3
Artificial In	3	2	2
Business (	0	0	2
Compiler I	3	2	3
Computati	2	1	1
Computer	3	2	3
Computer	3	0	1
Data Analy	3	3	2
Data Com	2	2	2

Data Struc	3	2	2
Data Struc	3	2	2
Database	3	2	2
Database	3	3	3
Design an	3	2	2
Digital Prir	2	3	2
Electron C	2	0	2
Employab	3	1	3
Engineerir	0	0	0
Engineerir	3	1	0
Fundamer	3	0	1
Internet of	3	3	3
Linear Alg	2	0	2
Mandatory	0	0	1
Mandatory	0	0	0
Mandatory	0	0	1
Mandatory	0	0	1
Mathemat	2	0	2
Mathemat	2	0	1
Micro cont	2	2	3
Mini Proje	3	3	3
Object Ori	3	1	2
Open Elec	2	1	2
Open Elec	2	1	2
Open Elec	2	1	2
Operating	3	2	3
Physics fo	2	0	0
Principles	3	1	3
Principles	1	0	0
Probability	2	0	1
Professior	2	2	1
Professior	2	2	1

Profession	2	2	1
Profession	2	2	1
Profession	2	2	1
Profession	2	2	1
Project	3	3	3
Python Pr	3	0	2
Python Pr	3	1	2
Software E	3	2	2
Theory of	3	2	3
Transform	2	0	2
Virtualizati	3	3	3
Web Tech	3	0	2
Web Tech	3	2	3

3.2 Attainment of Course Outcomes (75)   Total Marks 75.00

Institute Marks : 10.00

The step by step process for assessing course outcomes are:

Step 1:   The course coordinator (senior faculty member handling course) analyses each course outcome and identifies the different abilities specified in the outcome and the blooms taxonomy level defined for each ability.

Step 2:   The faculty incharge of the course, defines the capstone model as assessment criteria and fixes their targets, with the guidance of the course coordinator. These information are documented in the course information file and maintained in HoD's office**.**

Step 3:   The course coordinator collects the qualitative and quantitative data and analyzes the collected data. If the assessed data meets the performance targets which are specified in step 2, the outcome is attained. Otherwise, consider Step 4.

 Step 4: The Programme Advisory Committee (PAC) recommends content delivery methods / technical components/ course outcomes / curriculum improvements as needed.
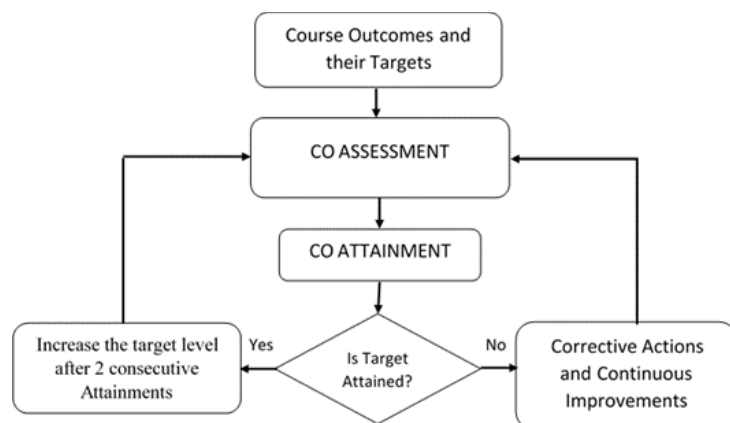
Figure 3.1 CO Assessment Process

There are 53 courses in the curriculum of 2018 batch. In this curriculum, five types of courses with different internal and external assessment criteria are provided. The details are given below:

Table 3.1 Types of Courses and Evaluation Methods

Assessment Tool	External	Internal
Theory course	Semester End- Theory Examination **(50 marks)**	Three CIA **(30 marks)** Capstone Model **(20 marks)**
Theory with lab component	Semester End –Theory Examination **(40 marks)**	Three CIA **(30 marks)** Rubric based Continuous Assessments in Lab **(30 marks)** (Lab observation and Record)
Lab course	Semester End - Practical Examination**(40 marks)**	Rubric based Continuous Assessments in Lab (Lab Observation and Record) **(50 marks)** Model Practical - (Internal Examination) **(10 marks)**

Mandatory course (with Certifications)	-	Internal Assignments
Mini Project / Project	Project Viva - Voce Exam **(40 marks)**	Internal reviews and Documentation **(60 marks)**

The Data Collection methods, Rubrics and Expected Level of attainment for the following types of courses are given in table 3.2:

A.   Theory Course

B.   Lab Course

C.   Theory cum Lab

D.   Miniproject/ Project

Table 3.2 The Data Collection methods, Rubrics and Expected Level of attainment for four types of courses

A. **THEORY COURSE**			Expected Level of Attainment: 70%		
Tools	**Criteria**	**Number of times**	**Data Collection methods**	**Marks**	**Overall Weightage in COs**
DAT	Continuous Internal Assessments	3	Answer Scripts	30	80%
	Capstone Model (Seminar / Technical Presentation / Tutorial (Analytical subjects) /Assignments / Coding / Mini Project / Group Discussion / Field work / Case study / Technical Quiz)	2 to 4	Program/Algorithm /Document /Assignment outcome /working model/video	20	
	End Semester Examination			50	
IAT	Course End Survey				20%
B. **LAB COURSE**		Expected Level of Attainment: 70%			
Tools	**Criteria**	**Number of Exercises**	**Data Collection methods**	**Marks**	**Overall Weightage in COs**
DAT	Rubric based Continuous Assessment	7 to 10 Lab Exercises	Observation, Record, Viva	60	80%
	End semester practical Exam			40	
IAT	Course End Survey				20%
C. **THEORY WITH LAB COMPONENT COURSES**		Expected Level of Attainment: 70%			

Tools	Criteria	Number	Data Collection Methods	Marks	Overall Weightage in COs
DAT	Continuous Internal Assessments	3	Answer Scripts	30	80%
	Rubric based Continuous Assessment	7 to 10 Lab Exercises	Observation, Record, Viva	30	
	End Semester Exam			40	
IAT	Course End Survey				20%

D. **PROJECT COURSES**			**Expected Level of Attainment: 70%**		
Tools	Criteria	Data Collection Methods	Marks	Overall Weightage in COs	
DAT	Summative Assessment on Continuous Examination	(Review 1; Review 2; Review 3; Mock & Project Report)	60	80%	
	End Semester Project Viva voce Exam		40		
IAT	Course End Survey			20%	

Assessment tools are divided into two categories

·   **Direct Assessment**

·   **Indirect Assessment**

I.   Direct Assessment tools

The direct assessment tools for theory, theory cum lab, practical and project courses are discussed with examples

   Direct Assessment tools for theory courses:

Three internal tests, two to four internal technical assessment components and one end semester examination have been conducted to assess the performance/knowledge obtained by the student through the course. The scheme of evaluation for theory courses consists of three criteria. They are internal test, technical components and end semester exam. The details of these criteria are given below:

These three assessment criteria for theory courses are explained below:

   i.   Internal test:

The monthly test has been conducted for 50 marks. The duration of the test is 1.30 hours. The level of bloom's taxonomy and course outcome are specified for each question. The quality of the question paper is analyzed by the course coordinator and cluster head of the course. The above-said process is verified by the HOD of the department.

Table 3.3 Details of internal test

Objective	To examine the level of knowledge or skill that students have acquired through lectures and materials.
Product	Answer scripts
Frequency	Monthly
Format	Part –A 9 x 2 =18 marks Part –B 2 x 16 = 32 marks Total marks = 50 Duration : 1hour and 30 minutes
Evaluation	Based on correctness of answers given in the scripts
Expected level of attainment of CO	70%
Criteria	Pass mark – 50%. If the students fail to get pass mark, remedial action will be taken. Minimum pass percentage to be obtained by the course incharge: 70%

A sample question paper and its scheme of evaluation (rubric) for Design and Analysis of Algorithms course is given to indicate the pattern and the quality of this tool.

Figure 3.2 A sample Question paper

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY
(An Autonomous Institution and affiliated to Anna University, Chennai)
Kuniamuthur, Coimbatore - 641 008

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
18IT401 – DESIGN AND ANALYSIS OF ALGORITHMS
CONTINUOUS INTERNAL ASSESSMENT –III
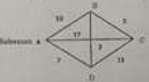
Date : 21-3-2020
Duration : 1.30 Hours   Semester : 04
Max. Marks : 50 Marks

Course Outcomes	
C401.1	Estimate the time and space complexities of recursive, non-recursive and brute force algorithms
C401.2	Illustrate the efficiency of decrease and conquer & divide and conquer algorithms
C401.3	Apply the dynamic programming and greedy approach to solve computing problems.
C401.4	Interpret backtracking, branch and bound and approximation algorithms
C401.5	Write efficient algorithms for solving various problems.

	PART A (Answer all questions) (9 X 2 = 18)	BT	CO	MARKS
1	For the given subset S= { 1, 3, 7, 9, 13}, draw the state space tree for the subsets, whose sum will be equivalent to d= 13.	AP	C401.4	2
2	Define Hamiltonian cycle and give the approaches through which it can be solved?	U	C401.5	2
3	Justify why 2-Queens problem is unsolvable?	AP	C401.5	2
4	What are the additional items required for branch and bound compared to backtracking technique?	U	C401.4	2
5	Give a template of a generic backtracking algorithm	U	C401.4	2
6	Find the accuracy ratio for the given traveling salesman problem using nearest neighbor approach.	AP	C401.4	2
7	State the reason for terminating search path at the current node in branch and bound algorithm	A	C401.4	2
8	Define vertex cover problem and give the approximation algorithm for solving it.	R	C401.4	2
9	An NP Hard problem can be solved in deterministic polynomial time, how?	A	C401.5	2

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	PART B (Answer all the questions) (2 X 16 = 32)	BT	CO	MARKS
10	i) Find the solution for the assignment problem given below:	AP	C401.5	8

	Job1	Job2	Job3	Job4
Person 1	4	3	8	6
Person 2	5	7	2	4
Person 3	16	9	3	1
Person 4	2	5	3	7

		BT	CO	MARKS
	ii) Describe in detail about P and NP complete problems	R	C401.5	8
11	i) Apply the branch and bound algorithm to solve the traveling salesman problem for the following graph.	AP	C401.4	8
	ii) i) Device an algorithm to compress the given text using Huffman coding with greedy technique. Also construct a Huffman tree for the following data and obtain its Huffman code	AP	C401.3	8

Character	A	B	C	D	E
Probability	0.13	0.35	0.05	0.1	0.3	0.05

ii) Encode the text DAD_BE using the obtained code

Faculty In-Charge   Cluster Head   HoD

Figure 3.3 A sample Scheme of Evaluation

ii) Technical Components:

   Apart from the internal tests there are ten other components to evaluate the performance of the students in the course. They are:

   1. Assignment
   2. Tutorial
   3. Technical Quiz/Test
   4. Seminar
   5. Technical Presentation
   6. Coding
   7. Case study
   8. Group Discussion
   9. Miniproject
  10. Field work

Table 3.4 The significance and details of Capstone Model

Assignment	Objective	To enhance students understanding of a particular reading
	Product	Program/Algorithm/Document/Assignment outcome
Tutorial	Objective	To gain thorough knowledge in the analytical courses by working out more problems
	Product	Solutions to different types of Analytical problems
Technical Quiz/Test	Objective	To measure knowledge, abilities and skills.
	Product	Script for Questions and Answers
Seminar	Objective	To train students with good scientific and engineering breadth through self learning
	Product	Awareness on Recent trends
Technical Presentation	Objective	To develop an ability to visualize and work on multi-disciplinary tasks
	Product	Independent thinking and creativity
Coding	Objective	To improve the coding skills for syntax and logical correctness
	Product	Program sheets
Case study	Objective	To use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.
	Product	Document or working model
Group Discussion	Objective	To make the students effectively communicate on complex engineering and social activities at large.
	Product	Peer to Peer Communication
Miniproject	Objective	To demonstrate knowledge and understanding of a particular course by applying the techniques/methods to one domain issue for solution
	Product	Project Document/Report
Field work	Objective	To understand the impact of the professional engineering solutions in real time with societal and environmental contexts and demonstrate the knowledge towards need for sustainable development
	Product	Document or Spreadsheet

Rubrics for Capstone Model/ Lab Components:

Course outcome/ PO specific rubrics are designed to evaluate the attainment of COs/POs and the key elements in the PO are treated as performance criteria and their attainment are evaluated in percentage.

Assessment is done for 5 or 10 marks with the following weight age:

Table 3.5 Rubrics for Capstone Model

Criteria	Scale
Understanding the Problem Statement	20%
Application of correct problem solving techniques to the selected task	30%
Content originality	20%
Quality of the solution	30%

Figure 3.4. A sample rubrics for lab Component

iii) End Semester Theory examination:

Table 3.6 Details of Semester End Exam

Objective	To examine the level of knowledge or skill students have acquired throughout the semester.
Product	Answer scripts
Frequency	Once in a semester
Format	Part –A 10 x 2 = 20 marks Part –B 5 x 16 = 80 marks Total marks = 100 Duration : 3hours

Evaluation	Based on correctness of answers given in the scripts as per the scheme of evaluation and answer key for detailed evaluation
Expected level of attainment of CO	70%
criteria	Pass mark – 50% If the students fail to get pass mark, arrear exams will be conducted once in a semester.

Course end survey: Course end survey is conducted at the end of the semester by the faculty in-charge of the course. The survey questions are aligned with course outcomes and used to assess the attainment of course outcomes.

Table 3.7 A sample CIA Attainment calculation sheet for an Internal test

SRI KRISHNA COLLEGE OF ENGINEEIRNG AND TECHNOLOGY, KUNIAMUTHUR, COIMBATORE - 641 008														
CONTINUOUS INTERNAL ASSESSMENT I														
Total Number of Students				71					Appeared		69			
S.No	Register Number	Q1 (2)	Q2 (2)	Q3 (2)	Q4 (2)	Q5 (2)	Q6 (2)	Q7 (2)	Q8 (2)	Q9 (2)	Q10 (16)	Q11 (16)	TEST SCORE (50)	TEST SCORE (100)
	Mapping with CO	C401.1	C401.1	C401.1	C401.1	C401.1	C401.1	C401.1	C401.1	C401.1	C401.1	C401.5		
1	18EUCS001	2	2	2	2	2	2	2	2	1	12	10	39	78
2	18EUCS002	0	0	2	2	0	0	2	0	0	10	0	16	32
3	18EUCS003	2	2	0	2	0	2	0	0	0	0	11	19	38
4	18EUCS005	2	2	2	2	2	2	2	2	2	10	12	40	80
5	18EUCS006	2	0	0	0	0	2	0	2	2	0	0	8	16
6	18EUCS007	2	2	2	2	2	0	0	0	2	10	10	32	64
7	18EUCS008	2	2	2	2	2	2	2	2	2	10	11	39	78
8	18EUCS009	2	2	2	2	2	0	0	2	2	10	11	35	70
9	18EUCS010	0	2	2	2	0	0	0	0	1	0	0	7	14
10	18EUCS011	2	2	2	2	2	2	2	1	1	10	0	26	52
11	18EUCS012	0	0	0	0	0	0	0	1	2	0	0	3	6
12	18EUCS013	2	2	2	2	2	0	0	0	0	10	10	30	60
13	18EUCS014	0	0	0	0	0	0	0	0	0	0	0	0	0
14	18EUCS015	2	2	2	2	2	2	2	2	2	15	14	47	94
15	18EUCS016	2	1	2	1	1	2	2	2	2	12	11	38	76
16	18EUCS017	2	2	2	2	2	0	0	0	0	2	0	12	24
17	18EUCS018	2	2	2	2	2	2	0	0	0	0	1	13	26
18	18EUCS019	2	2	2	2	2	2	2	2	2	7	0	25	50

19	18EUCS020	2	2	2	2	2	2	2	2	2	15	12	45	90
20	18EUCS021	2	2	2	2	2	2	2	2	2	13	14	45	90
21	18EUCS022	2	2	2	2	2	2	2	2	2	11	12	41	82
22	18EUCS023	2	2	2	2	2	2	0	0	2	0	11	25	50
23	18EUCS024	2	2	2	2	2	2	2	2	2	14	14	46	92
24	18EUCS025	2	2	2	2	2	0	0	0	1	0	0	11	22
25	18EUCS026	2	2	2	2	2	0	2	2	2	10	12	38	76
26	18EUCS027	2	2	2	2	2	2	2	0	0	0	11	25	50
27	18EUCS028	2	2	2	2	2	2	2	2	2	14	11	43	86
28	18EUCS029	2	2	2	2	2	2	2	2	2	12	10	40	80
29	18EUCS030	2	2	2	2	2	2	2	2	2	11	12	41	82
30	18EUCS031	2	2	2	2	0	2	2	2	2	10	10	36	72
31	18EUCS032	2	2	2	2	2	2	2	0	0	0	11	25	50
32	18EUCS033	2	2	2	2	2	2	2	2	2	14	12	44	88
33	18EUCS034	0	2	2	2	2	2	0	2	2	10	10	34	68
34	18EUCS035	0	0	0	2	0	2	1	2	2	0	0	9	18
35	18EUCS036	2	0	2	2	2	2	2	2	2	11	10	37	74
36	18EUCS037	0	1	2	2	2	0	0	2	0	0	0	9	18
37	18EUCS038	2	0	0	0	0	0	0	2	2	0	0	6	12
38	18EUCS039	0	0	0	0	0	0	0	0	0	0	0	0	0
39	18EUCS040	2	2	1	0	0	0	0	0	0	10	0	15	30
40	18EUCS041	0	0	0	0	0	0	0	0	0	0	0	AB	AB
41	18EUCS042	2	2	2	2	2	0	2	0	0	0	0	12	24
42	18EUCS043	2	2	2	2	2	2	2	2	2	12	12	42	84
43	18EUCS044	0	0	0	0	0	0	0	0	0	0	0	AB	AB
44	18EUCS045	2	2	2	2	2	2	2	2	2	15	15	48	96
45	18EUCS046	2	2	2	2	2	2	2	2	2	14	13	45	90
46	18EUCS047	2	2	2	2	2	2	2	2	2	10	11	39	78
47	18EUCS049	1	2	2	2	2	2	2	2	2	10	10	37	74
48	18EUCS050	1	0	2	2	2	2	2	2	2	10	10	35	70
49	18EUCS051	0	2	0	0	2	2	2	2	2	10	10	32	64
50	18EUCS052	2	2	2	2	2	2	2	2	2	12	13	43	86
51	18EUCS053	2	2	2	2	2	2	2	2	2	13	12	43	86
52	18EUCS054	2	2	2	2	0	2	2	2	2	10	10	36	72

53	18EUCS055	2	2	2	2	2	2	2	2	2	10	11	39	78
54	18EUCS056	2	2	2	2	2	2	2	2	2	15	14	47	94
55	18EUCS058	0	2	2	2	2	2	2	2	2	0	10	26	52
56	18EUCS059	2	2	1	2	2	2	2	0	0	10	10	33	66
57	18EUCS060	2	2	2	2	2	0	2	2	2	10	10	36	72
58	18EUCS061	2	2	2	2	2	2	2	2	2	12	13	43	86
59	18EUCS062	2	2	2	2	2	2	2	2	2	12	12	42	84
60	18EUCS064	2	2	2	2	2	2	2	2	2	13	12	43	86
61	18EUCS065	0	0	0	0	0	0	1	2	2	10	10	25	50
62	18EUCS066	2	2	2	2	2	2	2	2	2	11	10	39	78
63	18EUCS067	2	2	2	2	2	2	2	2	2	16	15	49	98
64	18EUCS068	1	2	2	2	2	2	2	2	2	12	12	41	82
65	19EUCS501	2	2	1	0	0	0	0	0	0	10	10	25	50
66	19EUCS502	2	2	2	2	0	0	0	0	0	0	0	8	16
67	19EUCS503	2	2	2	0	0	2	2	2	1	11	12	36	72
68	19EUCS505	2	2	2	2	2	2	2	2	2	11	11	40	80
69	19EUCS506	2	0	0	0	0	2	2	2	2	10	10	30	60
70	19EUCS507	2	2	2	2	2	2	2	2	2	16	15	49	98
71	19EUCS511	1	0	0	0	0	2	2	2	0	0	10	17	34
No. of students scores above the expected knowledge level of 70%		54	55	55	56	50	50	48	49	48	51	52		
% of Students scoring above the expected knowledge level		79	80	80	82	73	73	70	72	70	74	76		
Mapping with COs		C401.1	C401.1	C401.1	C401.1	C401.2	C401.1	C401.2	C401.1	C401.1	C401.1	C401.5		
Attainment level of each COs		**5**	**5**	**5**	**5**	**4**	**4**	**4**	**4**	**4**	**4**	**4**		
Course Outcomes		C401.1	C401.2	C401.3	C401.4	C401.5								
Attainment level of each COs		**76.25**	**72**			**76**								
COs Attainment Level Indicator														
% of students scoring above the expected Level		>=80	<=79 to >=70	<=69 to >=60	<=59 to >=50	<=49 to >=40								
Correlation Level		5	4	3	2	1								

Table 3.8 CO Attainment Calculation for Lab Component

SRI KRISHNA COLLEGE OF ENGINEEIRNG AND TECHNOLOGY, KUNIAMUTHUR, COIMBATORE - 641 008												
Rubric Based Continuous Internal Assessment												
Total Number of Students			71				Appeared		71		
S.No	Register Number	Ex.1 (100)	Ex.2 (100)	Ex.3 (100)	Ex.4 (100)	Ex.5 (100)	Ex.6 (100)	Ex.7 (100)	Ex.8 (100)	Ex.9 (100)	Ex.10 (100)	TEST SCORE (30)	TEST SCORE (100)
	Mapping with CO	C401.1	C401.1	C401.2	C401.2	C401.5	C401.3	C401.3	C401.3	C401.4	C401.4		
1	18EUCS001	88	88	90	94	91	96	96	92	94	96	28	93
2	18EUCS002	86	90	86	84	88	87	85	86	84	90	26	87
3	18EUCS003	78	80	76	80	80	82	79	78	80	82	24	80
4	18EUCS005	96	98	97	90	98	96	98	98	97	100	29	97
5	18EUCS006	70	74	75	79	80	84	74	79	76	80	23	77
6	18EUCS007	85	85	88	78	80	80	82	82	84	90	25	83
7	18EUCS008	82	84	83	90	90	90	92	83	89	90	26	87
8	18EUCS009	89	90	94	86	82	89	90	88	92	95	27	90
9	18EUCS010	72	70	76	74	75	74	72	72	75	74	22	73
10	18EUCS011	82	82	80	86	80	88	82	83	83	87	25	83
11	18EUCS012	70	72	70	71	70	72	74	77	78	80	22	73
12	18EUCS013	84	86	85	86	89	85	88	84	88	90	26	87
13	18EUCS014	80	64	66	70	61	62	63	65	67	70	20	67
14	18EUCS015	99	98	100	100	99	100	100	100	99	100	30	100
15	18EUCS016	96	97	97	100	97	98	98	96	99	94	29	97
16	18EUCS017	70	77	76	82	79	80	81	80	84	86	24	80
17	18EUCS018	75	80	76	82	79	80	82	83	80	86	24	80
18	18EUCS019	74	78	78	78	82	80	80	82	83	84	24	80
19	18EUCS020	100	100	99	100	99	100	100	99	99	100	30	100
20	18EUCS021	99	100	100	100	100	98	99	100	99	100	30	100
21	18EUCS022	99	100	100	100	100	98	99	90	90	90	29	97
22	18EUCS023	80	90	80	92	91	94	93	92	96	95	27	90
23	18EUCS024	100	100	99	100	99	100	100	99	99	100	30	100
24	18EUCS025	76	78	80	78	76	78	84	80	84	82	24	80
25	18EUCS026	95	95	98	96	97	96	100	96	96	98	29	97

26	18EUCS027	75	78	76	82	78	76	80	78	84	88	24	80
27	18EUCS028	99	98	100	100	100	100	100	100	99	100	30	100
28	18EUCS029	100	98	100	100	99	100	100	100	99	100	30	100
29	18EUCS030	91	97	99	97	100	93	99	100	100	92	29	97
30	18EUCS031	90	90	90	90	90	90	90	90	90	90	27	90
31	18EUCS032	80	82	86	84	85	85	83	79	83	87	25	83
32	18EUCS033	89	98	94	94	98	99	98	97	100	98	29	97
33	18EUCS034	88	88	92	97	91	93	96	92	93	97	28	93
34	18EUCS035	72	70	71	70	71	78	70	74	78	80	22	73
35	18EUCS036	80	82	88	87	88	83	88	90	89	92	26	87
36	18EUCS037	69	72	74	72	73	71	73	74	72	76	22	73
37	18EUCS038	68	60	70	68	66	68	67	72	78	79	21	70
38	18EUCS039	70	70	70	70	70	70	70	70	70	70	21	70
39	18EUCS040	80	68	72	70	69	78	76	72	70	75	22	73
40	18EUCS041	74	78	74	75	74	72	71	70	67	75	22	73
41	18EUCS042	78	80	76	74	77	78	76	75	78	82	23	77
42	18EUCS043	88	90	92	92	92	93	93	94	96	98	28	93
43	18EUCS044	87	90	92	92	92	93	93	94	96	97	28	93
44	18EUCS045	99	98	100	100	100	99	100	100	99	100	30	100
45	18EUCS046	100	98	100	99	99	100	100	100	99	100	30	100
46	18EUCS047	75	90	92	92	92	75	93	94	96	98	27	90
47	18EUCS049	100	98	100	99	99	100	100	100	99	100	30	100
48	18EUCS050	90	98	92	99	99	92	90	92	88	92	28	93
49	18EUCS051	89	90	88	83	85	86	84	100	99	100	27	90
50	18EUCS052	100	98	94	99	99	96	96	94	96	97	29	97
51	18EUCS053	81	90	93	90	90	95	97	97	96	98	28	93
52	18EUCS054	90	90	90	90	83	86	83	80	87	90	26	87
53	18EUCS055	90	90	81	83	82	86	88	90	85	94	26	87
54	18EUCS056	99	98	100	99	100	100	100	100	99	100	30	100
55	18EUCS058	75	86	85	83	80	86	84	82	85	86	25	83
56	18EUCS059	90	90	90	86	84	86	84	82	85	88	26	87
57	18EUCS060	71	78	80	100	99	100	100	100	99	100	28	93
58	18EUCS061	89	92	97	98	99	100	100	100	99	100	29	97
59	18EUCS062	86	89	97	98	99	99	100	100	99	100	29	97

60	18EUCS064	88	90	97	98	99	100	100	99	99	100	29	97
61	18EUCS065	78	80	80	80	88	84	86	88	83	86	25	83
62	18EUCS066	80	92	95	90	90	95	90	90	90	90	27	90
63	18EUCS067	99	98	100	99	100	100	100	100	99	100	30	100
64	18EUCS068	90	98	99	99	96	97	97	96	99	100	29	97
65	19EUCS501	80	76	82	80	82	84	86	88	83	84	25	83
66	19EUCS502	68	70	72	65	69	70	76	72	70	70	21	70
67	19EUCS503	87	90	86	89	88	88	86	86	84	87	26	87
68	19EUCS505	80	92	95	90	90	95	90	90	90	90	27	90
69	19EUCS506	75	78	80	80	78	84	79	80	83	86	24	80
70	19EUCS507	98	98	100	99	100	100	100	100	100	100	30	100
71	19EUCS511	72	76	73	72	70	76	72	76	70	73	22	73
No. of students scores above the expected knowledge level of 75%		58	61	60	60	61	63	61	62	64	66		
% of Students scoring above the expected knowledge level		81.70	85.92	85.92	84.51	85.92	88.74	85.92	87.33	90.15	92.96		
Mapping with COs		C401.1	C401.1	C401.2	C401.2	C401.5	C401.3	C401.3	C401.3	C401.4	C401.4		
Attainment level of each COs		**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**	**5**		
Course Outcomes		C401.1	C401.2	C401.3	C401.4	C401.5							
Attainment level of each COs		**83.8**	**85.2**	**87.3**	**91.6**	**85.9**							

Table 3.9 Direct Attainment calculation for Design and Analysis of Algorithm Course

DIRECT ATTAINMENT					
Direct Assesment Tools	C401.1	C401.2	C401.3	C401.4	C401.5
CONTINUOUS INTERNAL ASSESSMENT - I	76.25	71.50			76.00
CONTINUOUS INTERNAL ASSESSMENT - II		65.67	51.60		
CONTINUOUS INTERNAL ASSESSMENT - III				90.22	94.50
CO ATTAINMENT -CIA	**76.25**	**68.58**	**51.60**	**90.22**	**85.25**
CO ATTAINMENT - Rubric Based CIA	83.81	85.22	87.33	91.56	85.92
Course Outcomes	**Attainment Level**			**Direct Assessment**	**Direct Assessment**

	Continuous Assessment		End Semester Examination	(100%)	(80%)
	Continous Internal Assesments	Capstone Model/ Lab Component			
C401.1	76.25	83.81	89.60	83.86	67.09
C401.2	68.58	85.22	81.30	78.66	62.93
C401.3	51.60	87.33	87.10	76.52	61.22
C401.4	90.22	91.56	84.20	88.21	70.57
C401.5	91.56	85.92	81.40	85.80	68.64

Table 3.10 Indirect Attainment calculation for Design and Analysis of Algorithm Course

INDIRECT ATTAINMENT									
COURSE END SURVEY ANALYSIS									
Total No. of students	71								
Total No. of students appeared	71								
		Rubric Levels					Rubric Percentange	Attainment of COs through Course End Survey	Indirect attainment (20%)
		5	4	3	2	1			
COs	Questions	Yes, Very Definite	Yes, definite	Yes, moderate	Yes, doubtful	Needs improvement			
C401.1	Can you estimate the time and space complexities of recursive, non-recursive and brute force algorithms	51	7	6	3	4	87.61	**5**	1.0
C401.2	Can you illustrate the efficiency of decrease and conquer & divide and conquer algorithms	40	8	5	11	7	77.75	**4**	0.8

C401.3	Can you apply the dynamic programming and greedy approach to solve computing problems	34	11	10	11	5	76.34	**4**	0.8
C401.4	Are you able to Interpret backtracking, branch and bound and approximation algorithms	32	16	5	5	13	73.8	**4**	0.8
C401.5	Can you write efficient algorithms for solving various problems	30	5	18	13	5	71.83	**4**	0.8

Table 3.11 Overall CO Attainment calculation for Design and Analysis of Algorithm Course and suggestion for continuous Improvement

CO	Direct Assessment Tools	Indirect Assessment Tools	CO Attainment	Attainment Status	Remedial Measures
C401 .1	**83.9**	**87.61**	**84.6**	**Attained**	**NIL**
C401 .2	**78.7**	**77.75**	**78.5**	**Attained**	**NIL**
C401 .3	**76.5**	**76.34**	**76.5**	**Attained**	**NIL**
C401 .4	**88.2**	**73.80**	**85.3**	**Attained**	**Practice tests and coding contests are suggested**
C401 .5	**85.8**	**71.83**	**83.0**	**Attained**	

3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels (65)   Institute Marks : 65.00

Attainment of COs is measured from the performance of students in cumulative internal tests, technical/ lab components and from the course marks of the students in semester end examination.

Course Outcomes and Course Articulation Matrix are formulated for each course.

Course Outcomes Attainment is processed through 2 steps as

1. Direct Assessment

2. Indirect Assessment

I. **Direct Assessment of attainment of course outcomes for each course**

Three major types of courses are there in the curriculum. They are:

A. Theory
B. Lab
C. Project

These three types of courses are analyzed in different ways.
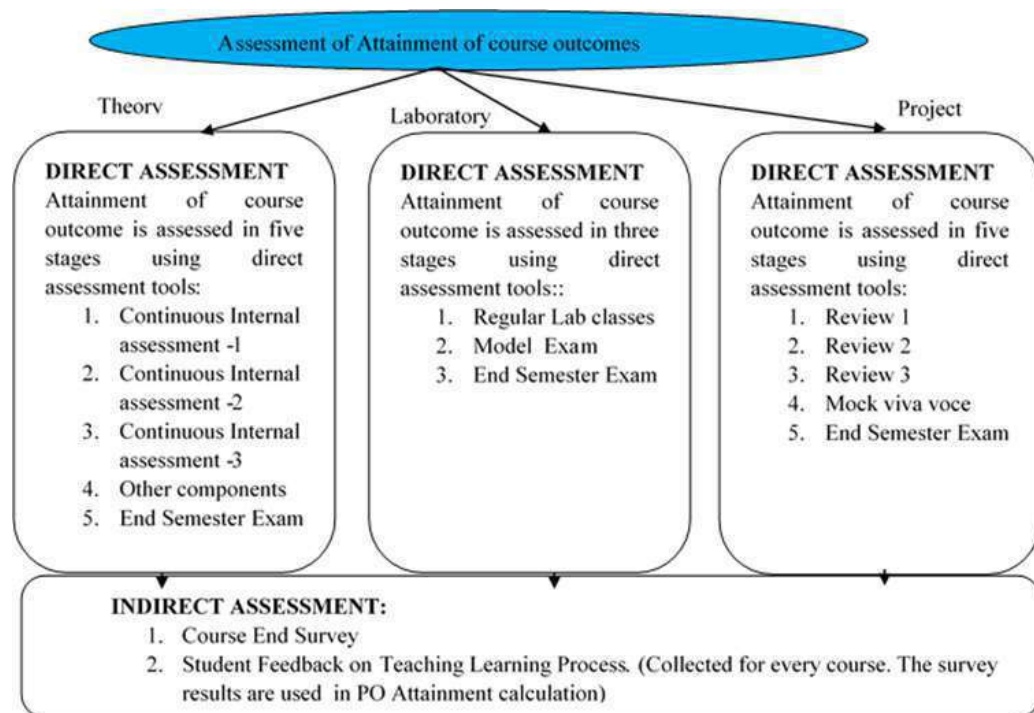
Figure 3.5 CO Assessment Tools

A. **Evaluation of attainment of Course outcomes in Theory Courses:**

The evaluation of theory courses is based on three continuous assessment tests, other components and end semester exam. The expected level of attainment (in %) for each course is fixed by the course coordinator and cluster head.

1. **Attainment of CO through Continuous Assessment Tests:**

The number of students who meet the expected level of the course outcome is identified. Then, the average level of attainment of each CO is calculated based on the correlation with continuous assessment questions. Later, the average of all COs is calculated for a particular course to find the attainment level of that course in Continuous assessment tests. **The weightage of this Component is 30%.**

The bloomers are also identified from the internal tests and they are given remedial coaching and one more chance for attaining course outcome. This remedial coaching analysis is prepared and maintained.

2. **Attainment of CO through Other Components:**

The number of students who meet the expected knowledge level of the course is identified. Then, the average level of attainment of each CO is calculated based on the correlation with other component questions. Later, the average of all COs is calculated for a particular course to find the attainment level of that course in other technical components. **The weightage of this Component is 20%.**

3. **Attainment of CO through End Semester Exams:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of each CO is calculated. **The weightage of this Component is 50%.**

The overall attainment of each Course outcome will be calculated by finding the average of the attainment of Course outcome through the above-said five stages.

B. Evaluation of attainment of Course outcomes in Practical Courses:

1. **Attainment of CO through regular lab classes:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of each CO is calculated based on the correlation with lab exercises. Later, the average of all COs is calculated for a particular lab course to find the attainment level of that course in regular lab classes. **The weightage of this Component is 50%.**

2. **Attainment of CO through model exam:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of CO is calculated . **The weightage of this component is 10%**

3. **Attainment of CO through End semester practical Exams:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of CO is calculated. **The weightage of this component is 40%**

The overall attainment of Course outcome will be calculated based on the given weightage.

Evaluation of attainment of Course outcomes in Theory cum Lab Courses:

There are three components in this category. They are internal test, Lab continuous evaluation, End semester exams. The weightage given to these components are 30%, 30% and 40% respectively.

C. Evaluation of attainment of Course outcomes in Project Courses:

1. **Attainment of CO through project reviews:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of each CO is calculated based on the rubrics. Later, the average of all COs is calculated for the project course to find the attainment level of that course in project reviews. **The weightage of this component is 50%**

2. **Attainment of CO through Mock viva –voce :**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of CO is calculated. The attainment of course outcomes calculations are performed in the excel sheets. **The weightage of this component is 10%.**

3. **Attainment of CO through End Semester practical Exams:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of CO is calculated. **The weightage of**

this component is 40%.

Table 3.13 The expected level of attainment (target) for each batch

Year	2013-17	2014-18	2015-19	2016-20	2017-21	2018-22	2019-23	2020-24
Expected Knowledge level in micro level Analysis	60%	65%	65%	65%	70%	Theory 70% Lab 75%	75 % for 2 times attained theory courses. 70% for other theory courses. 80% for lab courses.	75 % for 2 times attained courses. 70% for other courses
Expected Attainment percentage of each CO	65%	65%	65%	65%	70%	70%	70%	75%

CO attainment in Semester End Exam for the 2018-22 batch is given in the table below:

Table 3.14 Attainment of CO in the Semester End Examinations (SEE) for the batch (2018-2022) using Direct Assessment								
The target values set for this batch are:								
Knowledge Level, set for each Question (Semester End Exams) : Theory 70% Lab 75%								
Target set for Semester End Exams : 70%								

Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	Target %	overall Attainment %	Attainment Status
Semester I	18MA102	Mathematics I	81.2	76.2	82.3	77.4	77.4	70	78.9	Attained
	18MA103	Probability and Statistics	72.7	71.4	77.8	73.8	75.3	70	74.2	Attained
	18EE111	Principles of Electrical Engineering	80.2	77.3	79.5	78.8	80.3	70	79.2	Attained
	18CS101	Fundamentals of Computer Science	81.3	81.3	84.3	81.9	82.2	70	82.2	Attained
	8PH103	Physics for Computing Science	78.4	86.2	78.9	84.7	73.6	70	80.4	Attained
	18EN101	Business Communication and Value Science I	94.6	87.3	93.7	87.0	89.2	70	90.4	Attained
Semester II	18MA202	Linear Algebra	72.6	79.3	78.2	72.7	76.7	70	75.9	Attained

	18CS201	Python Programming	82.5	79.7	82.3	82.2	76.2	70	80.6	Attained
	18CH101	Engineering Chemistry	83.2	84.3	81.3	81.7	76.7	70	81.4	Attained
	18EC212	Electron Devices and Circuits	77.6	79.1	80.3	79.7	70.6	70	77.5	Attained
	18ME111	Engineering Graphics	80.6	70.2	78.5	71.9	72.4	70	74.7	Attained
	18CS202	Python Programming Laboratory	86.6	80.5	83.6	81.1	79.5	70	82.3	Attained
Semester III	18MA307	Mathematical logic, graph and number theory	78.5	70.2	79.6	72.1	79.6	70	76.0	Attained
	18CS312	Computer Organization and Architecture	74.9	71.2	76.9	72.3	70.5	70	73.2	Attained
	18IT301	Data Structures	73.6	73.3	76.5	81.7	81.2	70	77.3	Attained
	18IT303	Object Oriented Programming using Java	80.2	71.6	70.6	71.4	73.4	70	73.4	Attained
	18EC311	Digital Principles and System Design	70.2	71.6	66.6	65.8	69.3	70	68.7	**CO3,CO4,CO5 -Not Attained**
	18IT601	Software Engineering and Management	82.7	76.5	79.8	77.2	71.6	70	77.6	Attained
	18IT304	Data Structures Laboratory	86.8	86.2	82.3	85.4	81.6	70	84.5	Attained
Semester IV	18MA407	Transforms and Computational Methods	72.8	77.2	78.5	77.5	72.5	70	75.7	Attained
	18CS401	Web Technology	89.3	79.6	74.6	78.6	80.6	70	80.5	Attained
	18IT401	Design and analysis of algorithms	89.6	81.3	87.1	84.2	81.4	70	84.7	Attained
	18CS411	Database Management Systems	89.3	82.7	88.6	83.9	81.9	70	85.3	Attained
	18CS415	Operating Systems	82.7	80.6	81.3	80.7	81.5	70	81.4	Attained
	18CS402	Web Technology Laboratory	90.5	86.5	84.2	86.0	80.6	70	85.6	Attained
	18CS416	Database Management Systems Laboratory	92.3	82.7	84.3	83.0	81.6	70	84.8	Attained

Semester V	18CS501	Theory of Computation	81.7	88.7	89.0	83.0	89.5	70	86.4	Attained
	18IT501	Data Communications and Computer Networks	80.7	82.3	80.1	81.9	82.6	70	81.5	Attained
	18CS502	Artificial Intelligence and Expert Systems	88.2	89.8	86.2	89.1	88.6	70	88.4	Attained
	18EC571	Micro controllers and Embedded Systems	84.2	80.7	82.6	69.1	81.4	70	79.6	CO4-Not Attained
	18CS916	Object Oriented Analysis and Design(PE)	83.9	78.8	80.4	79.1	73.2	70	79.1	Attained
	18IT902	Distributed Systems	82.7	78.9	86.9	80.5	76.8	70	81.2	Attained
	18IT503	Computer Networks Laboratory	89.5	83.8	89.6	77.0	75.8	70	83.1	Attained
	18CS504	Mini Project	90.6	90.5	80.1	90.1	81.2	70	86.5	Attained
Semester VI	18CS601	Principles of Compiler Design	83.8	89.4	82.6	87.8	82.6	70	85.2	Attained
	18CS602	Data Analytics	76.8	82.6	80.1	82.1	84.6	70	81.2	Attained
	18CS603	Virtualization and Cloud	83.6	85.9	72.3	83.6	80.6	70	81.2	Attained
	18CS910	Real Time Systems	74.7	75.8	73.8	73.4	78.4	70	75.2	Attained
	18CS903	Cryptography and Network Security	75.9	88.6	76.4	86.2	84.2	70	82.3	Attained
	18IT923	Open Source Systems	81.9	75.6	76.5	75.8	78.6	70	77.7	Attained
	18ME001	Industrial Safety	70.6	74.6	72.6	74.2	72.9	70	73.0	Attained
	18EE004	Renewable Energy Sources	78.9	80.6	72.8	72.2	72.6	70	75.4	Attained
	18CS604	Compiler Design Laboratory	82.5	82.6	81.6	84.4	92.9	70	84.8	Attained
Semester VII	18CS701	Computational Biology	74.2	82.6	81.8	81.2	76.5	70	79.3	Attained
	18IT602	Internet of Things	78.6	78.9	80.8	79.3	79.4	70	79.4	Attained

	18CS924	Data warehousing and Data Mining	81.6	79.6	72.6	79.8	79.6	70	78.6	Attained
	18CS928	Information Retrieval	74.6	79.6	81.6	72.8	80.2	70	77.8	Attained
	18CE001	Disaster Management	76.4	84.6	80.6	83.8	72.6	70	79.6	Attained
	18ME004	Product Development	76.9	82.9	83.8	80.8	79.7	70	80.8	Attained
Sem VIII	18CS801	Project	89.6	87.6	89.7	82.0	82.7	70	86.3	Attained

Table 3.15 CO Attainment calculation in SEE of Theory of Computation (18CS501) Course

SRI KRISHNA COLLEGE OF ENGINEEIRNG AND TECHNOLOGY,KUNIAMUTHUR, COIMBATORE - 641 008																
SEMESTER END EXAM																
Total Number of Students			144						Appeared	144						
S.No	Register Number	Q1 (2)	Q2 (2)	Q3 (2)	Q4 (2)	Q5 (2)	Q6 (2)	Q7 (2)	Q8 (2)	Q9 /10 (14)	Q11/ 12 (14)	Q13/ 14 (14)	Q15/ 16 (14)	Q17/ 18 (14)	Q19/ 20 (14)	TEST SCORE (100)
	Mapping with CO	C501.1	C501.1	C501.2	C501.2	C501.3	C501.4	C501.5	C501.5	C501.1	C501.2	C501.3	C501.4	C501.5	C501.5	
1	18EUCS001	2	2	0	2	2	2	2	2	12	13	12	13	12	13	89
2	18EUCS002	0	2	2	2	0	2	2	2	13	12	13	13	12	13	88
3	18EUCS003	0	2	2	2	2	2	2	2	12	13	12	13	12	10	86
4	18EUCS005	0	2	2	2	2	2	2	2	12	12	12	10	12	13	85
5	18EUCS006	0	2	2	0	2	0	0	0	12	0	0	5	0	5	28
6	18EUCS007	0	2	2	2	2	2	2	2	9	11	12	13	12	13	84
7	18EUCS008	2	2	2	2	2	2	2	2	12	9	11	13	12	13	86
8	18EUCS009	0	2	2	2	2	2	2	2	12	12	12	13	12	13	88
9	18EUCS010	0	2	0	2	2	2	2	2	12	13	11	13	12	13	86
10	18EUCS011	0	2	2	2	2	2	2	2	12	13	12	13	12	13	89
11	18EUCS012	0	2	1	2	2	2	2	2	12	13	12	13	12	13	88
12	18EUCS013	0	1	2	2	2	1	2	2	12	13	12	11	12	13	85
13	18EUCS014	0	2	2	2	2	0	2	0	12	13	6	13	12	13	79
14	18EUCS015	0	2	1	2	2	2	2	2	12	13	12	12	12	13	87
15	18EUCS016	0	2	1	2	2	2	2	2	12	13	12	10	12	13	85
16	18EUCS017	0	2	2	2	2	2	2	2	12	13	12	8	12	13	84
17	18EUCS018	0	2	2	2	2	2	2	2	12	13	12	13	12	7	83

18	18EUCS019	0	2	2	2	2	0	2	0	12	12	6	13	12	13	78
19	18EUCS020	2	2	2	2	2	2	2	2	12	13	12	9	12	13	87
20	18EUCS021	0	2	2	2	2	2	2	2	12	13	12	13	8	13	85
21	18EUCS022	2	2	2	2	2	2	2	2	12	13	13	13	13	13	93
22	18EUCS023	2	2	2	2	2	2	2	2	12	13	12	13	13	13	92
23	18EUCS024	0	2	2	2	2	2	2	2	14	13	12	13	12	13	91
24	18EUCS025	0	2	2	2	2	2	2	2	10	13	12	13	12	13	87
25	18EUCS026	2	2	2	2	2	2	2	2	9	13	12	13	12	13	88
26	18EUCS027	0	0	1	2	2	0	2	0	2	13	7	13	12	13	67
27	18EUCS028	0	2	2	2	2	2	2	2	0	2	0	0	0	0	16
28	18EUCS029	0	2	2	2	2	2	2	2	12	10	12	13	12	13	86
29	18EUCS030	0	2	1	2	2	2	2	2	12	13	12	13	12	9	84
30	18EUCS031	0	0	0	2	2	2	2	2	12	13	12	4	12	13	76
31	18EUCS032	0	2	2	2	2	2	2	2	12	13	8	13	12	13	85
32	18EUCS033	0	2	2	2	2	2	2	2	12	13	6	13	12	13	83
33	18EUCS034	0	0	2	2	2	2	2	2	12	13	12	11	12	13	85
34	18EUCS035	0	2	0	0	0	0	0	2	0	0	0	0	0	5	9
35	18EUCS036	0	2	2	2	2	2	2	0	12	13	12	13	12	13	87
36	18EUCS037	0	2	2	2	2	0	2	0	12	13	12	13	12	13	85
37	18EUCS038	0	2	2	2	2	2	2	2	12	3	12	8	12	13	74
38	18EUCS039	0	2	0	2	2	2	2	0	12	13	8	13	7	13	76
39	18EUCS040	0	2	2	2	2	2	2	2	12	13	12	13	7	13	84
40	18EUCS041	0	2	2	2	2	0	2	0	12	13	12	13	10	13	83
41	18EUCS042	0	2	2	2	2	2	2	2	12	13	12	13	8	13	85
42	18EUCS043	0	2	2	2	2	2	2	2	13	13	13	13	12	13	91
43	18EUCS044	0	2	2	0	2	0	2	0	12	13	9	8	12	13	75
44	18EUCS045	2	2	2	2	2	2	2	2	13	13	12	13	12	13	92
45	18EUCS046	0	2	2	2	2	2	2	2	12	13	13	13	13	13	91
46	18EUCS047	0	2	2	2	2	2	2	2	12	13	7	6	12	8	72
47	18EUCS049	0	2	2	2	0	2	2	0	12	13	12	9	7	13	76
48	18EUCS050	0	2	2	2	2	2	2	2	12	13	12	10	12	13	86
49	18EUCS051	2	2	2	2	2	2	2	2	12	10	12	10	12	12	84
50	18EUCS052	0	2	2	2	2	2	2	2	12	13	10	13	12	10	84
51	18EUCS053	0	2	2	2	2	2	2	2	12	10	10	13	10	13	82

52	18EUCS054	0	2	2	2	2	0	2	0	13	13	13	13	12	13	87
53	18EUCS055	0	2	2	2	2	2	2	2	12	13	13	13	13	13	91
54	18EUCS056	0	2	2	2	2	2	2	2	12	11	8	13	12	13	83
55	18EUCS058	0	2	2	2	2	2	2	2	12	8	12	13	12	11	82
56	18EUCS059	0	2	2	2	2	2	2	2	12	7	9	13	6	13	74
57	18EUCS060	0	2	2	2	2	2	2	2	12	12	12	8	7	7	72
58	18EUCS061	0	2	2	2	2	2	2	2	12	13	12	10	12	11	84
59	18EUCS062	0	2	2	2	2	2	2	2	12	13	12	12	12	10	85
60	18EUCS064	1	2	2	2	2	2	2	2	12	10	12	10	11	13	83
61	18EUCS065	0	2	2	2	2	2	2	2	13	13	13	13	13	13	92
62	18EUCS066	0	2	2	2	2	0	2	2	12	13	12	11	10	13	83
63	18EUCS067	2	2	2	2	2	2	2	2	12	13	10	11	12	13	87
64	18EUCS068	0	2	2	2	2	2	2	2	13	13	13	13	13	13	92
65	19EUCS501	0	2	2	2	2	2	2	2	12	5	12	13	7	13	76
66	19EUCS502	0	2	2	2	2	0	2	2	12	13	9	7	12	13	78
67	19EUCS503	0	2	2	2	2	2	2	2	9	13	12	13	12	13	86
68	19EUCS505	0	2	2	2	2	2	2	2	12	10	12	12	12	13	85
69	19EUCS506	0	2	2	2	2	0	2	0	0	0	0	0	0	0	10
70	19EUCS507	0	2	2	2	2	2	2	2	12	13	12	10	12	13	86
71	19EUCS511	0	2	2	2	2	1	2	2	13	13	13	13	13	13	91
72	18EUCS801	0	2	2	2	2	2	2	2	12	11	12	13	12	13	87
73	18EUCS057	2	2	2	2	2	2	2	2	12	13	12	11	12	13	89
74	18EUCS069	2	2	2	2	2	2	2	2	12	13	12	10	12	13	88
75	18EUCS070	2	2	2	2	2	2	1	2	12	13	12	7	12	13	84
76	18EUCS071	2	2	2	2	2	0	2	0	12	13	8	13	12	13	83
77	18EUCS072	2	2	2	2	2	2	2	2	12	13	12	13	12	8	86
78	18EUCS073	2	1	2	2	2	2	2	0	12	13	12	13	3	13	79
79	18EUCS074	2	2	2	2	2	2	2	2	12	13	12	13	13	13	92
80	18EUCS075	2	2	2	2	2	2	2	2	12	13	12	13	12	13	91
81	18EUCS076	2	2	2	2	2	2	2	2	12	13	12	13	11	13	90
82	18EUCS077	2	2	2	2	2	2	2	2	12	13	13	13	13	13	93
83	18EUCS078	2	2	0	2	2	2	2	2	10	12	12	13	12	13	86
84	18EUCS079	2	2	2	2	2	2	2	2	12	13	12	11	12	13	89
85	18EUCS080	2	2	2	2	2	2	2	2	12	13	7	13	10	13	84

86	18EUCS081	0	0	0	2	2	0	2	2	12	13	12	13	12	13	83
87	18EUCS082	2	1	2	2	2	2	2	0	12	9	13	13	13	13	86
88	18EUCS083	2	2	2	2	2	2	2	2	12	13	9	8	12	13	83
89	18EUCS084	2	2	2	2	2	2	2	2	12	13	12	13	3	13	82
90	18EUCS085	2	2	2	2	2	2	2	2	12	0	11	10	5	13	67
91	18EUCS086	2	2	2	2	2	2	2	2	12	13	12	10	12	10	85
92	18EUCS087	2	2	2	2	0	2	2	2	12	10	12	13	12	13	86
93	18EUCS088	2	1	2	0	2	2	1	2	14	13	13	13	13	13	91
94	18EUCS089	2	2	2	2	2	2	2	2	13	13	13	13	12	13	93
95	18EUCS090	2	2	2	2	2	2	2	2	12	13	12	10	12	13	88
96	18EUCS091	2	2	2	2	2	2	2	2	12	13	12	11	12	13	89
97	18EUCS092	2	2	2	2	2	2	2	2	12	13	12	13	13	13	92
98	18EUCS093	2	2	2	2	2	0	2	2	13	13	13	14	13	13	93
99	18EUCS094	2	2	0	2	2	2	2	2	13	13	13	13	13	13	92
100	18EUCS095	2	2	2	2	2	0	2	2	13	13	13	13	12	13	91
101	18EUCS096	2	2	2	2	2	2	2	2	12	13	12	13	6	13	85
102	18EUCS097	2	2	2	2	2	2	2	2	10	9	10	0	10	10	65
103	18EUCS098	2	2	2	1	0	0	2	0	13	13	13	13	13	13	87
104	18EUCS099	0	2	0	2	2	0	2	0	12	13	7	11	12	13	76
105	18EUCS100	2	2	2	2	2	2	2	2	12	9	12	13	9	10	81
106	18EUCS101	2	2	2	2	2	2	0	2	13	13	14	13	12	13	92
107	18EUCS102	2	2	2	2	2	2	2	2	12	11	7	13	12	13	84
108	18EUCS103	2	2	2	2	2	2	2	2	12	9	7	13	12	13	82
109	18EUCS104	2	2	2	2	2	2	2	0	13	13	13	12	13	13	91
110	18EUCS105	2	2	2	2	2	0	2	0	12	13	12	13	10	13	85
111	18EUCS106	2	2	2	2	2	0	2	0	12	13	12	13	12	13	87
112	18EUCS107	2	2	0	2	2	0	2	2	12	8	12	13	12	13	82
113	18EUCS108	2	2	2	2	2	2	2	2	12	13	12	9	11	13	86
114	18EUCS109	2	2	2	2	2	2	2	2	12	13	12	13	12	13	91
115	18EUCS110	2	2	0	2	2	0	2	0	12	13	12	13	12	13	85
116	18EUCS111	2	2	2	2	2	0	1	0	12	13	12	13	12	12	85
117	18EUCS112	2	2	2	2	2	2	2	2	12	13	12	13	13	13	92
118	18EUCS113	2	2	2	2	2	2	2	2	12	13	12	13	12	13	91
119	18EUCS114	2	2	2	2	2	2	2	2	12	13	12	12	12	13	90

120	18EUCS115	2	2	2	2	2	2	2	0	12	13	12	13	12	12	88
121	18EUCS116	2	2	2	2	2	2	2	2	12	13	12	13	12	9	87
122	18EUCS117	2	2	1	2	2	2	2	2	12	8	12	13	13	13	86
123	18EUCS118	2	2	1	2	2	2	2	2	12	13	12	8	12	13	85
124	18EUCS119	2	2	2	2	2	2	2	2	12	13	12	13	12	13	91
125	18EUCS120	2	2	2	2	2	2	2	2	12	8	12	8	12	13	81
126	18EUCS121	2	2	2	2	2	2	2	2	12	7	12	13	12	11	83
127	18EUCS122	2	2	2	2	2	2	2	2	12	13	9	13	12	10	85
128	18EUCS123	2	2	2	2	2	2	2	2	10	7	10	10	9	10	72
129	18EUCS124	1	2	2	2	2	2	2	2	12	9	12	11	12	13	84
130	18EUCS125	2	2	2	2	2	2	2	2	12	0	2	13	12	13	68
131	18EUCS126	2	2	2	2	2	2	2	2	12	11	12	10	12	13	86
132	18EUCS127	2	2	2	2	2	2	2	2	12	0	0	13	0	13	54
133	18EUCS128	2	2	2	2	2	0	2	0	12	7	12	13	12	13	81
134	18EUCS129	2	2	2	2	2	0	2	0	12	13	7	13	13	13	83
135	18EUCS130	2	2	2	2	2	2	2	2	9	9	9	13	12	13	81
136	18EUCS131	2	2	2	2	2	2	2	2	11	12	11	11	12	11	84
137	18EUCS132	2	2	2	2	0	2	2	2	12	9	12	13	12	10	82
138	18EUCS165	2	2	2	2	2	0	2	2	11	10	12	10	12	10	79
139	19EUCS504	2	2	2	2	2	2	2	2	12	13	12	10	12	13	88
140	19EUCS508	2	2	2	2	2	2	2	2	12	13	12	7	12	13	85
141	19EUCS509	2	2	2	2	2	2	2	2	12	11	12	11	12	13	87
142	19EUCS510	2	2	2	0	2	0	2	0	12	12	12	13	12	13	84
143	19EUCS512	2	2	2	2	0	2	2	2	11	12	12	11	12	13	85
144	19EUCS513	2	2	2	2	2	2	2	2	12	0	12	4	10	0	54
No. of students scores above the expected knowledge level of 70%		78	136	126	138	137	115	138	118	136	118	118	123	125	133	
% of Students scoring above the expected knowledge level		55	95	88	96	96	80	96	82	95	82	82	86	87	93	
Mapping with COs		C501.1	C501.1	C501.2	C501.2	C501.3	C501.4	C501.5	C501.5	C501.1	C501.2	C501.3	C501.4	C501.5	C501.5	

Attainment level of each COs	2	5	5	5	5	5	5	5	5	5	5	5	5	5	
Course Outcomes	C501.1	C501.2	C501.3	C501.4	C501.5										
Attainment % of each CO	**81.67**	**88.67**	**89.00**	**83.00**	**89.50**										

CO attainment in both internal and SEE using Direct Assessment is given below:

Table 3.16 Attainment of CO(in both internal and SEE) for the batch (2018-2022) using Direct Assessment(D) and Indirect(I)
The target values set for this batch are:
Knowledge Level, set for each Question (in both Internal and SEE)   : Theory 70%   Lab 75%
Target set for each CO (Internal tests)   : 70%
Target set for Semester End Exams   : 70%

Sem	Course code	Course title	Target %	CO1			CO2			CO3			CO4			CO5			Remarks
				D	I	Avg	D	I	Avg	D	I	Avg	D	I	Avg	D	I	Avg	
Semester I	18MA102	Mathematics I	70	76.2	82.3	**77.42**	77.4	82.8	**78.48**	72.6	81.6	**74.4**	81.2	82.1	**81.38**	78.1	82.3	**78.94**	Attained
	18MA103	Probability and Statistics	70	71.4	77.8	**72.68**	75.3	80.2	**76.28**	70.8	75.9	**71.82**	71.3	82.4	**73.52**	76.2	74.3	**75.82**	Attained
	18EE111	Principles of Electrical Engineering	70	78.6	79.5	**78.78**	80.3	82.3	**80.7**	75.7	80.5	**76.66**	79.5	86.4	**80.88**	76.3	87.4	**78.52**	Attained
	18CS101	Fundamentals of Computer Science	70	81.3	84.3	**81.9**	82.2	78.9	**81.54**	82.3	84.3	**82.7**	81.6	83.2	**81.92**	83.4	81.3	**82.98**	Attained
	8PH103	Physics for Computing Science	70	86.2	78.9	**84.74**	73.6	85.2	**75.92**	78.5	83.45	**79.49**	76.6	80.2	**77.32**	79.4	82.3	**79.98**	Attained
	18EN101	Business Communication and Value Science I	70	85.3	93.7	**86.98**	89.2	92.5	**89.86**	83.2	91.7	**84.9**	80.3	86.2	**81.48**	83.4	85.6	**83.84**	Attained
	18MC101	Mandatory Course-1(Induction Programme)	70	84.2	82.3	**83.82**	81.6	80.3	**81.34**	84.2	81.6	**83.68**	-	-	-	-	-	-	Attained
Semester II	18MA202	Linear Algebra	70	79.3	81.2	**79.68**	76.7	83.2	**78**	71.3	81.2	**73.28**	76.2	82.5	**77.46**	71.2	78.3	**72.62**	Attained
	18CS201	Python Programming	70	79.7	82.3	**80.22**	76.2	82.6	**77.48**	74.2	71.8	**73.72**	75.3	80.4	**76.32**	72.7	84.6	**75.08**	Attained

Semester	Code	Name	Target																Status
	18CH101	Engineering Chemistry	70	84.3	81.3	**83.7**	76.7	83.6	**78.08**	78.9	78.6	**78.84**	71.9	76.9	**72.9**	79.2	80.6	**79.48**	Attained
	18EC212	Electron Devices and Circuits	70	79.1	82.3	**79.74**	73.6	71.6	**73.2**	70.3	74.2	**71.08**	70.6	80.4	**72.56**	71.3	82.1	**73.46**	Attained
	18ME111	Engineering Graphics	70	70.2	78.5	**71.86**	72.4	75.3	**72.98**	74.7	72.8	**74.32**	70.6	78.4	**72.16**	72.6	78.6	**73.8**	Attained
	18CS202	Python Programming Laboratory	70	80.5	83.6	**81.12**	79.5	80.3	**79.66**	79.6	80.7	**79.82**	73.6	80.3	**74.94**	76.3	81.12	**77.264**	Attained
	18MC201	Mandatory Course-2 (Environmental Sciences)	70	74.2	80.3	**75.42**	74.6	81.3	**75.94**	70.6	76.4	**71.76**	80.6	86.7	**81.82**	88.9	86.5	**88.42**	Attained
Semester III	18MA307	Mathematical logic, graph and number theory	70	70.2	79.6	**72.08**	72.6	74.3	**72.94**	72.3	80.6	**73.96**	75.6	79.6	**76.4**	72.6	76.3	**73.34**	Attained
	18CS312	Computer Organization and Architecture	70	71.2	76.9	**72.34**	70.5	79.5	**72.3**	71.5	76.8	**72.56**	76.3	79.6	**76.96**	71.6	78.6	**73**	Attained
	18IT301	Data Structures	70	80.3	87.5	**81.74**	81.2	79.6	**80.88**	75.6	73.9	**75.26**	72.3	79.5	**73.74**	71.2	81.3	**73.22**	Attained
	18IT303	Object Oriented Programming using Java	70	71.6	70.6	**71.4**	73.4	80.2	**74.76**	73.4	71.6	**73.04**	73.6	81.2	**75.12**	73.8	81.4	**75.32**	Attained
	18EC311	Digital Principles and System Design	70	77.6	78.6	**77.8**	76.3	78.9	**76.82**	**68.2**	**70.3**	**68.62**	**67.3**	**69.6**	**67.76**	76.4	78.6	**76.84**	**Not Attained**
	18IT601	Software Engineering and Management	70	76.5	79.8	**77.16**	71.6	75.6	**72.4**	75.9	85.6	**77.84**	78.3	76.9	**78.02**	82.3	85.6	**82.96**	Attained
	18IT304	Data Structures Laboratory	70	86.2	82.3	**85.42**	81.6	84.6	**82.2**	82.6	81.9	**82.46**	84.7	85.6	**84.88**	80.6	86.8	**81.84**	Attained
	18MC353	Mandatory Course-3 (Mooc Certification)	70	86.7	88.7	**87.1**	82.3	81.9	**82.22**	81.2	88.9	**82.74**	-	-	**-**	-	-	**-**	Attained
Semester IV	18MA407	Transforms and Computational Methods	70	77.2	78.5	**77.46**	72.5	79.5	**73.9**	73.6	70.9	**73.06**	72.9	78.9	**74.1**	70.8	76.8	**72**	Attained

Semester	Code	Course																Status
	18CS401	Web Technology	70	79.6	74.6	**78.6**	80.6	86.7	**81.82**	75.3	80.6	**76.36**	73.8	76.6	**74.36**	73.6	78.4	**74.56**	Attained
	18IT401	Design and analysis of algorithms	70	83.9	87.61	**84.6**	78.7	77.75	**78.5**	76.5	76.34	**76.5**	88.2	73.80	**85.3**	85.8	71.83	**83.0**	Attained
	18CS411	Database Management Systems	70	82.7	88.6	**83.88**	81.9	81.3	**81.78**	83.2	80.4	**82.64**	81.4	79.9	**81.1**	80.6	80.3	**80.54**	Attained
	18CS415	Operating Systems	70	80.6	81.3	**80.74**	81.5	80.6	**81.32**	84.6	81.9	**84.06**	83.9	78.9	**82.9**	82.7	87.5	**83.66**	Attained
	18CS402	Web Technology Laboratory	70	86.5	84.2	**86.04**	80.6	81.5	**80.78**	86.8	82.3	**85.9**	83.5	78.6	**82.52**	87.6	80.5	**86.18**	Attained
	18CS416	Database Management Systems Laboratory	70	82.7	84.3	**83.02**	81.6	80.4	**81.36**	81.5	80.6	**81.32**	78.9	82.4	**79.6**	82.6	78.9	**81.86**	Attained
	18MC452	Mandatory Course-4 (Quantitative Aptitude and Soft Skills)	70	80.3	78.5	**79.94**	82.3	78.6	**81.56**	78.6	72.6	**77.4**	-	-		-	-		Attained
Semester V	18CS501	Theory of Computation	70	88.80	87.50	**88.54**	90.24	83.61	**88.91**	85.14	79.31	**83.974**	89.34	78.89	**87.25**	85.59	81.67	**84.806**	Attained
	18IT501	Data Communications and Computer Networks	70	82.3	80.10	**81.86**	82.6	75.40	**81.16**	87.5	78.40	**85.68**	81.6	72.90	**79.86**	76.9	80.30	**77.58**	Attained
	18CS502	Artificial Intelligence and Expert Systems	70	89.8	86.20	**89.08**	88.6	80.20	**86.92**	90.1	85.30	**89.14**	93.2	82.40	**91.04**	84.7	86.20	**85**	Attained
	18EC571	Micro controllers and Embedded Systems	70	80.7	82.6	**81.08**	92.4	93.6	**92.64**	84.7	80.4	**83.84**	82.4	80.4	**82**	78.6	79.3	**78.74**	Attained
	18CS916	Object Oriented Analysis and Design(PE)	70	78.8	80.4	**79.12**	73.2	71.6	**72.88**	74.6	81.4	**75.96**	71.8	78.8	**73.2**	74.9	80.7	**76.06**	Attained
	18IT902	Distributed Systems	70	78.9	86.9	**80.5**	76.8	73.6	**76.16**	72.8	86.9	**75.62**	72.9	78.9	**74.1**	74.9	85.8	**77.08**	Attained
	18IT503	Computer Networks Laboratory	70	73.8	89.6	**76.96**	75.8	78.5	**76.34**	76.8	84.9	**78.42**	78.9	72.9	**77.7**	76.9	81.8	**77.88**	Attained
	18CS504	Mini Project	70	92.6	80.1	**90.1**	81.2	81.3	**81.22**	76.9	80.4	**77.6**	75.6	80.2	**76.52**	78.4	79.6	**78.64**	Attained

Semester	Code	Course	70															Status
Semester VI	18CS601	Principles of Compiler Design	70	89.4	81.6	**87.84**	82.6	80.2	**82.12**	84.6	73.2	**82.32**	72.8	80.2	**78.5**	73.8	81.5	**75.34**	Attained
	18CS602	Data Analytics	70	82.6	80.1	**82.1**	84.6	78.2	**83.32**	70.6	71.2	**70.72**	80.3	73.6	**78.96**	71.6	80.3	**73.34**	Attained
	18CS603	Virtualization and Cloud	70	85.9	74.3	**83.58**	89.6	81.6	**88**	92.5	82.6	**90.52**	88.7	90.6	**89.08**	79.4	80.6	**79.64**	Attained
	18CS910	Real Time Systems	70	85.8	73.8	**83.4**	78.4	78.6	**79.4**	84.8	78.4	**83.52**	80.5	84.7	**81.34**	76.8	73.9	**76.22**	Attained
	18CS903	Cryptography and Network Security	70	88.6	76.4	**86.16**	84.2	80.3	**83.42**	81.2	73.2	**79.6**	73.6	81.8	**75.24**	83.8	82.6	**83.56**	Attained
	18IT923	Open Source Systems	70	75.6	76.5	**75.78**	78.6	80.9	**79.06**	78.6	71.8	**77.24**	78.4	79.2	**78.56**	78.9	80.6	**79.24**	Attained
	18ME001	Industrial Safety	70	94.6	92.6	**94.2**	82.9	71.6	**80.64**	72.3	75.9	**73.02**	91.6	90.6	**91.4**				Attained
	18EE004	Renewable Energy Sources	70	84.6	72.8	**82.24**	72.6	80.6	**74.2**	78.9	73.9	**77.9**	71.5	82.6	**73.72**	75.3	81.8	**76.6**	Attained
	18CS604	Compiler Design Laboratory	70	92.6	81.6	**90.4**	92.9	78.6	**90.04**	89.6	80.6	**87.8**	84.6	88.9	**85.46**	82.9	72.9	**80.9**	Attained
Semester VII	18CS701	Computational Biology	70	88.6	81.8	**87.24**	76.5	72.6	**75.72**	76.8	84.8	**78.4**	78.3	72.9	**77.22**	73.9	80.4	**75.2**	Attained
	18IT602	Internet of Things	70	78.9	80.76	**79.272**	79.4	75.6	**78.64**	84.6	86.4	**84.96**	83.8	80.1	**83.06**	78.9	80.6	**79.24**	Attained
	18CS924	Data warehousing and Data Mining	70	79.6	80.6	**79.8**	79.6	73.2	**78.32**	79.6	85.9	**80.86**	78.6	73.7	**77.62**	72.4	74.6	**72.84**	Attained
	18CS928	Information Retrieval	70	89.6	81.6	**88**	80.2	78.6	**79.88**	78.9	81.6	**79.44**	78.9	76.9	**78.5**	73.8	72.8	**73.6**	Attained
	18CE001	Disaster Management	70	84.6	80.6	**83.8**	72.6	74.8	**73.04**	79.6	78.3	**79.34**	78.9	72.6	**77.64**	79.5	84.7	**80.54**	Attained
	18ME004	Product Development	70	88.9	83.8	**87.88**	79.7	82.6	**80.28**	78.9	76.8	**78.48**	75.8	72.9	**75.22**	78.6	84.8	**79.84**	Attained
	18CSE01	Employability Enhancement skills	70	77.9	80.4	**78.4**	81.6	87.9	**82.86**	80.6	89.8	**82.44**	-	-		-	-		Attained
Sem VIII	18CS801	Project	70	81.6	83.7	**82.02**	88.7	88.9	**88.74**	89.6	86.7	**89.02**	82.3	84.7	**82.78**	83.6	88.9	**84.66**	Attained

Attainment Gap Analysis

During the assessment process, when there are no attainment gaps or attainment gaps are negative for the three consecutive years, the Course Coordinator and cluster head would enhance the CO target of the course for the following batches of students. The attainment gap for the sample course 18IT401 Design and Analysis of Algorithms is provided in table 3.17

Table 3.17 Attainment Gap for the sample course 18IT401 Design and Analysis of Algorithms

CO	CO statement	CO Target (%)	CO Attainment (%) for three batches			Attainment Gap			Continuous Improvement			
			2018-22	2019-23	2020-24	2018-22	2019-23	2020-24	2018-22 and 2019-23 Batch		2020-24 and 2021-25	
									Improvement in Curriculum/ TLP	Target %	Improvement in Curriculum / TLP	Target %
CO 1	Estimate the time and space complexities of recursive, non-recursive and brute force algorithms	70	83.9	86.2	76.6	-13.9	-16.2	-6.6	Problem solving in Hacker rank and Hacker earth is insisted	70	Practice tests are conducted in industry training	75
CO 2	Illustrate the efficiency of decrease and conquer & divide and conquer algorithms.	70	81.8	78.5	75.2	-11.8	-8.5	-5.2	Scenario based questions are given	70	Tests with Scenario based questions and test cases are conducted	75
CO 3	Apply the dynamic programming and greedy approaches to solve computing problems	70	82.6	79.6	71.6	-12.6	-9.6	-1.6	Quiz tests are recommended for every topic	70	Quiz test is conducted on alternate days	75
CO 4	Interpret backtracking, branch and bound and approximation algorithms	70	81.1	80.4	70.6	-11.1	-10.4	-0.6	GATE problems are solved	70	Implementation skill is improved by coding contest	75
CO 5	Write efficient algorithms for solving various problems	70	80.5	78.5	71.4	-10.5	-8.5	-1.4	Societal problems are discussed	70	Range query and graph algorithms are added	75

The attainment gap for the sample course 18EC311 Digital Principles and System Design is provided in table 3.18

Table 3.18 Attainment Gap for the sample course 18EC311 Digital Principles and System Design

CO	CO statement	CO Target (%)	CO Attainment (%)	Attainment Gap	Action Taken	Attainment Status	CO Attainment (%)		Attainment Gap		Attainment Status
			2018 batch	2018-22 batch	2019-23 and 2020-24 batches	2018-22 batch	2019-23	2020-24	2019-23	2020-24	2019-23 and 2020-24 batches

CO		70	77.8	-7.8	Video Materials are provided.	Attained	80.3	74.2	-10.3	-4.2	Attained
CO1	Encode information in binary and to manipulate Boolean functions using Boolean algebra	70	77.8	-7.8	Video Materials are provided.	Attained	80.3	74.2	-10.3	-4.2	Attained
CO2	Minimize Boolean functions and implement them using digital logic gates	70	76.8	-6.82	GATE questions are discussed	Attained	78.3	75.3	-6.8	-8.3	Attained
CO3	Interpret and design different combinational logic circuits	70	68.6	**1.38**	Field work component is added. Simulation and tutorial problems are given	Not Attained	80.7	78.6	-10.7	-10.6	Attained
CO4	Design and analyze various sequential circuits	70	67.8	**-2..24**	Quiz Contests are conducted	Not Attained	78.9	72.6	-8.9	-2.6	Attained
CO5	Implement digital logic circuits using VHDL models and programmable logic devices	70	76.8	-10.5	Simulation tools are used	Attained	74.7	75.6	-4.7	-5.6	Attained

Closure of the Quality Loop

The closure of the quality loop in the quality in CO attainment calculation with action proposed to bridge the gap is provided in table 3.19.

Table 3.19 Closure of the quality loop in CO Attainment Calculation

Courses	Attainment status of 2018-22 batch	Suggestions proposed by Stake holders	Action Taken in Curriculum/TLP of 2020-24 Batch	Action Taken in Curriculum/TLP of 2021-25 Batch	Action Taken in Curriculum/TLP of 2022-26 Batch
Fundamentals of Computer Science	Attained	More theoretical.	Hacker earth problem solving became mandatory	Merged with Python Programming	Merged with Data Structures and C++
Business Communication and Value Science I	Attained	Individual presentations and Group discussions can be given	BEC certifications are encouraged. Participated in Youth talk competitions.		

Object Oriented Programming using Java	Attained	Java Certifications should be encouraged. Topics such as Functional Programming, Lambda, optional programming, JVM Internals, Garbage Collection, Executor framework can be added.	Learnathon and Skillathon Certifications are introduced.	Infosys Springboard Courses are introduced. A new course titled **Java Programming** is introduced.	Oracle Certifications are insisted. Advanced Technologies such as Spring Boot are introduced
Digital Principles and System Design	**Not Attained**	Video Materials can be provided	YouTube links are given	-	-
Data Structures Laboratory	Attained	Implementation skill has to be enhanced in order to face the placement tests	Questions from Hacker rank and Hacker earth portals are discussed	Data structures with C is framed and handled by industry	Data Structures with C++ course is designed and handled by industry
Web Technology	Attained	App Development skill is required by Product based companies	Mini project/ Application Development Components are added	**Web Frameworks** course is introduced.	Latest Technologies such as React, Node JS are introduced
Database Management Systems	Attained	Real time projects can be handled	Importance is given to Data base Connectivity and MySQL	Full stack development projects are given.	Industry training with full stack development projects is given in third semester
Design and analysis of algorithms	Attained	Problem solving and algorithm design skill has to be verified	Problem solving in Hacker rank and Hacker earth is insisted	Tests with Scenario based questions and test cases are conducted in industry training	Implementation skill is improved by coding contests
Operating Systems	Attained	Conceptual knowledge is required for facing the placement interview	Reference books such as Schaum's Series are added	Snap talks (where they can explain the concepts) are conducted.	

Web Technology Laboratory	Attained	This course can be handled in first year to prepare the students for participating in Hackathons. React.js can be included in Web Technology course in addition to Node.js concept	Hackathon problems are given as assignments	Application Development Practices course is handled in first semester. A new course titled **Web Development using React** is added in the curriculum and industry training was given	Application Development Practices course is handled by industry. Faculty trained by the industry will handle the course.
Theory of Computation	Attained	Real time applications can be discussed.	Hot Questions with Finite state machines are given in the assignment	Animated videos are added in the classroom	Case Studies are added in each module
Computer Networks Laboratory	Attained	Exercises such as Building simple LANs, perform basic configurations for routers and switches, and implement IPv4 and IPv6 addressing schemes can be added	Introduced NS2 exercises	Given more importance to Simulation tools	• Introduced Network Access. • IP Connectivity and IP Services exercises.
Mini Project	Attained	Guidelines and Templates should be given	Front end and back end tools are listed in the guidelines.	Real time development projects are encouraged.	-
Data Analytics	Attained	Unstructured database concepts and tools can be included in Data Analytics	Case studies from health care and business are discussed.	-	-
Virtualization and Cloud	Attained	Amazon cloud services can be practised	Amazon Account is created by all the students.	Industry training is given for cloud computing	-
Profession Electives	Attained	**Insist Hands-on experiences using tools for all professional electives, while handling classes.**	**Latest tools and case studies are added**	-	-
Computational Biology	Attained	Evolutionary computing and Swarm Intelligence can be added	Research papers are discussed in this course.	-	

3.3 Attainment of Program Outcomes and Program Specific Outcomes (75)   Total Marks 75.00

3.3.1 Describe assessment tools and processes used for measuring the attainment of each Program Outcome and Program Specific Outcomes (10)

Institute Marks : 10.00

Steps for Assessing POs and PSOs

1. The attainments of course outcomes for all the courses are calculated as explained in 3.2.2 . The attainment of programme outcomes are measured with the help of course Articulation matrices of the relevant courses. The PO atttainment is calculated for all the courses and tabulated in 3.3.2. A sample calculation for the Course titled "Design and Analysis of Algorithms" is given in this section.

2. Indirect assessment strategies for PO attainment include "Students' Feedback on Infrastructure, facilities, teaching learning process and R&D", "Graduate Exit Survey", Employer Survey, Parents Feedback, Alumni Feedback and Extra Curricular and Co-Curricular Activities Finally, attainment levels of programme outcomes are assessed using the relevant PO rubrics. The Programme Evaluation Committee validates the level of PO attainment. The Programme Advisory Committee performs attainment gap analysis and provides suggestion for continuous improvement.

The process and assessment tools used for measuring the attainment of each program outcome (PO) and program specific outcome(PSO) are given in the figures 3.6 and 3.7.
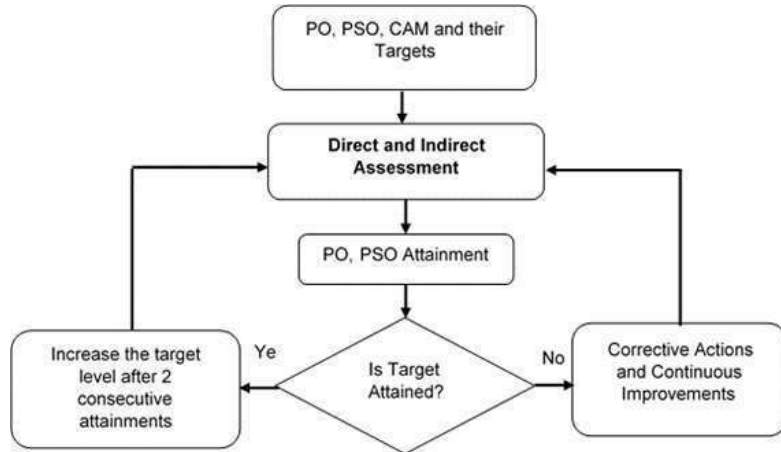
Figure 3.6 PO & PSO Attainment Evaluation Process
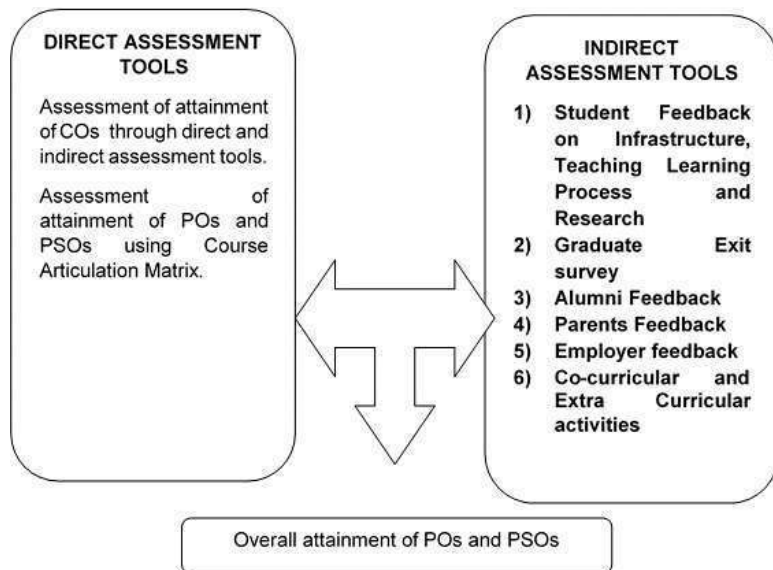
Fig 3.7 Assessment tools used for measuring the attainment of each PO and PSO

Table 3.20 Course Articulation Matrix (CAM) of the course "Design and Analysis of Algorithms"

COURSE ARTICULATION MATRIX (CAM) for the course "Design and Analysis of Algorithms"														
Correlation levels: 3-Substantial (High) 2-Moderate (Medium) 1 - Slight(Low)														
CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C401.1	3	2	2	-	-	-	-	-	-	-	-	2	3	-	1
C401.2	3	2	3	-	-	-	-	-	-	-	-	2	3	2	-
C401.3	3	3	3	3	3	2	-	-	-	-	-	2	3	2	-
C401.4	3	2	3	2	2	-	-	-	-	-	-	2	3	2	2
C401.5	3	3	3	3	3	2	-	2	3	3	2	3	3	2	2
C401	3	3	3	3	3	2	-	2	3	3	2	3	3	2	2

Table 3.21 Programme Outcome Attainment Calculation of Design and Analysis of Algorithms Course

COURSE OUTCOME ATTAINMENT for the course "Design and Analysis of Algorithms"															
CO	Direct Assessment Tools	Indirect Assessment Tools	CO Attainment	Attainment Status	Remedial Measures										
C401.1	83.9	87.61	84.6	Attained	NIL										
C401.2	78.7	77.75	78.5	Attained	NIL										
C401.3	76.5	76.34	76.5	Attained	NIL										
C401.4	88.2	73.80	85.3	Attained	Practice tests and coding contests are suggested										
C401.5	85.8	71.83	83.0	Attained											
PO - Attainment for the course "Design and Analysis of Algorithms"															
CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C401.1	2.5	1.7	1.7	-	-	-	-	-	-	-	-	1.7	2.5	-	0.8
C401.2	2.4	1.6	2.4	-	-	-	-	-	-	-	-	1.6	2.4	1.6	-
C401.3	2.3	2.3	2.3	2.3	2.3	1.5	-	-	-	-	-	1.5	2.3	1.5	-
C401.4	2.6	1.7	2.6	1.7	1.7	-	-	-	-	-	-	1.7	2.6	1.7	1.7

C401.5	2.5	2.5	2.5	2.5	2.5	1.7	-	1.7	2.5	2.5	1.7	2.5	2.5	1.7	1.7
C401	**2.45**	**2.44**	**2.44**	**2.43**	**2.43**	**2.39**	**-**	**2.49**	**2.49**	**2.49**	**2.49**	**2.45**	**2.45**	**2.42**	**2.53**

Indirect Assessment Methods:

The indirect assessment tools are :

1. Student Feedback on Infra Structure, Research, Basic Facilities and Teaching Learning process
2. Graduate exit survey during Eighth semester
3. Employer feedback during Internship Period
4. Parent's Feedback during Academic Review Meetings and Convocation
5. Alumni survey during Alumni Meet and Alumni Association Events
6. Co-curricular and Extra Curricular activities.

Table 3.22 Indirect Assessment tools and their data collection methods

Assessment tool	Assessment criteria	Frequency of data collection	Scale	Minimum % of Samples	Expected level of attainment
Student Feedback on Infra Structure, Teaching Learning and Research	Queries related to Infra Structure, Teaching Learning and Research mapped with PO, PSO	During Project Semester (VIII)	1-5	90%	80% (Grade 4,5)
Graduate Exit Survey	PO,PSO	End of the B.E. Programme	1-5	90%	80% (Grade 4,5)
Employer Survey	PO,PSO	During internship	1-5	20 %	80% (Grade 4,5)
Parents Feedback	Queries related to Infra Structure, Teaching Learning- mapped with PO and PSO	During Convocation	1-5	20 %	80% (Grade 4,5)
Alumni Survey	Queries related to Curriculum mapped with PO,PSO	During Convocation	1-5	20 %	80% (Grade 4,5)
Co-Curricular Activities	Mapped with PO and PSO	During 4 years B.E. programme	Participated /not	70 %	70%

| Extra-curricular Activities | Mapped with PO and PSO | Batch wise: During 4 years B.E. programme | Participated /not | 20 % | 50% |

The details about these tools are given below. The format for data collection is enclosed.

1. **Students' Feedback on Infrastructure, teaching learning process and Research:**

During the project semester, 'Form for the evaluation of Infrastructure, teaching learning process and Research by the students' are collected. The survey questions are used to assess the attainment of program outcomes. The survey attributes and their mapping with PO and PSO are given below:

Table 3.23 Mapping the Student feedback parameters with POs and PSOs

S.No.	Attribute	Programme Outcome												PSO		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	A.INFRASTRUCTURE															
1	Quality of smart classroom and visual aids	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
2	Equipment of Lab	-	-	3	-	-	-	-	-	-	-	-	-	2		
3	Access of Library	-	-	-	-	-	-	-	-	-	-	-	3			1
4	Internet Access	-	-	-	-	-	-	-	-	-	-	-	3			1
5	Institutional supportive system facilities	-	-	-	-	-	-	-	-	3	3	-	-			1
6	Cultural Activities	-	-	-	-	-	-	-	-	3	3	-	-			1
7	Basic Amenities	-	-	-	-	-	1	1	-	-	-	-	-		1	
	B. Teaching Learning															
8	Quality of Curriculum and Syllabi	3	3	3	3	3	3	-	-	-	-	-	3	3	1	1
9	Skill Development Courses															
10	Interaction with faculty members	-	-	-	-	-	-	-	3	-	3	-	-			1
11	Coverage of syllabus	3	-	-	-	-	-	-	-	-	-	-	3	1		1
12	Conducting of lab experiments	3	3	3	3	3	-	-	-	-	-	-	3	3		1
13	Counselling by teacher	-	-	-	-	-	-	-	3	-	3	-	3			2
14	Motivation of teachers	-	-	-	-	-	-	-	3	-	3	-	3			2
15	Frequency of internet use	-	-	-	-	-	-	-	-	-	-	-	2			1
16	Frequency of Library use	3	-	-	-	-	-	-	-	3	-	-	3	1		1
17	Transparency in evaluation system	3	3	3	3	3	-	-	-	-	-	-	-	3		
18	Training and Placement cell functions	-	-	-	-	-	-	-	-	3	3	-	3			2

	C. Research															
19	Seriousness of project work/ Internship	2	3	3	3	3	-	-	-	-	-	-	-	3		
20	Extra Projects	2	3	3	3	3	-	-	-	-	-	-	-	3		
21	Projects guidance by the faculty	3	3	3	3	3	-	-	-	-	-	3	-	3		
Total weight		22	18	21	18	18	4	1	9	12	18	3	30	22	2	16

2. Graduate Exit survey:

The graduate exit survey is based on the feedback collected from graduates at the end of the programme. The expected level of attainment (in %) is fixed by the program advisory committee (PAC). The survey questionnaire contains questions related to POs and PSOs. The scale of attainment is 1(low) to 5 (High). The levels 4 and 5 are considered as satisfactory levels. Finally, the attainment level of POs and PSOs are calculated based on the number of satisfactory levels.

3. Employer feedback:

This feedback is about how alumni of department can able to implement their knowledge in the company. The expected level of attainment (in %) is fixed by the program advisory committee. The same committee has to set a questionnaire based on the programme outcomes. The % of students, who meet the expected level of attainment is found out based on the answers given by the employer of the internship students, to the questionnaire. Finally, the attainment level of POs is calculated based on satisfactory level of POs (Grade 4,Grade 5).

4. Parents Feedback: The questions related to infrastructure, discipline, monitoring and follow-up are asked to the parents.Finally, the attainment level of POs is calculated based on the satisfactory level of POs.

5. Alumni Feedback:

This feedback is about how effectively they can able to implement their knowledge acquired through BE-Computer Science and Engineering Programme. The questionnaire is framed to assess how well the curriculum helps the students to attain the programme outcomes. The expected level of attainment (in %) is fixed by the program advisory committee. Finally, the attainment level of POs is calculated based on the satisfactory level of POs.(Grade 4,5)

6 Co-curricular and Extra-curricular activities:

The attainment of co-curricular tool is based on the student's performance in following Co-curricular activities:

1. Project models exhibited in Hackathon
2. Paper presentation in Symposium/Conference
3. Workshop/Seminar Participation
4. Placement Training
5. Competitive exam
6. Value added courses such as ICT Learnathon, Skillathon, etc.
7. Membership in Professional bodies

The expected level of attainment (1-5) is based on the % of students, who participated in co-curricular activities. Satisfactory grade levels defined for participating in co-curricular activities are given below:

Grade 1: 1 to 5%

Grades 2   6-10%

Grade 3: 11 to 15%,

Grade 4: 16 to 20%

Grade 5 :> 20%

Extra Curricular Activities:

This attainment of Extra-curricular tool is based on the student's performance in following Extra-curricular activities:

1. NSS, NCC
2. Cultural and Sports events
3. Saturday Activities
4. Outreach Programmes

The expected level of attainment (1-5) is based on the % of students, who participated in extra-curricular activities. Satisfactory grade levels defined for participating in extra -curricular activities are given below:

1. Grade 1   : 1 to 5%
2. Grades 2 :   6-10%
3. Grade 3: 11 to 15%,
4. Grade 4: 16 to 20%
5. Grade5 :> 20%

Table 3.24 Mapping the Co-curricular and Extra-Curricular components with POs and PSOs

Component		Programme Outcome												PSO		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
CO-CURRICULAR																
1	Hackathon Participation	3	3	3	3	3	3	1	1	3	3	-	-	3	1	2
2	Symposium/Conference Participation	-	-	-	-	-	-	-	-	3	3	-	-			2
3	Workshop/Seminar Participation	-	-	3	-	-	-	-	-	3	-	-	-	1		1
4	Placement Training	-	-	-	-	3	-	-	-	-	-	-	3	1		1
5	Competitive exam	3	3	3	3	-	-	-	-	-	-	-	3	2		1
6	Value added courses	-	-	-	-	-	-	-	-	3	3	2	-			2
7	Membership in Professional bodies	-	-	-	-	-	-	-	-	3	3	-	3			3
Extra -Curricular																
1	NSS							2	2	3	3				2	2
2	Cultural and Sports activities									3	1					
3	Saturday Activities									3	3					
4	Outreach programmes							3	1	3					2	1
	Total Weight	**6**	**6**	**9**	**6**	**6**	**3**	**6**	**4**	**27**	**19**	**2**	**9**	**7**	**5**	**15**

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY
Kuniamuthur, Coimbatore – 641008.
(AN AUTONOMOUS INSTITUTION, AFFILIATED TO ANNA UNIVERSITY CHENNAI)

Alumni Meet 2023 – Chennai Chapter

FEEDBACK FORM

Name: KOWSIK PIRABHU S R	Batch: 2018 – 22
Department: CSE	Address: Courts, kandanchowadi, perungudi, Chennai – 600076
Phone: 6374361310	E-mail: kowsikpirabhu@gmail.com

1. **Current Employment**

   Company / Organization: SuperOM.ai

   Designation: Frontend engineer

2. **Which of the following describe your primary job responsibilities?**

☐ Testing	☐ Research & Dev.	☐ Academician
✓ Developer	☐ QA Team	☐ Trainers
☐ Technical Support	☐ S/W Project Management	☐ Other – Please Describe:
☐ Designing	☐ Networking	

3. **Have you completed a post graduate degree or presently attending? If so, provide the details.**

   Degree: – No –   Institution/ University: Batch:

4. **Accomplishments (after graduation)**

   ☐ Yes   ☑ No   If yes, the respective Department Coordinators will reach you shortly

5. **Certifications (if any)**

   ☐ Yes   ☑ No   If yes, the respective Department Coordinators will reach you shortly

   Point Scale: 5 –Excellent, 4 – Very good, 3 – Good, 2 – Average, 1 - Poor

6. Application of the term "Student friendly Campus" sounds true.

5	✓	4		3		2		1	

7. How do you rate your department academic initiatives taken for the improvement of your technical knowledge.

   Industry Institute Collaboration

5	✓	4		3		2		1	

Figure 3.8 A sample Alumni Feedback

Rubrics developed to validate the POs and PSOs

The PO and PSO attainment target, set for different batches

PO	Passed Out Batches						Ongoing Batches	
PO\Batch	2014-18	2015-19	2016-20	2017-21	2018-22	2019-23	2020-24	2021-25
PO1	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO2	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO3	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO4	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO5	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4

PO6	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO7	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO8	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO9	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO10	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO11	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PO12	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PSO1	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PSO2	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4
PSO3	1.95	1.95	2.1	2.1	2.25	2.25	2.4	2.4

RUBRICS FOR PROGRAMME OUTCOME ASSESSMENT

PO1-Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

	Rubric	Level 3	Level 2	Level 1
1.1	Applying mathematical knowledge to find the solution for the complex problem	Excellent	Good	Low
1.2	Applying computational knowledge to find the solution for the problem	Excellent	Good	Low
1.3	Applying scientific theories to find an optimal solution for the problem	Excellent	Good	Low

PO2 -Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

	Rubric	Level 3	Level 2	Level 1
2.1	Comprehending the problem.	Excellent	Good	Low
2.2	Analyzing the complexity of the problem	Excellent	Good	Low
2.3	Identifying and formulating hardware and software requirements	Excellent	Good	Low

PO3 - Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

	Rubric	Level 3	Level 2	Level 1

3.1	Knowledge on software/hardware design methodologies	Excellent	Good	Low
3.2	Implementation of software/hardware components	Excellent	Good	Low
3.3	Verification of the design and validation of the performance of the software/hardware systems.	Excellent	Good	Low

PO4 - Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

	Rubric	Level 3	Level 2	Level 1
4.1	Conducting Literature Survey	Excellent	Good	Low
4.2	Investigate complex problems using research-based knowledge and research methods	Excellent	Good	Low
4.3	Provide valid conclusions on investigation	Excellent	Good	Low

PO5 - Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

	Rubric	Level 3	Level 2	Level 1
5.1	Create /Select prediction and modeling tools to complex engineering activities.	Excellent	Good	Low
5.2	Apply modern Engineering and IT tools for solving complex engineering activities.	Excellent	Good	Low
5.3	Discuss the limitations of the modern tools	Excellent	Good	Low

PO6 - The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

	Rubric	Level 3	Level 2	Level 1
6.1	Contextual knowledge on societal, health, safety, legal and cultural issues.	Excellent	Good	Low

6.2	Apply reasoning to assess societal, health, safety, legal and cultural issues	Excellent	Good	Low
6.3	Discuss the responsibilities relevant to the professional engineering practice	Excellent	Good	Low

PO7- Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

	Rubric	Level 3	Level 2	Level 1
7.1	Assess societal and environmental issues in the context of computing paradigms	Excellent	Good	Low
7.2	Undertaking professional responsibilities for solving environmental issues.	Excellent	Good	Low
7.3	Ensuring environmental sustainability as an engineer.	Excellent	Good	Low

PO8 - Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

	Rubric	Level 3	Level 2	Level 1
8.1	Knowledge of code of ethics in computing professional activities	Excellent	Good	Low
8.2	Apply ethical principles in engineering practice	Excellent	Good	Low
8.3	Commit to professional ethics and responsibilities and norms of the engineering practice.	Excellent	Good	Low

PO9 - Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

	Rubric	Level 3	Level 2	Level 1
9.1	Function effectively as an individual in multidisciplinary settings.	Excellent	Good	Low
9.2	Ability to coordinate the project team as a leader	Excellent	Good	Low
9.3	Work with a multi-disciplinary team to fulfill the tasks.	Excellent	Good	Low

PO10 - Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

	Rubric	Level 3	Level 2	Level 1
10.1	Make Effective presentation on the ideas and engineering activities to the society	Excellent	Good	Low
10.2	Comprehend and write effective reports and design documentation	Excellent	Good	Low
10.3	Establish effective communication across peers.	Excellent	Good	Low

PO11- Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

	Rubric	Level 3	Level 2	Level 1
11.1	Demonstrate knowledge and understanding of the engineering and management principles	Excellent	Good	Low
11.2	Prepare to succeed in various international competitive exams and design competitions.	Excellent	Good	Low
11.3	Manage projects in multidisciplinary environments	Excellent	Good	Low

PO12 – Life - Long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

	Rubric	Level 3	Level 2	Level 1
12.1	Practicing contextual and reflective learning techniques in certifications.	Excellent	Good	Low
12.2	Significance of continuing education for professional development	Excellent	Good	Low
12.3	Involvement in the activities of various professional bodies.	Excellent	Good	Low
12.4	Participation in national and international level competitive examinations like GATE, CAT, GRE,TOEFL etc.	Excellent	Good	Low

RUBRICS FOR PROGRAMME SPECIFIC OUTCOME ASSESSMENT

PSO1: Apply the fundamental knowledge for problem solving and analysis as well as conduct investigations in computer science and engineering for sustainable development

Rubric		Level 3	Level 2	Level 1
1.1	Apply the fundamental knowledge for problem solving	Excellent	Good	Low
1.2	Categorize the techniques by analysing them	Excellent	Good	Low
1.3	Prepare the valid conclusion by identifying the solution and conducting investigations of complex problems	Excellent	Good	Low

PSO2: Design and develop the solutions for real time problems and implement them by using modern software tools in lieu of deploying them in the society for its growth.

Rubric		Level 3	Level 2	Level 1
2.1	Select tools for implementing the solutions for real time problems	Excellent	Good	Low
2.2	Develop the solutions for the societal issues	Excellent	Good	Low
2.3	Validate the solution by deploying it in the society	Excellent	Good	Low

PSO3 : Communicate effectively, adopt ethics and engage in life-long learning

Rubric		Level 3	Level 2	Level 1
3.1	Explain the design of the product effectively and document it	Excellent	Good	Low
3.2	Apply ethical principles in every engineering practice	Excellent	Good	Low
3.3	Develop innovative systems and involve in life-long learning	Excellent	Good	Low

Contribution of Courses in PO/PSO Attainment

Regulation 2018

Number of Courses: 53

Count of Contributing Courses- R2018

Weighted Contribution Chart-Regulation 2018
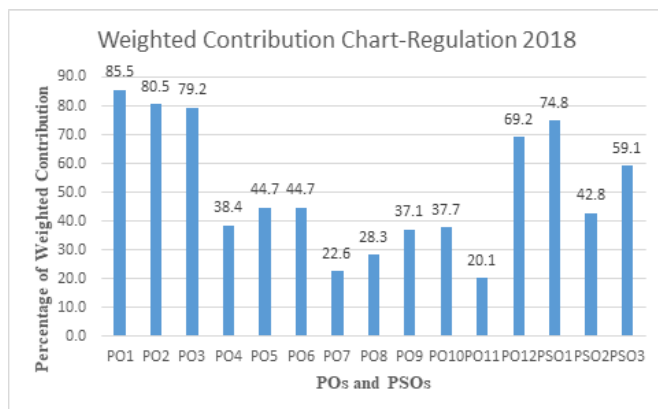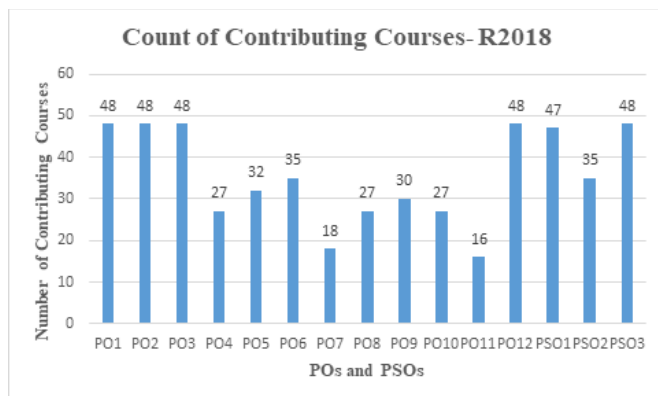
Level /Grade of Attainment Set:

The attainment level is fixed between 1 and 3 as below:

Level 1: Low – less than 1.95

Level 2: Good –1.96 to 2.25

Level 3: Excellent - Above 2.25

Performance Analysis of PO1 Attainment

PO1	**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	
Batch	**Overall Attainment (Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.32	**Excellent**
2018-2022	2.41	**Excellent**
2017-2021	2.22	Good
2016-2020	2.31	**Excellent**

Performance Analysis of PO2 Attainment

PO2	**Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.	
Batch	**Overall Attainment(Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.29	**Excellent**
2018-2022	2.41	**Excellent**
2017-2021	2.16	Good
2016-2020	2.18	Good

Performance Analysis of PO3 Attainment

PO3	**Design/Development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.	
Batch	**Overall Attainment (Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.31	**Excellent**
2018-2022	2.4	**Excellent**
2017-2021	2.11	Good
2016-2020	2.14	Good

Performance Analysis of PO4 Attainment

PO4	**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.	
Batch	**Overall Attainment(Direct and Indirect)**	

	Attainment	Level of Attainment
2019-2023	2.27	**Excellent**
2018-2022	2.46	**Excellent**
2017-2021	2.1	Good
2016-2020	2.11	Good

Performance Analysis of PO5 Attainment

PO5	**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations	
Batch	**Overall Attainment (Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.4	**Excellent**
2018-2022	2.44	**Excellent**
2017-2021	2.11	Good
2016-2020	2.14	Good

Performance Analysis of PO6 Attainment

PO6	**The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.	
Batch	**Overall Attainment(Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.42	**Excellent**
2018-2022	2.45	**Excellent**
2017-2021	2.12	Good
2016-2020	2.2	Good

Performance Analysis of PO7 Attainment

PO7	**Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	
Batch	**Overall Attainment (Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.33	**Excellent**
2018-2022	2.47	**Excellent**
2017-2021	2.13	Good
2016-2020	2.12	Good

Performance Analysis of PO8 Attainment

PO8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	
Batch	**Overall Attainment (Direct and Indirect)**	
	Level of Attainment	**Grade of Attainment**
2019-2023	2.42	**Excellent**
2018-2022	2.46	**Excellent**
2017-2021	2.14	Good
2016-2020	2.11	Good

Performance Analysis of PO9 Attainment

PO9	**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	
Batch	**Overall Attainment(Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.36	**Excellent**
2018-2022	2.4	**Excellent**
2017-2021	2.18	Good
2016-2020	2.13	Good

Performance Analysis of PO10 Attainment

PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions	
Batch	**Overall Attainment(Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.42	**Excellent**
2018-2022	2.45	**Excellent**
2017-2021	2.26	**Excellent**
2016-2020	2.19	Good

Performance Analysis of PO11 Attainment

PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.	
Batch	**Overall Attainment(Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.43	**Excellent**
2018-2022	2.48	**Excellent**
2017-2021	2.18	Good
2016-2020	2.11	Good

Performance Analysis of PO12 Attainment

PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Batch	Overall Attainment(Direct and Indirect)	
	Attainment	Level of Attainment
2019-2023	2.41	**Excellent**
2018-2022	2.42	**Excellent**
2017-2021	2.19	Good
2016-2020	2.15	Good

Performance Analysis of PSO1 Attainment

PSO1	Apply the fundamental knowledge for problem solving and analysis as well as conduct investigations in computer science and engineering for sustainable development	
Batch	Overall Attainment(Direct and Indirect)	
	Attainment	Level of Attainment
2019-2023	2.33	**Excellent**
2018-2022	2.4	**Excellent**
2017-2021	2.28	**Excellent**
2016-2020	2.31	**Excellent**

Performance Analysis of PSO2 Attainment

PSO2	Design and develop the solutions for real time problems and implement them by using modern software tools in lieu of deploying them in the society for its growth.	
Batch	Overall Attainment(Direct and Indirect)	
	Attainment	Level of Attainment
2019-2023	2.34	**Excellent**
2018-2022	2.44	**Excellent**
2017-2021	2.18	Good
2016-2020	2.21	Good

Performance Analysis of PSO3

PSO3	Communicate effectively, adopt ethics and engage in life-long learning	
Batch	**Overall Attainment(Direct and Indirect)**	
	Attainment	**Level of Attainment**
2019-2023	2.39	**Excellent**
2018-2022	2.41	**Excellent**
2017-2021	2.29	**Excellent**
2016-2020	2.25	**Excellent**

The Performance improvement in the PO & PSO attainment is shown in the following chart
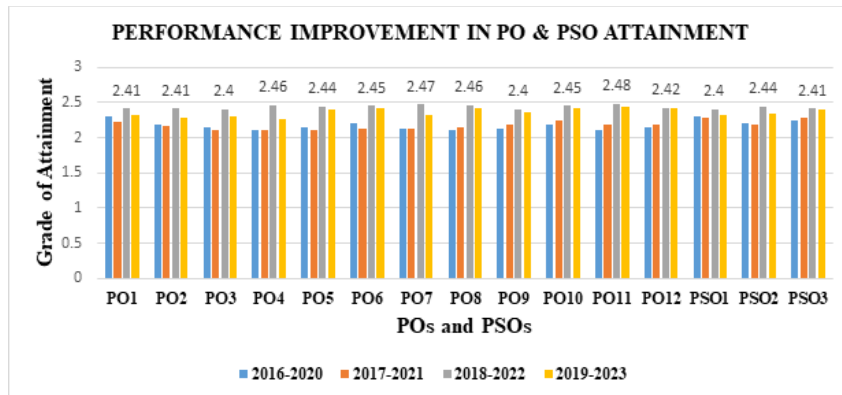
After completing the PO attainment process, the following steps are followed for continuous improvement

1. Plot the graph to display the attainment of all the PO's and PSO's and submit it in the PEC meeting.
2. Prepare an overall assessment report for the PO's and PSO's attainment.
3. Identify the PO which doesn't meet the set attainment level (or needs to be improved)
4. Conduct a meeting with the department faculties to record the suggestions for improvement.
5. Analyze the Attainment gap in the PAC meeting and record their suggestions.
6. Prepare an Action Taken Report by considering the points suggested for improvement.
7. Maintain Documentary Evidences for all the records created.

Documentation of Results

○ Continuous and semester end exam results are documented as in prescribed format and maintained in HOD's office
○ Samples of lab records and observation note books are maintained by faculty in-charge.
○ Course information, CIA QPs, marks, Performance report, weaker students list and coaching classes, Details of technical components, CO and PO attainment are maintained in the course file.
○ Semester plan is maintained by the class Advisors.
○ Projects are documented and maintained by the respective coordinators.

- All cell and professional society activities along with association activities are documented and maintained by respective in-charges.
- Student's performance in paper /project presentation, in-plant training and industrial visits are documented and maintained by the respective in-charges.
- PO, PSO attainments, PEC and PAC meeting Minutes and Surveys are maintained by the Programme coordinator.

3.3.2 Provide results of evaluation of each PO & PSO (65)

Institute Marks : 65.00

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Mathematic	2.35	2.35	2.34	0	0	0	0	0	2.37	0	0	2.35
Probability a	2.22	2.21	2.24	0	0	2.24	0	0	2.23	0	0	2.23
Principles o	2.37	2.38	2.37	0	0	0	0	0	0	0	0	0
Fundamenta	2.46	2.46	2.46	PO4	PO5	2.46	PO7	PO8	PO9	2.47	PO11	2.46
Physics for	2.40	2.38	2.38	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Business Co	PO1	PO2	PO3	PO4	PO5	PO6	PO7	2.51	PO9	2.57	PO11	2.58
Mandatory (	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	2.44	2.46	PO11	2.51
Linear Alge	2.24	2.23	2.25	PO4	PO5	PO6	PO7	PO8	2.25	PO10	PO11	2.25
Python Prog	2.30	2.27	2.27	PO4	PO5	PO6	PO7	PO8	2.27	2.25	PO11	2.27
Engineering	2.36	2.36	2.36	PO4	PO5	2.37	2.33	PO8	2.28	PO10	PO11	PO12
Electron De	2.22	2.23	2.23	PO4	PO5	PO6	PO7	PO8	2.18	2.26	PO11	2.22
Engineering	2.19	2.19	2.20	PO4	2.20	PO6	PO7	2.19	PO9	PO10	PO11	PO12
Python Prog	2.36	2.34	2.34	PO4	2.32	2.32	PO7	2.32	2.35	2.25	PO11	2.36
Mandatory (	PO1	PO2	PO3	PO4	PO5	PO6	2.39	PO8	PO9	PO10	PO11	PO12
Mathematic	2.21	2.21	2.21	PO4	PO5	PO6	PO7	PO8	2.22	2.23	PO11	2.25
Computer C	2.21	2.2	2.21	PO4	PO5	PO6	PO7	2.35	2.2	PO10	PO11	2.2
Data Structu	2.34	2.34	2.31	2.29	2.34	2.36	PO7	PO8	PO9	PO10	PO11	2.31
Object Orie	2.22	2.19	2.22	2.19	2.19	2.23	2.23	PO8	2.23	2.23	PO11	2.23
Digital Princ	2.18	2.21	2.18	PO4	2.05	PO6	PO7	PO8	PO9	PO10	PO11	2.21
Software En	2.33	2.33	2.34	2.33	2.33	2.33	2.37	2.33	2.33	2.33	2.33	2.33
Data Structu	2.51	2.51	2.51	2.52	2.51	2.5	PO7	PO8	2.52	2.49	2.46	2.52
Mandatory (	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2.52
Web Techno	2.3	2.3	2.3	2.24	2.31	2.31	2.23	2.24	2.24	PO10	PO11	2.31
Transforms	2.22	2.22	2.22	PO4	PO5	PO6	PO7	PO8	2.21	PO10	PO11	2.19
Database M	2.46	2.46	2.46	PO4	2.42	2.42	PO7	PO8	PO9	PO10	PO11	2.46
Design and	2.52	2.51	2.52	2.51	2.51	2.46	PO7	2.55	2.55	2.55	2.55	2.52
Operating S	2.48	2.48	2.48	2.48	2.48	2.5	2.48	2.49	2.49	2.48	PO11	2.47
Database M	2.45	2.44	2.44	PO4	2.44	2.43	PO7	2.44	2.44	2.44	2.41	2.44
Web Techno	2.52	2.52	2.51	2.49	2.52	2.53	2.58	2.53	2.51	2.53	2.55	2.54
Mandatory (	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2.39

Course											
Theory of C	2.6	2.6	2.6	PO4	2.62	2.62	PO7	PO8	PO9	PO10	PO11	2.6
Data Comm	2.44	2.44	2.44	2.44	2.44	2.43	2.44	PO8	PO9	PO10	PO11	2.44
Artificial Inte	2.65	2.65	2.64	2.64	2.64	2.65	2.55	2.55	2.64	2.64	2.55	2.64
Micro contro	2.51	2.5	2.53	PO4	2.53	PO6	PO7	2.56	2.55	2.55	PO11	2.51
Professiona	2.58	2.58	2.58	2.58	2.56	2.56	PO7	2.58	PO9	PO10	PO11	2.58
Professiona	2.62	2.61	2.55	2.55	2.55	2.55	PO7	2.56	PO9	PO10	PO11	2.56
Computer N	2.66	2.66	2.67	2.67	2.7	2.66	PO7	2.69	2.7	2.71	PO11	2.66
Mini Project	2.81	2.81	2.81	2.81	2.55	2.55	2.61	2.61	2.52	2.68	2.68	2.64
Principles o	2.41	2.4	2.41	PO4	2.55	PO6	PO7	PO8	PO9	PO10	PO11	2.38
Data Analyt	2.33	2.33	2.34	2.33	2.28	2.35	PO7	PO8	PO9	2.33	2.36	2.33
Virtualizatio	2.58	2.57	2.58	2.72	2.55	2.72	2.72	2.57	2.57	2.57	2.67	2.59
Professiona	2.45	2.44	2.38	2.38	2.38	2.46	PO7	2.38	PO9	PO10	PO11	2.38
Professiona	2.34	2.34	2.37	2.37	2.37	2.34	PO7	2.37	PO9	PO10	PO11	2.35
Open Electi	2.54	2.59	2.62	2.78	PO5	2.54	PO7	2.47	2.47	2.47	2.47	2.59
Compiler D	2.61	2.61	2.6	PO4	2.71	2.5	2.56	2.61	2.61	2.59	PO11	2.61
Computatio	2.36	2.36	2.28	2.36	PO5	2.29	PO7	PO8	PO9	PO10	PO11	2.38
Internet of T	2.42	2.43	2.44	2.44	2.43	2.49	2.45	2.46	2.42	2.45	2.36	2.42
Professiona	2.34	2.33	2.26	2.26	2.26	2.31	PO7	2.26	PO9	PO10	PO11	2.31
Professiona	2.39	2.37	2.27	2.27	2.27	2.39	PO7	2.27	PO9	PO10	PO11	2.31
Open Electi	2.37	2.37	2.35	2.37	PO5	2.38	PO7	2.37	2.19	2.3	2.4	2.32
Open Electi	2.41	2.41	2.41	2.41	PO5	2.41	PO7	2.41	2.41	2.41	2.35	2.35
Employabili	2.44	2.44	2.44	2.45	2.44	2.48	2.44	2.48	2.44	2.47	2.48	2.45
Project	2.46	2.46	2.46	2.46	2.66	2.66	2.67	2.67	2.48	2.48	2.54	2.56

PO Attainment Indirect

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Student Fee	2.76	2.73	2.79	2.67	2.7	2.55	2.47	2.44	2.67	2.68	2.42	2.75
Graduate E	2.56	2.43	2.57	2.68	2.67	2.51	2.37	2.41	2.74	2.68	2.11	2.42
Parent Fee	2.83	2.65	2.43	2.12	2.56	2.31	2.56	2.78	2.34	2.21	2.56	2.89
Employer F	2.34	2.14	2.15	2.31	2.65	2.14	2.76	2.54	2.32	2.12	2.21	2.34
Alumni Fee	2.46	2.17	2.34	2.16	2.12	2.56	2.34	2.18	2.56	2.45	2.53	2.76
Co-Curricula	2.56	2.23	2.56	2.10	2.67	2.78	2.54	2.54	2.87	2.56	2.56	2.45
Extra-Curric	PO1	PO2	PO3	PO4	PO5	PO6	2.05	2.15	2.13	2.11	2.13	2.45

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
InDirect Attainment	2.58	2.39	2.47	2.34	2.56	2.48	2.44	2.43	2.52	2.40	2.36	2.58
Direct Attainment	2.41	2.41	2.40	2.46	2.44	2.45	2.47	2.46	2.40	2.45	2.48	2.42

PSO Attainment

Course	PSO1	PSO2	PSO3
Mathematics I	2.36	PSO2	2.37
Probability and Statistic	2.23	PSO2	2.24
Principles of Electrical	2.37	PSO2	PSO3
Fundamentals of Comp	2.46	PSO2	2.47
Physics for Computing	2.38	PSO2	PSO3
Business Communicati	PSO1	PSO2	2.56
Mandatory Course -1	PSO1	PSO2	2.47
Linear Algebra	2.24	PSO2	2.26
Python Programming	2.29	PSO2	2.27
Engineering Chemistry	PSO1	PSO2	PSO3
Electron Devices and C	2.23	PSO2	2.22
Engineering Graphics	2.19	2.20	PSO3
Python Programming L	2.35	2.32	2.35
Mandatory Course -II	PSO1	PSO2	PSO3
Mathematical logic, gra	2.21	PSO2	2.21
Computer Organization	2.2	PSO2	2.2
Data Structures	2.34	2.31	2.3
Object Oriented Progra	2.22	2.23	2.23
Digital Principles and S	2.31	2.05	2.05
Software Engineering a	2.33	2.33	2.35
Data Structures Labora	2.51	2.51	2.5
Mandatory Course-III	PSO1	PSO2	2.52
Web Technology	2.3	PSO2	2.3
Transforms and Compu	2.22	PSO2	2.19
Database Managemen	2.46	2.42	2.46
Design and analysis of	2.52	2.51	2.6

Operating Systems	2.47	2.49	2.48
Database Managemen	2.44	2.43	2.44
Web Technology Labor	2.52	2.52	2.52
Mandatory Course-IV	PSO1	PSO2	2.39
Theory of Computation	2.60	2.62	2.6
Data Communications	2.44	2.44	2.44
Artificial Intelligence an	2.64	2.65	2.65
Micro controllers and E	2.42	2.55	2.53
Professional Elective-1	2.58	2.56	2.58
Professional Elective-2	2.62	2.55	2.56
Computer Networks La	2.67	2.66	2.65
Mini Project	2.68	2.66	2.63
Principles of Compiler I	2.4	2.45	2.38
Data Analytics	2.32	2.33	2.31
Virtualization and Clou	2.58	2.72	2.59
Professional Elective-3	2.45	2.46	2.38
Professional Elective-4	2.34	2.34	2.32
Open Elective-1	2.19	2.54	2.54
Compiler Design Labor	2.61	2.50	2.61
Computational Biology	2.36	2.3	2.36
Internet of Things	2.43	2.44	2.44
Professional Elective-5	2.34	2.3	2.31
Professional Elective-6	2.39	2.39	2.31
Open Elective-2	2.37	2.33	2.37
Open Elective-3	2.41	2.35	2.41
Employability Enhance	2.45	2.44	2.43
Project	2.46	2.66	2.54

PSO Attainment Indirect

Survey	PSO1	PSO2	PSO3
Student Feedback on Ii	2.54	2.15	2.68
Graduate Exit Survey	2.43	2.21	2.16
Employer Feedback du	2.15	2.45	2.18
Alumni Feedback durin	2.25	2.14	2.78

| Extra Curricular and Co | 2.67 | 2.78 | 2.85 |

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	2.40	2.44	2.41
InDirect Attainment	2.41	2.35	2.53

4 STUDENTS' PERFORMANCE (100)   Total Marks 93.49

Institute Marks :

Table 4.1

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2022-23 (CAY)	2021-22 (CAYm1)	2020-21 (CAYm2)	2019-20 (CAYm3)	2018-19 (CAYm4)	2017-18 (CAYm5)	2016-17 (CAYm6)
Sanctioned intake of the program(N)	207	180	180	180	180	180	180
Total number of students admitted in first year minus number of students migrated to other programs/ institutions plus No. of students migrated to this program (N1)	209	183	187	179	176	178	174
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	20	14	9	13	23	13
Separate division students, If applicable (N3)	0	0	0	0	0	0	0
Total number of students admitted in the programme(N1 + N2 + N3)	209	203	201	188	189	201	187

Table 4.2

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated without backlogs in any semester/ year of study (Without Backlog means no compartment or failures in any semester/ year of study)			
		I year	II year	III year	IV year
2022-23 (CAY)	209				
2021-22 (CAYm1)	203	173			
2020-21 (CAYm2)	201	181	169		
2019-20 (CAYm3)	188	167	171	162	
2018-19 (LYG)	189	166	172	164	160
2017-18 (LYGm1)	201	163	176	170	162
2016-17 (LYGm2)	187	159	166	153	147

Table 4.3

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2022-23 (CAY)	209				
2021-22 (CAYm1)	203	183			
2020-21 (CAYm2)	201	187	201		
2019-20 (CAYm3)	188	179	188	188	
2018-19 (LYG)	189	176	189	189	186
2017-18 (LYGm1)	201	178	201	200	195
2016-17 (LYGm2)	187	174	187	187	166

4.1 Enrolment Ratio (20)   Total Marks 20.00

Institute Marks : 20.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2022-23 (CAY)	207	209	100.97
2021-22 (CAYm1)	180	183	101.67
2020-21 (CAYm2)	180	187	103.89

Average [(ER1 + ER2 + ER3) / 3] :   102.18

Assessment :   20.00

4.2 Success Rate in the stipulated period of the program (20)
Total Marks 17.03

4.2.1 Success rate without backlogs in any semester / year of study (15)

Institute Marks : 12.30

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2 LYGm2 (2016-17)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	189.00	201.00	187.00
Y Number of students who have graduated without backlogs in the stipulated period	160.00	162.00	147.00
Success Index [SI = Y / X]	0.85	0.81	0.79

Average SI [(SI1 + SI2 + SI3) / 3] : 0.82

Assessment [15 * Average SI] : 12.30

4.2.2 Sucess rate in stipulated period (5)

Institute Marks : 4.73

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2 LYGm2 (2016-17)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	189.00	201.00	187.00
Y Number of students who have graduated in the stipulated period	186.00	195.00	166.00
Success Index [SI = Y / X]	0.98	0.97	0.89

Average SI[(SI1 + SI2 + SI3) / 3]: 0.95

Assessment [5 * Average SI] : 4.73

Note : If 100% students clear without any backlog then also total marks scored will be 20 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.3 Academic Performance in Second Year (10)

Total Marks 8.56

Institute Marks : 8.56

Academic Performance	CAYm2 (2020-21)	CAYm3 (2019-20)	LYG (2018-19)
Mean of CGPA or mean percentage of all successful students(X)	8.73	8.60	8.35
Total number of successful students (Y)	201.00	188.00	189.00
Total number of students appeared in the examination (Z)	201.00	188.00	189.00
API [X * (Y/Z)]	8.73	8.60	8.35

Average API [(AP1 + AP2 + AP3)/3] : 8.56

Assessment [AverageAPI] : 8.56

4.4 Placement, Higher Studies and Entrepreneurship (30)   Total Marks 27.90

Institute Marks : 27.90

Item	LYG(2018-19)	LYGm1(2017-18)	LYGm2(2016-17)
Total No of Final Year Students(N)	190.00	200.00	187.00
No of students placed in the companies or goverment sector(X)	164.00	175.00	151.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	12.00	12.00	10.00
No of students turned enterpreneur in engineering/technology (Z)	5.00	3.00	5.00
Placement Index [(X+Y+Z)/N] :	0.95	0.95	0.89

Average Placement [(P1 + P2 + P3)/3] :   0.93

Assessment [30 * Average Placement] : 27.90

Program Name : Computer Science & Engg.
Assessment Year : 2021-22 (CAYm1)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	PREETHI S	18EUCS084	Informatica	SKCET-CSE/Placement/21-22/001
2	THEOPHILA VAIZ R	18EUCS121	IBM	SKCET-CSE/Placement/21-22/002
3	ABISHEK GANESH	18EUCS001	Mr. Cooper	SKCET-CSE/Placement/21-22/003
4	AKIL PRASATH R	18EUCS008	Mr. Cooper	SKCET-CSE/Placement/21-22/004
5	AVINASH S NARAYANAN	18EUCS021	Mr.Cooper	SKCET-CSE/Placement/21-22/005
6	BALAMURUGA M	18EUCS024	Zoho	SKCET-CSE/Placement/21-22/006
7	GOKULA KRISHNAN N	18EUCS034	RFPIO	SKCET-CSE/Placement/21-22/007
8	PRANESH M	18EUCS080	Sirius	SKCET-CSE/Placement/21-22/008
9	THINESH KUMAR S	18EUCS122	Sirius	SKCET-CSE/Placement/21-22/009
10	KEERTHI RAAJAN K M	18EUCS058	Zoho	SKCET-CSE/Placement/21-22/010
11	NITHIYA SRI M	18EUCS075	Aspire	SKCET-CSE/Placement/21-22/011
12	SUDIR KRISHNAA R.S	18EUCS117	Publicis Sapient	SKCET-CSE/Placement/21-22/012
13	NITHIN K M	18EUCS153	Thoughtworks	SKCET-CSE/Placement/21-22/013
14	KAARTHIKEYAN K	18EUCS052	Zoho	SKCET-CSE/Placement/21-22/014
15	KARTHEESAN E	18EUCS054	Zoho	SKCET-CSE/Placement/21-22/015
16	IMRON KHAN S	18EUCS143	Kaar Tech	SKCET-CSE/Placement/21-22/016
17	BHAVIKK D PATEL	18EUCS026	Zoho	SKCET-CSE/Placement/21-22/017
18	BALA VIGESH C	18EUCS023	CSG	SKCET-CSE/Placement/21-22/018
19	HARI KRISHNA A	18EUCS037	Rapid Data	SKCET-CSE/Placement/21-22/019
20	DIVYA BHARATHI S	18EUCS031	TCS	SKCET-CSE/Placement/21-22/020
21	KOWSHIK K	18EUCS060	Nineleaps	SKCET-CSE/Placement/21-22/021
22	SATHYAPRABA G	18EUCS103	IBM	SKCET-CSE/Placement/21-22/022
23	SWETHA S	18EUCS120	IBM	SKCET-CSE/Placement/21-22/023
24	NANDHA KUMAR N	18EUCS150	Aptean India Pvt Ltd	SKCET-CSE/Placement/21-22/024
25	SURIYAPRAKASH S	18EUCS174	Aptean India Pvt Ltd	SKCET-CSE/Placement/21-22/025
26	JEYA PRADEEPA K	18EUCS051	Enquero	SKCET-CSE/Placement/21-22/026
27	YOGESHWARAN R	18EUCS180	Sillicon labs	SKCET-CSE/Placement/21-22/027
28	HARIHARAN V C	18EUCS139	Temenos	SKCET-CSE/Placement/21-22/028
29	HARSHAN J	18EUCS140	Wipro	SKCET-CSE/Placement/21-22/029
30	SUKUMAR E	18EUCS118	Wipro	SKCET-CSE/Placement/21-22/030
31	SAKTHIVEL R	18EUCS166	Wipro	SKCET-CSE/Placement/21-22/031
32	SETHURAMAN S	18EUCS106	CTS	SKCET-CSE/Placement/21-22/032
33	SHYAM B	18EUCS111	Cognizant	SKCET-CSE/Placement/21-22/033

34	DHARIKA P	18EUCS137	Tiger analytics	SKCET-CSE/Placement/21-22/034
35	ULFATH FARHAN H	18EUCS123	SOTI	SKCET-CSE/Placement/21-22/035
36	KEERTHANA K	18EUCS057	Cognizant	SKCET-CSE/Placement/21-22/036
37	NITHISH KUMAR S	18EUCS073	Publicis Sapient	SKCET-CSE/Placement/21-22/037
38	SHAHAN SHAMSUDIN	18EUCS108	KPMG	SKCET-CSE/Placement/21-22/038
39	INFANT RASHMI E	18EUCS045	HPE	SKCET-CSE/Placement/21-22/039
40	MOKESH ANAND KUMAR G	18EUCS149	Vajro	SKCET-CSE/Placement/21-22/040
41	HASANTHI M M	18EUCS043	CTS	SKCET-CSE/Placement/21-22/041
42	HARIHARAN R	18EUCS040	VALUE LABS	SKCET-CSE/Placement/21-22/042
43	SARAVANAN M	18EUCS099	FORD	SKCET-CSE/Placement/21-22/043
44	SIBI SARATH K	19EUCS512	Xerago	SKCET-CSE/Placement/21-22/044
45	SURENDAR RAJ G	18EUCS173	Ford	SKCET-CSE/Placement/21-22/045
46	PRANAV Y	18EUCS079	Sterlite technologies	SKCET-CSE/Placement/21-22/046
47	ARUNKUMAR L	18EUCS017	Tata Elxsi Limited	SKCET-CSE/Placement/21-22/047
48	RITHVIKK A	18EUCS094	Tata Elxsi Limited	SKCET-CSE/Placement/21-22/048
49	JANANI S	18EUCS046	IBM	SKCET-CSE/Placement/21-22/049
50	BAVIN KUMAR R	18EUCS025	CTS	SKCET-CSE/Placement/21-22/050
51	HARI VISHAL J	18EUCS039	CTS	SKCET-CSE/Placement/21-22/051
52	SHRIRAAM R	19EUCS511	CTS	SKCET-CSE/Placement/21-22/052
53	THARSHAN KUMAR R G	18EUCS176	Cognizant	SKCET-CSE/Placement/21-22/053
54	ASHWIN KUMAR L	18EUCS019	Equitas	SKCET-CSE/Placement/21-22/054
55	DHIVYA S	18EUCS030	Equitas	SKCET-CSE/Placement/21-22/055
56	DHANISHTA K R	18EUCS136	Pwc	SKCET-CSE/Placement/21-22/056
57	KAVYASHREE B	18EUCS056	CTS	SKCET-CSE/Placement/21-22/057
58	KRUPA SUGUMARAN	18EUCS062	Cognizant	SKCET-CSE/Placement/21-22/058
59	LAVANYA R	18EUCS064	IBM	SKCET-CSE/Placement/21-22/059
60	ARUN BHARATH S	18EUCS013	Cognizant	SKCET-CSE/Placement/21-22/060
61	MADHAVAN G R	18EUCS066	Cognizant	SKCET-CSE/Placement/21-22/061
62	NITHISH S	18EUCS074	Equitas	SKCET-CSE/Placement/21-22/062
63	DHEEP KANISHK S V	18EUCS029	Equitas	SKCET-CSE/Placement/21-22/063
64	NIVAS S	18EUCS156	Accenture	SKCET-CSE/Placement/21-22/064
65	PAVITHRAN M	18EUCS159	Accenture	SKCET-CSE/Placement/21-22/065
66	RAVISHANKAR V	18EUCS163	Accenture	SKCET-CSE/Placement/21-22/066
67	AJAAY KRISHNA P	18EUCS003	Accenture	SKCET-CSE/Placement/21-22/067

68	ARAVIND C J	18EUCS011	Accenture	SKCET-CSE/Placement/21-22/068
69	ARUL GANESHAN S	18EUCS012	Accenture	SKCET-CSE/Placement/21-22/069
70	ASHWIN B	18EUCS018	Accenture	SKCET-CSE/Placement/21-22/070
71	JEGAN K K	18EUCS049	Accenture	SKCET-CSE/Placement/21-22/071
72	LOGESHWARAN R R	18EUCS065	Accenture	SKCET-CSE/Placement/21-22/072
73	PADMASANKAR K S	19EUCS506	Accenture	SKCET-CSE/Placement/21-22/073
74	PRASAD L	18EUCS081	Accenture	SKCET-CSE/Placement/21-22/074
75	RAMKUMAR S	18EUCS162	Iopex	SKCET-CSE/Placement/21-22/075
76	RANGANAYAGI P	18EUCS090	Accenture	SKCET-CSE/Placement/21-22/076
77	SHREEJA K	19EUCS510	Accenture	SKCET-CSE/Placement/21-22/077
78	SOWMIYA B S	18EUCS113	Accenture	SKCET-CSE/Placement/21-22/078
79	SRINATH C	19EUCS513	Accenture	SKCET-CSE/Placement/21-22/079
80	YASWANT S	18EUCS129	Accenture	SKCET-CSE/Placement/21-22/080
81	YOGESH S	18EUCS130	Accenture	SKCET-CSE/Placement/21-22/081
82	MIKE GLADSON L	18EUCS071	Accenture	SKCET-CSE/Placement/21-22/082
83	SANJAYAN M K	18EUCS095	Accenture	SKCET-CSE/Placement/21-22/083
84	SHAARAN KUMAR S	18EUCS107	Accenture	SKCET-CSE/Placement/21-22/084
85	NAVEEN KUMAR B	18EUCS151	Zoho	SKCET-CSE/Placement/21-22/085
86	PRIYADHARSHINI M	18EUCS085	Informatica	SKCET-CSE/Placement/21-22/086
87	VIJAYAALAYAN A	18EUCS178	Informatica	SKCET-CSE/Placement/21-22/087
88	KANISHA R	18EUCS053	ADF Data Science	SKCET-CSE/Placement/21-22/088
89	NIVITHA SHREE R H	18EUCS076	ADF Data Science	SKCET-CSE/Placement/21-22/089
90	RAKUL V M	19EUCS509	ADF	SKCET-CSE/Placement/21-22/090
91	SOBIGHA B	18EUCS112	ADF Data Science	SKCET-CSE/Placement/21-22/091
92	VASANTH T	18EUCS125	ADF Data Science	SKCET-CSE/Placement/21-22/092
93	AKILAN I	19EUCS501	Bosch	SKCET-CSE/Placement/21-22/093
94	SANTHIYA R	18EUCS096	Bosch	SKCET-CSE/Placement/21-22/094
95	SIVASANJAYRAAHUL M	18EUCS170	Thoughtworks	SKCET-CSE/Placement/21-22/095
96	SRUTHI A R	18EUCS114	Thoughtworks	SKCET-CSE/Placement/21-22/096
97	YOKESH M P	18EUCS132	Cognizant	SKCET-CSE/Placement/21-22/097
98	SRI JAYANTH P	18EUCS172	KPMG	SKCET-CSE/Placement/21-22/098
99	DHARSHINI R M	18EUCS138	Superops.ai	SKCET-CSE/Placement/21-22/099
100	JEGANPRAKASH B	18EUCS050	Superops	SKCET-CSE/Placement/21-22/100
101	KOWSIK PIRABHU S R	18EUCS061	SuperOps.ai	SKCET-CSE/Placement/21-22/101

102	SARANYA P	18EUCS097	SuperOps.ai	SKCET-CSE/Placement/21-22/102
103	ARUNAA G T	18EUCS015	Toshiba	SKCET-CSE/Placement/21-22/103
104	ASWIN A R	18EUCS020	Striim	SKCET-CSE/Placement/21-22/104
105	MOHAMED KAMARUDEEN S	19EUCS505	Striim	SKCET-CSE/Placement/21-22/105
106	SARATH GOPAL G	18EUCS098	Striim	SKCET-CSE/Placement/21-22/106
107	KABILAN S	18EUCS144	Zoho	SKCET-CSE/Placement/21-22/107
108	KAUSIK M	18EUCS055	Planful	SKCET-CSE/Placement/21-22/108
109	SHAMEER B	18EUCS109	Odessa	SKCET-CSE/Placement/21-22/109
110	VISHVAK V	18EUCS128	Publicis Sapient	SKCET-CSE/Placement/21-22/110
111	BHAVIK KUMAR N	18EUCS134	Sterlite Technologies PVT LTD	SKCET-CSE/Placement/21-22/111
112	HARSHITHA VASUDEVAN	18EUCS141	Publicis Sapient	SKCET-CSE/Placement/21-22/112
113	SANDHYA A	18EUCS168	Aspire Systems	SKCET-CSE/Placement/21-22/113
114	PARVATHYNATHAN S	18EUCS158	Quinbay Technologies	SKCET-CSE/Placement/21-22/114
115	SARULATHA R	18EUCS102	Planful	SKCET-CSE/Placement/21-22/115
116	ARUNKUMAR K	18EUCS016	MAERSK	SKCET-CSE/Placement/21-22/116
117	MANOSHREE J	18EUCS147	Athenahealth	SKCET-CSE/Placement/21-22/117
118	PARITHI AHIL K S	18EUCS157	Wipro	SKCET-CSE/Placement/21-22/118
119	PRATHISHA M	18EUCS083	Athenahealth	SKCET-CSE/Placement/21-22/119
120	NANDHAKUMAR B	18EUCS072	Tech Mahindra	SKCET-CSE/Placement/21-22/120
121	SANJAIY KUMAR T N	18EUCS169	Rently	SKCET-CSE/Placement/21-22/121
122	RANJITH KUMAR P	18EUCS091	MAERSK	SKCET-CSE/Placement/21-22/122
123	PRAVEEN CHANDAR P	18EUCS160	LTI	SKCET-CSE/Placement/21-22/123
124	RAHUL RAGHAVENDER S	18EUCS088	Capgemini	SKCET-CSE/Placement/21-22/124
125	RAMYAA R	18EUCS089	Capgemini	SKCET-CSE/Placement/21-22/125
126	NITHISKUMAR R	18EUCS155	Virtusa	SKCET-CSE/Placement/21-22/126
127	ROHITH T	18EUCS164	Virtusa	SKCET-CSE/Placement/21-22/127
128	SENTHILVASUDEVAN B	18EUCS104	Virtusa	SKCET-CSE/Placement/21-22/128
129	Apsara S K	18EUCS133	HCL	SKCET-CSE/Placement/21-22/129
130	DIVYASRI K	18EUCS032	BNY Mellon	SKCET-CSE/Placement/21-22/130
131	MOHAMED NOUSATH YUSUF J	18EUCS148	HCL	SKCET-CSE/Placement/21-22/131
132	NITHISH S	18EUCS154	HCL	SKCET-CSE/Placement/21-22/132
133	PARTHIBAN S	19EUCS508	HCL	SKCET-CSE/Placement/21-22/133
134	VASANTH M	18EUCS124	Wiley	SKCET-CSE/Placement/21-22/134
135	SARNITHASREE R K	18EUCS101	Planful	SKCET-CSE/Placement/21-22/135

136	CATHERINE CHANDRALEKHA T	18EUCS135	Cognizant	SKCET-CSE/Placement/21-22/136
137	PRIYALAKSHMI R	18EUCS086	Thoughtworks	SKCET-CSE/Placement/21-22/137
138	GOKILAVANI K	19EUCS503	HCL	SKCET-CSE/Placement/21-22/138
139	NISHIT M	18EUCS152	Microfocus	SKCET-CSE/Placement/21-22/139
140	JAWAHAR P M M	18EUCS047	Zoho	SKCET-CSE/Placement/21-22/140
141	HEMA DHARSINI P	18EUCS142	Amazon	SKCET-CSE/Placement/21-22/141
142	MADHU BALA S	18EUCS067	Banfico	SKCET-CSE/Placement/21-22/142
143	SHANMUGAPRIYAN S B	18EUCS110	TONIK	SKCET-CSE/Placement/21-22/143
144	AKHILESH R	18EUCS007	Trimble	SKCET-CSE/Placement/21-22/144
145	VENKATESHAN A P	18EUCS177	Trimble	SKCET-CSE/Placement/21-22/145
146	BALA KRISHNAN S	18EUCS022	Presidio	SKCET-CSE/Placement/21-22/146
147	VISHAL SRIVALSAN R	18EUCS127	Amazon	SKCET-CSE/Placement/21-22/147
148	SUDHARSHAN S	18EUCS116	CGI	SKCET-CSE/Placement/21-22/148
149	HARI VARSHA E	18EUCS038	Rockwell Automation	SKCET-CSE/Placement/21-22/149
150	LAKSHMI NARAYANAN A S	18EUCS146	HCL	SKCET-CSE/Placement/21-22/150
151	MADHURUSHA G	18EUCS068	HCL	SKCET-CSE/Placement/21-22/151
152	RAGUL M N	18EUCS087	Xerago	SKCET-CSE/Placement/21-22/152
153	SURYA S	18EUCS119	Zoho	SKCET-CSE/Placement/21-22/153
154	INDERAJITH K	18EUCS044	Aveon	SKCET-CSE/Placement/21-22/154
155	SANCHITA T	18EUCS167	Accolite Digital	SKCET-CSE/Placement/21-22/155
156	PARKAVI R	19EUCS507	HCL	SKCET-CSE/Placement/21-22/156
157	MAKESHKUMAR R	18EUCS069	Kgis	SKCET-CSE/Placement/21-22/157
158	KAVIN RAJ P	19EUCS504	Vaanam technologies	SKCET-CSE/Placement/21-22/158
159	DHANUSH R	18EUCS028	HCL	SKCET-CSE/Placement/21-22/159
160	HARIHARAN S	18EUCS041	HCL	SKCET-CSE/Placement/21-22/160
161	PRASATH T	18EUCS082	HCL	SKCET-CSE/Placement/21-22/161
162	VIGNESH L	18EUCS126	HCL technologies	SKCET-CSE/Placement/21-22/162
163	ARAVIND S	19EUCS502	Tech Mahindra	SKCET-CSE/Placement/21-22/163
164	ELAKKIYA R	18EUCS033	HCL	SKCET-CSE/Placement/21-22/164

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S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Janan K	17EUCS065	Hexaware	SKCET-CSE/Placement/20-21/001
2	Shaliq Nigal	17EUCS142	AstraZeneca	SKCET-CSE/Placement/20-21/002
3	AYSHA RAFEEQ	17EUCS023	AstraZeneca	SKCET-CSE/Placement/20-21/003
4	Sanmugapriya K	17EUCS134	AstraZeneca	SKCET-CSE/Placement/20-21/004
5	Naveena K R	17EUCS104	RFPIO	SKCET-CSE/Placement/20-21/005
6	Saran Karthik K A	17EUCS136	RFPIO	SKCET-CSE/Placement/20-21/006
7	Suba Shree V	17EUCS159	Lucid Technologies	SKCET-CSE/Placement/20-21/007
8	DHIVYAA SANKARI B	17EUCS045	Qubercomm	SKCET-CSE/Placement/20-21/008
9	Sharang Ramana G	17EUCS146	Grootan	SKCET-CSE/Placement/20-21/009
10	Theepavishal Ra	17EUCS170	L & T Infotech	SKCET-CSE/Placement/20-21/010
11	HARI PRIYA M J	17EUCS057	Thought Focus	SKCET-CSE/Placement/20-21/011
12	AJAYE K P	17EUCS008	EY Global Building Service	SKCET-CSE/Placement/20-21/012
13	AMRRISH ROSHAN B L	17EUCS013	EY Global Building Service	SKCET-CSE/Placement/20-21/013
14	BHARANIDHARAN C	17EUCS025	EY Global Building Service	SKCET-CSE/Placement/20-21/014
15	HAARISH S L	17EUCS056	EY Global Building Service	SKCET-CSE/Placement/20-21/015
16	JIMRY SINGH T	18EUCS506	EY Global Building Service	SKCET-CSE/Placement/20-21/016
17	KAVIN KUMAR A	18EUCS507	EY Global Building Service	SKCET-CSE/Placement/20-21/017
18	MARIMUTHU K	18EUCS511	EY Global Building Service	SKCET-CSE/Placement/20-21/018
19	PRADEEP K	18EUCS515	EY Global Building Service	SKCET-CSE/Placement/20-21/019
20	Sadhana Sri S A S	17EUCS130	EY Global Building Service	SKCET-CSE/Placement/20-21/020
21	SOUNDARIYA K	18EUCS522	EY Global Building Service	SKCET-CSE/Placement/20-21/021
22	Sridharan N S	17EUCS155	EY Global Building Service	SKCET-CSE/Placement/20-21/022
23	Lalith Kumar V	17EUCS086	MulticoreWare	SKCET-CSE/Placement/20-21/023
24	Nannila J	17EUCS102	MulticoreWare	SKCET-CSE/Placement/20-21/024
25	HARI RITHANYA M	17EUCS058	Thoughtworks	SKCET-CSE/Placement/20-21/025
26	DEEPIKHA R	17EUCS034	TCS Ninja	SKCET-CSE/Placement/20-21/026
27	GOKUL B	17EUCS051	TCS Ninja	SKCET-CSE/Placement/20-21/027
28	GOKUL G	17EUCS052	TCS Ninja	SKCET-CSE/Placement/20-21/028
29	HARI VARSAN S	17EUCS059	TCS Ninja	SKCET-CSE/Placement/20-21/029
30	KARTHIKEYAN A	17EUCS075	TCS Ninja	SKCET-CSE/Placement/20-21/030
31	KARTHIKEYAN K	17EUCS076	TCS Ninja	SKCET-CSE/Placement/20-21/031
32	KISORE L	17EUCS084	TCS Ninja	SKCET-CSE/Placement/20-21/032
33	PRATIK D KORADIA	17EUCS116	TCS Ninja	SKCET-CSE/Placement/20-21/033

34	Sabarish Niranjan R	17EUCS129	TCS Ninja	SKCET-CSE/Placement/20-21/034
35	SAI KRISHNA R	17EUCS131	TCS Ninja	SKCET-CSE/Placement/20-21/035
36	Vidyasagar E	17EUCS175	TCS	SKCET-CSE/Placement/20-21/036
37	ELAMUKHIL K	17EUCS048	Zoho	SKCET-CSE/Placement/20-21/037
38	Vijay Varshini Lakshmi Narayanan	17EUCS177	AppViewX	SKCET-CSE/Placement/20-21/038
39	ABISHEK S R	17EUCS005	Zoho	SKCET-CSE/Placement/20-21/039
40	Rajaraman R	17EUCS122	SlickPOS	SKCET-CSE/Placement/20-21/040
41	Shivaani V	17EUCS147	Zoho	SKCET-CSE/Placement/20-21/041
42	AKASH S	17EUCS011	Quadra Systems	SKCET-CSE/Placement/20-21/042
43	BRIJESH MADAVAN C A	17EUCS026	Quadra Systems	SKCET-CSE/Placement/20-21/043
44	CAROL HENNA K J	17EUCS027	Accenture	SKCET-CSE/Placement/20-21/044
45	DEVI MEENAKSHI A	17EUCS035	Accenture	SKCET-CSE/Placement/20-21/045
46	DHANUSHYA C	17EUCS038	Accenture	SKCET-CSE/Placement/20-21/046
47	Joshua Joseph P S	17EUCS069	Accenture	SKCET-CSE/Placement/20-21/047
48	Kavin Harnesh M	17EUCS078	Accenture	SKCET-CSE/Placement/20-21/048
49	Mohammed Insaf	17EUCS095	Accenture	SKCET-CSE/Placement/20-21/049
50	Rishikrishna R	17EUCS125	Accenture	SKCET-CSE/Placement/20-21/050
51	Sabari R S	17EUCS128	Accenture	SKCET-CSE/Placement/20-21/051
52	Sathish Kumar T	17EUCS140	Accenture	SKCET-CSE/Placement/20-21/052
53	Siddarth U S	17EUCS149	Accenture	SKCET-CSE/Placement/20-21/053
54	BALACHANDRAN M	18EUCS502	Capegemini	SKCET-CSE/Placement/20-21/054
55	HARISH G	17EUCS061	Capegemini	SKCET-CSE/Placement/20-21/055
56	AMRUTHA J	17EUCS014	Accenture	SKCET-CSE/Placement/20-21/056
57	ANUROOPA M	17EUCS015	Accenture	SKCET-CSE/Placement/20-21/057
58	ARCHITH K	17EUCS016	Accenture	SKCET-CSE/Placement/20-21/058
59	ARJUN T	17EUCS017	Accenture	SKCET-CSE/Placement/20-21/059
60	ASHWANTH K P	17EUCS021	Accenture	SKCET-CSE/Placement/20-21/060
61	DEEPA S	17EUCS030	Accenture	SKCET-CSE/Placement/20-21/061
62	DEEPAK R	17EUCS031	Accenture	SKCET-CSE/Placement/20-21/062
63	DEEPAN T	17EUCS032	Accenture	SKCET-CSE/Placement/20-21/063
64	DURGANANDINI G	17EUCS047	Accenture	SKCET-CSE/Placement/20-21/064
65	GANESH S	17EUCS049	Accenture	SKCET-CSE/Placement/20-21/065
66	GIRISH S	17EUCS050	Accenture	SKCET-CSE/Placement/20-21/066
67	GOKULAVASAN S	17EUCS053	Accenture	SKCET-CSE/Placement/20-21/067

68	Ragunath D	18EUCS519	Accenture	SKCET-CSE/Placement/20-21/068
69	Roshan Jeniel R	17EUCS126	Accenture	SKCET-CSE/Placement/20-21/069
70	Sanjeev Kumaar N M	17EUCS133	Accenture	SKCET-CSE/Placement/20-21/070
71	Pavithra S	17EUCS111	Cloud Assert	SKCET-CSE/Placement/20-21/071
72	DEEPHIKA C	17EUCS033	Accenture	SKCET-CSE/Placement/20-21/072
73	Santhosh Kumar K	17EUCS135	Accenture	SKCET-CSE/Placement/20-21/073
74	Naveen S	17EUCS103	Qubercomm	SKCET-CSE/Placement/20-21/074
75	Nitish S	17EUCS109	Qubercomm	SKCET-CSE/Placement/20-21/075
76	INDHRESH TRS	17EUCS062	Cognizant	SKCET-CSE/Placement/20-21/076
77	Kabilan N	17EUCS071	Cognizant	SKCET-CSE/Placement/20-21/077
78	Kavipriya N	17EUCS079	Cognizant	SKCET-CSE/Placement/20-21/078
79	Manikandan M	17EUCS090	Cognizant	SKCET-CSE/Placement/20-21/079
80	Nishanthi S	17EUCS107	Cognizant	SKCET-CSE/Placement/20-21/080
81	Padmanaban P	17EUCS110	Cart Rabbit	SKCET-CSE/Placement/20-21/081
82	Shri Raam S	17EUCS148	Cognizant	SKCET-CSE/Placement/20-21/082
83	Tharani T	17EUCS168	Cognizant	SKCET-CSE/Placement/20-21/083
84	Tharuneshwar V	17EUCS169	Accenture	SKCET-CSE/Placement/20-21/084
85	DHARSHINI A	17EUCS042	Cognizant	SKCET-CSE/Placement/20-21/085
86	Jothipriya G	17EUCS070	Cognizant	SKCET-CSE/Placement/20-21/086
87	AJAY PRABU R	17EUCS007	Thoughtworks	SKCET-CSE/Placement/20-21/087
88	Sree Ranjani M	17EUCS151	Thoughtworks	SKCET-CSE/Placement/20-21/088
89	Sri Devi Abhirami V	17EUCS153	Thoughtworks	SKCET-CSE/Placement/20-21/089
90	ASHFAK AHAMED A	17EUCS020	Quinbay Technologies	SKCET-CSE/Placement/20-21/090
91	DEVIPRIYA S	17EUCS036	Quinbay Technologies	SKCET-CSE/Placement/20-21/091
92	Jagadeep M	17EUCS064	Athena healthcare	SKCET-CSE/Placement/20-21/092
93	Indhu K	17EUCS063	Quinbay	SKCET-CSE/Placement/20-21/093
94	Naga Viknesh M	17EUCS100	QuinBay	SKCET-CSE/Placement/20-21/094
95	Manojkumar M	17EUCS092	High Radius	SKCET-CSE/Placement/20-21/095
96	BALASUBRAMANIAM V	17EUCS024	Virtusa	SKCET-CSE/Placement/20-21/096
97	Mathan S	17EUCS093	Virtusa	SKCET-CSE/Placement/20-21/097
98	Preethi S	17EUCS117	Virtusa	SKCET-CSE/Placement/20-21/098
99	Punitha R	17EUCS118	Virtusa	SKCET-CSE/Placement/20-21/099
100	SAKTHI ESWARAN K	17EUCS132	Virtusa	SKCET-CSE/Placement/20-21/100
101	Shalini M	17EUCS141	Virtusa	SKCET-CSE/Placement/20-21/101

102	SREEJA D	17EUCS152	Virtusa	SKCET-CSE/Placement/20-21/102
103	Swethamura M	17EUCS167	Virtusa	SKCET-CSE/Placement/20-21/103
104	THIRUMOORTHY S	17EUCS171	Virtusa	SKCET-CSE/Placement/20-21/104
105	VALLIYAPPAN K R	17EUCS173	Virtusa	SKCET-CSE/Placement/20-21/105
106	Vasanthageethan A	17EUCS174	Virtusa	SKCET-CSE/Placement/20-21/106
107	Vishali G	17EUCS180	Virtusa	SKCET-CSE/Placement/20-21/107
108	AJEETH R	17EUCS009	Virtusa	SKCET-CSE/Placement/20-21/108
109	DHATCHAIYINE B M	17EUCS043	Wipro Tech	SKCET-CSE/Placement/20-21/109
110	Ravi Shankar Govindarajan	17EUCS124	L & T Infotech	SKCET-CSE/Placement/20-21/110
111	Sathish Kumar J	17EUCS139	LTI	SKCET-CSE/Placement/20-21/111
112	Senjila S	18EUCS521	LTI	SKCET-CSE/Placement/20-21/112
113	Shamrutha S S	17EUCS143	LTI	SKCET-CSE/Placement/20-21/113
114	Shanmuga Praveen V	17EUCS144	LTI	SKCET-CSE/Placement/20-21/114
115	Sri Dhanya K	17EUCS154	LTI	SKCET-CSE/Placement/20-21/115
116	Praveen M R	18EUCS516	Accenture	SKCET-CSE/Placement/20-21/116
117	DHARNISH C M	17EUCS041	Msys Technologies	SKCET-CSE/Placement/20-21/117
118	DARSHINI B	17EUCS029	Hexaware	SKCET-CSE/Placement/20-21/118
119	DHARINI R	17EUCS040	Hexaware	SKCET-CSE/Placement/20-21/119
120	Karthiga V	17EUCS074	Wipro Tech	SKCET-CSE/Placement/20-21/120
121	DHANUSHRAM R	17EUCS037	Trimble	SKCET-CSE/Placement/20-21/121
122	HARIHARASUDHAN D	17EUCS060	Trimble	SKCET-CSE/Placement/20-21/122
123	Praneet S	17EUCS114	TCS Ninja	SKCET-CSE/Placement/20-21/123
124	Roshini G	17EUCS127	Cognizant	SKCET-CSE/Placement/20-21/124
125	Vishali S	17EUCS181	Trimble	SKCET-CSE/Placement/20-21/125
126	Jaya pradap J	18EUCS505	BYJUS	SKCET-CSE/Placement/20-21/126
127	Raghul Prasadh K	17EUCS119	BYJUS	SKCET-CSE/Placement/20-21/127
128	Suba Ranjani M	17EUCS158	Informatica	SKCET-CSE/Placement/20-21/128
129	ASHA PRIYA G	17EUCS019	Capegemini	SKCET-CSE/Placement/20-21/129
130	Nithiesh Kumar M	17EUCS108	Informatica	SKCET-CSE/Placement/20-21/130
131	ABISHEK S	17EUCS004	Freshworks	SKCET-CSE/Placement/20-21/131
132	Mohankumar M	17EUCS097	Freshworks	SKCET-CSE/Placement/20-21/132
133	RIYAZ AHAMED A	17EUCS182	Freshworks	SKCET-CSE/Placement/20-21/133
134	Kishore G	17EUCS083	PWC	SKCET-CSE/Placement/20-21/134
135	DHYANESHWARAN K	17EUCS046	Examly	SKCET-CSE/Placement/20-21/135

136	Jeril L	17EUCS067	Examly	SKCET-CSE/Placement/20-21/136
137	Manish M	17EUCS091	Ugam	SKCET-CSE/Placement/20-21/137
138	Niranjana D M	17EUCS106	Ugam	SKCET-CSE/Placement/20-21/138
139	Rahul A	17EUCS120	Ugam	SKCET-CSE/Placement/20-21/139
140	Sruthi S	17EUCS157	Ugam	SKCET-CSE/Placement/20-21/140
141	Mohammed Inam S	17EUCS094	HCL Tech	SKCET-CSE/Placement/20-21/141
142	ASHWIN R	17EUCS022	Ford IT	SKCET-CSE/Placement/20-21/142
143	Saranprasath N	17EUCS137	Ford IT	SKCET-CSE/Placement/20-21/143
144	Jeevanantham S	17EUCS066	Kovai.co	SKCET-CSE/Placement/20-21/144
145	Periyakaruppan K P	17EUCS112	HCL Tech	SKCET-CSE/Placement/20-21/145
146	CHANDHINI SHRI V S	17EUCS028	HCL Tech	SKCET-CSE/Placement/20-21/146
147	Dhivya T A	18EUCS503	HCL Tech	SKCET-CSE/Placement/20-21/147
148	Prasanth A	17EUCS115	HCL Tech	SKCET-CSE/Placement/20-21/148
149	Subramanian G	17EUCS160	HCL Tech	SKCET-CSE/Placement/20-21/149
150	Saravana Kumar M	17EUCS138	Ford IT	SKCET-CSE/Placement/20-21/150
151	Laxmiprabha S	17EUCS087	Cognizant	SKCET-CSE/Placement/20-21/151
152	Monica K B	17EUCS098	Capegemini	SKCET-CSE/Placement/20-21/152
153	Nanda Kisore S	17EUCS101	Capegemini	SKCET-CSE/Placement/20-21/153
154	Kameshwaran S	17EUCS073	Kovai.co	SKCET-CSE/Placement/20-21/154
155	Sushma Priya P N	17EUCS164	HCL Tech	SKCET-CSE/Placement/20-21/155
156	GOWDHAM R	17EUCS054	HCL Tech	SKCET-CSE/Placement/20-21/156
157	Suganti T	17EUCS161	Capegemini	SKCET-CSE/Placement/20-21/157
158	DHARANI P	17EUCS039	HCL Tech	SKCET-CSE/Placement/20-21/158
159	Kiruthika K	17EUCS081	HCL Tech	SKCET-CSE/Placement/20-21/159
160	Kiruthikanjali B	17EUCS082	HCL Tech	SKCET-CSE/Placement/20-21/160
161	Sriram S	17EUCS156	HCL Tech	SKCET-CSE/Placement/20-21/161
162	Swetha M	17EUCS166	HCL Tech	SKCET-CSE/Placement/20-21/162
163	GOWSALYA J	17EUCS055	HCL Tech	SKCET-CSE/Placement/20-21/163
164	Sivakumar T	17EUCS150	Edge Verve	SKCET-CSE/Placement/20-21/164
165	Vishal A	17EUCS179	HCL Tech	SKCET-CSE/Placement/20-21/165
166	Pooja R	17EUCS113	Accenture	SKCET-CSE/Placement/20-21/166
167	AKSHARA D	17EUCS012	Robert Bosch	SKCET-CSE/Placement/20-21/167
168	Sharan Raj R	17EUCS145	Robert Bosch	SKCET-CSE/Placement/20-21/168
169	AISHWARYA K	17EUCS006	Capegemini	SKCET-CSE/Placement/20-21/169

170	AAKASH R	17EUCS002	HCL Tech	SKCET-CSE/Placement/20-21/170
171	Kausic S	17EUCS077	Kovai.co	SKCET-CSE/Placement/20-21/171
172	Sunandhana S	17EUCS163	Capegemini	SKCET-CSE/Placement/20-21/172
173	Swadthi N G	17EUCS165	Capegemini	SKCET-CSE/Placement/20-21/173
174	Mohanaprasanth K	18EUCS512	LTI	SKCET-CSE/Placement/20-21/174
175	Rajkumar B	17EUCS121	HCL Tech	SKCET-CSE/Placement/20-21/175

Assessment Year : 2019-20 (CAYm3)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Abishek M	16EUCS006	ZOHO	SKCET-CSE/Placement/19-20/001
2	Arun J	16EUCS029	ZOHO	SKCET-CSE/Placement/19-20/002
3	Arunan C	16EUCS031	ZOHO	SKCET-CSE/Placement/19-20/003
4	Periyasamy C	16EUCS117	ZOHO	SKCET-CSE/Placement/19-20/004
5	Sabareesan R	16EUCS138	ZOHO	SKCET-CSE/Placement/19-20/005
6	Sai Vikram R	16EUCS142	ZOHO	SKCET-CSE/Placement/19-20/006
7	Somasundaram C	16EUCS159	ZOHO	SKCET-CSE/Placement/19-20/007
8	Santhosivan R P	16EUCS145	INTAIN	SKCET-CSE/Placement/19-20/008
9	Murali Manohar K S	16EUCS097	Coda Global	SKCET-CSE/Placement/19-20/009
10	Aasikaa C M R	16EUCS003	SIRIUS	SKCET-CSE/Placement/19-20/010
11	Arunkumar M	16EUCS032	ZOHO	SKCET-CSE/Placement/19-20/011
12	Prabhu Sarathy G	16EUCS118	ZOHO	SKCET-CSE/Placement/19-20/012
13	Priya Dharshini V	16EUCS122	ZOHO	SKCET-CSE/Placement/19-20/013
14	Saran M	17EUCS512	ZOHO	SKCET-CSE/Placement/19-20/014
15	Nikitha M	16EUCS103	ZOHO	SKCET-CSE/Placement/19-20/015
16	Nithesh M	16EUCS108	VALUELABS	SKCET-CSE/Placement/19-20/016
17	Nithesh Kumar K	16EUCS107	ZOHO	SKCET-CSE/Placement/19-20/017
18	Sowndar S	16EUCS162	ASTRAZENECA	SKCET-CSE/Placement/19-20/018
19	Gowtham R	16EUCS055	xome	SKCET-CSE/Placement/19-20/019
20	HariPrasath.B.R	16EUCS056	xome	SKCET-CSE/Placement/19-20/020
21	Manoj K	17EUCS507	xome	SKCET-CSE/Placement/19-20/021
22	Priya Lakshmi S	16EUCS123	VIRTUSA	SKCET-CSE/Placement/19-20/022
23	Aishwarya S	16EUCS009	Amtex	SKCET-CSE/Placement/19-20/023
24	Pranesh P	16EUCS119	ARICENT	SKCET-CSE/Placement/19-20/024
25	Jafrin Nevis J	16EUCS067	TCS	SKCET-CSE/Placement/19-20/025
26	Velsankar R	16EUCS175	TCS	SKCET-CSE/Placement/19-20/026
27	Aakhil Karthikkeyan V	16EUCS002	Accenture	SKCET-CSE/Placement/19-20/027
28	Menaka P	16EUCS089	Accenture	SKCET-CSE/Placement/19-20/028
29	Ramkarthik S	16EUCS132	Accenture	SKCET-CSE/Placement/19-20/029
30	Selvakumar K	16EUCS150	Accenture	SKCET-CSE/Placement/19-20/030
31	Sindhu S	16EUCS157	Accenture	SKCET-CSE/Placement/19-20/031
32	Anindhitha A	16EUCS021	Accenture	SKCET-CSE/Placement/19-20/032
33	Manoj Kumar K P	16EUCS085	INTAIN	SKCET-CSE/Placement/19-20/033

34	Varshini R	16EUCS173	Accenture	SKCET-CSE/Placement/19-20/034
35	Swathy R	16EUCS169	SKILL LYNC	SKCET-CSE/Placement/19-20/035
36	Ersath Ahamed N	17EUCS504	Accenture	SKCET-CSE/Placement/19-20/036
37	Nagulraj A	16EUCS098	Accenture	SKCET-CSE/Placement/19-20/037
38	Nandha Kumar S	16EUCS099	Accenture	SKCET-CSE/Placement/19-20/038
39	Nirmal Kumar M	16EUCS104	Accenture	SKCET-CSE/Placement/19-20/039
40	Nithya Bhagavathy R	16EUCS110	Accenture	SKCET-CSE/Placement/19-20/040
41	Nivas R	16EUCS111	Accenture	SKCET-CSE/Placement/19-20/041
42	Sathyasubha L	16EUCS149	Accenture	SKCET-CSE/Placement/19-20/042
43	Abishake M	16EUCS005	Accenture	SKCET-CSE/Placement/19-20/043
44	Akash T	17EUCS501	Accenture	SKCET-CSE/Placement/19-20/044
45	Akshaya V	16EUCS016	Accenture	SKCET-CSE/Placement/19-20/045
46	Anisha S	16EUCS022	Accenture	SKCET-CSE/Placement/19-20/046
47	Archana A	16EUCS027	Accenture	SKCET-CSE/Placement/19-20/047
48	Aruna Rani M	16EUCS030	Accenture	SKCET-CSE/Placement/19-20/048
49	Bala praveen.K	16EUCS036	Accenture	SKCET-CSE/Placement/19-20/049
50	Bharathipriya C	16EUCS038	Accenture	SKCET-CSE/Placement/19-20/050
51	Deepalakshmi R	16EUCS040	Accenture	SKCET-CSE/Placement/19-20/051
52	Deepshika J K	16EUCS041	Accenture	SKCET-CSE/Placement/19-20/052
53	Dhanush Karthi R G	16EUCS043	Accenture	SKCET-CSE/Placement/19-20/053
54	Ezhil K	16EUCS047	Accenture	SKCET-CSE/Placement/19-20/054
55	Gowtham U	16EUCS054	Accenture	SKCET-CSE/Placement/19-20/055
56	Keerthana B	16EUCS071	Accenture	SKCET-CSE/Placement/19-20/056
57	Mathangi K	16EUCS087	Accenture	SKCET-CSE/Placement/19-20/057
58	Nishanth R	16EUCS106	Accenture	SKCET-CSE/Placement/19-20/058
59	Nivethidha K B	16EUCS113	Accenture	SKCET-CSE/Placement/19-20/059
60	Priyanka B	16EUCS125	Accenture	SKCET-CSE/Placement/19-20/060
61	Ravi Prasath V	16EUCS135	Accenture	SKCET-CSE/Placement/19-20/061
62	Saishiyam G	16EUCS143	Accenture	SKCET-CSE/Placement/19-20/062
63	Sathisraj S	16EUCS148	Accenture	SKCET-CSE/Placement/19-20/063
64	Sharon Jane D	16EUCS152	Accenture	SKCET-CSE/Placement/19-20/064
65	Sujith A	16EUCS165	Accenture	SKCET-CSE/Placement/19-20/065
66	Sujith Kumar P	16EUCS166	Accenture	SKCET-CSE/Placement/19-20/066
67	Vignesh B	16EUCS177	Accenture	SKCET-CSE/Placement/19-20/067

68	Brahadeesh B	16EUCS039	Accenture	SKCET-CSE/Placement/19-20/068
69	Lavanya J	16EUCS081	Accenture	SKCET-CSE/Placement/19-20/069
70	Monika S	16EUCS095	Accenture	SKCET-CSE/Placement/19-20/070
71	Naveen V	16EUCS102	Accenture	SKCET-CSE/Placement/19-20/071
72	Bharath Kumar J	16EUCS037	Accenture	SKCET-CSE/Placement/19-20/072
73	Gokulapriya E	16EUCS052	Accenture	SKCET-CSE/Placement/19-20/073
74	Harshitha M R	16EUCS064	Accenture	SKCET-CSE/Placement/19-20/074
75	Kiruthik Ruba K S	16EUCS073	Accenture	SKCET-CSE/Placement/19-20/075
76	Lakshmi Priya M	16EUCS079	Accenture	SKCET-CSE/Placement/19-20/076
77	Shreya Suresh	16EUCS154	ZILKER	SKCET-CSE/Placement/19-20/077
78	Supriya B	16EUCS167	AMAZON	SKCET-CSE/Placement/19-20/078
79	Agash C P	16EUCS008	Odessa	SKCET-CSE/Placement/19-20/079
80	Akhil M	16EUCS012	Odessa	SKCET-CSE/Placement/19-20/080
81	Akil S	16EUCS013	Odessa	SKCET-CSE/Placement/19-20/081
82	Akshaya K	16EUCS015	Odessa	SKCET-CSE/Placement/19-20/082
83	Aravindkumar Jain P	16EUCS024	Odessa	SKCET-CSE/Placement/19-20/083
84	Gowtham V	17EUCS505	Odessa	SKCET-CSE/Placement/19-20/084
85	Karthikeyan J	16EUCS069	Odessa	SKCET-CSE/Placement/19-20/085
86	Nithin Bharathi K K	16EUCS109	Odessa	SKCET-CSE/Placement/19-20/086
87	Priyadharshini I	16EUCS124	Odessa	SKCET-CSE/Placement/19-20/087
88	Ajeetha R	16EUCS011	Athena	SKCET-CSE/Placement/19-20/088
89	Arullamudhane LC	16EUCS028	Athena	SKCET-CSE/Placement/19-20/089
90	Faris Gani A	16EUCS048	Freshworks	SKCET-CSE/Placement/19-20/090
91	Ajay Kumar S	16EUCS010	Astrazeneca	SKCET-CSE/Placement/19-20/091
92	Dhanesh M	16EUCS042	Astrazeneca	SKCET-CSE/Placement/19-20/092
93	Harini S	16EUCS059	Astrazeneca	SKCET-CSE/Placement/19-20/093
94	Manoj Kumar M	17EUCS508	Astrazeneca	SKCET-CSE/Placement/19-20/094
95	Parameshwari P	16EUCS115	COVIAM	SKCET-CSE/Placement/19-20/095
96	Sornambikai R	16EUCS160	UGAM	SKCET-CSE/Placement/19-20/096
97	Anumitha S	16EUCS023	INFORMATICA	SKCET-CSE/Placement/19-20/097
98	Hari Varthini S	16EUCS057	ARICENT	SKCET-CSE/Placement/19-20/098
99	Hemanshu P Thaker	16EUCS065	VAKIL SEARCH	SKCET-CSE/Placement/19-20/099
100	Naveen R	16EUCS101	KAAR TECHNOLOGIES	SKCET-CSE/Placement/19-20/100
101	Praveena G	16EUCS120	ZOHO	SKCET-CSE/Placement/19-20/101

102	Valarmathi P	16EUCS171	ZOHO	SKCET-CSE/Placement/19-20/102
103	Nivetha R	16EUCS112	VIRTUSA	SKCET-CSE/Placement/19-20/103
104	Priyanka R	16EUCS126	VIRTUSA	SKCET-CSE/Placement/19-20/104
105	Raghul Krishnaa R	16EUCS127	VIRTUSA	SKCET-CSE/Placement/19-20/105
106	Dinesh E M	16EUCS045	Accenture(ICI)	SKCET-CSE/Placement/19-20/106
107	Srivishnusai S A	16EUCS164	Accenture(ICI)	SKCET-CSE/Placement/19-20/107
108	Diwakar S S	16EUCS046	Accenture(ICI)	SKCET-CSE/Placement/19-20/108
109	Gokul R	16EUCS051	Accenture(ICI)	SKCET-CSE/Placement/19-20/109
110	Jayaprakash K	17EUCS506	Accenture(ICI)	SKCET-CSE/Placement/19-20/110
111	Sanjay C	16EUCS144	Accenture	SKCET-CSE/Placement/19-20/111
112	Agalya S	16EUCS007	VIRTUSA	SKCET-CSE/Placement/19-20/112
113	Harishmitha R	16EUCS061	VIRTUSA	SKCET-CSE/Placement/19-20/113
114	Madhu Priya V	16EUCS082	VIRTUSA	SKCET-CSE/Placement/19-20/114
115	Narain K P	16EUCS100	VIRTUSA	SKCET-CSE/Placement/19-20/115
116	Nisha K	16EUCS105	VIRTUSA	SKCET-CSE/Placement/19-20/116
117	Sachin Mohamed Rafic	16EUCS140	VIRTUSA	SKCET-CSE/Placement/19-20/117
118	Swetha P	16EUCS170	VIRTUSA	SKCET-CSE/Placement/19-20/118
119	Balaji Narasimhan M.V.L	16EUCS035	FOURKITES	SKCET-CSE/Placement/19-20/119
120	Keerthana V	16EUCS072	FOURKITES	SKCET-CSE/Placement/19-20/120
121	Mithun K	17EUCS090	Qubercomm	SKCET-CSE/Placement/19-20/121
122	Mohamed Abul Hissam A	16EUCS091	FOURKITES	SKCET-CSE/Placement/19-20/122
123	Infanta Jerald Rivitha	16EUCS066	VIRTUSA	SKCET-CSE/Placement/19-20/123
124	Rayen Merffi Ramesh	16EUCS136	Gain Insights	SKCET-CSE/Placement/19-20/124
125	Aravindraj S	16EUCS026	ZOHO	SKCET-CSE/Placement/19-20/125
126	Bala Vignesh S	16EUCS034	ZOHO	SKCET-CSE/Placement/19-20/126
127	Abinaya S	16EUCS004	Freshworks	SKCET-CSE/Placement/19-20/127
128	Ashiha K S	17EUCS503	Freshworks	SKCET-CSE/Placement/19-20/128
129	Mohamed Ashiq M	16EUCS092	Freshworks	SKCET-CSE/Placement/19-20/129
130	Aravind S	16EUCS025	ASPIRE SYSTEMS	SKCET-CSE/Placement/19-20/130
131	Dhanush Vijay S P	16EUCS044	ASPIRE SYSTEMS	SKCET-CSE/Placement/19-20/131
132	Gokul Chakkravarthi S	16EUCS050	Vaken Technologies	SKCET-CSE/Placement/19-20/132
133	Gopinath R	16EUCS053	Vaken Technologies	SKCET-CSE/Placement/19-20/133
134	Sivakumar S	16EUCS158	ASPIRE SYSTEMS	SKCET-CSE/Placement/19-20/134
135	Kailas S	16EUCS068	Temenos	SKCET-CSE/Placement/19-20/135

136	Kathir Ezhilan M M	16EUCS070	Temenos	SKCET-CSE/Placement/19-20/136
137	Kishore Kumar S	16EUCS075	Temenos	SKCET-CSE/Placement/19-20/137
138	Pawan K K	16EUCS116	Temenos	SKCET-CSE/Placement/19-20/138
139	Rahul Gandhi A	16EUCS129	Temenos	SKCET-CSE/Placement/19-20/139
140	Rakeshram K	16EUCS130	Temenos	SKCET-CSE/Placement/19-20/140
141	Ram Vikash K	16EUCS131	Temenos	SKCET-CSE/Placement/19-20/141
142	Subash P	17EUCS513	Temenos	SKCET-CSE/Placement/19-20/142
143	Sibi Athithya C A	16EUCS156	D CUBE ANALYTICS	SKCET-CSE/Placement/19-20/143
144	Srinivasan S	16EUCS163	TCS	SKCET-CSE/Placement/19-20/144
145	Kiruthika S N	16EUCS074	INTAIN	SKCET-CSE/Placement/19-20/145
146	Lakshman Vishal K	16EUCS078	INTAIN	SKCET-CSE/Placement/19-20/146
147	Mohana A	16EUCS094	INTAIN	SKCET-CSE/Placement/19-20/147
148	Radhakrishnan A	17EUCS510	INTAIN	SKCET-CSE/Placement/19-20/148
149	Sherin Joshua Samuel	16EUCS153	INTAIN	SKCET-CSE/Placement/19-20/149
150	Alfred.E.Jose	17EUCS502	Survey Sparrow	SKCET-CSE/Placement/19-20/150
151	Shalini S	16EUCS151	FRESHWORKS	SKCET-CSE/Placement/19-20/151

4.5 Professional Activities (20)   Total Marks 20.00

4.5.1 Professional societies/chapters and organizing engineering events (5)

Institute Marks : 5.00

Professional Societies / Chapters and Events organized

The Department advocates holistic learning for the students by incorporating various resources into their learning curriculum. The regular organisation of seminars and workshops with highly recommended resource persons have facilitated interaction and being up to date on the current trends thus increasing their **employability skills.**

Students are also encouraged to regularly take part in **Hackathons and Ideathons** which instils in them the importance of teamwork, communication, idea presentations, problem solving skills and help them innovate, learn and also make a good impression on the professional front.

The **entrepreneurial development skills** are aimed at students interested in turning their skill set and ideas into a profitable business with good potential. They are made aware of all the opportunities in the market that could benefit their business ideas. Similarly, students opting for **higher studies** after their undergraduate degree are also provided with necessary counselling that makes them aware of the available opportunities that could cater to their needs, goals and ambitions.

Detail of Professional Societies/Club Activities:

S.No	Club Name	Club Coordinator
1	**Institute of Electrical and Electronics Engineers (IEEE)**	**Mr.M.Vengateshwaran AP/CSE** **Ms.B.Sophia AP/CSE**
2	**Entrepreneurship Development Cell (EDC)**	**Dr.M.Sujaritha Professor/CSE** **Dr.V.K. Reshma AP/CSE**
3	**Hack Club**	**Ms.A.Priya AP/CSE** **Dr.M.Rohini AP/CSE**
4	**IO Club**	**Dr.M.Sujaritha Professor/CSE** **Dr.T.Latha Maheswari, Associate Professor/CSE**

Nature of the program	Academic Year											
	2022-2023				**2021-2022**				**2020-2021**			
	IEEE	**EDC**	**HC**	**IOC**	**IEEE**	**EDC**	**HC**	**IOC**	**IEEE**	**EDC**	**HC**	**IOC**
Workshop	3	-	-	4	2	3	-	2	2	-	-	2
Guest Lecturer/ Seminar	2	10	-	4	2	11	1	20	3	5	-	9
Ideathon/ Project contest	-	1	5	-	-	-	2	-	-	-	1	1
FDP/ Conference	1	-	-	-	2	-	-	-	4	-	-	1

Details of Engineering events conducted

Academic Year 2022-2023

S.No	Title of program	Category	Date	Resource Person	PO	PEO	PSO
1	Automation Testing using Cucumber (BDD) Framework	Workshop	17.10.2022	Mr.S.MEIYAPPAN Associate Software Engineer, CTS, Chennai	PO1-PO5	PEO1-PEO3	PSO1-PSO2
2	AICTE- SPICES SponsoredIdeathon	Ideathon	27.7.2022	Dr.Wilfred Blessing NR Faculty of IT University of Technology & Applied science, Oman	PO1-PO12	PEO1-PEO4	PSO1-PSO3
3	AICTE- SPICES Sponsored Engineers Day (Project Expo)	(Project Expo)	15.9.2022	Mr.B.Shameer, Software Engineer, Odessa Technologies, Bangalore	PO1-PO12	PEO1-PEO4	PSO1-PSO3
4	IIC Sponsored India Startup "IdeaFest"	Ideathon	9.11.2022	Mr.AJ GOKUL Software Engineer, Wipro Ltd, Coimbatore	PO1-PO12	PEO1-PEO4	PSO1-PSO3
5	AICTE- SPICES Sponsored Xplore 2022 –Ideathon	Ideathon	11.11.2022	Mr. V. M. Prabhakaran Designation: Founder & CEO, Visaithalam Solutions Coimbatore. 2. Mr. B. Shameer (Alumni) Software Engineer Odessa Technologies, Bangalore.	PO1-PO12	PEO1-PEO4	PSO1-PSO3
6	IIC Sponsored SMARTATHON'23- Innovative Idea contest	Ideathon	2.3.2023 & 3.3.2023	Ms.G.Ahalya Software Engineer, CTS, Coimbatore	PO1-PO12	PEO1-PEO4	PSO1-PSO3

7	AICTE- SPICES Sponsored Codethon	Ideathon	7.3.2023	Mr. PraneshAnnamalai Senior manager,Wipro - Coimbatore.	PO1-PO12	PEO1-PEO4	PSO1-PSO3
8	Innovations in Amazon Business Architecture models	Seminar	20-7-2022	Vikas , Data Engineer, Amazon	PO1- PO5	PEO1-PEO3	PSO1-PSO2
9	Angular Technologies for tech Startup	Seminar	23-7-2022	Varshini , Angular Developer, Accenture	PO1- PO5	PEO1-PEO3	PSO1-PSO3
10	Innovative Web design Frameworks for Business	Seminar	25-7-2022	R RaghulKrishna , React JS Consultant, Virtusa	PO1- PO5	PEO1-PEO3	PSO1-PSO2
11	How to plan for Start-up and Legal & Ethical steps	Seminar	11.06.2022	Dr.Doreen Robin Founder & Director, Computational Intelligence Research Foundation, Chennai	PO1-PO5,PO7PO8	PEO1-PEO4	PSO1-PSO3
12	EDI Tamilnadu& AU Hub Sponsored Essential Characteristics of Social Entrepreneurs	Seminar	22-7-2022	Sudir Krishna R S, Publicis Sapient	PO1-PO5,PO8,PO9	PEO1-PEO4	PSO1-PSO3
13	An Innovative Leasing Platform for Improved Business Performance	Seminar	28-7-2022	NithinBharathi, Senior Software Engineer, Odessa Technologies , Bangalore	PO1-PO3,P012	PEO1-PEO3	PSO1-PSO3
14	"Entrepreneurship and Innovation" as Career Opportunity	Seminar	3.11.2022	Mr.M.Sabarinathan Sr.Technical Manager, Gateway Software Solutions, Coimbatore	PO1-PO5,PO8,PO9	PEO1-PEO4	PSO1-PSO3
15	EDI Tamilnadu& AU Hub Sponsored Innovation Voucher Programme	Seminar	07.11.2022	Ms.NarayaniPriyadharshini IVP Grant Recipient 2020	PO1-PO5,PO8,PO9	PEO1-PEO3	PSO1-PSO3
16	EDI Tamilnadu& AU Hub Sponsored ENTREPRENEURSHIP SUMMIT 2022	Seminar	10.11.2022	Mr.SibidharanNandhakumar, Founder and CEO of Self-made Ninja Academy	PO1-PO5,PO8,PO9	PEO1-PEO4	PSO1-PSO3

17	Intellectual Property Rights (IPR)	Seminar	23.11.2022	Mr.S.Sundarmahalingam Director of Operation & Services, Thiranz Tech Solutions, Coimbatore	PO1,PO2,PO7,P08	PEO1-PEO3	PSO1-PSO3
18	EDI Tamilnadu& AU Hub Sponsored 6th Edition TNSI 2022 Launching Programme	Seminar	9.1.2023	Dr.V.Vadivelan Director IGNETTA Holographic Pvt.Ltd,Coimbatore	PO1-PO5,PO8,PO9	PEO1-PEO3	PSO1-PSO3
19	"Higher Education & Research Opportunities"	Seminar	17.3.2023	Mr. Rajesh Balasubramanian Director, IIM, Chennai	P012	PEO4	PSO1-PSO3
20	IPR Awareness Workshop	Workshop	30-7-2022	Vasanthageethan A Associate Software Engineer, Virtusa, Hyderabad	PO1,PO2,PO7,P08	PEO1-PEO3	PSO1-PSO3
21	"Process of Innovation development, Technology Readiness Level (TRL); Commercialization of Lab Technologies & Tech-Transfer"	Workshop	7.2.2023	Mr.M.AmarnathKarthic Director, Embuzz Technologies Pvt.Ltd.,Coimbatore	PO-PO5, P011, P012	PEO1-PEO4	PSO1-PSO3
22	FDP on Research Advancements in Intelligent Computing Technologies	FDP	19-12-2022 to 23-12-2022	Dr.R.Sudha Dean/CSE VIT	-	-	-
23	Frontiers of Cyber Security & Ethical Hacking	Seminar	12.09.2022	Mr.DineshParathagan Founder & CEO, Hackup Technology, Coimbatore	PO1-PO5	PEO1-PEO3	PSO1-PSO2
24	Emerging Trends & Future of Cloud and Azure Devops	Workshop	23.09.2022	Mr.B.RYogeshwar, Senior IOT Analyst, Lennox International, Chennai	PO1-PO5	PEO1-PEO3	PSO1-PSO2
25	React - A JavaScript library for building user interfaces	Workshop	17.2.2023	Don Bosco G Software Engineer UST Global, Trivandram	PO1-P012	PEO1-PEO3	PSO1-PSO2

26	Java Projects in IT field	Seminar	18.3.2023	Mr.Thamaraiselavn Software Engineer Accenture, Chennai	PO1-P012	PEO1-PEO3	PSO1-PSO2
27	5G networks	Seminar	20.4.2023	Mr. Daniel Keysight Technologies, Muscat	PO1-PO5	PEO1-PEO3	PSO1-PSO2
28	How to plan a startup for legical & Ethical Steps	Seminar	9.5.2023	Mr.R. Suraj Haqto Technologies ,Coimbatore	PO1-PO5	PEO1-PEO3	PSO1-PSO2
29	Getting started with Angular Framework	Workshop	15.5.2023	Mr.Arun J, Software Engineer, Zoho , Chennai	PO1-PO5,P09	PEO1-PEO3	PSO1-PSO2
30	Web designing	Workshop	24.5.2023	Mr.B.Deva TNQ, Coimbatore	PO1-PO5	PEO1-PEO3	PSO1-PSO2

Academic Year 2021-2022

S.No	Title of program	Category	Date	Resource Person	PO	PEO	PSO
1	AICTE- SPICES Sponsored Journey to Google	Seminar	31.7.2021	Mr. AruljothiSivakurunathan, Cloud Technical Solution Engineer, Google, Dublin.	PO1-PO3	PEO1-PEO3	PSO1-PSO2

2	Innovative Applications in Big Data	Seminar	29.06.2021	Ms. SHARADHA MURUGAPPAN, Senior Software Engineer, Robert Bosch, Coimbatore	PO1-PO5	PEO1-PEO4	PSO1-PSO2
3	INNOVATION IN CYBERSECURITY DOMAIN	Seminar	03.07.2021	Mr. THULASI DAS G, Senior Software Developer, Securden, Inc., Chennai	PO1-PO5	PEO1-PEO4	PSO1-PSO2
4	Life as a Full Stack Developer and Insights on Hacking	Seminar	17.07.21	Mr.J.Arun Software Developer Zoho Corporation	PO1-PO3	PEO1-PEO3	PSO1-PSO2
6	MERN STACK DEVELOPMENT	Seminar	18.09.2021	Mr.M.ManojKumar, Zoho Corp, Chennai	PO1-PO5	PEO1-PEO2	PSO1-PSO2
7	Impact of Electric Vehicle in Energy Sector	Seminar	14.12.2021	Dr. ArunmozhiManimuthu, Research Fellow, Cybersecurity Research Center (CYSREN), Nanyang Technological University, Singapore	PO1-PO3,PO6	PEO1-PEO3	PSO1-PSO2
8	Innovation in Recent Technologies	Seminar	12.02.2022	Ms. Vishnu Sree, Senior Business Analyst, CSS Corp, Chennai.	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3
9	Innovation in Technology – The Drive for a new kind of Data Warehousing	Seminar	14.02.2022	Mr. Balaji S, Data Engineer, Freo, Bengaluru	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3
10	Innovation in Recent Technologies - Application of Artificial Intelligence and Machine Learning	Seminar	15.02.2022	Ms.VijayVarshini Lakshmi Narayanan,MS Artificial Intelligence, Saint Louis University, St Louis, Missouri, USA	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3
11	Innovation in Technology – Automation Testing	Seminar	15.02.2022	MsAmuthavalli, Senior Associate, DBS bank, Hyderabad	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3

12	Innovation in Technology - Growth of SaaS industry in India	Seminar	16.02.2022	Mr. SrihariManoharan, Head of Sales Development – India, Freshworks	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3
13	Technology and Innovation on Front end	Seminar	18.02.2022	Ms.RajashreeDevaraj , Project Specialist,Condenast India private limited, Bangalore	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3
14	Innovation in Service Industry	Seminar	18.02.2022	SaranyaBalajiKrishna sami, Assistant Systems engineer, Ministry of Human Resource &Emiratisation, Dubai, UAE	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3
15	Innovation in Technology -Codeless Data Science	Seminar	05.03.2022	D.Sudharson, Data Engineer, Forge, Coimbatore	PO1-PO5,PO12	PEO1-PEO4	PSO1-PSO3
16	Innovation in Technology Series- Web App Development for Start Ups	Seminar	27.06.2021	Ms.RajashreeDevaraj , Project Specialist, Payoda Technology Pvt Limited, Coimbatore	PO1-PO5,PO9,PO12	PEO1-PEO3	PSO1-PSO3
17	React Native App Development for Entrepreneurs	Seminar	17.05.2022	Mr. K.Inderajith, React Native Developer, Leora Solutions LLP,	PO1-PO5,PO9	PEO1-PEO4	PSO1-PSO3
18	Startups based on Spring Boot Framework	Seminar	18.05.2022	Ms. R.TheophilaVaiz	PO1-PO5,PO9,P12	PEO1-PEO4	PSO1-PSO3
19	Web 3.0 Metaverse Innovations and new Digital Economy	Seminar	19.5.2022	Mr.S.Thineshkumar, Software Development Engineer, Sirius	PO1-PO5, PO12	PEO1-PEO3	PSO1-PSO2
20	Predictive Analytics using R	Workshop	21.02.2022	Dr.Sathish Kumar PDF Scholar, South korea	PO1-PO5	PEO1-PEO2	PSO1-PSO2
21	Innovation in Technology - Spring Boot Framework	Workshop	05.03.2022	S. Subhasri, Senior Software Engineer, Rakuten, Bangalore	PO1-PO5	PEO1-PEO2	PSO1-PSO2

22	Recent Trends & Innovation in Natural Language Processing	Workshop	13.05.2022	Dr.S.Dhivya Senior Data Scientist, Dun & Bradstreet Technologies, Chennai	PO1-PO5	PEO1-PEO3	PSO1-PSO2
23	ATAL FDP on "Deep Learning for Visual Computing	FDP	12.07.21 to 16.07.21	Dr.Srika Professor/CSE Amirtha University, Coimbatore	-	-	-
24	IEEE International Level conference on Advanced Computing Technologies and Applications	International Conference	4.3.2022 & 5.3.2022	Dr.N.Kumarappan Chairman, IEEE Madaras Section	-	-	-
25	AICTE- SPICES Sponsored Hacks	Hackathon	26.2.2022 to 28.2.2022	Dr.J.Janet Principal	PO1-PO12	PEO1-PEO4	PSO1-PSO3
26	Innovative Skills Improvement	Seminar	19.06.2021	Ms.C M R.Aasikaa, Associate Consultant, Sirius Computer Solutions, Chennai	PO1-PO3,PO9,PO12	PEO1-PEO4	PSO1-PSO3
27	Skills to run a start-up	Seminar	24.06.2021	Mr.Akshay V, Founder & CEO, Edzola Technologies, Coimbatore	PO9,PO12	PEO1-PEO4	PSO1-PSO3
28	Opportunities in Banking	Seminar	26.06.2021	Mr.Bipin R, Assitant Manager, Federal Bank, Cochin	PO9,PO12	PEO1-PEO3	PSO1-PSO3
29	Multidisciplinary research perspective towards sustainable development goals	Seminar	17.08.21	Dr. S. S. Dawn Professor and Head, Center for Waste Management, Sathyabama Institute of Science & Technology, Chennai.	PO7,PO9,PO12	PEO1-PEO3	PSO1-PSO3
30	Innovative Skills for Job	Seminar	21.08.2021	Mr. ASHFAK AHAMED A Coviam , Bangalore India	PO9,PO12	PEO1-PEO3	PSO1-PSO3

31	Webinar on Entrepreneurship and Innovation for Career Opportunities	Seminar	13.12.2021	Mr. Sasikumar A P, Founder of AGNICART, Coimbatore	PO1-PO3,PO9,PO12	PEO1-PEO3	PSO1-PSO3
32	Webinar on Pitching Event for PoCs Developed and Linkage with Innovation Ambassadors for Mentorship Support	Seminar	04.01.2022	Mr. RamkumarKuppuchamy, Senior Delivery Manager, Presidio, Coimbatore	P01-PO12	PEO1-PEO4	PSO1-PSO3
33	Role of Creative minds in industries as an Innovators	Seminar	14.02.2022	Mr.Sanjaydeep G

Software Development Engineer,

Blackboard Inc, Chennai | PO1-PO3,PO9 | PEO1-PEO3 | PSO1-PSO2 |
| 34 | EDI Tamilnadu& AU Hub Sponsored

Entrepreneurship Skills – Understanding your Leadership skills | Seminar | 15.02.2022 | Mr. Arun J, Software Development Engineer, Level 3 (SWE L3), Google LLC. | PO9,PO12 | PEO1-PEO4 | PSO1-PSO3 |
35	Be an Entrepreneur in the corporate world	Seminar	16.02.2022	Ms. NivethaManikandan PGDM (Finance), Great Lakes Institute of Management, Incoming Financial Analyst, JP Morgan Chase & Co	PO1-PO3, PO9,PO12	PEO1-PEO3	PSO1-PSO3
36	A walk through the skill sets of an Entrepreneur	Seminar	17.02.2022	Mr.Mathanraj S, Founder & CEO, The Savouries shots	PO1-PO3, PO9	PEO1-PEO3	PSO1-PSO3
37	ICT as a Tool for Entrepreneurship	Seminar	16.05.2022	Ms. Preethi, Software Development Engineer, Informatica,	PO1-PO3, PO9	PEO1-PEO3	PSO1-PSO3
38	Getting prepared for a fruitful Innovation	Seminar	24.05.2022	Mr. T. Praveen, Software Development Engineer 2, Plum, Bangalore	PO1-PO3	PEO1-PEO3	PSO1-PSO2
39	Funding Opportunity For Early Stage Entrepreneur	Seminar	25.05.2022	Dr. V. R. Nedunchezhian, Dean of Commerce And Management – STC College, Pollachi	PO1-PO3, PO9	PEO1-PEO4	PSO1-PSO3

S.No	Title of program	Category	Date	Resource Person	PO	PEO	PSO
40	Higher studies Opportunities	Seminar	25.05.2022	Mr.M.Ramkumar Robert Boshch,Coimbatore	PO12	PEO1-PEO3	PSO1-PSO3
41	Design Thinking Workshop	Workshop	28.2.2022	Mr. Aruljothi Sivakurunathan Google, Dublin, Ireland 2. Mr.J.Arun , Member Technical Staff, Zoho Corporation	PO1-PO5	PEO1-PEO3	PSO1-PSO3
42	EDI Tamilnadu& AU Hub Sponsored Workshop in the Institution Council	Workshop	12.3.2022	Dr. Venkateshwaran Loganathan, Principal Consultant, Hexaware Technologies	PO1-PO3, PO9	PEO1-PEO3	PSO1-PSO3
43	EDI Tamilnadu& AU Hub Sponsored Business plan Preparation Workshop	Workshop	18.3.2022	Mr. Manoj, Founder Tripledart	PO1-PO3, PO9	PEO1-PEO4	PSO1-PSO3
44	EDI Tamilnadu& AU Hub Sponsored Workshop on Intellectual Property Rights	Workshop	22.3.2022	Mr. B.Vivek, Head-Admin Murugappa Groups Coimbatore.	PO1-PO3, PO8	PEO1-PEO3	PSO1-PSO3
45	Innovation in Computer Vision	Seminar	26.06.2021	Mr.Dhyakesh S, Machine Learning Engineer, OptisolDatalabs, Coimbatore	PO1-PO5	PEO1-PEO2	PSO1-PSO3

Academic Year 2020-21

S.No	Title of program	Category	Date	Resource Person	PO	PEO	PSO

1	Quality of Service in Networks	Workshop	04.06.2020	Mr.Kevin Wallace. Kevin Wallace, double CCIE, Cisco Press author	PO1-PO5	PEO1-PEO3	PSO1-PSO2
2	Hack from Home	Hackathon	12.5.2021 to 14.5.2021	Zach Latta Founder,Hack Club	PO1-PO12	PEO1-PEO4	PSO1-PSO3
3	MongoDB Practice and Applications	Workshop	3.11.2020	Mr.M.Balaji, AI specialist,Cork Institute of Technology, Ireland	PO1-PO5	PEO1-PEO3	PSO1-PSO2
4	Innovations and Challenges in IoT	Seminar	15.05.2021	Mr.K.Vaitheeswaran, Technical Project manager, Walmart Labs, Bangalore	PO1-PO5	PEO1-PEO3	PSO1-PSO2
5	AICTE-Sponsored Short Term TrainingProgramme On "BUILDING CYBER PHYSICAL ECOSYSTEM"	STTP	3.8.2020 to 8.8.2020	Mr.KingPrakatheesh, Cyber Security Consultant,Ernst& Young Global Limited, Chennai .	-	-	-
6	AICTE-Sponsored STTPOn "Augmented Reality and Virtual Reality – A Future Technology"	STTP	2.11.2020 to 7.11.2020	Ms.S.Priya, Senior Software Engineer, HCL Technologies, Chennai	-	-	-
7	Bigdata Analytics with hadoop	FDP	1.12.2020 to 3.12.2020	Chandrasekaran K, Professor, Department of CSE, National Institute of Technology Karnataka (NITK), Surathkal	-	-	-
8	Intelligent Computing in Data Science	FDP	7.12.2020 to 11.12.2020	Dr.MohanrajVengadachalam, Data Scientist, RNTBI, Chennai	-	-	-
9	Bright Talk on employment opportunities	Seminar	3.10.2020	Mr.S.Muthuselvan, founder, Raadha Trades, Chocolate Factory, Chennai	PO12	PEO1-PEO4	PSO1-PSO3
10	Health and Hygiene during COVID situation	Seminar	6.10.2020	Dr.SadhyaKandhasamy MBBS, DGO,SudhaHospital, Coimbatore	PO6	PEO1	PSO1-PSO2

11	My Story – Motivational Session by successful Innovator	Seminar	20.1.2021	Mr. G.GowthamSiddharth, Managing Director, Linga Technologies, Coimbatore	PO12	PEO1-PEO3	PSO1-PSO3
12	Process of Innovation Development	Seminar	21.1.2021	Mr.BoopathiBadran, Director, AB PlastomechPvt.Ltd, Bangalore	PO1-PO5, P09,PO12	PEO1-PEO4	PSO1-PSO3
13	My Accelerators/Incubation -Opportunities for Students & Faculties - Early Stage Entrepreneurs	Seminar	25.3.2021	Mr.Sasikumar. A.P, Founder of AGNICART, Coimbatore	PO1-PO12	PEO1-PEO4	PSO1-PSO3
14	Process Design and Development	Seminar	31.3.2021	Mr. R. Soundararajan Founder and CEO, VLEAP3D OPC PVT LTD	PO1-PO5	PEO1-PEO3	PSO1-PSO2
15	How to plan for Start-up and legal & Ethical Step	Seminar	1.4.2021	Mr. Praveen Suresh Managing Director, Praveen Lubricants Private Limited, Palladam.	PO1-PO5,PO8	PEO1-PEO3	PSO1-PSO2
16	Motivational talk for Budding Engineers	Seminar	05.05.2021	Mr.Hariprasath Schema Business School France	PO1-PO3,PO6	PEO1-PEO3	PSO1-PSO2
17	Student Entrepreneur Skills	Seminar	22.05.2021	Mr.Vigneshwarmanoharan Senior Technical Architect R&D Bharath Labs	PO1-PO12	PEO1-PEO4	PSO1-PSO2
18	Higher Education	Seminar	17.5.2021	S.Siva Times of India	PO12	PEO4	PSO3
19	Virtual reality and Augmented reality	Workshop	12.6.2020	Dr. Shriram K V, Founder mentor- BGB Industries E-bike Manufacturer, Hosur.	PO1-PO5	PEO1-PEO3	PSO1-PSO2
20	Building Enterprise Blockchain Solution	Workshop	2.8.2020	Mr.AnanthSivam, Senior Development Engineer, Aruba HBE, Chennai	PO1-PO5	PEO1-PEO3	PSO1-PSO2

21	Next Gen Artificial Intelligence	Seminar	2.6.2020	Mrs.Priya Software Devloper HCL Technologies,	PO1-PO5	PEO1-PEO3	PSO1-PSO2
22	Tools for Business Model Generation	Seminar	3.6.2020	Mr.Yuvaraj CTS, Chennai	PO1-PO12	PEO1-PEO3	PSO1-PSO2
23	Innovation during the times of uncertainty	Seminar	6.6.2020	Ms.Subashree Dell, Coimbatore	PO1-PO5	PEO1-PEO3	PSO1-PSO2
24	AICTE sponsored Short Term Training Programme On "Augmented Reality and Virtual Reality – A Future Technology"	STTP	19.10.2020 to 24.10.2020	Dr.Sheba Professor in CSE Pondichery University	-	-	-
25	IIC Innovation Contest - Idea submission, Poc and Prototype Submission by Student teams	Ideathon	01.08.2020 - 31.08.2020	Mr.Selvaraj Kumaran System Chennai	PO1-PO12	PEO1-PEO3	PSO1-PSO3
26	Essence of Cyber Security	Seminar	13.6.2020.	Mr.R.Devaraj Leturer & IT Admin Oman	PO1-PO5	PEO1-PEO3	PSO1-PSO2
27	Cloud Computing using AWS	Seminar	02.07.2020	R.PrakadeesshArunachalam, Software Development Engineer-2, Amazon, Seattle, Washington	PO1-PO5	PEO1-PEO3	PSO1-PSO2
28	Block chain technology in IT field	Seminar	8.7.2020	Mr.K.Pramod chandran CTS,Kochi	PO1-PO5	PEO1-PEO3	PSO1-PSO2

Figure 4.1 Hack club inauguration
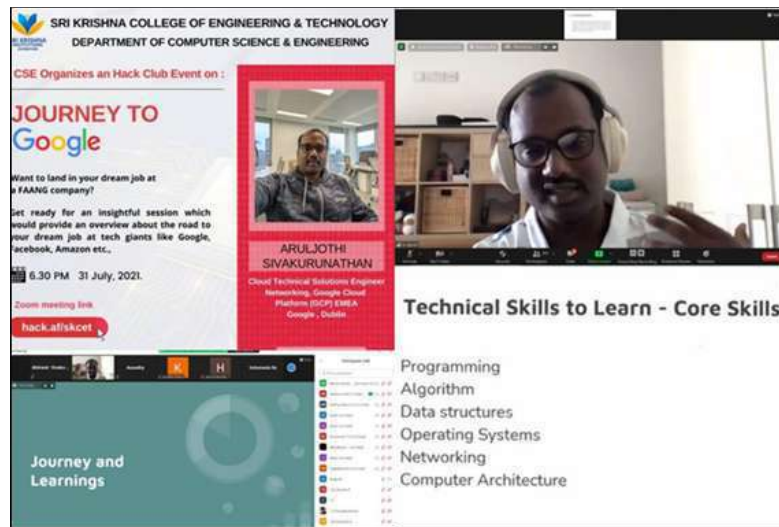
Figure 4.2 AICTE- SPICES Sponsored Journey to Google

Figure 4.3 Hack club activity - Ideathon

Figure 4.4 Hack club activity - Hackathon

Figure 4.5 Hack club – Internal Ideathon

Figure 4.6 Workshop on Automation Testing using Cucumber (BDD) Framework

Figure 4.7 Seminar on Entrepreneurship and Innovation" as Career Opportunity

Figure 4.8 Seminar on "Higher Education & Research Opportunities"

4.4.2 Publication of technical magazines, newsletters, etc. (5)   Institute Marks : 5.00

Department Newsletter – CSE GAZETTE

Department of Computer Science and Engineering publish newsletter "CSE GAZETTE" once in a semester. The editorial board consists of faculty and student representatives and the content of newsletter is about Highlights of the Department which includes Hackathon Accolades of the Students, Event organized by the Department, Research and Development activities, Student participation and Certifications on technical events and courses attended by Faculty members.

S.No	Name of the Program	Chief Editor	Faculty Editors	Student Editors
1.	Newsletter for Academic Year 2020-21 (June – December) Volume 2 Issue 1	Dr.K.Sasi Kala Rani Prof & Head, CSE	Dr.S.Oswalt Manoj, AP-CSE Ms.N.Pooranam, AP-CSE	Shameer B – III CSE Theophila Vaiz R – III CSE
2.	Newsletter for Academic Year 2020-21 (January – May) Volume 2 Issue 2	Dr.K.Sasi Kala Rani Prof & Head, CSE	Dr.S.Oswalt Manoj, AP-CSE Ms.N.Pooranam, AP-CSE	Shameer B – III CSE Theophila Vaiz R – III CSE
3.	Newsletter for Academic Year 2021-22 (June – December) Volume 3 Issue 1	Dr.K.Sasi Kala Rani Prof & Head, CSE	Dr.S.Oswalt Manoj, AP-CSE Ms.N.Pooranam, AP-CSE	Ashwin K Biju – II CSE Angelin Varghese – II CSE
4.	Newsletter for Academic Year 2021-22 (January – May) Volume 3 Issue 2	Dr.K.Sasi Kala Rani Prof & Head, CSE	Dr.S.Oswalt Manoj, AP-CSE Ms.N.Pooranam, AP-CSE	Ashwin K Biju – II CSE Angelin Varghese – II CSe
5.	Newsletter for Academic Year 2022-23 (June – December) Volume 4 Issue 1	Dr.K.Sasi Kala Rani Prof & Head, CSE	Dr.S.Oswalt Manoj, AP-CSE Ms.N.Pooranam, AP-CSE	Ashwin K Biju – III CSE Angelin Varghese – III CSE
6.	Newsletter for Academic Year 2022-23 (January – May) Volume 4 Issue 2	Dr.K.Sasi Kala Rani Prof & Head, CSE	Dr.S.Oswalt Manoj, AP-CSE Ms.N.Pooranam, AP-CSE	Ashwin K Biju – III CSE Angelin Varghese – III CSE

Figure 4.9 CSE GAZETTE - Department Newsletter

Department Magazine - Inventus

"Inventus" – Computer Science and Engineering, Sri Krishna College of Engineering and Technologys Magazine, packed with informative and entertaining content and promises to captivate readers with its diverse sections and engaging features.

The magazine begins with a captivating first page that sets the tone for the entire publication. It features the vision and mission of our esteemed department, emphasizing our commitment to excellence in education and research. The Principals message and the Head of Departments message provide insights into the departments goals and aspirations for the Year.

The magazines content covers a wide range of topics that cater to both technical and non-technical interests. The technical section showcases the departments achievements and events, including lectures, hackathons, and ideathons. Readers can delve into the world of our exceptional facultys achievements, students hackathon wins, internships, academic accolades, and their extraordinary performances in extracurricular activities.

On the non-technical side, the magazine highlights the creative talents of our students and faculty. It showcases their remarkable artistic skills, and a special section called the "Comic Conclave" tells an interesting story that entertains while spreading awareness about new technologies.

We are proud to introduce the dedicated team behind the creation of **"Inventus"**

S.No	Name of the Program	Chief Editor	Faculty Editors	Student Editors
1.	Magazine for Academic Year 2020-21 (Volume :15)	Dr.K.Sasi Kala Rani Professor & Head, CSE	Ms.Priya A	Adthiya Menon S- IV CSE KeerthI Rajan K .M IV CSE
2.	Magazine for Academic Year 2021-22 (Volume : 16)	Dr.K.Sasi Kala Rani	Ms.Rohini M	Kumaraguru T -III CSE Ms.Emma Thomus - III CSE

| 3. | Magazine for Academic Year 2022-23 (Volume : 17) | Dr.K.Sasi Kala Rani | Dr.Reshma V.K | Kavya Kumar-II CSE

Ms.Harsha M II CSE |

Figure 4.10 INVENTUS- Department Magazine

Institution Newsletter – SKCET Buzz

SKCET BUZZ, the weekly Campus News Letter provides high value information of the weekly activities of the college with a factual and timely visual presentation of all the events in an easily navigated e-format. This mobile friendly version is released during every week Friday through E-mail and WhatsApp groups.

SKCET Buzz features the following activities

- **Institutional Level Events:** Central Events, Plenums, Centre of Excellences, AICTE, MHRD & UGC Visits, Awards and Recognitions, EA Camps, Industry Nteworking, Exam Result reviews, NBA and NAAC Reviews, NSS activities, PMKVY training and Timetable schedules.
  - **Events:** Tech talks by Industry professionals, Association activities, Workshops, Industrial visits, Hands-on trainings, Spoken tutorials, Pedagogical initiatives, Webinars, Club Activities, Outside Classroom learning activities, Alumni Interactions and Department Meetings.
  - **Placement:** Various trainings, Wipro PRP, Infosys campus Connect Programmes, Industry connects, campus drives and results.
  - **Student Achievements:** Laurels and Accolades won at Hackathons, National and Inter collegiate events, Sports, Internships and MOOCs.
  - **Faculty Achievements:**Faculty progression, participation in workshops and Invited Talks.
  - **Research and Development:**R&D outcomes related to journals, patents, technical magazines, books and proposal presentations.
  - **Media:** Newspaper clippings and snapshots of TV channel coverage videos highlighting the college events
  - **General:**Exclusive column to feature the creative talents of students in the form of painting, doodles, photography clicks and literary pieces, quiz and weekly contests, technology advancements, upcoming competitions and information on Higher Education opportunities.

Figure 4.11 SKCET Buzz – Campus Newsletter

4.4.3 Participation in inter-institute events by students of the program of study (10)   Institute Marks : 10.00

Participation in inter-institute events by students

YEAR	2022-2023		2022-2021		2020-2021	
Event	Won	Participated	Won	Participated	Won	Participated
Co-Curricular	67	64	53	47	49	23
Extra-Curricular	3	8	1	-	8	-

Academic Year 2022-23

S. No	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1.	Prithika Andrea Angelina F	II CSE	Techgium	L&T	2.5.2023-4.5.2023	First Runner up with cash award of Rs.5,00,000
2.	Monish Kumar A	II CSE	Techgium	L&T	2.5.2023-4.5.2023	First Runner up with cash award of Rs.5,00,000
3.	ShwetaHarini S	III CSE	Techgium	L&T	2.5.2023-4.5.2023	Employee Choice award with cash of Rs.50000
4.	Prithika Andrea Angelina F	II CSE	Techgium	L&T	2.5.2023-4.5.2023	Employee Choice award with cash of Rs.50000
5.	Kumaraguru T	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022 26.08.2022	Winner with cash prize of Rs. 1 Lakh
6.	Monish kumar A	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022- 26.08.2022	Winner with cash prize of Rs. 1 Lakh

7.	Rahul R N	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
8.	Prajwal pandi S V	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
9.	Priyadharsini B	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
10.	Mohammad Suhail J	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
11.	Prajeet kumar K	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
12.	Yeshika S	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
13.	Prithika Andrea Angelina F	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
14.	Kumaraguru T	IV CSE	Darkathon 2022	Narcotics Control Bureau	19.7.2022	First Prize with cash award of 2.5 lakhs
15.	Samuel Wycliffue J	IV CSE	Darkathon 2023	Narcotics Control Bureau	19.7.2022	First Prize with cash award of 2.5 lakhs
16.	Aswathy H	III CSE	Unesco India Africa Hackathon	AICTE, MIC	22.11.22 - 25.11.22	Winner with cash award of 3 lakhs
17.	Kumaraguru T	IV CSE	Unesco India Africa Hackathon	AICTE, MIC	22.11.22 - 25.11.22	Winner with cash award of 3 lakhs
18.	Prithika Andrea Angelina F	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of Rs.75000
19.	Nagasundar N	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of Rs.75000

20.	Monish Kumar A	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of Rs.75000
21.	ShwetaHarini S	III CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of Rs.75000
22.	Priyadharsini B	III CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of Rs.50000
23.	Rajkumar T	III CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of Rs.50000
24.	Naveen M	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of Rs.50000
25.	Madhumitha R	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of Rs.50000
26.	Priyadharsini U	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of 5Rs.0000
27.	Aswin B	III CSE	Electhon 23	Election Commission of India	15.4.2023-16.2.2023	Runner up with cash award of Rs.50000
28.	Devadharsana S	III CSE	Electhon 23	Election Commission of India	15.4.2023-16.2.2023	Runner up with cash award of Rs.50000
29.	Ashwin K Biju	III CSE	Electhon 23	Election Commission of India	15.4.2023-16.2.2023	Runner up with cash award of Rs.50000
30.	Aswathy H	III	Cubethon	Cubet techno labs	June 10	Winner with cash prize of Rs. 1 Lakh
31.	Shametha K G	IV	Smart India Hackathon	AICTE, MIC	25.08.2022- 26.08.2022	Winner with cash prize of Rs. 1 Lakh

32.	Aswathy H	III	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize of Rs. 1 Lakh
33.	Anwisha Zaman	III	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Winner – Team of excellence cup
34.	Samyukta K	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Winner – Team of excellence cup
35.	Sanjay R	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Winner – Team of excellence cup
36.	Prithika Andre Angelina F	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
37.	Monisha K	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
38.	Priyadharshini U	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
39.	Madhumitha R	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
40.	Samuel Wycliffe J	III	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
41.	Shametha K G	IV CSE	Darkathon 2022	NCB	19.7.2022	Top 15
42.	Prithika Andrea Angelina F	II CSE	Darkathon 2022	NCB	19.7.2022	Top 15
43.	Aswathy H	III CSE	Darkathon 2022	NCB	19.7.2022	Top 15
44.	Siddesh Aggarwal	II CSE	Powering STEM Hacks	Devpost	28.12.2022-02.01.2023	Best Overall Hacks with goodies
45.	Kumaraguru T	IV	Cubethon	Cubet techno labs	June 10	Winner with cash prize of Rs. 1 Lakh

46.	Shrihari M	III	National Level Hackathon	Sri Eshwar College of Engineering and Technology	Nov 4 -5 2022	1st Prize with cash award Rs.50000
47.	Suganth M	III	National Level Hackathon	Sri Eshwar College of Engineering and Technology	Nov 4 -5 2022	1st Prize with cash award Rs.50000
48.	Sushanthika M	III	National Level Hackathon	Sri Eshwar College of Engineering and Technology	Nov 4 -5 2022	1st Prize with cash award Rs.50000
49.	Vinishah N	III	Technical Event	KCT	14th - 30th May 2022	Runner Up
50.	Priyadharsini B	III	Emids Helathcare Hackathon	IIIT Sricity	11th-12th Nov, 2022	Top 5
51.	Raj Kumar T	III	Emids Helathcare Hackathon	IIIT Sricity	11th-12th Nov, 2022	Top 5
52.	Anwizha Zaman	III	Emids Helathcare Hackathon	IIIT Sricity	11th-12th Nov, 2022	Top 5
53.	Rakshapriyan V P	II	Trident Hacks	Devpost	11.4.2023	Winner
54.	Rasiha S	II	Trident Hacks	Devpost	11.4.2023	Winner
55.	Prithika Andrea Angelina F	II	Tech-a-Thon 2.0	Shaheed Rajguru College of Applied Sciences for Women, University of Delhi	26.3.2023	Winner in Healthcare Track
56.	Nagasundar N	II	Tech-a-Thon 2.0	Shaheed Rajguru College of Applied Sciences for Women, University of Delhi	26.3.2023	Winner in Healthcare Track
57.	Siddesh Agarwal	II	Capture the Flag	Jansons Institute of Technology	25.2.2023	First Prize
58.	Prathiba S	II	Binance Ideathon	I4c	August 2022	Winner with 500 USD
59.	Shruthiga K	II	Binance Ideathon	I4c	August 2022	Winner with 500 USD

60.	Vidhyalakshmi S	II	Binance Ideathon	I4c	August 2022	Winner with 500 USD
61.	Siddhesh Agarwal	II	Binance Ideathon	I4c	August 2022	Runner
62.	Yashu Venkat S	II	Binance Ideathon	I4c	August 2022	Runner
63.	Sneha Janarthanan	II	Binance Ideathon	I4c	August 2022	Runner
64.	Prithika Andrea Angelina F	II	Impractical Hackers 2 Hackathon	Major League Hacking	18.09.2022	Best Track Prize
65.	Nagasundar N	II	Impractical Hackers 2 Hackathon	Major League Hacking	18.09.2022	Best Track Prize
66.	Monishkumar A	II	Impractical Hackers 2 Hackathon	Major League Hacking	18.09.2022	Best Track Prize
67.	Prathiba S	II	Pragyan Startup Arena	National Institute of Technology, Trichy	23.3.2023 to 26.3.2023	First Prize with Rs.15000

Co-Curricular Participation:

S.No	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1.	Barath R R	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
2.	Ashwin B	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
3.	Keerthi Raajan K M	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
4.	Bhavikk D patel	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
5.	Sneha Janarthanan	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
6.	Madhubala S	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
7.	Ashwin K Biju	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
8.	Jason Jose P	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated

9.	Katyayini R	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
10.	Devadharshana S	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
11.	Harini R	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
12.	Johans Olivia A	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
13.	Rakshapriyan V P	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
14.	Raj Narayanan B	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
15.	Rasiha S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
16.	Priyanga P	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
17.	Phooja S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
18.	Madhupriya R	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
19.	Rithik Raj K S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
20.	Ravikrishna B	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
21.	Prathiba S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
22.	Nithya S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
23.	Mrinalini K	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
24.	Akil Prasath R	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
25.	Mounika Sri A	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
26.	Moumitha R	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
27.	Prithika Andrea Angelina F	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
28.	Nagasundar N	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated

29.	Monish kumar A	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
30.	ShwetaHarini S	III CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
31.	Praveen T	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
32.	Rahul L	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
33.	Rahul R N	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
34.	Nandha Kumar P	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
35.	Navaneethan G	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
36.	Pranav Kumar S	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
37.	Bala Velan M	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
38.	Ajay K	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
39.	Dharanidharan S	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
40.	Abishek Girish	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
41.	Dhanush Tharan M	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
42.	Dharun C	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
43.	Siddesh Aggarwal	II CSE	Reva Hacks	Reva University	13.11.2022	Participated
44.	Prathiba S	II CSE	Reva Hacks	Reva University	13.11.2022	Participated
45.	Mohammed Asif J	II CSE	Reva Hacks	Reva University	13.11.2022	Participated
46.	Siddesh Aggarwal	II CSE	Courier Hacks	Devpost	10.12.22	Participated
47.	Prathiba S	II CSE	Courier Hacks	Devpost	10.12.22	Participated
48.	Rithik Raj K S	II CSE	Courier Hacks	Devpost	10.12.22	Participated
49.	Mohammed Aasif J	II CSE	Courier Hacks	Devpost	10.12.22	Participated

50.	MohanaPrasasd S	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
51.	Navadin Nehru T	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
52.	Maginesh U T	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
53.	Mark Felix A	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
54.	Larwin J	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
55.	Nigitha S	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
56.	Krithika K	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
57.	Methuna S	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
58.	Prajwal pandi S V	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
59.	Rahul R N	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
60.	Prajeet kumar K	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
61.	Mohammed Suhail J	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
62.	Dharanidharan S	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
63.	Rakshapriyan V P	II CSE	Kumari Hackathon	Naan Mudalvan and Startup TN	5.5.23-6.5.2 023	Participated
64.	Rasiha S	II CSE	Kumari Hackathon	Naan Mudalvan and Startup TN	5.5.23-6.5.2 023	Participated

Extra-Curricular Achievements:

S.NO	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1	Meenakshi A	II	4th CIT COVAI TIES (Sports-Football)	Coimbatore Institute of Technology	25.02.2023 to 03.03.2023	First Prize
2	Madhumitha R	II	4th CIT COVAI TIES (Sports-Football)	Coimbatore Institute of Technology	25.02.2023 to 03.03.2023	First Prize

ACADEMIC YEAR (2021-2022)

Co-Curricular Achievements:

S.NO	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1	Shametha K G	III	Superposition Hackathon	STEM Organization, Canada	13.8.21- 15-8.21	Winner of Best Mobile App category
2	Aswathy H	II	Superposition Hackathon	STEM Organization, Canada	13.8.21- 15-8.21	Winner of Best Mobile App category
3	Abirami S	II	Superposition Hackathon	STEM Organization, Canada	13.8.21- 15-8.21	Winner of Best Mobile App category
4	Mridula Kalaiselvan	III	Creatica Hackathon	Newyork City Virtual Hackathon	20.8.21- 22.8.21	Best Impact Hack
5	Emma Thomas	III	Creatica Hackathon	Newyork City Virtual Hackathon	20.8.21- 22.8.21	Best Impact Hack
6	Abirami S	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh

7	Barath R R	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh
8	Ashwin K Biju	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh
9	Aswathy H	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh
10	Anwisha ZAMAN	II	peace out hacks	MLH,USA	17.8.21-19.8.21	First overall winner and best domain name winner
11	Angelin Varghese	II	peace out hacks	MLH,USA	17.8.21-19.8.21	First overall winner and best domain name winner
12	Kumaraguru T	III	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Best Financial Hack
13	Adithya menon S	IV	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Best Financial Hack
14	Samuel Wycliffe J	III	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Best Financial Hack
15	Nivetha.A	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winner with cash prize of Rs. 1 Lakh
16	Arthika G	II	Manthan 2021	AICTE,Bureau of Police Research and Development	08.12.21-10.12.21	Winner with cash prize of Rs. 1 Lakh
17	Arshath B	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winner with cash prize of Rs. 1 Lakh

18	Nandhini V	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winner with cash prize of Rs. 1 Lakh
19	Priyadharshini V	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winner with cash prize of Rs. 1 Lakh
20	Aparna K	III	Envirothon	Wolfarm Award-Under various Contries	1.10.21-12.10.21	Winner
21	Abiraj R	III	Envirothon	Wolfarm Award-Under various Contries	1.10.21-12.10.21	Winner
22	Darwesh Fazil A	III	Envirothon	Wolfarm Award-Under various Contries	1.10.21-12.10.21	Winner
23	Grace Ebenezer R	III	Envirothon	Wolfarm Award-Under various Contries	1.10.21-12.10.21	Winner
24	Aparna K	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
25	Abiraj R	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
26	Darwesh Fazil A	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
27	Grace Ebenezer R	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
28	Kumaraguru T	III	Hack Bells	Hack Club, Budha College, Azhapuzha	10.12.2021-12.12.2021	Runner up
29	Prithika Andrea Angelina F	I	Hack Bells	Hack Club, Budha College, Azhapuzha	10.12.2021-12.12.2021	Runner up
30	Madhumitha R	I	Hack Bells	Hack Club, Budha College, Azhapuzha	10.12.2021-12.12.2021	Runner up
31	Nivetha.A	II	Snow Hacks	Devpost	11.2.2022-13.2.2022	Overall winner

32	Priyadharshini B	II	Snow Hacks	Devpost	11.2.2022-13.2.2022	Overall winner
33	Nandhini V	II	Snow Hacks	Devpost	11.2.2022-13.2.2022	Overall winner
34	Shametha K G	III	Kurinji Hacks	Super Position	11.2.2022-13.2.2022	Overall winner
35	Aswathy H	II	Kurinji Hacks	Super Position	11.2.2022-13.2.2022	Overall winner
36	Abirami S	II	Kurinji Hacks	Super Position	11.2.2022-13.2.2022	Overall winner
37	Aswathy H	II	Y Hacks	Yale University, MLH	8.4.2022 - 10.4.2022	Best travel Track - Second Prize
38	Ashwin K Biju	II	Y Hacks	Yale University, MLH	8.4.2022 - 10.4.2022	Best travel Track - Second Prize
39	Aswin B	II	Y Hacks	Yale University, MLH	8.4.2022 - 10.4.2022	Best travel Track - Second Prize
40	F. Prithika Andrea Angelina	I	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022- 3.3.2022	Participated and Internship Offer
41	Madhumitha R	I	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022- 3.3.2022	Participated and Internship Offer
42	S.Aravindhan	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022- 3.3.2022	Participated and Internship Offer
43	Ashok Aadhav R R	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022- 3.3.2022	Participated and Internship Offer
44	Ida Winona A J	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022- 3.3.2022	Participated and Internship Offer
45	Dhiksha S	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022- 3.3.2022	Participated and Internship Offer

46	Anwisha Zaman	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
47	Angelin Varghese	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
48	Priyadharsini B	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
49	ANEES FATHIMA S	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
50	Nivetha.A	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
51	Nandhini V	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
52	Siddesh Agarwal	I	InnoHacks	KIET Group of Institutions	15.05.2022-16.05.2022	Second Runner-Up
53	Yashu Venkat S	I	InnoHacks	KIET Group of Institutions	15.05.2022-16.05.2022	Second Runner-Up

Co-Curricular Participation:

S.NO		NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1		Harish Shunmugam J	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
2		Keerthi Rajan K M	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
3		Akash S M	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated

4		Dhivya Bharathi S	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
5		Kaushik M	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
6		Hariharan R	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
7		Adithya Menon S	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
8		Yogeshwar B K	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
9		Kumaraguru T	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
10		Samuel Wycliffe J	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
11		Theophila Vaiz R	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
12		Barath R R	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
13		Anwisha Zaman	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
14		Anees Fathima S	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
15		Geetha R	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
16		Angelin Varghese	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
17		Adithya Menon S	IV	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist
18		Yogeshwar B K	IV	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist

19		Kumaraguru T	III	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist
20		Shametha K G	III	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist
21		Vaishal Krishna V S	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
22		Varun S	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
23		Vinisha H	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
24		Valan Antony A	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
25		Barath R R	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
26		Abirami S	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
27		Aswin B	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
28		Jason Jose P	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
29		Pranesh S	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
30		Mohana Sowdesh R	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
31		Ponnaiah Karthik R M	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
32		Logeshkumar R	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
33		Navaneeth K B	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
34		Kumaraguru T	III	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated
35		Adithya menon	IV	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated

36		Samuel Wycliffe J	III	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated
37		Yogeshwar B k	IV	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated
38		Abirami S	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
39		Barath R R	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
40		Keerthi Rajan K M	IV	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
41		Bhavik D Patel	IV	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
42		Aswathy H	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
43		Ashwin K Biju	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
44		Johans Olivia A	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
45		Ajay Ganesh G M	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
46		Jason Jose P	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
47		Aswin B	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated

ACADEMIC YEAR (2020-2021)

Co-Curricular Achievements:

S.NO	Name of the Student	YEAR OF STUDY	Event Name	INSTITUTION	DATE	POSITION HELD

1		Keerthi Raajan K M	III	ASEAN India Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	Winner with cash award of 2500 USD
2		Harish Shunmugham J	III	ASEAN India Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	Third with cash award of 600 USD
3		Akhilesh.R	III	ASEAN India Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	Third with cash award of 600 USD
4		Parvathynathan.S	III	ASEAN India Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	Third with cash award of 600 USD
5		Kumaraguru T	II	Make Harvard	Harvard University USA	13.2.2021&14.2.2021	First Prize
6		Kumaraguru T	II	Steel Hacks	Pittsburgh University USA	19.2.2021 To 21.2.2021	First Prize
7		Samuel Wycliffe J	II	Steel Hacks	Pittsburgh University USA	19.2.2021 To 21.2.2021	First Prize
8		Adithya Menon S	III	Steel Hacks	Pittsburgh University USA	19.2.2021 To 21.2.2021	First Prize
9		Yogeshwar B K	III	Steel Hacks	Pittsburgh University USA	19.2.2021 To 21.2.2021	First Prize
10		Kumaraguru T	II	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	First Prize
11		Samuel Wycliffe J	II	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	First Prize
12		Adithya Menon S	III	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	First Prize
13		Yogeshwar B K	III	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	First Prize
14		Kumaraguru T	II	Calvin Hacks	Calvin University USA	26.3.2021 & 27.3.2021	Second Prize

15		Samuel Wycliffe J	II	Calvin Hacks	Calvin University USA	26.3.2021 & 27.3.2021	Second Prize
16		Adithya Menon S	III	Calvin Hacks	Calvin University USA	26.3.2021 & 27.3.2021	Second Prize
17		Yogeshwar B K	III	Calvin Hacks	Calvin University USA	26.3.2021 & 27.3.2021	Second Prize
18		Jeganprakash B	III	Smart India Hackathon 2020 Hardware Edition	AICTE MoE	21.12.2020	First Prize with cash award of Rs.one lakh
19		Keerthi Raajan K M	III	Smart India Hackathon 2020 Hardware Edition	AICTE MoE	21.12.2020	Winner with cash prize of Rs. 1 Lakh
20		Parvathynathan S	III	Smart India Hackathon 2020 Hardware Edition	AICTE MoE	21.12.2020	Winner with cash prize of Rs. 1 Lakh
21		Aparna K	II	Assam Police Hackathon	Assam Police	24.7.2020 to 30.9.2020	First Prize with cash award of Rs. 1.5 Lakhs
22		Grace Ebenezer R	II	Assam Police Hackathon	Assam Police	24.7.2020 to 30.9.2020	First Prize with cash award of Rs. 1.5 Lakhs
23		Darawesh Fazil A	II	Assam Police Hackathon	Assam Police	24.7.2020 to 30.9.2020	First Prize with cash award of Rs. 1.5 Lakhs
24		Abiraj R	II	Assam Police Hackathon	Assam Police	24.7.2020 to 30.9.2020	First Prize with cash award of Rs. 1.5 Lakhs
25		Harish Shunmugham J	III	Py Hack	Saama Technology	13.3.2021	Internship with Rs.2000 per month
26		Jegan Prakash B	III	Guvithon	Guvi	25.1.2021	Top 20 developers

27		Shameer B	III	Guvithon	Guvi	25.1.2021	Top 20 developers
28		Kumaraguru T	II	Open Innovation Challenge	NIT Warangal	23.11.2020	Honourable Award
29		Samuel Wycliffe J	II	Open Innovation Challenge	NIT Warangal	23.11.2020	Honourable Award
30		Adithya Menon S	III	Open Innovation Challenge	NIT Warangal	23.11.2020	Honourable Award
31		Yogeshwar B K	III	Open Innovation Challenge	NIT Warangal	23.11.2020	Honourable Award
32		Vijayalayan A	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 to 3.8.2020	Winner with cash prize of Rs. 1 Lakh
33		Swetha V	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 to 3.8.2020	Winner with cash prize of Rs. 1 Lakh
34		Sanjaiy Kumar T N	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 to 3.8.2020	Winner with cash prize of Rs. 1 Lakh
35		Nithin K M	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 to 3.8.2020	Winner with cash prize of Rs. 1 Lakh
36		Naveen Kumar B	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 to 3.8.2020	Winner with cash prize of Rs. 1 Lakh
37		Kiran Subramanian S	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 to 3.8.2020	Winner with cash prize of Rs. 1 Lakh
38		Vijayalayan A	III	Oxford Hack	Oxford University,UK	14.11.2020 to 16.11.2020	First Prize
39		Sanjaiy Kumar T	III	Oxford Hack	Oxford University,UK	14.11.2020 to 16.11.2020	First Prize
40		Nithin K M	III	Oxford Hack	Oxford University,UK	14.11.2020 to 16.11.2020	First Prize
41		Naveen Kumar B	III	Oxford Hack	Oxford University,UK	14.11.2020 to 16.11.2020	First Prize
42		Kiran Subramanian S	III	Oxford Hack	Oxford University,UK	14.11.2020 to 16.11.2020	First Prize

S.NO		NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
43		Kumaraguru T	II	Hack Princeton	Princeton University	3.4.21 & 4.4.21	Second Prize
44		Samuel Wycliffe J	II	Hack Princeton	Princeton University	3.4.21 & 4.4.21	Second Prize
45		Adithya Menon S	III	Hack Princeton	Princeton University	3.4.21 & 4.4.21	Second Prize
46		Yogeshwar B K	III	Hack Princeton	Princeton University	3.4.21 & 4.4.21	Second Prize
47		Kumaraguru T	II	Make Harvard	Harvard University	13.2.21& 14.2.21	First Prize
48		Kumaraguru T	II	Jini Hotel Hacakthon	Booking Jini	May 2020	First Prize with cash award of Rs.1 Lakh
49		Samuel Wycliffe J	II	Jini Hotel Hacakthon	Booking Jini	May 2020	First Prize with cash award of Rs.1 Lakh

Co-Curricular Participation:

S.NO		NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1		Infant Rashmi E	Iii	Fight Corona Ideathon	MOE,AICTE	27th To 29th March 2020	Participated
2		Madhu Bala S	Iii	Fight Corona Ideathon	MOE,AICTE	27th To 29th March 2020	Participated
3		Mehavarthini K	Ii	Fight Corona Ideathon	MOE,AICTE	27th To 29th March 2020	Participated

4		Menaga M	Ii	Fight Corona Ideathon	MOE,AICTE	27th To 29th March 2020	Participated
5		Elakkiya R	Iii	Fight Corona Ideathon	MOE,AICTE	27th To 29th March 2020	Participated
6		Hasanthi M M	Iii	Fight Corona Ideathon	MOE,AICTE	27th To 29th March 2020	Participated
7		Shametha K G	Ii	Hact The Crisis	Mygov	2nd And 3rd April 2020	Participated
8		Shobbana K	II	HACT THE CRISIS	Mygov	2nd And 3rd April 2020	Participated
9		Shubhiksha R	Ii	Hact The Crisis	Mygov	2nd And 3rd April 2020	Participated
10		Vaishnav M A	Ii	Hact The Crisis	Mygov	2nd And 3rd April 2020	Participated
11		Parvathy Nathan S	Iii	Hact The Crisis	Mygov	2nd And 3rd April 2020	Participated
12		Jawahar P M M	Iii	5g Hackathon	Ministry Of Telecommunications	August 2020	Participated
13		Inderajith K	Iii	5g Hackathon	Ministry Of Telecommunications	August 2020	Participated
14		Keerthi Raajan K M	Iii	5g Hackathon	Ministry Of Telecommunications	August 2020	Participated
15		Akil Prasath R	Iii	5g Hackathon	Ministry Of Telecommunications	August 2020	Participated
16		Aditya Menon S	Iii	Global Cyber Peace-A-Thon	Global Cyber Challenge	16.2.2021	Participated
17		Aditya Menon S	Iii	Octa Hacks 3.0	Chitkara University	20.11.2020 To 22.11.2020	Participated
18		Aditya Menon S	Iii	Recursion 2.0 Hackathon	Rajiv Gandhi Institute Of Technology	20.3.2021&21.3.2021	Participated
19		Akil Prasath R	Iii	Infathon	Informatica	Feb 2021	Participated
20		Akil Prasath R	Iii	Covid 19 Hackathon	Anna University	April 2020 To Jan 2021	Participated

21		Akshaya Varshini P	Iii	Covid 19 Hackathon	Anna University	April 2020 To Jan 2021	Participated
22		Abhishek Ganesh	Iii	Covid 19 Hackathon	Anna University	April 2020 To Jan 2021	Participated
23		Kumaraguru T	Ii	Dishathon	Incubate Ind,Dish Tv	19.6.2020 To 21.6.2020	Participated

Extra-Curricular Achievements:

S.NO	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1	Yash P. A	III	TCFC 5A side Football Tournamnet	TDFC	30.01.2021	First
2	Yash P. A	III	5-A side Football Tournament	Socceroos F.C	3rd & 4th April 21	Runners
3	Yash P. A	III	Independence Day Football Trophy	Dream Lights	15.08.2021	First
4	Ajay Ganesh G M	II	RR T20 Trophy	RR	December 2020	Runners
5	Ajay Ganesh G M	II	Parasivam T20 memorial Tournament	Parasivam Memorial Tournament	November 2021	Runners
6	Ajay Ganesh G M	II	GPT T20 Tournament	GPT	January 2021	Winners
7	Ajay Ganesh G M	II	COBA T20 Tournament	COBA	June 2021	Runners
8	Ajay Ganesh G M	II	U-19 State level Inter Academy Cricket Tournament		May2021	Runners

SMASHING ACCOLADES OF CSE DEPARTMENT

L&T TechGium 6th Edition – 1st runner up with Rs.5,00,000 Cash award

Smart India Hackathon 2022 –First Prize With 1 Lakh Cash Award

Smart India Hackathon 2022 –First Prize With 1 Lakh Cash Award

Darkathon 2022 organized by NCB - Winners with Rs.2.5 Lakhs cash prize

GITEX GLOBAL SUMMIT 2021-DUBAI

SIH 2020 HARDWARE HACKATHON

SIH 2019 First Place

SIH 2019 First Place

SIH 2019 First Place

ASEAN - INDIAN 2 – Winners, 3 – Runner Ups

HACKATHON'2018 2 – Winners

HACKATHON'2018 1 – Runner

PINNACLE – OLYMPICS OF HACKATHON'21

PEACE-OUT HACKS'21

CREATICA TECH' 21

CLIMATE HACKS – TRASHGRAM'21

MAKEHARVARD 2020 MAKEATHON

SANTA BARBARA HACKATHON'20

HACK HARVARD'19, USA

UNSCRIPT2K20

JINI HACKS 2020

ASSAM HACKATHON'2020

FIGHT CORONA IDEATHON'20

Smart India Hackathon 2022

Award Ceremony for Darakathon winners, Chandigarh

Runner Up in Electhon 23 by Election Commission of India with Rs.50,000 cash award

Darkathon 2022, NCB

Smart India Hackathon 2022 – Winner

UNESCO India Africa Hackathon Winner with cash award of Rs.3 Lakhs

G20 Dance Performance at Delhi
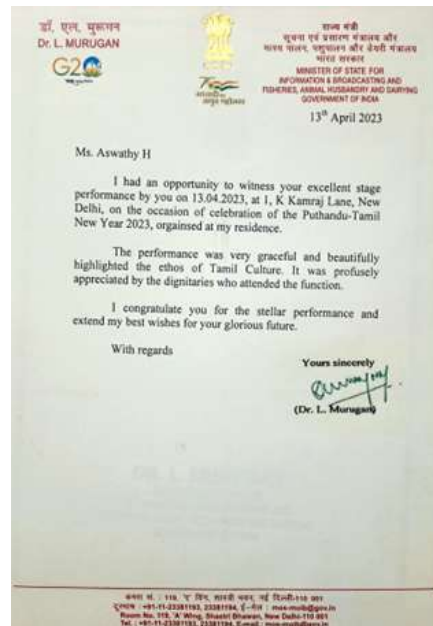
SPORTS ACHIEVEMENTS

5 FACULTY INFORMATION AND CONTRIBUTIONS (200)

Total Marks 191.96

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Sr. No	Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof / Assoc. Prof.)	Initial Date of Joining	Association Type	At present working with the Institution (Yes / No)	Date of Leaving	IS HOD?
1	Dr.J.Janet	AHTPJ0108J	ME/M. Tech and PhD	11/07/2007	Knowledge based system, FOG Computing	19	2	1	Professor	07/11/2016	07/11/2016	Regular	Yes		No
2	Dr. J.P. Ananth	AJOPA2175R	ME/M. Tech and PhD	30/04/2013	Image Processing, Pattern Recognition, Big Data, Artificial Intelligence	22	7	3	Professor	03/04/2017	03/04/2017	Regular	Yes		No
3	Dr. K. Sasi Kala Rani	BBSPS6294N	ME/M. Tech and PhD	16/06/2014	Networking & Soft Computing, Database Management Systems, Data Structures	10	2	0	Professor	01/08/2018	01/08/2018	Regular	Yes		Yes
4	Dr.M.Sujaritha	CEEPS2349J	ME/M. Tech and PhD	18/11/2011	Image Processing, Machine Learning	16	2	1	Professor	20/08/2014	20/08/2014	Regular	Yes		No
5	Dr. V. Vijeya Kaveri	AFDPV0793H	ME/M. Tech and PhD	19/12/2019	Data Mining, Machine Learning, Social Networking	10	0	0	Professor	01/06/2021	18/03/2020	Regular	Yes		No
6	Dr.K.Ramesh	AMOPR2220D	ME/M. Tech and PhD	21/05/2016	Artificial intelligence, Machine Learning	17	6	2	Professor	02/05/2022	02/05/2022	Regular	Yes		No
7	Dr.P.Mohan Kumar	ANGPM5547H	ME/M. Tech and PhD	30/04/2013	Network security and IoT, Cloud Computing	10	4	2	Professor	01/09/2021	01/09/2021	Regular	Yes		No
8	Dr. G. Vijaya	AGXPV4108K	ME/M. Tech and PhD	10/03/2017	Machine Learning, Medical Image Processing	2	0	0	Professor	02/05/2022	02/05/2022	Regular	Yes		No

9	Dr.D.Rasi	AROPR0315A	ME/M. Tech and PhD	13/04/2017	Image Processing, Data Mining	2	0	0	Professor	17/06/2022	17/06/2022	Regular	Yes		No
10	Dr.Jayasudha Subburaj	AJRPJ0955B	MCA and PhD	09/09/2015	Database Management Systems, Machine Learning	3	0	0	Associate Professor	01/06/2022	01/06/2022	Regular	Yes		No
11	Dr. T. Latha Maheswari	AFJPT9800K	ME/M. Tech and PhD	26/10/2018	Machine Learning	8	0	0	Associate Professor	03/06/2019	03/05/2006	Regular	Yes		No
12	Dr. S. Oswalt Manoj	AAOPO2797A	ME/M. Tech and PhD	06/09/2021	Cloud Computing, Big Data Analytics, Machine Learning and Deep Learning	14	0	0	Associate Professor	01/06/2022	09/07/2020	Regular	Yes		No
13	Dr.K.Senathipathi	DHOPS7237H	ME/M. Tech and PhD	28/12/2018	Cloud Computing, Software Engineering	6	0	0	Associate Professor	01/06/2020	06/05/2016	Regular	Yes		No
14	Dr. A. Pushpalatha	AYWPP8671Q	ME/M. Tech and PhD	05/06/2020	Sensor networks, Image Processing	10	0	0	Associate Professor	06/06/2020	15/05/2009	Regular	Yes		No
15	Dr.A.Sajeev Ram	BVIPS9521E	ME/M. Tech and PhD	15/11/2019	Machine Learning, Medical Image Processing	3	0	0	Associate Professor	01/06/2020	09/10/2019	Regular	Yes		No
16	Dr.C.S.Shylaja	EEOPS2197E	ME/M. Tech and PhD	03/06/2020	Computer Networks, Artificial Intelligence	1	0	0	Associate Professor	01/06/2020	18/03/2020	Regular	Yes		No
17	Dr.V.K.Reshma	BHYPR8192N	ME/M. Tech and PhD	23/02/2021	Machine Learning, Data Mining	1	0	0	Assistant Professor		01/06/2022	Regular	Yes		No
18	Dr. N. Kousika	BTJPK1308L	ME/M. Tech and PhD	07/10/2022	Data Mining, Big Data Analytics, Machine Learning	8	0	0	Assistant Professor		04/06/2009	Regular	Yes		No

19	Dr. M. Rohini	AVQPR2976K	ME/M. Tech and PhD	24/06/2022	Machine Learning, Data structures, Web Programming, Serverless Computing	8	0	0	Assistant Professor		12/06/2015	Regular	Yes		No
20	Dr.P.D.Mahendran	BTFPM9321P	ME/M. Tech and PhD	25/11/2022	Machine Learning, Cloud Computing	4	0	0	Assistant Professor		02/06/2021	Regular	Yes		No
21	Dr.A.Arun Kumar	ALUPA8387P	ME/M. Tech and PhD	23/06/2022	Big Data Analytics, Machine Learning	3	0	0	Assistant Professor		18/06/2007	Regular	Yes		No
22	Dr. M. Kavitha	BIXPK1491F	ME/M. Tech and PhD	20/02/2023	Machine Learning, Deep Learning	6	0	0	Assistant Professor		01/06/2018	Regular	Yes		No
23	Ms. B. Sophia	ATDPS8363G	M.E/M.Tech	01/06/2015	Artificial intelligence, Machine learning, Digital logic and Design	4	0	0	Assistant Professor		23/09/2009	Regular	Yes		No
24	Ms. V.R. Azhaguramyaa	BDRPA8605G	M.E/M.Tech	01/06/2012	Internet of Things, Fog Computing, Computer Networks	6	0	0	Assistant Professor		10/07/2015	Regular	Yes		No
25	Ms.S.Shunmuga Priya	EOYPS8034G	M.E/M.Tech	30/04/2015	Computer Networks, Artificial Intelligence	2	0	0	Assistant Professor		04/06/2015	Regular	Yes		No
26	Ms.N.Pooranam	DEWPP8331A	M.E/M.Tech	01/06/2016	Machine Learning, Artificial Intelligence, Distributed Systems	6	0	0	Assistant Professor		25/07/2016	Regular	Yes		No
27	Ms. A. Priya	CLZPP5702N	M.E/M.Tech	01/06/2013	Data Science, Ambient Intelligence, Software Engineering	6	0	0	Assistant Professor		02/05/2017	Regular	Yes		No

28	Ms. K. M. Majidha Fathima	AKEPM0085D	M.E/M.Tech	02/04/2012	Computer Networks, Artificial Intelligence, Cyber forensics	8	0	0	Assistant Professor		02/05/2017	Regular	Yes		No
29	Ms.S.Biruntha	AWEPB1192Q	M.E/M.Tech	01/06/2010	Machine Learning, Deep Learning	8	0	0	Assistant Professor		02/05/2017	Regular	Yes		No
30	Mr.J.Daniel Francis Selvaraj	CGDPS0953F	M.E/M.Tech	30/04/2005	Network Security, Cloud Computing	6	0	0	Assistant Professor		06/06/2018	Regular	Yes		No
31	Ms.G.Bhuvaneshwari	BGOPB9780M	M.E/M.Tech	30/04/2013	Web Programming, Serverless Computing	0	0	0	Assistant Professor		03/06/2019	Regular	Yes		No
32	Ms. R. Gowthamani	AWXPG7196C	M.E/M.Tech	01/06/2010	Machine Learning, Edge Computing, Data Structures and Programming	5	0	0	Assistant Professor		16/08/2019	Regular	Yes		No
33	Mr.S.Palani	CSZPP8770R	M.E/M.Tech	01/06/2013	Cloud Computing, Network Security	4	0	0	Assistant Professor		06/03/2020	Regular	Yes		No
34	Ms.A.Adlin	BMLPA6661D	M.E/M.Tech	01/06/2013	Software Engineering, Software Testing	1	0	0	Assistant Professor		06/03/2020	Regular	Yes		No
35	Ms.A.Banu	BJFPB9576H	M.E/M.Tech	30/04/2014	Machine & Deep learning, Information Retrieval	0	0	0	Assistant Professor		02/06/2020	Regular	Yes		No
36	Ms.G. Renugadevi	AMSPR0946G	M.E/M.Tech	01/06/2010	Machine Learning, Data structures and Programming	5	0	0	Assistant Professor		01/05/2020	Regular	Yes		No
37	Ms.Rama Ranjini	DQZPR2979R	M.E/M.Tech	30/04/2011	Social Network Analysis, Data mining	0	0	0	Assistant Professor		01/06/2020	Regular	Yes		No

38	Mr.R.Yasir Abdullah	ADYPY2999P	M.E/M.Tech	01/06/2009	Big Data Analytics, Machine & Deep learning	4	0	0	Assistant Professor		17/06/2021	Regular	Yes		No
39	Mr.M.Vengateshwaran	AQKPV1976A	M.E/M.Tech	01/06/2017	Big Data Analytics, Information Retrieval, Social Network Analysis, Data mining	2	0	0	Assistant Professor		03/01/2022	Regular	Yes		No
40	Dr. D.Prabha	AIVPP8556B	ME/M. Tech and PhD	04/04/2014	Data Analytics	15	9	4	Professor	03/06/2019	20/08/2007	Regular	No	31/05/2022	No
41	Dr.V.Arulkumar	BCFPA1509J	ME/M. Tech and PhD	11/11/2020	Cloud Computing, Network Security	3	0	0	Associate Professor	11/11/2020	03/06/2019	Regular	No	31/05/2022	No
42	Ms.S.Mohana Gowri	FROPS6568B	M.E/M.Tech	02/06/2014	Social Network Analysis, Network Analysis	3	0	0	Assistant Professor		09/06/2014	Regular	No	31/05/2022	No
43	Mr.K.R.Senthil Murugan	BXNPS2943F	M.E/M.Tech	01/06/2012	Network Analysis, Data mining	6	0	0	Assistant Professor		02/05/2017	Regular	No	31/05/2022	No
44	Ms.J.Boopala	CFPPB7638D	M.E/M.Tech	02/06/2014	Image Processing, Deep Learning	2	0	0	Assistant Professor		01/06/2018	Regular	No	31/05/2022	No
45	Ms.S.Nagajothi	AVWPN5488J	M.E/M.Tech	01/06/2016	Machine Learning	4	0	0	Assistant Professor		03/06/2019	Regular	No	31/05/2022	No
46	Mr.M.Sivakumar	CKTPS8387M	M.E/M.Tech	01/07/2009	Software Engineering	2	0	0	Assistant Professor		01/06/2020	Regular	No	31/05/2022	No
47	Mr.N.Karthikeyan	BHPPK5660P	M.E/M.Tech	01/06/2015	Web frameworks	2	0	0	Assistant Professor		01/06/2020	Regular	No	31/05/2022	No
48	Mr.D.Mansoor Hussain	AWBPM9882H	M.E/M.Tech	02/06/2008	Cloud Computing, Serverless computing	4	0	0	Assistant Professor		05/04/2010	Regular	No	31/05/2022	No
49	Mr.M.Manikandan	BZTPM4673E	M.E/M.Tech	29/04/2017	Machine & Deep learning, Information Retrieval	4	0	0	Assistant Professor		03/06/2019	Regular	No	28/05/2021	No

5.1 Student-Faculty Ratio (SFR) (20)   Total Marks 18.00

Institute Marks : 18

UG

No. of UG Programs in the Department 1

B.E Computer Science and Engineering						
Year of Study	**CAY**		**CAYm1**		**CAYm2**	
	(2022-23)		**(2021-22)**		**(2020-21)**	
	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students	Sanction Intake	Actual admitted through lateral entry students
2nd Year	180	20	180	14	180	9
3rd Year	180	14	180	9	180	13
4th Year	180	9	180	13	180	23
Sub-Total	**540**	**43**	**540**	**36**	**540**	**45**
Total	**583**		**576**		**585**	
Grand Total	583		576		585	

PG

No. of PG Programs in the Department 2

M.E Computer Science and Engineering			
Year of Study	**CAY(2022-23)**	**CAYm1(2021-22)**	**CAYm2 (2020-21)**
	Sanction Intake	**Sanction Intake**	**Sanction Intake**
1st Year	24	24	24
2nd Year	24	24	24
Total	**48**	**48**	**48**

M.E Software Engineering			
Year of Study	**CAY(2022-23)**	**CAYm1(2021-22)**	**CAYm2 (2020-21)**
	Sanction Intake	**Sanction Intake**	**Sanction Intake**
1st Year	9	9	9
2nd Year	9	9	18
Total	**18**	**18**	**27**
Grand Total	66	66	75

SFR

No. of UG Programs in the Department 1

No. of PG Programs in the Department 2

Description	CAY(2022-23)	CAYm1 (2021-22)	CAYm2 (2020-21)
Total No. of Students in the Department(S)	649 **Sum total of all (UG+PG) students**	642 **Sum total of all (UG+PG) students**	660 **Sum total of all (UG+PG) students**
No. of Faculty in the Department(F)	39 **F1**	42 **F2**	40 **F3**
Student Faculty Ratio(SFR)	16.64 **SFR1=S1/F1**	16.50 **SFR2=S2/F2**	15.29 **SFR3=S3/F3**
Average SFR	16.14 **SFR=(SFR1+SFR2+SFR3)/3**		
F=Total Number of Faculty Members in the Department (excluding first year faculty)			

Note: All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.

2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.

3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2022-23)	39	0
CAYm1(2021-22)	42	0
CAYm2(2020-21)	40	0

Average SFR for three assessment years :   16.14

Assessment SFR :   18

5.2 Faculty Cadre Proportion (20)   Total Marks 20.00

Institute Marks : 20.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2022-23)	3.00	9.00	7.00	7.00	21.00	23.00
CAYm1(2021-22)	3.00	7.00	7.00	6.00	21.00	29.00
CAYm2(2020-21)	3.00	5.00	7.00	7.00	22.00	28.00
Average Numbers	3.00	7.00	7.00	6.67	21.33	26.67

Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 10 :   20.00

5.3 Faculty Qualification (20)   Total Marks 15.96

Institute Marks : 15.96

	X	Y	F	FQ = 2 x [(10X + 4Y) / F)]
2022-23(CAY)	21	18	32.00	17.62
2021-22(CAYm1)	14	28	32.00	15.75
2020-21(CAYm2)	12	28	32.00	14.50

Average Assessment :   15.96

5.4 Faculty Retention (10)   Total Marks 8.00

Institute Marks : 8.00

Description	2021-22 (CAYm1)	2022-23 (CAY)
No of Faculty Retained	39	30
Total No of Faculty	40	40
% of Faculty Retained	98	75

Average :   86.00

Assessment Marks :   8.00

5.5 Faculty competencies in correlation to Program Specific Criteria (10)   Total Marks 10.00

Institute Marks : 10.00

Competencies represent an amalgamation of professional and personal skill sets of an individual. Over the span of their career, faculty members need to adapt to the technological developments in the allied areas to be highly competent. The teaching skills and life-long learning competencies of faculty members is measured based on their excellence in academic degrees, academic related training, certifications, achievements and research publications. Faculty competency was measured based on the following domains:

- Internet of Things (IoT)
- Cloud computing
- Artificial Intelligence
- Edge computing
- Cyber Physical System
- Image Processing
- Network

Table 5.1 Faculty List with Specialization

S.No	Name of the Faculty	Specialization	
		Research Domain	Subject Domain
1	Dr.J.Janet	Artificial Intelligence, Internet of Things (IoT)	Fog Computing
2	Dr. J.P. Ananth	Artificial Intelligence, Internet of Things (IoT), Edge Computing	Cloud Computing
3	Dr. K. Sasi Kala Rani	Network, Cloud computing	Database Management Systems, Computer Networks
4	Dr.M.Sujaritha	Artificial Intelligence, Cloud Computing	Theory of Computation, Design and Analysis of Algorithms, Data Structures
5	Dr. D.Prabha	Artificial Intelligence	Cloud Computing, Distributed Systems, Data Analytics, Big Data
6	Dr. V. Vijeya Kaveri	Artificial Intelligence, Internet of Things (IoT)	Computer Architecture, Web Technology
7	Dr.P.Mohan Kumar	Artificial Intelligence, Cloud Computing	Operating System
8	Dr.K.Ramesh	Edge computing, Cloud Computing	Internet of Things (IoT), Network security
9	Dr. G. Vijaya	Artificial Intelligence	Computational Biology
10	Dr.D.Rasi	Artificial Intelligence	Theory of Computation, Compiler Design
11	Dr.Jayasudha Subburaj	Internet of Things (IoT)	Database Management Systems
12	Dr. T. Latha Maheswari	Internet of Things (IoT)	Database Management Systems, Cryptography and Network Security
13	Dr. S. Oswalt Manoj	Artificial Intelligence, Internet of Things (IoT), Cloud Computing	Computer Networks, Theory of Computation
14	Dr.K.Senathipathi	Artificial Intelligence	Software Testing
15	Dr. A. Pushpalatha	Internet of Things (IoT), Network	Web Frameworks, Operating System
16	Dr.A.Sajeev Ram	Artificial Intelligence	Software Testing, Cloud Computing
17	Dr.C.S.Shylaja	Artificial Intelligence	Software Testing
18	Dr.V.K.Reshma	Internet of Things (IoT),Artificial Intelligence	Web Applications, Cloud Computing

19	Dr. N. Kousika	Artificial Intelligence	Theory of Computation, Internet of Things
20	Dr. M. Rohini	Artificial Intelligence	Programming & Data structures, Web Frameworks
21	Dr.P.D.Mahendran	Edge computing	Operating System, Web Frameworks
22	Dr.A.Arun Kumar	Artificial Intelligence	Object Oriented Analysis and Design
23	Dr. M. Kavitha	Internet of Things (IoT)	Artificial Intelligence
24	Ms. B. Sophia	Network	Open Source Systems
25	Ms. V.R. Azhaguramyaa	Internet of Things (IoT)	Computer Networks, Database Management System
26	Ms.S.Shunmuga Priya	Internet of Things (IoT)	Web Development
27	Ms.N.Pooranam	Artificial Intelligence	Software Testing
28	Ms. A. Priya	Artificial Intelligence	Software engineering, Analysis of Algorithms
29	Ms. K. M. Majidha Fathima	Internet of Things (IoT)	Computer Networks, Cyber Forensics
30	Ms.S.Biruntha	Internet of Things (IoT)	Web Application using Java, Serverless Computing
31	Mr.J.Daniel Francis Selvaraj	Internet of Things (IoT), Edge Computing	OOAD, Database Management Systems
32	Ms.G.Bhuvaneshwari	Cloud Computing	Web Programming
33	Ms. R. Gowthamani	Artificial Intelligence, Cloud Computing	Internet of Things (IoT)
34	Mr.S.Palani	Internet of Things (IoT), Image Processing	Database Management Systems
35	Ms.A.Adlin	Artificial Intelligence	Distributed Systems, Data Structures
36	Ms.A.Banu	Cyber Physical System	Cloud Computing, Java Programming
37	Ms. G. Renugadevi	Artificial Intelligence	Web Application, Serverless computing
38	Ms.Rama Ranjini	Artificial Intelligence	Internet of Things (IoT)
39	Mr.R.Yasir Abdullah	Network	Web Frameworks, Computer Networks
40	Mr.M.Vengateshwaran	Artificial Intelligence	Cloud Computing, Object Oriented Analysis and Design
41	Ms.M.Kirubha	Artificial Intelligence	Application Development, Problem Solving
42	Ms. A. Glory Santha Vinothini	Cloud Computing	Database Management Systems
43	Ms.S.Abirami	Artificial Intelligence	Database Management System, Data Structures
44	Ms.S.Mohana Gowri	Artificial Intelligence	Data Structures
45	Mr.K.R.Senthil Murugan	Artificial Intelligence	Computer Networks, Social Network Analysis
46	Ms.J.Boopala	Internet of Things (IoT)	Ambient Intelligence, Theory of Computation
47	Dr.V.Arulkumar	Artificial Intelligence	Network Security
48	Ms.S.Nagajothi	Internet of Things (IoT)	Software Engineering
49	Mr.M.Sivakumar	Artificial Intelligence	Programming with JAVA
50	Mr.N.Karthikeyan	Artificial Intelligence	Software Engineering

51	Mr.D.Mansoor Hussain	Artificial Intelligence	Web frameworks
52	Ms.M.Anandapriya	Network	Serverless computing, Cloud Computing,
53	Ms.V.Priyadharsini	Image Processing	High Performance Computing
54	Mr.M.Manikandan	Internet of Things (IoT)	Information Retrieval
55	Ms.S.Dhivya	Artificial Intelligence, Image Processing	Software Engineering

Table 5.2 Faculty competencies during 2022-2023

S.No	Name of the Faculty	Specialization	Research Publication	Course Development	Certificates/Course attended
1	Dr.J.Janet	**Artificial Intelligence, Internet of Things (IoT),** Fog Computing	√		
2	Dr. J.P. Ananth	**Artificial Intelligence, Internet of Things (IoT), Edge Computing,** Cloud Computing	√		
3	Dr. K. Sasi Kala Rani	**Network,Cloud computing**, Database Management Systems, Computer Networks	√	√	√
4	Dr.M.Sujaritha	**Artificial Intelligence, Cloud Computing**, Theory of Computation, Design and Analysis of Algorithms, Data Structures	√	√	√
5	Dr. V. Vijeya Kaveri	**Artificial Intelligence, Internet of Things (IoT)**, Computer Architecture, Web Technology	√	√	√

6	Dr.P.Mohan Kumar	**Artificial Intelligence, Cloud Computing,** Operating System	√	√	√
7	Dr.K.Ramesh	**Edge computing, Cloud Computing**, Internet of Things (IoT), Network security	√	√	√
8	Dr. G. Vijaya	**Artificial Intelligence,** Computational Biology	√	√	√
9	Dr.D.Rasi	**Artificial Intelligence**, Theory of Computation, Compiler Design	√	√	√
10	Dr.Jayasudha Subburaj	**Internet of Things (IoT)**, Database Management Systems	√	√	√
11	Dr. T. Latha Maheswari	**Internet of Things (IoT)**, Database Management Systems, Cryptography and Network Security	√	√	√
12	Dr. S. Oswalt Manoj	**Artificial Intelligence, Internet of Things (IoT), Cloud Computing**, Computer Networks, Theory of Computation	√	√	√
13	Dr.K.Senathipathi	**Artificial Intelligence, Cloud Computing**, Software Testing	√	√	√
14	Dr. A. Pushpalatha	**Internet of Things (IoT), Network**, Web Frameworks, Operating System	√	√	√
15	Dr.A.Sajeev Ram	**Artificial Intelligence**, Software Testing, Cloud Computing	√	√	√

16	Dr.C.S.Shylaja	**Artificial Intelligence**, Software Testing	√	√	√
17	Dr.V.K.Reshma	**Internet of Things (IoT), Artificial Intelligence**, Web Applications, Cloud Computing	√	√	√
18	Dr. N. Kousika	**Artificial Intelligence,** Theory of Computation, Internet of Things	√	√	√
19	Dr. M. Rohini	**Artificial Intelligence**, Programming & Data structures, Web Frameworks	√	√	√
20	Dr.P.D.Mahendran	**Edge computing,** Operating System, Web Frameworks	√	√	√
21	Dr.A.Arun Kumar	**Artificial Intelligence**, Object Oriented Analysis and Design	√		√
22	Dr. M. Kavitha	**Internet of Things (IoT),** Artificial Intelligence	√	√	√
23	Ms. B. Sophia	**Network**, Open Source Systems	√	√	√
24	Ms. V.R. Azhaguramyaa	**Internet of Things (IoT)**, Computer Networks, Database Management System	√	√	√
25	Ms.S.Shunmuga Priya	**Internet of Things (IoT)**, Web Development	√	√	√
26	Ms.N.Pooranam	**Artificial Intelligence**, Software Testing	√	√	√
27	Ms. A. Priya	**Artificial Intelligence**, Software engineering, Analysis of Algorithms	√	√	√

28	Ms. K. M. Majidha Fathima	**Internet of Things (IoT),** Computer Networks, Cyber Forensics	√	√	√
29	Ms.S.Biruntha	**Internet of Things (IoT)**, Web Application using Java, Serverless Computing	√		√
30	Mr.J.Daniel Francis Selvaraj	**Internet of Things (IoT), Edge Computing**, OOAD, Database Management Systems	√		√
31	Ms.G.Bhuvaneshwari	**Cloud Computing**, Web Programming			√
32	Ms. R. Gowthamani	**Artificial Intelligence, Cloud Computing**, Internet of Things (IoT)	√	√	√
33	Mr.S.Palani	**Internet of Things (IoT), Image Processing**, Database Management Systems	√	√	√
34	Ms.A.Adlin	**Artificial Intelligence**, Distributed Systems, Data Structures	√		√
35	Ms.A.Banu	**Cyber Physical System,** Cloud Computing, Java Programming			√
36	Ms. G. Renugadevi	**Artificial Intelligence**, Web Application, Serverless computing	√	√	√
37	Ms.Rama Ranjini	**Artificial Intelligence**, Internet of Things (IoT)			√
38	Mr.R.Yasir Abdullah	**Network**, Web Frameworks, Computer Networks	√	√	√

| 39 | Mr.M.Vengateshwaran | **Artificial Intelligence**, Cloud Computing, Object Oriented Analysis and Design | √ | √ | √ |

Table 5.3 Faculty competencies during 2021-2022

S.No	Name of the Faculty	Specialization	Research Publication	Course Development	Certificates/Course attended
1	Dr.J.Janet	**Artificial Intelligence, Internet of Things (IoT),** Fog Computing	√		
2	Dr. J.P. Ananth	**Artificial Intelligence, Internet of Things (IoT), Edge Computing,** Cloud Computing	√		
3	Dr. K. Sasi Kala Rani	**Network, Cloud computing**, Database Management Systems, Computer Networks	√	√	√
4	Dr.M.Sujaritha	**Artificial Intelligence, Cloud Computing**, Theory of Computation, Design and Analysis of Algorithms, Data Structures	√	√	√
5	Dr. V. Vijeya Kaveri	**Artificial Intelligence, Internet of Things (IoT)**, Computer Architecture, Web Technology	√	√	√

6	Dr. D.Prabha	**Artificial Intelligence**, Cloud Computing, Distributed Systems, Data Analytics, Big Data	√	√	√
7	Dr.P.Mohan Kumar	**Artificial Intelligence, Cloud Computing,** Operating System	√	√	√
8	Dr. T. Latha Maheswari	**Internet of Things (IoT)**, Database Management Systems, Cryptography and Network Security	√	√	√
9	Dr.K.Senathipathi	**Artificial Intelligence, Cloud Computing**, Software Testing	√		√
10	Dr. A. Pushpalatha	**Internet of Things (IoT), Network**, Web Frameworks, Operating System	√	√	√
11	Dr.A.Sajeev Ram	**Artificial Intelligence**, Software Testing, Cloud Computing	√		√
12	Dr.C.S.Shylaja	**Artificial Intelligence**, Software Testing	√		√
13	Dr.V.Arulkumar	**Cyber Physical System, Artificial Intelligence,** Network Security	√	√	√
14	Dr. S. Oswalt Manoj	**Artificial Intelligence, Internet of Things (IoT), Cloud Computing**, Computer Networks, Theory of Computation	√	√	√
15	Mr.A.Arun Kumar	**Artificial Intelligence**, Object Oriented Analysis and Design	√		√

16	Ms. N. Kousika	**Artificial Intelligence,** Theory of Computation, Internet of Things	√	√	√
17	Ms. B. Sophia	**Network**, Open Source Systems	√	√	√
18	Ms. M. Rohini	**Artificial Intelligence**, Programming & Data structures, Web Frameworks	√	√	√
19	Ms. V.R. Azhaguramyaa	**Internet of Things (IoT)**, Computer Networks, Database Management System	√	√	√
20	Ms.S.Shunmuga Priya	**Internet of Things (IoT)**, Web Development	√		√
21	Ms. N. Pooranam	**Artificial Intelligence**, Software Testing	√	√	√
22	Ms. A. Priya	**Artificial Intelligence**, Software Engineering, Analysis of Algorithms	√	√	√
23	Ms. K. M. Majidha Fathima	**Internet of Things (IoT),** Computer Networks, Cyber Forensics	√	√	√
24	Ms.S.Biruntha	**Internet of Things (IoT)**, Web Application using Java, Serverless Computing	√	√	√
25	Mr.J.Daniel Francis Selvaraj	**Internet of Things (IoT), Edge Computing**, OOAD, Database Management Systems	√		√
26	Ms. M. Kavitha	**Internet of Things (IoT),** Artificial Intelligence	√	√	√
27	Ms.G.Bhuvaneshwari	**Cloud Computing**, Web Programming			√

28	Ms. R. Gowthamani	**Artificial Intelligence, Cloud Computing**, Internet of Things (IoT)	√	√	√
29	Mr.S.Palani	**Internet of Things (IoT), Image Processing**, Database Management Systems	√	√	√
30	Ms.A.Adlin	**Artificial Intelligence**, Distributed Systems, Data Structures			√
31	Ms.A.Banu	**Cyber Physical System,** Cloud Computing, Java Programming			√
32	Ms. G. Renugadevi	**Artificial Intelligence**, Web Application, Serverless computing	√	√	√
33	Mr.P.D.Mahendran	**Edge computing,** Operating System, Web Frameworks	√	√	√
34	Ms.Rama Ranjini	**Artificial Intelligence**, Internet of Things (IoT)			√
35	Mr.R.Yasir Abdullah	**Network**, Web Frameworks, Computer Networks	√	√	√
36	Mr.M.Vengateshwaran	**Artificial Intelligence**, Cloud Computing, Object Oriented Analysis and Design	√	√	√
37	Ms.S.Mohana Gowri	**Artificial Intelligenc**e, Data Structures	√	√	√
38	Mr.K.R.Senthil Murugan	**Artificial Intelligence**, Computer Networks, Social Network Analysis	√	√	√

39	Ms.J.Boopala	**Internet of Things (IoT)**, Ambient Intelligence, Theory of Computation	√	√	√
40	Ms.S.Nagajothi	**Internet of Things (IoT),** Software Engineering	√	√	√
41	Mr.M.Sivakumar	**Artificial Intelligence,** Programming with JAVA	√	√	√
42	Mr.N.Karthikeyan	**Artificial Intelligence**, Software Engineering	√	√	√
43	Mr.D.Mansoor Hussain	**Artificial Intelligence**, Web frameworks	√	√	√
44	Ms. A. Glory Santha Vinothini	**Artificial Intelligence, Internet of Things(IoT),** Fog Computing			√

Table 5.4 Faculty competencies during 2020-2021

S.No	Name of the Faculty	Specialization	Research Publication	Course Development	Certificates/Course attended
1	Dr.J.Janet	**Artificial Intelligence, Internet of Things (IoT),** Fog Computing	√		
2	Dr. J.P. Ananth	**Artificial Intelligence, Internet of Things (IoT), Edge Computing,** Cloud Computing	√		
3	Dr. K. Sasi Kala Rani	**Network, Cloud computing**, Database Management Systems, Computer Networks	√	√	√

4	Dr.M.Sujaritha	**Artificial Intelligence, Cloud Computing**, Theory of Computation, Design and Analysis of Algorithms, Data Structures	√	√	√
5	Dr. D.Prabha	**Artificial Intelligence**, Cloud Computing, Distributed Systems, Data Analytics, Big Data	√	√	√
6	Dr. T. Latha Maheswari	**Internet of Things (IoT)**, Database Management Systems, Cryptography and Network Security	√	√	√
7	Dr. V. Vijeya Kaveri	**Artificial Intelligence, Internet of Things (IoT)**, Computer Architecture, Web Technology	√	√	√
8	Dr.K.Senathipathi	**Artificial Intelligence, Cloud Computing**, Software Testing	√		√
9	Dr. A. Pushpalatha	**Internet of Things (IoT), Network**, Web Frameworks, Operating System	√	√	√
10	Dr.A.Sajeev Ram	**Artificial Intelligence**, Software Testing, Cloud Computing	√	√	√
11	Dr.C.S.Shylaja	**Artificial Intelligence**, Software Testing	√		√
12	Dr.V.Arulkumar	**Cyber Physical System, Artificial Intelligence**, Network Security	√	√	√

13	Mr.A.Arun Kumar	**Artificial Intelligence**, Object Oriented Analysis and Design	√		√
14	Ms. N. Kousika	**Artificial Intelligence,** Theory of Computation, Internet of Things	√	√	√
15	Ms. B. Sophia	**Network**, Open Source Systems	√	√	√
16	Ms. M. Rohini	**Artificial Intelligence**, Programming & Data structures, Web Frameworks	√	√	√
17	Ms. V.R. Azhaguramyaa	**Internet of Things (IoT)**, Computer Networks, Database Management System	√	√	√
18	Ms.S.Shunmuga Priya	**Internet of Things (IoT)**, Web Development	√		√
19	Ms. N. Pooranam	**Artificial Intelligence**, Software Testing	√	√	√
20	Ms. A. Priya	**Artificial Intelligence**, Software Engineering, Analysis of Algorithms	√	√	√
21	Ms. K. M. Majidha Fathima	**Internet of Things (IoT),** Computer Networks, Cyber Forensics	√	√	√
22	Ms.S.Biruntha	**Internet of Things (IoT)**, Web Application using Java, Serverless Computing	√	√	√
23	Mr.J.Daniel Francis Selvaraj	**Internet of Things (IoT), Edge Computing**, OOAD, Database Management Systems	√		√

24	Ms. M. Kavitha	**Internet of Things (IoT),** Artificial Intelligence	√	√	√
25	Ms.G.Bhuvaneshwari	**Cloud Computing**, Web Programming			√
26	Ms. R. Gowthamani	**Artificial Intelligence, Cloud Computing**, Internet of Things (IoT)	√	√	√
27	Mr. S. Oswalt Manoj	**Artificial Intelligence, Internet of Things (IoT), Cloud Computing**, Computer Networks, Theory of Computation	√	√	√
28	Mr.S.Palani	**Internet of Things (IoT), Image Processing**, Database Management Systems	√	√	√
29	Ms.A.Adlin	**Artificial Intelligence**, Distributed Systems, Data Structures			√
30	Ms.A.Banu	**Cyber Physical System,** Cloud Computing, Java Programming			√
31	Ms. G. Renugadevi	**Artificial Intelligence**, Web Application, Serverless computing	√	√	√
32	Ms.Rama Ranjini	**Artificial Intelligence**, Internet of Things (IoT)			√
33	Ms.S.Mohana Gowri	**Artificial Intelligenc**e, Data Structures	√	√	√
34	Mr.K.R.Senthil Murugan	**Artificial Intelligence**, Computer Networks, Social Network Analysis	√	√	√

35	Ms.J.Boopala	**Internet of Things (IoT)**, Ambient Intelligence, Theory of Computation	√	√	√
36	Ms.S.Nagajothi	**Internet of Things (IoT),** Software Engineering	√	√	√
37	Mr.M.Sivakumar	**Artificial Intelligence,** Programming with JAVA	√	√	√
38	Mr.N.Karthikeyan	**Artificial Intelligence**, Software Engineering	√	√	√
39	Mr.D.Mansoor Hussain	**Artificial Intelligence**, Web frameworks	√	√	√
40	Mr.M.Manikandan	**Internet of Things (IoT)**, Information Retrieval	√	√	√

Table 5.5 Faculty competencies in Correlation to Course Development

S.No.	Name of the Faculty	Course Development	GCR Links
1	Ms.S.Mohana Gowri	Data Structures	https://classroom.google.com/c/OTY0OTg0OTcyODZa
2	Dr.K.Rama Abirami	Computer Organization and Architecture	https://classroom.google.com/u/0/c /OTY1NTQxMDUwODZa
3	Ms.K.M.Majidha Fathima	Data Communications and Computer Networks	https://classroom.google.com/c/OTY2MzYxMjcwNDVa
4	Ms.N. Pooranam	Artificial Intelligence and Expert System	https://classroom.google.com/c/OTY0ODAzNjQ2NzJa
5	Dr.A.Pushpalatha	Object Oriented Analysis and Design	https://classroom.google.com/c/OTY1ODkwMTAxNjBa
6	Ms.S. Biruntha	Principles of Compiler Design	https://classroom.google.com/c/NDQ4NjE0MTYyMzA5
7	Ms.G.Renugadevi	Database Management Systems	https://classroom.google.com/c/MjI3NzI1NDU1MTkx
8	Mr.M.Vengateshwaran	Data warehousing and Data mining	https://classroom.google.com/c/NDU3MDUzNTI5NzI4
9	Ms.V.R. Azhaguramyaa	Internet of Things	https://classroom.google.com/c/OTY0ODQzMTEzMjNa
10	Ms. N. Kousika	Theory of Computation	https://classroom.google.com/c/NDU3MDQwNDEzOTU3
11	Ms.S.Nagajothi	Virtualization and Cloud	https://classroom.google.com/c/NDU2NTEyMTI3MDg5
12	Dr.D.Prabha	Distributed systems	https://classroom.google.com/u/0/c/OTY0NDkzOTkyMzla
13	Dr.A.Pushpalatha	Cryptography and Network Security	https://classroom.google.com/c/NDU2Nzc1NDIyMDM1
14	Mr. N.Karthikeyan	Data Analytics	https://classroom.google.com/c/NDU3MDM4MTY1MTQ0
15	Dr.D.Mansoor Hussain	Design and Analysis Algorithm	https://classroom.google.com/c/NDU2NzI4ODAyNzQx

Table 5.6 Faculty competencies based on Publication

S.No	Name of the Faculty	Competency areas	Research Publications
1	Dr.J.Janet	Artificial Intelligence, Internet of Things (IoT)	**Artificial Intelligence** - Hybrid Optimization Algorithm Enabled Deep Learning Approach Brain Tumor Segmentation and Classification Using MRI **Internet of Things (IoT)** - Experimental analysis for moisture sensing system on silica sand using IoT approach - Indicator for the Water Level using IoT - Forest Fire Alerting System with GPS Co-ordinates Using IoT

| 2 | Dr. J.P. Ananth | Artificial Intelligence, Internet of Things (IoT), Edge Computing | **Artificial Intelligence**

• Video Summarization using Deep Convolution Neural Networks and Mutual Probability - based K-Nearest Neighbour
• Local Optimal-Oriented Pattern and Exponential Weighed-Jaya Optimization-Based Deep Convolutional Networks for Video Summarization
• Network Intrusion Detection and Mitigation Using Hybrid Optimization Integrated Deep Q Network
• Deep Recurrent Encoder Network and Spark Model for Angiographic Disease Risk Classification
• Underwater Target Tracking in Radar Images Using Exponential Competitive Swarm-based Deep Neuro Fuzzy Network
• FACVO-DNFN: Deep learning-based feature fusion and Distributed Denial of Service attack detection in cloud computing
• Whale social optimization driven deep recurrent neural network for loan eligibility prediction
• Image noise removal using optimal deep learning-based noisy pixel identification and image enhancement
• Hybrid Optimization Algorithm Enabled Deep Learning Approach Brain Tumor Segmentation and Classification Using MRI
• Remora Jaya Optimization-Enabled Deep Quantum Neural Network for Underwater Target Tracking Using Radar Images
• Robust Object Detection and Localization Using Semantic Segmentation Network
• Deep Recurrent Encoder Network and Spark Model for Angiographic Disease Risk Classification
• Identification of IoT Device From Network Traffic Using Artificial Intelligence Based Capsule Networks
• MapReduce and Optimized Deep Network for Rainfall Prediction in Agriculture
• A Modified Rider Optimization Algorithm for Multihop routing in WSN

Internet of Things (IoT)

• IoT enabled lung cancer detection and routing algorithm using CBSOA-based ShCNN
• Internet of Things-based root disease classification in alfalfa plants using hybrid optimization-enabled deep convolutional neural network
• Root Disease classification with hybrid optimization models in IOT

Image Processing

• Image tampering detection in image forensics using earthworm-rider optimization

Edge computing

• Design of Grover's Algorithm over 2, 3 and 4- Qubit Systems in Quantum Programming Studio
• Taylor Kernel Fuzzy C Means Clustering algorithm for trust and energy – aware cluster head selection in wireless sensor networks |

3	Dr. K. Sasi Kala Rani	Network, Cloud computing	**Cloud computing** - Fatigue Monitoring using Real – time facial expression based on Neural Technique - Secured Cloud Based Healthcare Framework with Blockchain
4	Dr.M.Sujaritha	Artificial Intelligence, Cloud Computing	**Artificial Intelligence** - An Intrusion Detection Using Machine Learning Algorithm Multi-Layer Perceptron (MIP): A Classification Enhancement in Wireless Sensor Network (WSN) - Real – time face mask identification using Deep Learning **Cloud computing** - Secure Auditing and Deduplicating in Cloud Computing using MD5 Algorithm - Privacy Preserving Verification Scheme for Cloud Platform using DML - Secure Auditing and Deduplicating in Cloud Computing using MD5 Algorithm
5	Dr. D.Prabha	Artificial Intelligence	**Artificial Intelligence** - Improved EM algorithm in software reliability - Diabetes Mellitus Prediction System Using Hybrid KPCA-GA-SVM Feature Selection Techniques - Alleviating NB conditional independence using Multi-stage variable selection (MSVS): Banking customer dataset application - Design of novel multi filter union feature selection framework for breast cancer dataset - Optimizing Naive Bayes Probability Estimation in Customer Analysis Using Hybrid Variable Selection - Sentiment analysis of student feedback using multi-head attention fusion model of word and context embedding for LSTM - Customer behavior analysis using Naïve Bayes with bagging homogenous feature selection approach
6	Dr. V. Vijeya Kaveri	Artificial Intelligence, Internet of Things (IoT)	**Artificial Intelligence** - Majority Voting Ensembled Feature Selection And Customized Deep Neural Network For The Enhanced Clinical Decision Support System - Classification of Malignant Melanoma Using Convolutional Neural Network **Internet of Things (IoT)** - Big Data Learning Through Text Analytics Labeled Compounds of the IOT Bio Environment **Image Processing** - An Automated Security Approach of Image and Video Steganography

7	Dr.P.Mohan Kumar	Artificial Intelligence, Cloud Computing	**Artificial Intelligence** • ShChain_3D-ResNet: Sharding Blockchain with 3D-Residual Network (3D-ResNet) Deep Learning Model for Classifying DDoS Attack in Software Defined Network • An Ophthalmic Evaluation of Central Serous Chorioretinopathy • Decentralized and Privacy Sensitive Data De-Duplication • RANC-CROP Recommendation Attributed to Soil Nutrients and Stock Analysis Using Machine Learning **Cloud computing** • Fusion-based advanced encryption algorithm for enhancing the security of Big Data in Cloud • Framework for Convenient Big Data Management in Cloud Backup Systems • Implementing an Efficient Data Deduplication Framework for Cloud Storage
8	Dr.K.Ramesh	Edge computing, Cloud Computing	**Edge computing** • An Algorithm for Detection and identification of infestation • Certain Investigation on Improved Cluster Protocol with Trust security for Wireless Sensor Networks **Cloud computing** • An Energy Efficient Resource Monitor and Alert Model Using Cloud Computing
9	Dr. G. Vijaya	Artificial Intelligence	**Artificial Intelligence** • Machine Learning based analysis and prediction of COVID - 19 cases based on large - scale assessment **Cybersecurity** • A Review Analysis of attack detection using various methodologies in Network Security
10	Dr.D.Rasi	Artificial Intelligence	**Artificial Intelligence** • FHGSO: Flower Henry gas solubility optimization integrated deep convolutional neural network for image classification • YOLO Based Deep Learning Model for Segmenting the Color Images
11	Dr. T. Latha Maheswari	Internet of Things (IoT)	**Image Processing** • Synthesis and Applications of Nano Duck Swarm Optimization Algorithm for Breast Cancer Segmentation in Earlier Stage **Neural Networks** • Classification of Arrhythmia Conditions using Neural Networks • Classification of Arrhythmia Conditions using Neural Networks **Internet of Things (IoT)** • Health Monitoring System Using IOT Sensors Network • Forest Fire Alerting System with GPS Co-ordinates Using IoT

12	Dr. S. Oswalt Manoj	Artificial Intelligence, Internet of Things (IoT), Cloud Computing	**Cloud computing** - A novel fuzzy based deep neural network for rain fall prediction using cloud images **Artificial Intelligence** - A New Deep Learning Approach Enhanced with Ensemble Learning for Accurate Intrusion Detection in IoT Networks - MapReduce and Optimized Deep Network for Rainfall Prediction in Agriculture - MapReduce and Optimized Deep Network for Rainfall Prediction in Agriculture
13	Dr.K.Senathipathi	Artificial Intelligence	**Artificial Intelligence** - Electromyography in Machine Learning
14	Dr. A. Pushpalatha	Internet of Things (IoT), Network	**Neural Networks** - Skin Cancer Classification Detection using CNN and SVM
15	Dr.V.K.Reshma	Internet of Things (IoT), Artificial Intelligence	**Internet of Things (IoT)** - The Detection and Identification of Pest-FAW Infestation in Maize Crops Using IoT-Based Deep-Learning Algorithms
16	Dr. N. Kousika	Artificial Intelligence	**Artificial Intelligence** - An improved privacy-preserving data mining technique using singular value decomposition with three-dimensional rotation data perturbation - Machine Learning based Fraud Analysis and Detection System - Differential Privacy Preservation Mechanism Using Bernstein Polynomial Function for Heart Disease Dataset
17	Dr. M. Rohini	Artificial Intelligence	**Artificial Intelligence** - Multiclassifier learning for the early prediction of dementia disease progression from MCI - Toward Alzheimer's disease classification through machine learning
18	Dr.A.Arun Kumar	Artificial Intelligence	**Artificial Intelligence** - Machine Learning Based Approach For Corona Virus Disease Recovery Prediction
19	Dr. M. Kavitha	Internet of Things (IoT)	**Internet of Things (IoT)** - A Sensitive Wavebands Identification System for Smart Farming - IoT Based Flood Vigilance System
20	Ms. B. Sophia	Network	**Network** - A secure remote clinical sensor network approach for privacy enhancement
21	Ms. V.R. Azhagu Ramya	Internet of Things (IoT)	**Internet of Things (IoT)** - Location-Aware Security System for Smart Cities Using IoT

22	Ms.N.Pooranam	Artificial Intelligence	**Artificial Intelligence** • An Automated Machine Learning Approach for Stroke Prediction • A Safety measuring tool to Maintain Social Distancing on COVID – 19 using Deep Learning Approach
23	Ms. A. Priya	Artificial Intelligence	**Artificial Intelligence** • Assistant for the guest with visually impaired using Deep learning
24	Ms. K. M. Majidha Fathima	Internet of Things (IoT)	**Internet of Things (IoT)** • MEMS Multi sensor Intelligent Damage Detection for Wind Turbines using IoT
25	Ms.S.Biruntha	Internet of Things (IoT)	**Internet of Things (IoT)** • IOT Based Smart Hands Talk **Blockchain Technology** • Blockchain for controlling social network activities and authorization procedures
26	Mr.J.Daniel Francis Selvaraj	Internet of Things (IoT), Edge Computing	**Internet of Things (IoT)** • Internet of Things-based root disease classification in alfalfa plants using hybrid optimization-enabled deep convolutional neural network • Root Disease classification with hybrid optimization models in IOT **Edge Computing** • Design of Grover's Algorithm over 2, 3 and 4- Qubit Systems in Quantum Programming Studio
27	Ms. R. Gowthamani	Artificial Intelligence, Cloud Computing	**Artificial Intelligence** • Predict Heart Disease using hybrid machine learning model **Cloud Computing** • Secured Cloud Based Healthcare Framework with Blockchain
28	Ms.A.Adlin	Artificial Intelligence	**Artificial Intelligence** • Image Description Generator Using Deep Learning
29	Ms. G. Renugadevi	Artificial Intelligence	**Artificial Intelligence** • Predict Heart Disease using hybrid machine learning model **Blockchain Technology** • Secured Cloud Based Healthcare Framework with Blockchain
30	Mr.R.Yasir Abdullah	Network	**Network** • An Enhanced Anomaly Forecasting in Distributed Wireless Sensor Network Using Fuzzy Model
31	Dr.P.D.Mahendhiran	Edge Computing	**Edge Computing** • CLSA-CapsNet: Dependency based concept level sentiment analysis for text

32	Dr.A.Sajeev Ram	Artificial Intelligence	**Artificial Intelligence** • Conditional Random Field-recurrent neural network segmentation with optimized deep learning for brain tumor classification using magnetic resonance imaging
33	Mr.S.Palani	Internet of Things (IoT), Image Processing	**Image Processing** • Fuzzy Statistical Spatiotemporal Analysis on Ground Water Supervision
34	Ms.S.Mohana Gowri	Artificial Intelligence	**Artificial Intelligence** • Audio Navigation System for Vision Impaired People • Real – time social distance maintaining using Image Processing and Deep Learning
35	Mr.K.R.Senthil Murugan	Artificial Intelligence	**Artificial Intelligence** • Audio Navigation System for Vision Impaired People • Real – time social distance maintaining using Image Processing and Deep Learning
36	Ms.S.Nagajothi	Internet of Things (IoT)	**Internet of Things (IoT)** • The Desiderata of Blockchain and IoT in Medical and Pharmaceutical Enterprises
37	Mr.N.Karthikeyan	Artificial Intelligence	**Artificial Intelligence** • Machine learning based classification models for Heart Disease Prediction **Network** • Enhanced development of communication between the network and the end user by eliminating the interference signals in MIMO channel **Image Processing** • Fast and efficient lossless encoder in image compression with low computation and low memory
38	Mr.D.Mansoor Hussain	Artificial Intelligence	**Artificial Intelligence** • Ensemble Nonlinear Support Vector Machine Approach for Predicting Chronic Kidney Diseases
39	Mr.M.Manikandan	Internet of Things (IoT)	**Internet of Things (IoT)** • The Desiderata of Blockchain and IoT in Medical and Pharmaceutical Enterprises

Table 5.7 Faculty competencies based on Book Chapter Publication

S.No	Author	Competency areas	Title of the Book Chapters published
1	Dr.J.Janet	Artificial Intelligence, Internet of Things (IoT)	• Introduction to Mobile Computing

2	Dr. J.P.Ananth	Artificial Intelligence, Internet of Things (IoT), Edge Computing	- Elsevier (Artificial Intelligence for Renewable Energy Systems)- FWS-DL: forecasting wind speed based on deep learning algorithms - Artificial Intelligence for Renewable Energy Systems - Deep Feature Selection for Wind Forecasting-II
3	Dr.K.Sasi Kala Rani	Network, Cloud computing	Nature-Inspired Algorithms Applications - Efficiency of Finding Best Solutions Through Ant Colony Optimization (ACO) Technique
4	Dr.M.Sujaritha	Artificial Intelligence, Cloud Computing	- Theory of Computation - Privacy and Security Challenges in Location Aware Computing - Security Attacks on Internet of Things
5	Dr.D. Prabha	Artificial Intelligence	Systems Simulation and Modelling for Cloud Computing and Big Data Applications - IoT-based smart mirror for health monitoring
6	Dr.V.Viyeya Kaveri	Artificial Intelligence, Internet of Things (IoT)	- Internet of things - Smart Buildings Digitalization - Design and Implementation of Prototype for Smart Home Using Internet of Things and Cloud - Smart Buildings Digitalization - Grid-Interconnected Photovoltaic Power System with LCL Filter Feasible for Rooftop Terracing
7	Dr.P.Mohan Kumar	Artificial Intelligence, Cloud Computing	Machine Learning Principles and Applications
8	Dr.G.Vijaya	Artificial Intelligence	Deep Learning- based Computer- Aided Diagnosis System", Application of Deep Learning Methods in Health Care and Medical Sciences (ADLMHMS2022)
9	Dr. S. Oswalt Manoj	Artificial Intelligence, Internet of Things (IoT), Cloud Computing	- Elsevier (Artificial Intelligence for Renewable Energy Systems)- FWS-DL: forecasting wind speed based on deep learning algorithms - IET (Source: Evolving Predictive Analytics in Healthcare: New AI techniques for real-time interventions,2022) - Classification methodologies in healthcare - IET (Source: Evolving Predictive Analytics in Healthcare: New AI techniques for real-time interventions,2022) - Introducing deep learning in medical domain - Artificial Intelligence for Renewable Energy Systems - Deep Feature Selection for Wind Forecasting-II
10	Dr.N.Kousika	Artificial Intelligence	Theory of Computation
11	Dr. M. Rohini	Artificial Intelligence	Elsevier (Artificial Intelligence for Renewable Energy Systems)- FWS-DL: forecasting wind speed based on deep learning algorithms
12	Dr.M.Kavitha	Internet of Things (IoT)	Challenges and Opportunities for the Convergence of IoT, Big Data, and Cloud Computing - Machine and Deep Learning Techniques in IoT and Cloud
13	Ms.N.Pooranam	Artificial Intelligence	- Elsevier (Artificial Intelligence for Renewable Energy Systems)- FWS-DL: forecasting wind speed based on deep learning algorithms - Biomedical Engineering Tools for Management for Patients with COVID-19 - Smart equipment to protect patients and people from COVID disease - Nature-Inspired Algorithms Applications - Efficiency of Finding Best Solutions Through Ant Colony Optimization (ACO) Technique - Innovations in Electrical and Electronics Engineering - A Smart Machine for Fitness Care Scrutinizing Technique—A Review

| 14 | Ms.S. Nagajothi | Internet of Things (IoT) | • Blockchain Applications in IoT Ecosystem - The Desiderata of Blockchain and IoT in Medical and Pharmaceutical Enterprises
• Conceptualization of Computer Networks
• Introduction to Python Programming |
| 15 | Mr.V.Arulkumar | Artificial Intelligence | • Big Data Analytics for Sustainable Computing - Big data Analytics in healthcare industry. An Analysis of Healthcare applications in Machine learning with Big data Analytics |

Table 5.8 Faculty competencies in Patents

S.No	Name of the Faculty	Competency areas	Patent Title
1	Dr.J.Janet	Artificial Intelligence, Internet of Things (IoT)	• Shikaayant Samarthan • AI Based Tool to Get Information About 5 Good Institutes Based On AISHE • An Efficient Air Conditioner with Self Sanitizing Techniques • An Intelligent Acoustic Serenity using Self Adjustable User Friendly IoT Embedded Microphone • A New 2R Approach: The Mobile Electronic Waste in INDIA'S Automotive • Non-isolated bi-directional converters with coupled inductor for hybrid electric vehicle applications • Smart accessible ATM for Visually Imparied • Intelligent Wheelchair with Voice User Interface (VUI) System for Disabled and Elderly using IOT
2	Dr.J.P.Ananth	Artificial Intelligence, Internet of Things (IoT), Edge Computing	• Smart IOT Based Women Safety Detecting Wrist Band
3	Dr.K.Sasi Kala Rani	Network, Cloud computing	• Shikaayant Samarthan • AI Based Tool to Get Information About 5 Good Institutes Based on AISHE • Personal Assistant System and Wearable Gadget for Elderly People and Alzheimer Patients
4	Dr. M. Sujaritha	Artificial Intelligence, Cloud Computing	• AI Based Tool to Get Information About 5 Good Institutes Based on AISHE
5	Dr. D.Prabha	Artificial Intelligence	• Fabric defect detection using deep convolutional neural network and monitoring with industrial internet of things • Personal Assistant System and Wearable Gadget for Elderly People and Alzheimer Patients • IOT based Border Alerting System for Tamilnadu Fisherman • Smart Air and Noise Pollution Monitoring Kit
6	Dr. V. Vijeya Kaveri	Artificial Intelligence, Internet of Things (IoT)	• IOT Integrated Printer • Fabric defect detection using deep convolutional neural network and monitoring with industrial internet of things • Automatic Smart Attendance Management System Based on Face Recognition using Deep Learning • Modelling of an Efficient Solar Module Using Pervoskite

7	Dr.P.Mohan Kumar	AI and Machine Learning, Cloud Computing	• Systems For Monitoring and Diagnostics of Cyber/Network Security Remotely Using Machine Learning Feature
8	Dr. G. Vijaya	Artificial Intelligence	• Smart Handheld Device • An IOT Based Agriculture Drone for Pesticide Spray • An IOT Based Drainage Pipes Cleaning Robot System • Intelligent Charging Station based on Internet of Things
9	Dr.D.Rasi	Artificial Intelligence	• High Performance Computing (HPC) Integration of IoT and Big Data Analytics: Design and Experimental Evaluation of an HPDA Framework for eScience at Scale
10	Dr. T. Latha Maheswari	Internet of Things (IoT)	• Fabric defect detection using deep convolutional neural network and monitoring with industrial internet of things
11	Dr. A. Pushpalatha	Internet of Things (IoT), Network	• Fabric defect detection using deep convolutional neural network and monitoring with industrial internet of things • IOT based Border Alerting System for Tamilnadu Fisherman
12	Dr.S.Oswalt Manoj	Artificial Intelligence, Internet of Things (IoT), Cloud Computing	• An intelligent concrete mixture system with prediction of mixture strength using deep learning • Machine Learning based Patients' Illness prediction and automatic Doctor appointment alert • Lip movement based visual speech recognition device for automatic documentation in built with digital camera • Smart Digitech Pen Apparatus Design for Human Handwriting Replica Hands-free from Audio or Soft Copy of Typed Text • IOT based Hardware Platform for Crypto Algorithm Analysis
13	Dr.V.K.Reshma	Internet of Things (IoT), Artificial Intelligence	• Portable Smart External Hard disk drive
14	Ms.B.Sophia	Network	• Fabric defect detection using deep convolutional neural network and monitoring with industrial internet of things
15	Ms. R. Gowthamani	Artificial Intelligence, Cloud Computing	• Real-Time smartphone tracking app of virtual cloud server based healthcare monitoring system for emergency service using WBSN • IOT based Border Alerting System for Tamilnadu Fisherman
16	Mrs.V.R.Azhaguramyaa	Internet of Things (IoT)	• Intra - Body Communication in Biomedical Applications • Smart accessible ATM for Visually Imparied
17	Ms. S. Mohana Gowri	Artificial Intelligence	• Fabric defect detection using deep convolutional neural network and monitoring with industrial internet of things
18	Ms.A.Priya	Artificial Intelligence	• Shikaayant Samarthan
19	Ms.G.Renugadevi	Artificial Intelligence	• Deep Learning Based Intelligent Weather Prediction for Future Agriculture

20	Ms.S.Biruntha	Internet of Things (IoT)	• IOT based Border Alerting System for Tamilnadu Fisherman • Design and Implementation of Survillance system based on IOT • Design and Evaluation of an IOT systems machine learning security
21	Mr.V.Arulkumar	Artificial Intelligence	• An efficient feature selection for color face recognition using hidden Markov model and particle swarm optimization with image key generation • An intelligent technique for uniquely recognizing face and finger image Using learning vector quantization (lvq)-based template key generation
22	Ms.J.Boopala	Internet of Things (IoT)	• IOT based Border Alerting System for Tamilnadu Fisherman
23	Mr.M.Vengateshwaran	Artificial Intelligence	• AI Based Automatic Sea/Lake Cleaning Robot
24	Mr.S.Palani	Internet of Things (IoT), Image Processing	• Humidity Detection Sensor System • Sensor based smart belt

Table 5.9 Faculty competencies related to Reviewer in reputed Journals

S.No	Name of the Faculty	Competency related to Reviewer in reputed Journals
1	Dr.K.Sasi Kala Rani	• Optik, Elsevier • Measurement: Sensors, Elsevier • Soft Computing, Springer • Journal of Ambient Intelligence and Humanized Computing, Springer • Microprocessors and Microsystems, Elsevier
2	Dr.M.Sujaritha	• Elsevier- COMPAG • Elsevier- Information Processing in Agriculture • Pest Science • AJCST • National Virtual conference on Advanced Informatics, Electronics and Vision • Pest Management Science
3	Dr.P.Mohan Kumar	• Journal of Sensor and Actuator Networks • Asian Journal of Research in Computer Science • Asian Journal of Advanced Research and Reports • Sensors • Journal of Applied Security Research • The International Arab Journal of Information Technology

4	Dr.K.Ramesh	- Journal of Computer Science - International Journal of Electrical and Electronics Research - Journal of Applied Science and Engineering - Turkish Journal of Electrical Engineering & Computer Sciences - Big Data Research - Elsevier journal - ICMACC-22 - ISDA 2022
5	Dr.G.Vijaya	- International Journal of Electrical and Electronics Research (Scopus Indexed) - International Conference on Intelligent Systems Design and Applications (Online), Seattle, USA - International Conference in Smart System Technologies and Applications (ICSSTA 2023) organized by the Department of ECE, VelTech Rangarajan Dr. Sagunthala R&D Institute of Science & Technology, Chennai
6	Dr.D.Rasi	- International Journal of Multimedia Tools and Applications, Springer - International Journal of Ambient Intelligence and Humanized Computing, Springer - Reviewer in International Conference on Fuzzy Systems and Data Mining (FSDM2021), Seoul, South Korea - Alexandria Engineering Journal, Elsevier, SCImago Journal - International Conference in Smart System Technologies and Applications (ICSSTA 2023), Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology (Deemed to be University), Chennai - International Journal of SN Computer Science, Springer Journals - Deep Learning Based Smart Healthcare: An Application Based Analysis
7	Dr.M.Rohini	- Informatics in Medicine Unlocked, Elsevier - BMC Medical Informatics and Decision Making, Springer Nature - QEIOS - IEEE Conferences (IEEE International Conference on Integrated Circuits and Communication Systems 2023, International Conference on Advanced Network Technologies and Intelligent Computing, The International Conference on Innovations in Robotics, Intelligent Automation and Control (ICIRIAC 2022))
8	Dr.N.Kousika	- The Journal of Supercomputing - International Journal of Computers and Applications

9	Mr.M.Vengateshwaran	• International Journal of Science &Engineering Development Research • International journal of Creative Research Thoughts

Table 5.10 Faculty competencies related to Resource Person

S.No	Name of the Faculty	Competency related to Resource Person
1	Dr. M. Sujaritha	• Resource Person in Adama Science and Technology University, Ethiopia, Titled " Machine Learning: Prediction and Image Recognition" • Resource Person in Ramakrishna College of Engineering, Trichy, Titled " Prediction using Transfer Learning"
	Dr.K.Ramesh	• Resource Person in Kongunadu Arts and Scince College, Titled " Trends in Cloud Computing"
2	Dr.N.Kousika	• Resource Person in AICTE-ISTE sponsored Refresher Programme on "Blockchain Technology in Health Care"
3	Ms.N.Pooranam	• Resource person for a Special Lecturer titled on "Problem Solving and Data Analytics Using R"
4	Mr.M.Vengateshwaran	• Acted as Resource person in Seminar on " Innovation & Development using Data Analytics " @ Jeppiar Engineering College, Chennai • Acted as Resource person in Seminar on " Research Methodology and IPR " @ Hindustan College of Engineering and Technology (Autonomous), Coimbatore

Table 5.11 Faculty competencies related to Industry Trained Faculty

S.No	Name of the Faculty	Name of the Program	Certified by
1	Dr. M. Sujaritha	Business Strategy	TCS, IIM Ranchi
2	Dr. D. Prabha	Ruby Programming	IIT, Bombay
3	Dr.P.Mohan Kumar	C++ & DS	IAMNEO
4	Dr. T. Latha Maheswari	RDBMS	IAMNEO
5	Dr.A.Pushpalatha	Ruby Programming	IIT, Bombay
6	Dr.K.Senathipathi	Advanced Technology Program-AI/ML-Workshop	Wipro, Bangalore
7	Dr.N.Kousika	Object Oriented Programming Systems	TCS at ISI, Kolkata
		Java Full Stack Development	Virtusa

		React	
8	Dr.M.Rohini	Spring Boot, Maven, Hibernate	Virtusa
		Case Study development	
		JAVA	IAMNEO
9	Dr.M.Kavitha	Java Full Stack Development	Virtusa
		Advanced Technology Program-AI/ML-Workshop	Wipro, Bangalore
		Java, SQL and Web Programming	Hexaware
		Basics of Machine Learning	IISER, Bhopal, Combined with IIT Madras
10	Ms.S.Nagajothi	Red Hat Certified System Adminstrator	RedHat
		Python Programming	Infosys
		Basics of Machine Learning	IISER, Bhopal, Combined with IIT Madras
		Moodle Learning Management	IIT, Bombay
		Machine learning and Data analytics using Python	IIT, Roorkee
		Train the Trainer Programme (Computer Organization and Architecture)	TCS-ISI Kolkatta
		Database management systems	Infosys
11	Ms. A. Priya	TCS - Train the Trainer Programme (Software Design with UML)	TCS Siruseri Campus
		InfyTQ Python	Infosys
		Principal Component Analysis using Python	TCS at ISI, Kolkata
		Moodle Learning Management	IIT, Bombay
		Train the Trainer Programme (Computational Statistics)	TCS-ISI Kolkatta
		C++ & DS	IAMNEO

12	Ms.J.Boopala	Infosys Campus Connect - Agile Methodology	Infosys
		Database management systems	Infosys
13	Ms. V. R. Azhaguramyaa	Moodle Learning Management	IIT, Bombay
		JAVA	IAMNEO
		RDBMS	IAMNEO
14	Ms.R.Gowthamani	Moodle Learning Management	IIT, Bombay
		RDBMS	IAMNEO
15	Mr.M.Manikandan	Learning Experience	Infosys
16	Ms. B. Sophia	Deep learning and its applications	IIT Roorkee
		Moodle Learning Management	IIT, Bombay
		Ruby Programming	IIT, Bombay
17	Ms.Majidha Fathima	C++ & DS	IAMNEO
18	Ms.S.Abirami	JAVA	IAMNEO
		RDBMS	IAMNEO

Table 5.12 Faculty competencies based on Certification Courses

S.No	Name of the Faculty	NITTTR / NPTEL / INFOSYS SPRINGBOARD/COURSEERA
1	Dr.M.Sujaritha	NPTEL-Database Management Systems NITTR- Data Science using Python
2	Dr D Prabha	NITTR- Leadership and Management Development SPRINGBOARD- HTML5,CSS3,TypeScript
3	Dr.G.Vijaya	NPTEL- Deep Learning NITTR- Data Science using Python, Big Data Applications in Electrical Engineering SPRINGBOARD - Introduction to Deep Learning, Explore Machine Learning using R
4	Dr.D.Rasi	NPTEL-Database Management Systems
5	Dr. T.Latha Maheswari	NPTEL-Database Management Systems, Programming in JAVA

6	Dr.M.Rohini	NPTEL- Programming in JAVA
7	Dr. N. Kousika	NPTEL- Python Programmer Certification, Programming in Java
8	Ms. V.R. Azhaguramyaa	NITTR- Data Science using Python, MATLAB - Artificial Intelligence and Optimisation Techniques NPTEL- Programming in Java, Cloud computing, Introduction to Database Systems
9	Ms. N. Pooranam	NPTEL- HTML Web Development Crash Course NITTR-MATLAB - Artificial Intelligence and Optimisation Techniques SPRINGBOARD - AI in Industry,HTML Web Development Crash Course
10	Ms. A. Priya	NITTR- Data Science using Python NPTEL-Introduction to internet of things, Software Conceptual Design
11	Ms. R. Gowthamani	NPTEL- Operating System Fundamentals, Cloud computing
12	Ms. K.M.Majidha Fathima	NPTEL- Leadership and Team Effectiveness
13	Mr.S.Palani	NITTR- Data Science using Python

Table 5.13 Faculty competencies based on NPTEL Mentorship

S.No	Name of the Faculty	NPTEL (Top Performing Mentor/Mentor)
1	Dr.M.Sujaritha	• Data Base Management System
2	Dr D Prabha	• Ethics in Engineering Practice
3	Dr. V. Vijeya Kaveri	• Python for Data Science
4	Dr.P.Mohan Kumar	• Data Base Management System • Programming In Java
5	Dr.R.Ramesh	• Ethics in Engineering Practice
6	Dr.D.Rasi	• Programming In Java
7	Dr. T. Latha Maheswari	• Data Base Management System • Ethics in Engineering Practice
8	Dr.A.Pushpalatha	• Enhancing Soft Skills and Personality • Ethics in Engineering Practice
9	Dr.S.Oswalt Manoj	• The Joy of Computing using Python • Stress Management
10	Dr.V.K.Reshma	• Data Base Management System • Programming In Java
11	Dr.N.Kousika	• Ethics in Engineering Practice

12	Dr.M.Rohini	• Ethics in Engineering Practice
13	Ms.A.Priya	• Data Base Management System • Ethics in Engineering Practice
14	Ms. K. M. Majidha Fathima	• Ethics in Engineering Practice
15	Ms. V.R. Azhaguramyaa	• Python for Data Science • Developing Soft Skills and Personality • Ethics in Engineering Practice
16	Ms.B.Sophia	• Developing Soft Skills and Personality • Ethics in Engineering Practice
17	Mr.R.Yasir Abdullah	• Ethics in Engineering Practice
18	Mr.M.Vengateshwaran	• Python for Data Science • Ethics in Engineering Practice
19	Ms. R.Gowthamani	• Ethics in Engineering Practice
20	Ms.N.Pooranam	• Ethics in Engineering Practice
21	Ms.S.Biruntha	• Developing Soft Skills and Personality • Ethics in Engineering Practice
22	Ms.G.Renugadevi	• Python for Data Science • Developing Soft Skills and Personality • Ethics in Engineering Practice
23	Mr.J.Daniel Francis Selvaraj	• Stress Management
24	Mr.D.Mansoor Hussain	• Ethics in Engineering Practice
25	Ms.S.Nagajothi	• Speaking Effectively
26	Ms.S.Mohana Gowri	• Ethics in Engineering Practice
27	Mr.N.Karthikeyan	• Developing Soft Skills and Personality • Ethics in Engineering Practice
28	Mr.M.Sivakumar	• Developing Soft Skills and Personality
29	Ms.J.Boopala	• Ethics in Engineering Practice
30	Mr.S.Palani	• Ethics in Engineering Practice

Table 5.14 Faculty competencies based on Nalaiya Thiran [2022-2023] acted as a Mentor

S.No	Name of the Faculty	Competency with Specialization
1	Dr M Sujaritha	Artificial Intelligence, Cloud Computing
2	Dr M.Rohini	Artificial Intelligence
3	Dr. N.Kousika	Artificial Intelligence

4	Ms.R.Gowthamani	Artificial Intelligence, Cloud Computing
5	Ms K.M. Majidha Fathima	Internet of Things (IoT)
6	Ms N. Pooranam	Artificial Intelligence
7	Mr M.Vengateshwaran	Artificial Intelligence

Table 5.15 Faculty competencies based on Nalaiya Thiran [2022-2023] acted as an Evaluator

S.No	Name of the Faculty	Competency with Specialization
1	Dr V.Vijeya Kaveri	Artificial Intelligence, Internet of Things (IoT)
2	Dr K.Ramesh	Edge computing, Cloud Computing
3	Dr G.Vijaya	Artificial Intelligence
4	Dr D.Rasi	Artificial Intelligence
5	Dr T. Latha Maheswari	Internet of Things (IoT)
6	Ms V.R.Azhaguramyaa	Internet of Things (IoT)
7	Ms A.Priya	Artificial Intelligence

Table 5.16 FDP/Seminar/Workshop/Webinar/STTP attended by the faculty

Events attended by Faculty	2022-2023	2021-2022	2020-2021
FDP/STTP	109	90	83
Workshop	35	22	4
Seminar/Webinar	45	15	74

Table 5.17 FDP/Seminar/Workshop/Webinar/STTP organized by the faculty

Events organized by Faculty	2022-2023	2021-2022	2020-2021
FDP/Conference	1	2	5
Guest Lecture/Seminar /Webinar	16	34	17
Workshop	7	7	4
Ideathon/Project Contest	6	2	2

5.6 Innovations by the Faculty in Teaching and Learning (10)

Total Marks 10.00

Institute Marks : 10.00

5.6 Innovations by the Faculty in Teaching and Learning

Innovative pedagogies are needed to transform learning. The utilization of various types of technologies are regarded as most significant form of innovations in teaching-learning processes. The pedagogies target skills that most impact students' job prospects and social lives and secure the necessary depth and breadth of skills needed for lifelong learning. Many of these approaches can be used in low-resource settings and without technology, which can help close gaps in equity by helping learners who are furthest behind.

Faculty members articulate their domain specific knowledge to groom the students to excel in academics through Lecture based systems (Smart Classrooms), Flipped models, project-based learning, virtual labs, Animated videos, etc. Also, they mentor the students to participate in various events like Smart India Hackathons, Ideathon, Internships, Industry training through MoU, Hack Club and IO Club activities, Paper presentation, Project Presentation, MOOC certifications, etc. Faculty members show consistent progress in their domain by publishing their research works in renowned Journals, patents and actively contributing their services to the industries as consultancy works.

The practice of effective and meaningful teaching can benefit immensely when educators thoughtfully experiment and apply new or different pedagogical approaches, technologies, curricular enhancement, course design and organization, and assessments. Interdisciplinary courses through open elective, Integrated theory cum practical courses, Value added courses, Classroom and course management innovations, etc., improves students' ability to apply what they learn, in theory, novel assignments that lead to increased student engagement, student publications, and activities that bring students from diverse backgrounds together. The faculty members handling the subjects with new innovative methods in the classroom help to improve the creative ideas of the students.

Innovations by Faculty in teaching and learning is measured based on their excellence in following the key areas / program specific areas:

- Interactive Smart Board
- Flipped Class Rooms and Technology Enabled Learning
- Project Based Learning
- Mandatory Internship
- Enhancement of Hackathon Skills by Club Activities
- Value added courses
- Industry drafted Choice Based Credit System
- Interdisciplinary Learning
- Industry Institue Interaction
- Integrated Theory cum Practical Courses
- Research Based Learning

INTERACTIVE SMART BOARD

All classrooms in the department are installed with smart boards which are more flexible and interactive way of presenting the lectures aided with pictures and videos. Students find it interesting and help since entire lecture delivery through the smart board can be converted and saved as PDF. The saved format could be sent to students for their reference and therefore it would benefit the absentees as well.

Fig 5.1 Lecture capture system

FLIPPED CLASS ROOMS AND TECHNOLOGY ENABLED LEARNING

The flipped classroom (Google Classroom) is an innovative tool which is very effectively used in our campus for every course. Soon after the commencement of classes for the semester faculty members add all students of the course to it. They also upload course plans, Lecture notes eBooks, previous year question papers, question banks, weblinks etc. It works like 24/7 classroom where students can learn and post questions anytime. It also helps the students to come prepared to the class. The quiz and assignments questions are uploaded by the faculty and the tools in the Google class room facilitate the grading of students automatically. Hence, the students' performance is quickly evaluated by the faculty.

Studies have shown that using smart technologies, like the smart boards in the classrooms have improved the success rate. These interactive boards provide an extraordinary opportunity for teachers to create a classroom environment where students with different learning styles can learn from each other. An online platform like 'Google Classroom' is an easy way to share course materials and assignments with the students as it is super user-friendly.

The Google Classroom of our courses provide the students with the following features:

1. Course Description
2. Syllabus
3. Course Information
4. Subject Module with presentation, quiz, high-order thinking questions and relevant videos
5. Internal marks and attendance details
6. Higher Education perspectives of the subjects including Jobs and Studies
7. Assignment questions with CO-PO mapping
8. Research perspectives with information on Journals and Conference for further study
9. Details on Virtual Labs, Certification courses, Competitive Exam Question Banks
10. Class recordings, Simulation tools and Animations.
11. Study materials, if any.
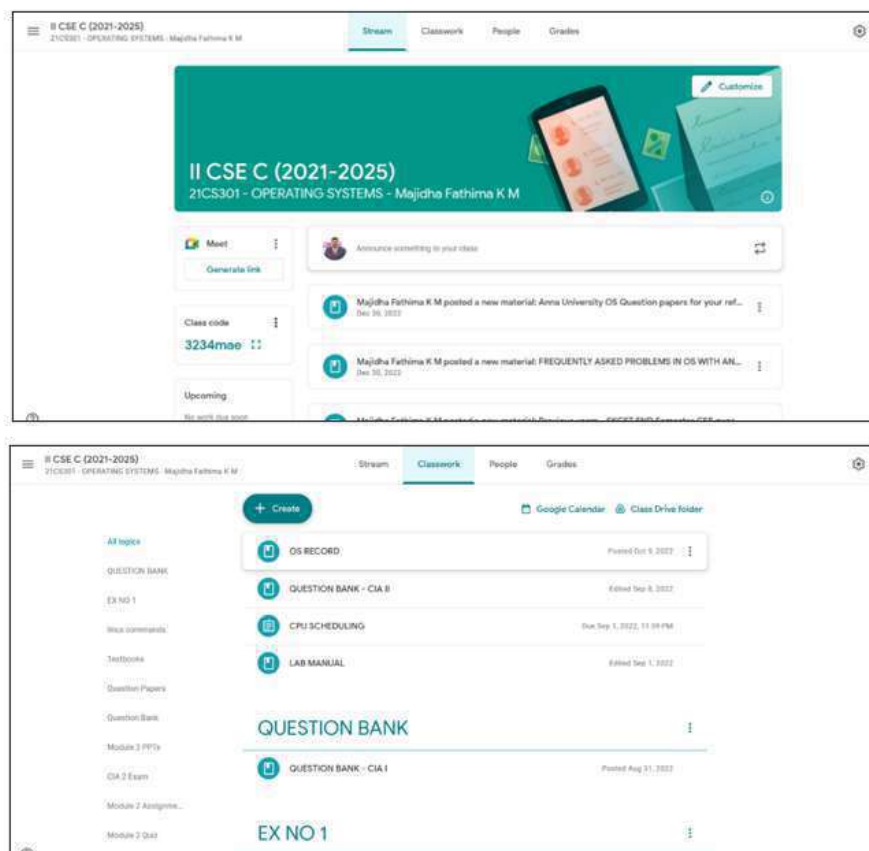
Fig 5.2 Flipped Classroom-GCR

PROJECT BASED LEARNING

"Scientists study the world as it is. Engineers create the world that has never been."

Department of CSE celebrated the ENGINEERS DAY on 15th September with all elegance and innovations. To make the celebration out in front we organized a project expo which was a platform for inquisitive individuals with an unquenchable thirst for science. The expo unleashed the potential of the students by showcasing their innovative projects and providing an opportunity for them to demonstrate their learning experience.

Students had exhibited various projects based on distinguished topics using recent technologies like IoT , AI, Mobile application & Software development. Students were able to show their project at higher level and the process boosted their confidence.

Fig 5.3 An IoT project

Fig 5.4 Project Expo

MANDATORY INTERNSHIP

- The students are encouraged to take up internship/industrial training programs during their semester break. Also, some of the final year students are encouraged to do their project works along with internship in eighth semester.

- Faculty members help the students by providing the students with recommendation letters, interacting with the industrial experts, and other necessary supports.

Table 5.18 Internship Details

Sl. No.	Academic Year	Number of Internship/Inplant Training
1	2020-2021	135
2	2021-2022	223
3	2022-2023	256

Sl. No.	Batch	Number of Internship with Stipend
1	2017-2021	34
2	2018-2022	51
3	2019-2023	98

S. No	Name of the Student	Register Number	Company	Intern Stipend	Duration/Starting Date
1	Deepika T	727721EUCS023	Amazon	35K	12.06.2023 - 04.08.2023
2	ASWATHY H	20EUCS019	AICTE	5K	13.06.2022 - 30.09.2022
3	JEBA REGAN RAJ B	19EUCS053	Striim	40K	04.04.2022 to 31.03.2023
4	BINESH J	19EUCS024	Striim	40K	04.04.2022 to 31.03.2023
5	JAYANTH C R	19EUCS049	Informatica	15K	07.04.2022 - May 2022
6	ACHYUTH PRAMOD	19EUCS003	IBM	15K	07.04.2022 - May 2022
7	DHARUN S	19EUCS029	Zoho	15K	07.04.2022 - May 2022
8	HARI PRASATH P	19EUCS180	Zoho	15K	07.04.2022 - May 2022
9	NIVETHIDHA R V	19EUCS102	Zoho	15K	Apr 2022 - May 2022
10	RENUGA DEVI V	19EUCS115	Quinbay	31K	Apr 2022 - May 2022
11	MADHIVADHANAN B R	19EUCS076	Zoho /TCS Ninja	15K	Apr 2022 - May 2022
12	MOHAMMED SAFWAN S	19EUCS088	Zoho	15K	Apr 2022 - May 2022
13	Harini M	19EUCS039	Inai	25k	July 2022 -one yr
14	HARESHVAR A R	19EUCS037	Purchasing Power	25k	July 2022-one yr
15	DARWESH FAZIL A	19EUCS026	Super ops	25K	May - one yr
16	AVINASH SANTHOSH	19EUCS019	Super ops	20k	May - one yr
17	HEMAHARINI S M	19EUCS045	QuinBay	31K	July - 10 months
18	Harish S	19EUCS042	DOCPROS	USD$200	25.04.22-25.10.22
20	KISHORE RAJ D	19EUCS065	Zoho	15K	Apr 2022 - May 2022
21	PRANESH S	19EUCS107	Hewlett Packard Enterprise	30K	01-07-2022
22	RAAJEEV CHANDRAN S	19EUCS112	Hewlett Packard Enterprise	30K	01-07-2022
23	SAMUEL WYCLIFFE J	19EUCS117	Hewlett Packard Enterprise	30K	01-07-2022
24	Mohamed Afsal S	19EUCS086	Quinbay	31K	01-07-2022
25	Madhumitha N	19EUCS077	Open Text	15K	6 months
26	MARTINA ROMISHA D	19EUCS081	Open Text	15K	4th july 2022
27	Mohanapriya R	19EUCS092	Open Text	15K	4th july 2022
28	Muthukumaran M	19EUCS096	Open Text	15K	4th july 2022

Fig 5.5 Internship Certificates

INDUSTRY TRAINING

Industrial training is referred to as a program that offers good practical training in the specified time frame. It is offered by private companies as well as by the government organizations. Industrial training provides students with significant skills and practical knowledge and motivates them to become a professional and successful engineer. Training programs can be created independently or with the MOUs, with the goal of employee long-term development.

Our program curriculum and syllabus are partially developed by **industry experts**.Industry-based training provides students with practical experience and exposes them to real-world scenarios. This helps them understand how **theoretical concepts are applied in actual practice**, which enhances their understanding of the subject. We have MOUs with various Industries such as **Wipro, Infosys, Aspire Systems, Capgemini, Robert Bosch, Hexaware, Virtusa, TCS**etc., who are providing training to our students. Our Faculty members are also undergoing industry training based on **Train the Trainer programme.**

Students get the opportunity to learn from these experts and Industry trained faculty members and gain **insights into the latest technologies, tools, and techniques used in the industry**. Industry-based training programs help students gain hands-on experience with the latest technologies, which can **improve their employability.**

With these training programs, it is possible to **bridge the gap between academia and industry**.

Table 5.19 Industry Trained Faculty

S.No	Name of the Faculty	Name of the Program	Certified by
1	Dr. M. Sujaritha	Business Strategy	TCS, IIM Ranchi
2	Dr. D. Prabha	Ruby Programming	IIT, Bombay

3	Dr.P.Mohan Kumar	C++ & DS	IAMNEO
4	Dr. T. Latha Maheswari	RDBMS	IAMNEO
5	Dr.A.Pushpalatha	Ruby Programming	IIT, Bombay
6	Dr.K.Senathipathi	Advanced Technology Program-AI/ML-Workshop	Wipro, Bangalore
7	Dr.N.Kousika	Object Oriented Programming Systems	TCS at ISI, Kolkata
		Java Full Stack Development	Virtusa
8	Dr.M.Rohini	React	Virtusa
		Spring Boot, Maven, Hibernate	
		Case Study development	
		JAVA	IAMNEO
9	Dr.M.Kavitha	Java Full Stack Development	Virtusa
		Advanced Technology Program-AI/ML-Workshop	Wipro, Bangalore
		Java, SQL and Web Programming	Hexaware
		Basics of Machine Learning	IISER, Bhopal, Combined with IIT Madras
10	Ms.S.Nagajothi	Red Hat Certified System Adminstrator	RedHat
		Python Programming	Infosys
		Basics of Machine Learning	IISER, Bhopal, Combined with IIT Madras
		Moodle Learning Management	IIT, Bombay
		Machine learning and Data analytics using Python	IIT, Roorkee
		Train the Trainer Programme (Computer Organization and Architecture)	TCS-ISI Kolkatta
		Database management systems	Infosys

11	Ms. A. Priya	TCS - Train the Trainer Programme (Software Design with UML)	TCS Siruseri Campus
		InfyTQ Python	Infosys
		Principal Component Analysis using Python	TCS at ISI, Kolkata
		Moodle Learning Management	IIT, Bombay
		Train the Trainer Programme (Computational Statistics)	TCS-ISI Kolkatta
		C++ & DS	IAMNEO
12	Ms.J.Boopala	Infosys Campus Connect - Agile Methodology	Infosys
		Database management systems	Infosys
13	Ms. V. R. Azhaguramyaa	Moodle Learning Management	IIT, Bombay
		JAVA	IAMNEO
		RDBMS	IAMNEO
14	Ms.R.Gowthamani	Moodle Learning Management	IIT, Bombay
		RDBMS	IAMNEO
15	Mr.M.Manikandan	Learning Experience	Infosys
16	Ms. B. Sophia	Deep learning and its applications	IIT Roorkee
		Moodle Learning Management	IIT, Bombay
		Ruby Programming	IIT, Bombay
17	Ms.Majidha Fathima	C++ & DS	IAMNEO
18	Ms.S.Abirami	JAVA	IAMNEO
		RDBMS	IAMNEO

Fig 5.6 Dr.M.Rohini attended the training Program-Full stack Developer given by Virtusa

ENHANCEMENT OF HACKATHON SKILLS BY CLUB ACTIVITIES

Hackathons stimulate the creative juices of participants and foster problem-solving and risk-taking in a casual environment. The diversity of participants guarantees a multitude of perspectives and the time limit on hackathons creates a uniquely productive atmosphere that forces participants to distil their visionary concepts down to actionable solutions. All this increases the chance of finding innovative fixes to persistent problems.

Here are some reasons which makes participating in Hackathons important:

- Students are challenged to solve a real problem in limited amount of time; the constraint of time helps them think of creative solutions.
- Students get awesome networking opportunities, readily meet CEO, CTO of the different companies. Making friends from different industries helps them in long run.
- Students can get validation on ideas that comes up to them from variety of people (if students have plan to ever become a entrepreneur)
- By winning hackathons the students profile becomes stronger. They will get interview calls from big companies if they cross some number of hackathon wins.
- By participating students get experience which is worth when they try to solve something in their work / personal projects or next hackathon.
- Students get informed about current market trends, openly available kickass api's which makes it easy to think of new ideas.
- Good prize money. It ranges from 20K to 30L and more. Some international travelling opportunities as well.
- Internal Hackathon is one of the best practice followed in the department where our students would get expertise in the open source tools which they use in various hackathons like Smart india hackathon, Harvard hackathon to develop their product to create dynamic web pages with good UI/UX.
- The students get familiarize with the tools such as **Angular JS, React JS, React Native, Node JS, MongoDB, Android Studio, XAMPP, BootStrap, GraphHopper, QGIS, Firebase, PHP**

<u>**Hack Club**</u>

Hack Club, the coding club of SKCET was inaugurated on 20.03.2021. Zach Latta, founder of Hack club USA, a non profit network of student coding clubs,

funded by Elon Musk was the Keynote Speaker. He encouraged the students to boost their talents by participating in multiple hackathons, coding contests and engage in friendly programming to build out network. Principal Madam Dr.J.Janet, presided over the ceremony and gave a special address motivating the young minds. More than 450 students from various colleges participated in the session and gained valuable insights. To enable students to take part in competitive and collaborative coding activities and to maintain a healthy community for coders at SKCET, various events was conducted in HACK club.

Table 5.20 Hack Club events for the academic year 2022-2023

S.No	Category	Title of program	Date	Resource Person
1	Ideathon	**AICTE- SPICES** Sponsored Ideathon	27.7.2022	Dr.Wilfred Blessing NR Faculty of IT University of Technology & Applied science, Oman
2	(Project Expo)	**AICTE- SPICES** Sponsored Engineers Day (Project Expo)	15.9.2022	Mr.B.Shameer, Software Engineer, Odessa Technologies, Bangalore
3	Ideathon	**AICTE- SPICES** Sponsored Xplore 2022 –Ideathon	11.11.2022	Mr. V. M. Prabhakaran Designation: Founder & CEO, Visaithalam Solutions Coimbatore. Mr. B. Shameer (Alumni) Software Engineer Odessa Technologies, Bangalore.
4	Ideathon	**IIC Sponsored** SMARTATHON'23- Innovative Idea contest	2.3.2023 & 3.3.2023	Ms.G.Ahalya Software Engineer, CTS, Coimbatore
5	Ideathon	**AICTE- SPICES** Sponsored Codethon	7.3.2023	Mr. PraneshAnnamalai Senior manager,Wipro - Coimbatore.

Table 5.21 Hack Club events for the academic year 2021-2022

S.No	Category	Title of program	Date	Resource Person
1	Seminar	**AICTE- SPICES** Sponsored Journey to Google	31.7.2021	Mr. Aruljothi Sivakurunathan, Cloud Technical Solution Engineer, Google, Dublin.
2	Hackathon	**AICTE- SPICES** Sponsored Hacks	26.2.2022 to 28.2.2022	Dr.J.Janet Principal

Table 5.22 Hack Club events for the academic year 2020-2021

S.No	Category	Title of program	Date	Resource Person

1	Hackathon	Hack from Home	12.5.2021 to 14.5.2021	Zach Latta Founder, Hack Club

Fig 5.7 Hack Club Events

<u>**IO CLUB**</u>

Various events was conducted in IO club for the benefit of students to get insight in new technologies. Around 40 events was conducted during the assessment years in various new era.

VALUE ADDED COURSES

The integration of value added courses should focus on leveraging the talent and innovative capabilities of the budding professionals to meet the needs of the contemporary dynamic business environment thus making the student more industry ready. The value added programs supplements students learning and enhances their preparedness to meet the challenges of professional life. These programmes enable the students to acquire a more holistic perspective and thus have better understanding of issues present-day industry challenges and also facilitate the students to gain and develop innovative and creative skills through a wide array of course offerings.

The industry demands in contemporary times has become enormously competitive, the need for skilled professionals possessing diverse persona are best fit to meet the industry demand. Present work environment have become more target oriented, quality determined, skill and competence driven. A multi disciplinary and application oriented focus is expected to make the student industry ready is at the core of the development and delivery of the value added courses. The student is motivated to build on his/her strength areas by choosing courses in areas which is of interest to them.

Value Added Courses

S.No.	Course Code	Course	Credit	Category
1	21VA200	Cassandra	1	VAC
2	21VA201	MongoDB	1	VAC

Fig 5.8 Value Added Course in regulation 2021

INDUSTRY DRAFTED CBCS CURRICULUM

The curriculum and syllabus are revised every year based on feedback obtained from leading industries and academic institutions. Additional credit system is followed, through which the student can choose courses apart from their own discipline and additional credits are provided for such courses. A Capstone matrix has been prepared for testing the various skill sets required for learning each course and continuous evaluation is done based on the modular assessment method. The academic and industry experts are officially invited to seek their expertise, recording their feedback. The experts are also invited to share their ideas as a member of the academic body.

Fig 5.9 Companies visited the campus for curriculum upgrading

Indusrty experts joined the Board of Studies for curriculum upgrading.
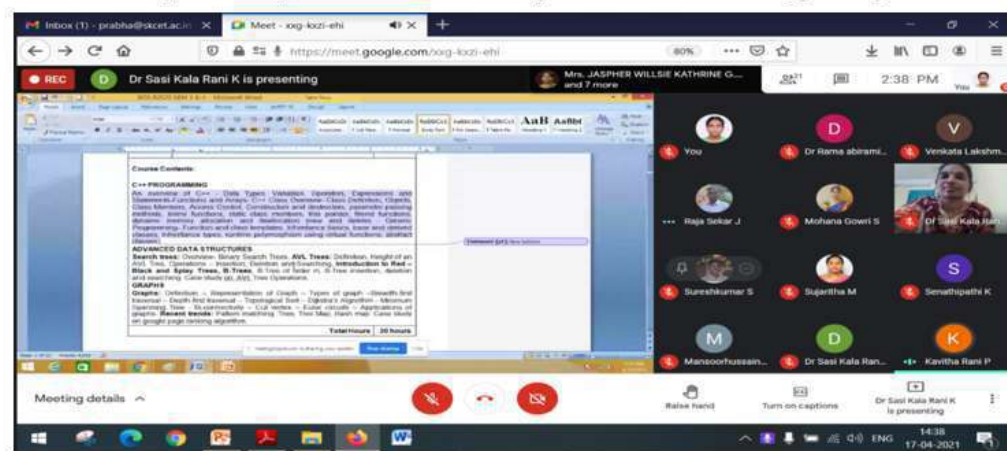
Fig 5.10 Board of Studies Meeting conducted online

INTERDISCIPLINARY LEARNING

To work together to build self-management skills, learn higher level thinking and new concepts, finding solutions for real world problems, and completion of tasks.

Collaborative learning enhances the student's learning capability by forming a team of their choice irrespective of the departments to work unitedly. The process also creates a mutual relationship between the interdisciplinary department students towards their contribution in projects. Each and every stage of the project is to be addressed by the respective domain which delivers the successful completion of project. Project Based Learning unleashes a contagious, creative energy among students and teachers by encouraging students to work on a project over an extended period of time – from a week upto a semester. Our student's successful completion rate of projects has increased in inter-team hardware hackathons.

Interdisciplinary Event: Glimpse: L&T PAN INDIA CONTEST

The winners of the L&T TechGium 6th edition in different 2 categories

Team 1:

1st Runner up with 5,00,000 cash prize.

Project title: Plugin kit for ready charging

Teammates:

1.Prithika Andrea Angelina F - II CSE

2. Pavan Kumar M A - III MECH

3.Manswini P S - III EEE

4.Monish Kumar - II CSE

Team 2:

Employee choice award with gift vouchers worth Rs.50,000

Project title: IoT based early detection of muscle cramps / spasms

Teammates:

1. Mohammed Riyash J - III MECH

2. Shwetaharini S - III CSE

3. Prithika Andrea Angelina - II CSE

4. Sharon Peter A P - III MECH

Fig 5.11 L&T Pan India Contest

<u>Open Elective</u>

The system of Open Electives also encourages cross and multidisciplinary learning, as students pick and choose subjects from across different faculties and streams. Open Elective means an elective course which is available for students of all programmes. Students of other Department will opt these courses subject to fulfilling of eligibility of criteria as laid down by the Department offering the course.

Open Elective Courses offered by MECHATRONICS		
1	21MT001	Basics of Robotics
2	21MT006	Intelligent Automotive Systems
3	21MT002	Mechatronics Engineering Applications
4	20MT004	Field and Service Robotics
Open Elective Courses offered by MECHANICAL		
1	20ME006	Technology Management
2	21ME003	Total Quality Management
3	21ME001	Industrial Safety
4	21ME004	Product Development
Open Elective Courses offered by CIVIL ENGG.		
1	21CE001	Disaster Management
2	21CE005	Industrial Pollution control and Prevention Techniques
Open Elective Courses offered by EEE		
1	21EE004	Renewable Energy Sources
Open Elective Courses offered by ECE		
1	21EC004	Brain computer interface and it's applications
2	21EC005	Wireless wearable sensors

Fig 5.12 Open Elective courses

INDUSTRY INSTITUTE INTERACTION

To encourage students to undertake internships, real-world ventures, and problem-solving training. The Institute encourages its faculty, research scholars, technicians and students to interact with industry in implementing applied concepts with the spirit of deriving mutual benefit. The resource person from the industry handles the interaction session about the various quality concepts (5'S) followed in industry. This creates awareness on the quality and cleanliness in work environment.

Professional consultancy by the faculty to industries is offered. Industrial consultancy projects by faculty & students are carried out at site or in laboratory. Joint research programmes and field studies between faculty and industrial employee are provided. Faculty visits industry for study and discussions or delivering lectures on subjects of mutual interest

The necessity to improve the quality of engineering education to meet the needs of industry are fulfilled ;the thought provoking ideas of students and faculty members are implemented.
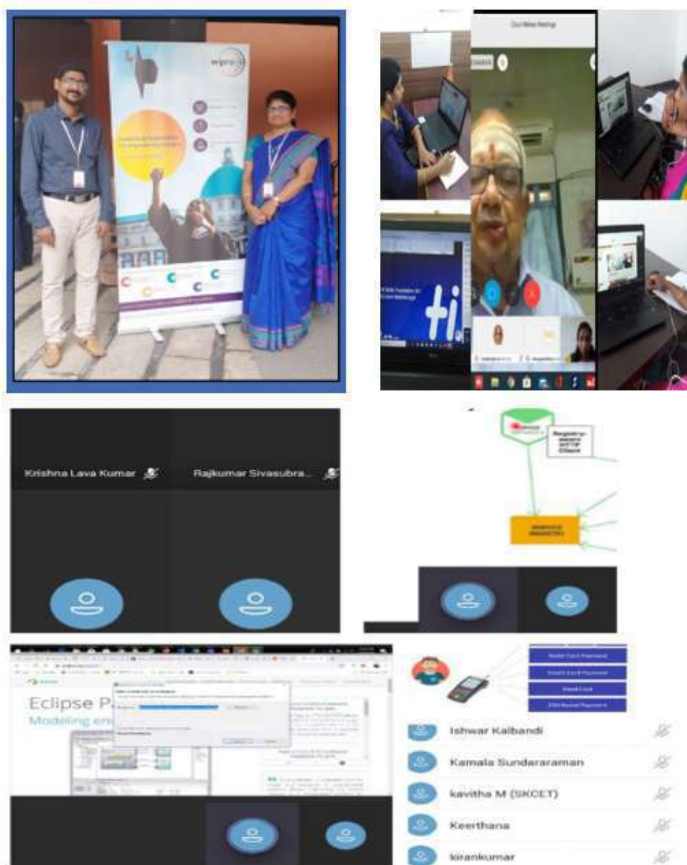
Fig 5.13 Industry Institute Interaction

INTEGRATED THEORY CUM PRACTICAL COURSES

Integrated curriculum relies on unifying concepts and holistic learning to connect diverse areas of study. Today's experts must continuously reconstruct their expertise and be able to apply their theoretical knowledge in actual work. The development of expertise is a long process, during which theoretical, practical and metacognitive elements of expert knowledge are integrated into a coherent whole. It is important to foster student's learning and integration of theoretical knowledge in practice during tertiary education and hence introduced in regulations.

Our Curriculum contains theory cum lab subjects, which enable the students to get hands on experience on the theoretical concepts they are learning. Labs allow students to **reinforce their understanding of theoretical concepts through hands-on experimentation and observation**. This helps them better comprehend complex theories and apply them in practical scenarios. Lab components offer opportunities for students to develop practical skills such as data analysis, research methodology, experimental design, and critical thinking. These skills and expertise in latest software tools are important in various fields and are highly sought after by employers. We follow Block teaching methodologies, that focus on hands on experience for the students along with the technical knowledge they are getting while learning a course.

18CS603	VIRTUALIZATION AND CLOUD	3/0/2/4

Nature of Course F (Theory Programming)

Pre requisites: Computer Networks/ Computer Architecture

Course Objectives:

1. To explain the basic concepts of cloud infrastructure such as cloud models, services and virtualization.
2. To describe about procedures to implement virtual data center environment.
3. To design and configure virtual data center environment.
4. To study the Security issues associated with cloud infrastructure.
5. To identify Next generation Data center technologies and Cloud API.

Course Outcomes:

Upon completion of the course, students shall have ability to:

C603.1	Describe the characteristics of cloud infrastructure and virtualization	[U]
C603.2	Demonstrate the virtual data center's functionalities and cloud computing.	[U]
C603.3	Apply configuration procedures to implement virtual data center environment	[AP]
C603.4	Interpret cloud infrastructure management services, storage and security policies.	[A]
C603.5	Deduce the Next generation technologies and Cloud API.	[A]

Course Contents:

INTRODUCTION TO CLOUD COMPUTING: Evolution of Cloud Computing – Cloud Characteristics – Elasticity in Cloud – On-demand Provisioning – NIST Cloud Computing Reference– Architectural Design Challenges –Cloud Deployment Models: Public, Private and Hybrid Clouds – Service Models:Iaas-Paas-Saas-Benefits of Cloud Computing. Classic Data Center-Application-DBMS-Compute-Storage –Network.

VIRTUALIZATION: Introduction to Web Service and Service Oriented Architecture – SOAP – REST-A Phased Approach from classic Data center to Virtual Data center - Basics of virtualization-Para Virtualization - Full virtualization - Hardware Assisted Virtualization –Implementation levels of Virtualization –Benefits of Virtualization Tools and Mechanisms – Virtualization of CPU – Memory – I/O Devices – Virtualized Data Center -Storage –Networking –Desktop Virtualization –Server virtualization and its Applications.

CLOUD MANAGEMENT, STORAGE AND SECURITY: Resource Provisioning and Methods – Cloud Management Products – Cloud Storage –Provisioning Cloud Storage – Managed and Unmanaged Cloud Storage – Cloud Security Overview – Cloud Security Challenges –Security Architecture design – Virtual Machine Security – Application Security –Data Security. **CLOUD SOFTWARE AND COMPUTING PLATFORMS** HDFS – Map Reduce – Google App Engine (GAE) – Programming Environment for GAE – Architecture of GFS – Case Studies: Openstack, Heroku, and Docker Containers –AmazonEC2, AWS, Microsoft Azure, Google Compute Engine.

Total Hours: 45

Lab Exercises:

1. Installation of Hosted hypervisor and Bare metal hypervisor.
2. Implementation of network traffic management technique in a virtual machine.
3. Implementation of Virtual Machine using VMware VSphere client.
4. Installation of Openstack.
5. Installation and configuration of Hadoop.
6. Implement the following file management tasks in Hadoop: Adding files and directories, retrieving files and deleting files.
7. Install HIVE and perform CURD operations.
8. Creating a warehouse application in a website.
9. Implementation of Virtual Data Center in AWS.
10. Deployment and configuration of Microsoft Azure.

Total Hours: 30

Fig 5.14 Theory cum Practical-Virtualization and Cloud

Table 5.34 Theory cum Practical subjects in R2021

SEMESTER III							
S No.	Course Code	Course	L/T/P	Contact hrs/week	Credit	Ext/Int	Category
THEORY							
1	21MA302	Mathematical Structures	3/1/0	4	4	60/40	BSC
THEORY CUM PRACTICAL							
2	21AD302	Analysis of Algorithms	3/0/2	5	4	50/50	PCC
3	21IT301	Web Development using React	3/0/2	5	4	50/50	PCC
4	21CS301	Operating Systems	3/0/2	5	4	50/50	PCC
5	21CS302	Java Programming	3/0/2	5	4	50/50	PCC
6	21CS303	Managing Data using RDBMS	3/0/2	5	4	50/50	PCC

RESEARCH BASED LEARNING

Our final year students are publishing their project work and outcomes as research articles in refereed journals and conferences. With this practice, we are motivating the students to develop and publish their project work in a research perspective. As their articles are published in Scopus indexed research journals such as IEEE Xplore and Springer, they get more exposure to research based learning.
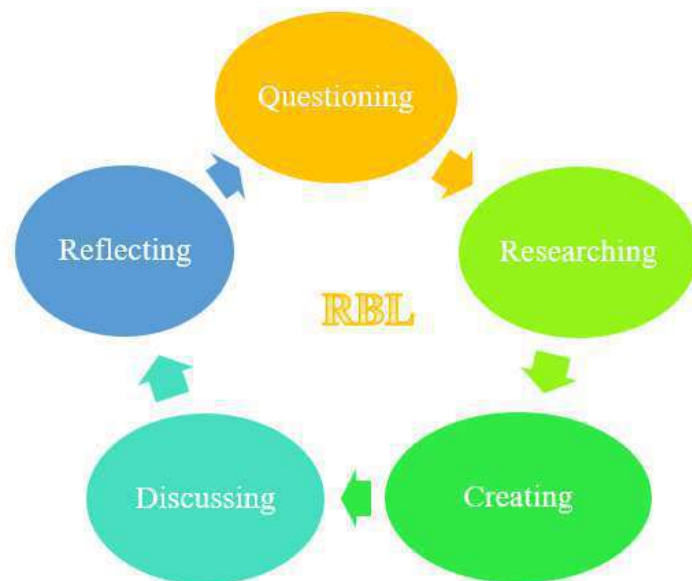
Fig 5.15 Research Based Learning

The students are asked to identify problems from domains such as Internet of Things, Blockchain, Artificial Intelligence. Students are insisted to publish their

work in reputed journals and file the patents. The best projects are also taken to the next stage for funding options by various government agencies. The students are taught the method of writing journal paper in a prescribed format. The related projects are kept for display in the science exhibition and several school students are invited to participate in the event. Student contribution count to the reputed journal publication, paper presentation and IEEE conferences has been eventually increased every year. Intensive skills are required in programming and handling design software tools like JIRA,VMWARE.

Health Analyser and Prognostic System using SVM Algorithm and IoT

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Abstract

The main idea of our model of work includes sensors for calculating parameters such as body temperature, heart rate, oxygen level for paralyzed and coma affected patients by using respective sensors. An Arduino microcontroller system is used to study patient inputs such as Temperature, heartbeat and oxygen level sensors. The sensed data of patient's health condition is transferred to the cloud storage via Node MCU then it is processed by Machine Learning (SVM algorithm) to predict the condition of patients. The tracked values are compared with the doctor prescribed level to check whether the patient health condition is normal/abnormal. Threshold range based monitoring will be a immediate response which will intimate the caretaker on time through mail.It is therefore crucial for research and evaluation of patient health status.By integrating notification system, this method can be tailored to more versatile medical applications, making it useful in hospitals as a very effective and dedicated tool for patientcare.

Keywords: Arduino, microcontroller, data, health, SVM, ThingSpeak

1. Introduction

For health monitoring systems, numerous IoT systems have been built in recent days. IoT has been widely used for linking advanced medical services and providing people with acute and reliablehealthcare services. Remote health care has become a part of our life with the rising increase of medically disabled people.Wehavenotedthe increasing interest in wearable sensors in recent years and these tools are available on the market for cheaper prices for personal healthcare and behaviourmonitoring to track the patient's health on an ongoing basis.IoT also has a significant effect

Fig 5.16 Paper published in Journal by CSE Students

5.7 Faculty as participants in Faculty development/training activities/STTPs (15)

Total Marks 15.00

Institute Marks : 15.00

Name of the faculty	Max 5 Per Faculty		
	2021-22(CAYm1)	2020-21(CAYm2)	2019-20(CAYm3)
Dr.J.Janet	3.00	3.00	5.00
Dr. J.P. Ananth	3.00	3.00	5.00
Dr. K. Sasi Kala Rani	5.00	5.00	5.00
Dr.M.Sujaritha	5.00	5.00	5.00
Dr. S. Balakrishnan	0.00	0.00	5.00
Dr. Ilango Krishnamurthi	0.00	0.00	5.00
Dr. D. Surendran	0.00	0.00	5.00
Dr. V. Vijeya Kaveri	5.00	5.00	0.00
Dr. D.Prabha	5.00	5.00	5.00
Dr.P.Mohan Kumar	5.00	0.00	0.00
Dr. T. Latha Maheswari	5.00	5.00	5.00
Dr. S. Oswalt Manoj	5.00	5.00	0.00
Dr.K.Senathipathi	5.00	5.00	5.00
Dr. A. Pushpalatha	5.00	5.00	5.00
Dr.A.Sajeev Ram	5.00	5.00	0.00
Dr.C.S.Shylaja	5.00	5.00	0.00
Dr. K. Rama Abirami	0.00	0.00	5.00
Dr. H. Azath	0.00	0.00	5.00
Dr. N. Kousika	5.00	5.00	3.00
Dr. M. Rohini	5.00	5.00	3.00
Dr.P.D.Mahendran	5.00	0.00	0.00
Dr.A.Arun Kumar	5.00	5.00	5.00
Dr. M. Kavitha	5.00	5.00	5.00

Ms. B. Sophia	5.00	5.00	5.00
Ms. V.R. Azhaguramyaa	5.00	5.00	3.00
Ms.S.Shunmuga Priya	5.00	3.00	3.00
Ms.N.Pooranam	5.00	5.00	5.00
Ms. A. Priya	5.00	5.00	3.00
Ms. K. M. Majidha Fathima	5.00	5.00	5.00
Ms.S.Biruntha	5.00	5.00	3.00
Mr.J.Daniel Francis Selvaraj	3.00	3.00	3.00
Ms.G.Bhuvaneshwari	5.00	5.00	3.00
Ms. R. Gowthamani	5.00	5.00	3.00
Mr.S.Palani	3.00	3.00	0.00
Ms.A.Adlin	5.00	3.00	0.00
Ms.A.Banu	5.00	5.00	0.00
Ms. G. Renugadevi	5.00	5.00	0.00
Ms.Rama Ranjini	5.00	5.00	0.00
Mr.R.Yasir Abdullah	5.00	0.00	0.00
Ms.M.Kirubha	3.00	0.00	0.00
Ms. A. Glory Santha Vinothini	3.00	0.00	0.00
Ms.S.Mohana Gowri	5.00	5.00	5.00
Mr.K.R.Senthil Murugan	5.00	3.00	5.00
Ms.J.Boopala	5.00	5.00	3.00
Dr.V.Arulkumar	5.00	5.00	5.00
Ms.S.Nagajothi	5.00	5.00	3.00
Mr.M.Sivakumar	5.00	5.00	0.00

Mr.N.Karthikeyan	5.00	3.00	0.00
Mr.D.Mansoor Hussain	5.00	5.00	3.00
Ms.M.Anandapriya	3.00	3.00	3.00
Ms.V.Priyadharsini	5.00	5.00	3.00
Mr.M.Manikandan	0.00	5.00	5.00
Ms.S.Dhivya	0.00	5.00	5.00
Mr. V. Muneeswaran	0.00	0.00	3.00
Ms. K. Devipriya	0.00	0.00	3.00
Mr. R. Balaji	0.00	0.00	5.00
Ms. P. Anitha	0.00	0.00	5.00
Ms. M. Nithya	0.00	0.00	5.00
Ms. D. Srivaishnavi	0.00	0.00	5.00
Ms. J. Fenila Naomi	0.00	0.00	3.00
Ms. S. Roobini	0.00	0.00	3.00
Ms. R.M. Sangeetha	0.00	0.00	5.00
Ms. J. Vadivambigai	0.00	0.00	5.00
Ms. G. Ignisha Rajathi	0.00	0.00	5.00
Ms. J. Angeline Rubella	0.00	0.00	3.00
Ms. M. Suganya	0.00	0.00	5.00
Ms. K. Saranya	0.00	0.00	3.00
Sum	216.00	197.00	215.00
RF = Number of Faculty required to comply with 20:1 Student Faculty Ratioas per 5.1	32.00	32.00	33.00
Assessment [3*(Sum / 0.5RF)]	40.50	36.94	39.09

Average assessment over 3 years: 15

5.8 Research and Development (75)

Total Marks 75.00

5.8.1 Academic Research (20)

Institute Marks : 20.00

Table 5.23 Publications in refereed/SCI Journals, citations, Books/Book Chapters

Academic Year	Journal	Book Chapters/Book	Patent	Conference Proceedings
2022 - 2023	50	6	17	48
2021 - 2022	43	6	16	13
2020 - 2021	43	13	9	8

Academic Year	Journal		Patent	
	SCI/SCIE/WoS	Scopus	Granted	Published
2022 - 2023	18	32	7	10
2021 - 2022	20	23	2	14
2020 - 2021	3	40	1	8

Table 5.24 Department Citations, h-index and i10 index

Particulars	All	Since 2018
Citations	425	421
h-index	11	11
i10-index	11	11

Department Citation
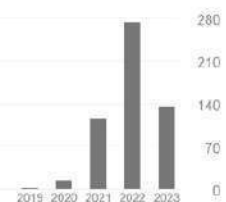
Journal Publications

Table 5.25 Journal Publications during the academic year 2022-2023

S.No.	SCI/WOS/ Scopus/ Others	Name of the Author(s)	Title of the Paper	Name of the Journal	Vol. / Issue / Year	PP.	Impact Factor
1.	SCIE & Scopus	Dr. J. P. Ananth Mr.L. Jimson.	Video Summarization using Deep Convolution Neural Networks and Mutual Probability - based K-Nearest Neighbour	Journal of Experimental & Theoretical Artifical Intelligence	2022	Online	8.665
2.	Scopus & SCIE & WoS	Dr. P. Mohan Kumar	ShChain_3D-ResNet: Sharding Blockchain with 3D-Residual Network (3D-ResNet) Deep Learning Model for Classifying DDoS Attack in Software Defined Network	Symmetry	vol. 14, issue 6, 2022	1254 - 1272	8.139
3.	Scopus & SCIE & WoS	Dr. P. Mohan Kumar	Decentralized and Privacy Sensitive Data De-Duplication Framework for Convenient Big Data Management in Cloud Backup Systems	Symmetry	Vol 14, Issue 7,2022	1 - 20	4.085
4.	Scopus & SCIE	Dr. J. P. Ananth Mr.R.Vinoth	Deep Recurrent Encoder Network and Spark Model for Angiographic Disease Risk Classification	International Journal of Pattern Recognition and Artificial Intelligence	Vol 36 , Issue 4, 2022	2250010 - 2250015	2.94

No.	Index	Author	Title	Journal	Volume/Issue	Page	Impact
5.	Scopus & SCIE	Thiruselvan D Dr. J. P. Ananth	Underwater Target Tracking in Radar Images Using Exponential Competitive Swarm-based Deep Neuro Fuzzy Network	World Scientific - International Journal on Artificial Intelligence Tools	Vol 31, Issue 8, 2022	Article No. 2250039	2.94
6.	Scopus & SCI	Dr. J. P. Ananth Mr.Emil Selvan	FACVO-DNFN: Deep learning-based feature fusion and Distributed Denial of Service attack detection in cloud computing	Elsevier - Knowledge Based Systems	Vol 261 , Issue 1, 2022	Article No. 110132	2.432
7.	Scopus & SCIE & WoS	Dr. S. Oswalt Manoj	A New Deep Learning Approach Enhanced with Ensemble Learning for Accurate Intrusion Detection in IoT Networks	Ad Hoc & Sensor Wireless Networks	Vol 54, Issue 1, 2022	1-20	2.34
8.	SCI & Scopus	Dr.J.P.Ananth	Image noise removal using optimal deep learning-based noisy pixel identification and image enhancement	The Imaging Science Journal	Vol 69, Issue 1-4,2023	109-206	1.737
9.	Scopus & SCIE	D.Thiruselvan J.P.Ananth	Remora Jaya Optimization-Enabled Deep Quantum Neural Network for Underwater Target Tracking Using Radar Images	Cybernetics and Systems	2023	Online	1.37
10.	Scopus & SCIE & WoS	Daniel Francis Selvaraj Jayapalan, John Patrick Ananth	Root Disease classification with hybrid optimization models in IOT	Expert System with Applications	Vol 226	Online	0.871
11.	Scopus & SCIE & WoS	Jothi K R, Mehul Jain, Ankit Jain, Geraldine Bessie Amali D and Dr. S. Oswalt Manoj	A New Deep Learning Approach Enhanced with Ensemble Learning for Accurate Intrusion Detection in IoT Networks	Ad Hoc & Sensor Wireless Networks	2022	Online	0.871
12.	WOS & Scopus & SCI - E	Yasir Abdullah R	An Enhanced Anomaly Forecasting in Distributed Wireless Sensor Network Using Fuzzy Model	International Journal of Fuzzy Systems	Vol 24	3327–3347	0.778
13.	WOS & Scopus & SCI - E	PD Mahendhiran	CLSA-CapsNet: Dependency based concept level sentiment analysis for text	Journal of Intelligent & Fuzzy Systems	Vol 43 (1)	107-123	0.4
14.	SCI & Scopus	Dr.A.Sajeev Ram	Conditional Random Field-recurrent neural network segmentation with optimized deep learning for brain tumor classification using magnetic resonance imaging	The Imaging Science Journal	Online	Online	0.4
15.	Scopus	S Deepa J Janet S Sumathi J P Ananth	Hybrid Optimization Algorithm Enabled Deep Learning Approach Brain Tumor Segmentation and Classification Using MRI	Journal of Digital Imaging	2023	Online	4.903
16.	WoS & Scopus	P. Mohan Kumar	An Ophthalmic Evaluation of Central Serous Chorioretinopathy	Computer Systems Science & Engineering	Vol 44 , Issue 1, 2022	613-628	4.397

17.	Scopus	Dr.John Patrick Ananth	IoT enabled lung cancer detection and routing algorithm using CBSOA-based ShCNN	International Journal of Adaptive Control and Signal Processing	vol 37, Issue 1, 2022	224 - 243	3.369
18.	Scopus	Dr. P. Mohan Kumar	Fusion-based advanced encryption algorithm for enhancing the security of Big Data in Cloud	Concurrent Engineering: Research and Applications	Vol 30, Issue 2, 2022	171-180	2.5
19.	Scopus	M.P.Ramkumar Dr. J P Ananth	Deep maxout network for lung cancer detection using optimization algorithm in smart Internet of Things	Wiley - Concurrency Computation Practice and Experiance	Vol 34, Issue 25, 2022	e7264	2.175
20.	Scopus	John Patrick Ananth	Image tampering detection in image forensics using earthworm-rider optimization	Wiley - Concurrency Computation Practice and Experiance	vol 34, Issue 26, 2022	e7293	2.175
21.	Scopus	Dr. S. Oswalt Manoj	A novel fuzzy based deep neural network for rain fall prediction using cloud images	Concurrency and Computation: Practice and Experience	Vol 35, Issue 1, 2022	e7412	2.175
22.	Scopus	John Patrick Ananth	Internet of Things-based root disease classification in alfalfa plants using hybrid optimization-enabled deep convolutional neural network	Concurrency Computation Practice and Experience	vol 35 , Issue 3, 2023	e7504	2.175
23.	Scopus	John Patrick Ananth	Whale social optimization driven deep recurrent neural network for loan eligibility prediction	Concurrency Computation Practice and Experience	vol 35 , Issue 3, 2023	e7510	2.175
24.	WoS & Scopus	Dr. J. P. Ananth Mr.L. Jimson.	Local Optimal-Oriented Pattern and Exponential Weighed-Jaya Optimization-Based Deep Convolutional Networks for Video Summarization	International Journal of Swarm Intelligence Research (IJSIR)	Vol 13, Issue 3, 2022	1-18	1.86
25.	scopus	Dr. J. P. Ananth	Network Intrusion Detection and Mitigation Using Hybrid Optimization Integrated Deep Q Network	Taylor and Francis - Cybernetics and Systems	2022	Online	1.859
26.	Scopus	Oswalt Manoj Stanislaus, Sajeev Ram	A novel fuzzy based deep neural network for rain fall prediction using cloud images	Concurrency and Computation: Practice and Experience	Vol 35, Issue 1, 2022	Online	1.83

27.	Scopus	AnushaBamini.A.M, Chitra.R, Vijayalakshmi Senniappan, OswaltManoj.S, Rohini.M	Logic Functions Analysis Based on Quantum Cellular Automata	International Journal of Mechanical Engineering	Vol 7, Issue 4, 2022	241-253	1.53
28.	Scopus	Dr.M.Sujaritha	An Intrusion Detection Using Machine Learning Algorithm Multi-Layer Perceptron (MIP): A Classification Enhancement in Wireless Sensor Network (WSN)	International Journal on Recent and Innovation Trends in Computing and Communication	Vol 10	139 - 145	1.376
29.	Scopus	Dr.D.Rasi	FHGSO :Flower Heavy gas soluibility optimizatio integrated deep convolutions	Applied Intelligence	53	7278-7297	1.172
30.	Scopus	Dr. V. Vijeya Kaveri M. Dhilsath Fathima Dr.S. Justin Samuel	Majority voting ensambled feature selection and customized deep neural network for the enhanced clinical decision support system	International Journal of Computers and Applications	Vol 44 , Issue 10,2022	991-1001	1.06
31.	Scopus	Dr.Reshma V.K	The Detection and Identification of Pest-FAW Infestation in Maize Crops Using Iot-Based Deep-Learning Algorithms	International Journal of Electrical and Electronics Engineering	Vol 69 , Issue 1-4, 2023	109-206	0.871
32.	Scopus	K Ramesh	An Algorithm for Detection and identification of infestation	International Journal of Intelligent Systems and Applications in Engineering (IJISAE)	Volume 70, Issue 9, 2022	240 - 251	0.742
33.	Scopus	K Ramesh	An Energy Efficient Resource Monitor and Alert Model Using Cloud Computing	International Journal of Intelligent Systems and Applications in Engineering	Volume 10, Issue 2,2022	105 - 110	0.742
34.	Scopus	Dr. G. Sathish Kumar	Privacy Preserving Data Mining - Past and Present	International Journal of Business Intelligence and Data Mining	Vol 13, Issue 4 , 2022	1199-1209	0.654
35.	Scopus	Dr. G Sathish Kumar	Hybrid Firefly Meta Optimization for Bio Medical Image Processing Using Deep Learning	Journal of Pharmaceutical Negative Results	Vol 13, Issue 4, 2022	1199-1209	0.654
36.	Scopus	Dr.G.Vijaya	A Review Analysis of attack detection using various methodologies in Network Security	Journal of Pharmaceutical Negative Results	Vol 13, Issue 4 , 2022	1509-1614	0.654

37.	Scopus	K Ramesh	Certain Investigation on Improved Cluster Protocol with Trust security for Wireless Sensor Networks	International Journal of Electrical and Electronics Research	Vol 10, Issue 4,2022	1043 - 1049	0.167
38.	Scopus	Dr.D.Rasi	YOLO Based Deep Learning Model for Segmenting the color Images	International Journal of Electrical and Electronics Research	Vol 11(1)	Online	0.167
39.	Scopus	Dr.G.Vijaya	Machine Learning based analysis and prediction of COVID - 19 cases based on large - scale assessment	Positif Journal	Vol 22, Issue 10 , 2022	67-74	NA
40.	WoS & Scopus	Dr.G.Vijaya	A Novel Method for exploration and prediction of Lung Cancer using SVM	International Journal of Biology, Pharmacy and Allied Sciences	Vol. 12(7)	Online	0.88
41.	WoS & Scopus	Dr.G.Vijaya	Crime forecasting using Machine Learning Approaches	AIP Conference Proceedings	Vol 2683, Issue 5	Online	0.4

Table 5.26 Journal Publications during the academic year 2021-2022

10.1155/2022/2500377

S.No.	SCI/WOS/ Scopus/ Others	Name of the Author(s)	Title of the Paper	Name of the Journal	Vol. / Issue / Year	PP.	Impact Factor
1.	SCI	Dr.J.P.Ananth A.Francis Alexander Raghu	Robust Object Detection and Localization Using Semantic Segmentation Network	The Computer Journal	Vol 64, Issue 10, 2021	1531–1548	4.83
2.	SCI	Diana Jingle Shylu Sam Mano Paul J P Ananth Daniel Selvaraj	Design of Grover's Algorithm over 2, 3 and 4- Qubit Systems in Quantum Programming Studio	Intl Journal Of Electronics And Telecommunications,	Vol 68, Issue 1,2022	77 - 82	4.83
3.	SCI	Mr. D. Mansoor Hussain	Industrial Centric Node Localization and Pollution Prediction Using Hybrid Swarm Techniques	Computer Systems Science & Engineering, Tech Science Press	Vol 42, Issue 2, 2022	545 - 560	4.83
4.	SCI	Mr. D. Mansoor Hussain	Ensemble Nonlinear Support Vector Machine Approach for Predicting Chronic Kidney Diseases	Computer Systems Science & Engineering, Tech Science Press	Vol 42, Issue 3, 2022	1273-1287	3.165
5.	SCI	Dr.P. Mohan Kumar	Implementing An Efficient Data Deduplication Framework For Cloud Storage	Indian Journal of Computer Science and Engineering	Vol 13 , Issue 1 2022	136 - 144	1.762
6.	SCI	Ms.M.Kavitha	A Sensitive Wavebands Identification System for Smart Farming	Computer Systems Science and Engineering	Vol 43, Issue 1,2022	245 - 257	1.762

7.	SCI	R.Vinoth Dr. J.P. Ananth	Deep Recurrent Encoder Network and Spark Model for Angiographic Disease Risk Classification	International Journal of Pattern Recognition and Artificial Intelligence	Vol 36, Issue 4, 2022	2250010 -2250015	1.436
8.	SCI	H.Azath M.Devi Mani J.P.Ananth	Identification of IoT Device From Network Traffic Using Artificial Intelligence Based Capsule Networks	Wireless Personal Communication	Vol 123, 2022	2227 - 2243	1.261
9.	SCI & Scopus	Mr.S.Sureshkumar, Dr.J.Janet, Ms.D.Srivaishnavi Ms.S.Briuntha,	An Efficient Surveillance system to detect and prevent elephant intrusion in forest borders	Journal of Computational and Theoretical Nanoscience	Vol 17, Issue 4, 2022	1725-172 7	1.2
10.	SCI	Oswalt Manoj S, J.P.Ananth	MapReduce and Optimized Deep Network for Rainfall Prediction in Agriculture	The Computer Journal	23(6) - 2020	900 - 912	0.851
11.	SCI	Susan Augustine, J.P.Ananth	Taylor Kernel Fuzzy C Means Clustering algorithm for trust and energy – aware cluster head selection in wireless sensor networks	Wireless Networks	26(1) - 2020	5113 - 5132	0.29
12.	SCI	Susan Augustine, J.P.Ananth	A Modified Rider Optimization Algorithm for Multihop routing in WSN	International Journal of Numerical Modelling : Electronic Devices and Fields	33 (6) - 2020	E2764	0.173
13.	WOS	A. Arunkumar	Machine Learning Based Approach For Corona Virus Disease Recovery Prediction	International Journal of Aquatic Science	Vol 12, Issue 3 , 2021	1188 - 1199	7.86
14.	WOS	Ms.N.Kousika	Differential Privacy Preservation Mechanism Using Bernstein Polynomial Function For Heart Disease Dataset	International Journal of Aquatic Science	Vol 12, Issue 3 , 2021	1662 - 1671	7.86
15.	WOS	Dr.V.Vijeya Kaveri	Big Data Learning Through Text Analytics Labeled Compounds Of The Iot Bio Environment	International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS)	Vol 10, Issue 11,2021	1339-135 1	0.667
16.	WoS	K.Senathipathi	Animal Detection using Image Processing for Agri	International Journal of Disaster Recovery and Business Continiuty	Vol 11, No.1, 2020	3381-338 7	0.3
17.	WoS	Dr.S.Venkata Lakshmi, Dr. J. Janet, Dr Mahesh C, Mr. K. Satyamoorthy,	Evolutionary Deep Learning Based Liver Tumour Segmentation Optimized With Pso In Ct Scans	International Journal of Grid and Distributed Computing	Vol. 13, No. 2 (2020)	2398-240 5	0.174

18.	WOS & Scopus	Yasir Abdullah. R	Improved Handover Authentication in Fifth-Generation Communication Networks Using Fuzzy Evolutionary Optimisation with Nanocore Elements in Mobile Healthcare Applications	Journal of Healthcare Engineering		3.822	
19.	WOS & Scopus	Yasir Abdullah. R	Application of Internet of Things on the Healthcare Field Using Convolutional Neural Network Processing	Journal of Healthcare Engineering	10.1155/2 022 /1892123. eCollectio n 2022		3.822
20.	WOS & Scopus	Yasir Abdullah. R	Blockchain-Based Deep Learning to Process IoT Data Acquisition in Cognitive Data	Journal of Healthcare Engineering	10.1155/2 022 /5038851. eCollectio n 2022		3.822
21.	Scopus	Rohini M Dr Surendran D	Toward Alzheimer's disease classification through machine learning	Soft Computing	Vol.25, Issue 4 (2021)	2589-259 7	3.732
22.	Scopus	Kousika N, K. Premalatha	An improved privacy-preserving data mining technique using singular value decomposition with three-dimensional rotation data perturbation	Journal of Supercomputing	77(6)	10003-10 011	2.557
23.	Scopus	Dr.P. Mohan Kumar	RANC-CROP Recommendation Attributed to Soil Nutrients and Stock Analysis Using Machine Learning	IETE Journal of Research	2022	Online	1.877
24.	Scopus	Rohini.M	Multiclassifier learning for the early prediction of dementia disease progression from MCI	International Journal of Intelligent Engineering Informatics	Vol 9, Issue 5 , 2022	455-469	1.46
25.	Scopus	K.Rama Abirami, Sharon Jane D, Swathy R , Sornambikai R	Metastatic Tissue Detection in Lymphnodes Using Convolutional Neural Networks	International Journal of Advanced Science and Technology	Vol 29, Issue 9s, 2020	5483 - 5488	0.88
26.	Scopus	Majidha Fathima K M, R.Harishmitha, V.Madhu Priya, K.Nisha	Health Analyzer and Prognostic System using SVM algorithm and IOT	International Journal of Advanced Science and Technology	Vol. 29, No. 8s, 2020	3740 - 3745	0.88

27.	Scopus	V.R.Azhaguramyaa, Hemanshu P Thakker, Murali Manohar K S, Mithun K	Smart Product Recommender System using Machine Learning	International Journal of Advanced Science and Technology	Vol 29, Issue 9s, 2020	5561-5566	0.88
28.	Scopus	Sudharson D, Dr.D.Prabha	Improved EM algorithm in software reliability growth models	International Journal of Powertrains, Inderscience publishers	Vol. 9, No. 3, 2020	186 -199	0.85
29.	Scopus	A.Priya, Dr J Janet, Sivakumar S, Ramkarthik S, Srinivasan S	A Machine Learning Approach for Early Prediction of Sepsis from Clinical Data	Test Engineering and Management	Vol 83, 2020	10190 - 10194	0.416
30.	Scopus	Dr. K. Sasikala Rani, B .Priyanka , B Supriya , P Valarmathi	A supervised deep learningFramework for blood content prediction using blood images	Test Engineering and Management	Vol 83, 2020	24811 - 24816	0.416
31.	Scopus	Dr. K. Sasikala Rani, Dhyakesh S, Aasikaa CMR, Dr.M.Sujaritha, Dr.T.LathaMaheswari	Mobile based application to aid the visually challenged to learn	Test Engineering and Management	Vol 83, 2020	9711-9715	0.416
32.	Scopus	M. Rohini, Dr. D. Surendran Dr. S. Oswalt Manoj	Prognosis of Alzheimers Disease Progression from Mild Cognitive Impairment Using Apolipoprotein-E Genotype	Journal of Electrical Engineering and Technology	Vol 17	1445-1457	0.314
33.	Scopus	Dr. N. Kumaresh, Dr. S. Oswalt Manoj, Dr. S. ThangaRamya, Dr. V. GladisPushparathi Dr. D. Praveen	Memory and Time aware Automated Job Ontology Construction with reduced Ontology Size Based Semantic Similarity	Journal of Xi'an Shiyou University, Natural Science Edition	, Volume 17, Issue 10	664-668	0.26
34.	Scopus	N.Pooranam,Nithya, M Praveen Kumar, D Nayak, Rashmi P Rakesh, G.	A Study on Optimization Algorithm (OA) in Machine Learning and Hierarchical Information	Journal of Computational and Theoretical Nanoscience	Vol 17, No. 4, 2020	1733 -1736	0.173

35.	Scopus	M Nithya,N Pooranam, R Deepalakshmi, M Aruna Rani, S Anandha Swarna	Sensor Based Accident Prevention System	Journal of Computational and Theoretical Nanoscience	Vol 17, No. 4, 2020	1720-1724	0.173
36.	Scopus	Ms. D. Srivaishnavi, Dr.C.S. Anita Dr. K.V.S.S.S.S. Sairam Dr.Nachiyappan. S Dr. Nilamadhab Mishra	Iot Based Function Point Analysis Of Detecting Vanishing Point In Unstructured Environments Using Optical Dominant Method	European Journal of Molecular & Clinical Medicine	Volume 7 , Issue 7	187-194	0.152
37.	Scopus	Dr.V.Vijeya Kaveri, V.Meenakshi, Deepan.T, Dharnish.C.M , Haarish.S.L	Image Generation for Real Time Application Using DCGAN (Deep Convolutional Generative Adversarial Neural Network)	Turkish Journal of Computer and Mathematics Education	Vol.12 No. 11 (2021)	617 - 621	0.148
38.	Scopus	IgnishaRajathi G, Vedhapriyavandhana R, Pooranam N Oswalt Manoj S	Holistic Education by breaking the binaries beyond the boundaries	Turkish Journal of Computer and Mathematics Education	Volume 12, Issue 1s	709-717	0.148
39.	Scopus	A. Suresh, OswaltManoj.S, D PrabuRagavendiran	An Adaptive Non-Local Mean with Stationary Wavelet Transform (A-Nl-Swt) Filtering Method for Bio Metric Image Denoising	Anals of Romanian Society for Cell Biology	Volume 25, Issue 6	7795-7802	0.106
40.	Scopus	Dr.T.Latha Maheswari	Synthesis And Applications Of Nano Duck Swarm Optimization Algorithm For Breast Cancer Segmentation In Earlier Stage	Annals of the Romanian Society for Cell Biology	Vol 25 , Issue 6, 2021	19332-19342	0.101
41.	Scopus	Dr. V. P. GladisPushparathi, Dr. S. ThangaRamya, Dr. D. Praveena, Dr. A. Sumaiya Begum, Dr. K. Illamathi, Oswalt Manoj S	Roadmap to Biomedical Image Segmentation and Processing – Background and Approaches	Design Engineering	Vol , Issue 6, 2021	2582-8584	0.1
42.	Scopus	K.Rama Abirami G Ram Sundar	Integrating Block Chain for Data Sharing using Tree Based Data Processing in Vanet Application	Test Engineering	83 / May – June/ 2020	13865 - 13870	NA

| 43. | Scopus | Nagajothi S
Senthil Murugan K R
Nithin Bharathi K
Kailash | Audio Navigation System for Vision Impaired People | Test Engineering | 83 / May – June/ 2020 | 17854 - 17859 | NA |

Table 5.27 Journal Publications during the academic year 2020-2021

S.No.	SCI/WOS/ Scopus/ Others	Name of the Author(s)	Title of the Paper	Name of the Journal	Vol. / Issue / Year	PP.	Impact Factor
1.	SCI	N. Kousika & K. Premalatha	An improved privacy-preserving data mining technique using singular value decomposition with three-dimensional rotation data perturbation	The Journal of Supercomputing	77 – 2021	10003 - 10011	3.732
2.	SCI	M. Rohini & D. Surendran	Toward Alzheimer's disease classification through machine learning	Soft Computing	25 - 2021	2589-2597	3.414
3.	SCI & Scopus	N. Karthikeyan, N. M. Saravanakumar, M. Sivakumar	Fast and efficient lossless encoder in image compression with low computation and low memory	IET Image Processing	15 – 2021	2494 – 2507	2.6
4.	Scopus	K Sasikala Rani, N Kabilan, M Mohankumar Kumar M Nithiesh	Fatigue Monitoring using Real – time facial expression based on Neural Technique	Journal of Physics	1916 – 2021	07-Jan	3.66
5.	Scopus	M Sujaritha, S Kabilan, M Manikandan S Nanda Kisore	Real – time face mask identification using Deep Learning	Journal of Physics	1916 – 2021	10-Jan	3.66
6.	Scopus	R Gowthamani, K Sasi Kala Rani, G Renugadevi, Kannah K Prithvi Prakash D Suriya	Secured Cloud Based Healthcare Framework with Blockchain	Journal of Physics	1916 – 2021	07-Jan	3.66
7.	Scopus	Pooranam N , Sushma Priya P N , Sruthi S , Sri Dhanya K	A Safety measuring tool to Maintain Social Distancing on COVID – 19 using Deep Learning Approach	Journal of Physics	1916 – 2021	08-Jan	3.66

8.	Scopus	Latha Maheshwari, J Janet, Jeevanandham S Kausic S, Manish M	Forest Fire Alerting System with GPS Co-ordinates Using IoT	Journal of Physics	1916 – 2021	10-Jan	3.66
9.	Scopus	T Latha Maheswari, S Anumitha, R. Ajeetha	Classification of Arrhythmia Conditions using Neural Networks	International Journal of Innovative Technology and Exploring Engineering	9(8) – 2020	421 - 424	2.5
10.	Scopus	Dr Sujaritha.M, Sibimanigandan.S, Sachin Mohammed Rafic, Sibi Athithya.C.A, Sujith.A	Secure Auditing and Deduplicating in Cloud Computing using MD5 Algorithm	Test Engineering	83 / May – June/ 2020	6880 -6884	NA
11.	Scopus	Mansoor Hussain Aakhil Karthikkeyan V ,Hariharan R , Bharath Kumar J	Wireless Water Level Informer Using IOT	International Journal of Advanced Science and Technology	29 (09) - 2020	5496 – 5501	NA
12.	Scopus	J.Boopala Agash CP, T.Akash, M.Abishake, S.Biruntha	Blockchain for controlling social network activities and authorization procedures	Test Engineering and Management	83 / May – June/ 2020	1912 - 1917	NA
13.	Scopus	Dr.T.Latha Maheswari S.Anumitha, R.Ajeetha	Classification of Arrhythmia Conditions using Neural Networks	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	9(8) – 2020	421 - 424	NA
14.	Scopus	Mansoor Hussain B Amutha A Christy Jeba Malar Karthick Nanmaran V Jeyakrishnan M. Karthikeyan	Enhanced development of communication between the network and the end user by eliminating the interference signals in MIMO channel	Transactions on Emerging Telecommunications Technologies	31(12) - 2020	4086 - 4092	NA
15.	Scopus	S. Biruntha Naga Viknesh M, Naveena K R, Kameshwaran S, Kaza Ananya, Jothipriya. G	IOT Based Smart Hands Talk	International Journal of Future Generation Communication and Networking	13(3) - 2020	3837 – 3846	NA

16.	Scopus	M. Kavitha, J.Fenila Naomi, E.M.Dinesh, B.Brahadeesh, M.Akhil	IoT Based Flood Vigilance System	Journal of Xi'an University of Architecture & Technology	12(9) – 2020	207 - 211	NA
17.	Scopus	D. Prabha, D.Sudharson	Improved EM algorithm in software reliability growth models	International Journal of Powertrains	9(3) – 2020	186 - 199	NA
18.	Scopus	D.Prabha, M.G. Dinesh	Diabetes Mellitus Prediction System Using Hybrid KPCA-GA-SVM Feature Selection Techniques	Journal of Physics	1767 – 2021	1 – 17	NA
19.	Scopus	D Prabha, R Siva Subramanian, J Aswini , B Maheswari , M Anita	Alleviating NB conditional independence using Multi-stage variable selection(MSVS): Banking customer dataset application	Journal of Physics	1767 – 2021	1 – 11	NA
20.	Scopus	P. Lavanya , P. Anusha V. Vijeya Kaveri	An Automated Security Approach of Image and Video Steganography	Advances in Power System and Energy Management - Lecture Notes in Electrical Engineering	310 – 2021	443 - 450	NA
21.	Scopus	Prabha Dhandayudam, Dinesh Morkonda Gunasekaran	Design of novel multi filter union feature selection framework for breast cancer dataset	Concurrent Engineering: Research and Applications	29(3) - 2021	06-Jan	NA
22.	Scopus	Latha Maheswari T, T Jimry Singh, M Balachandran, S Hari Varsan	Health Monitoring System Using IOT Sensors Network	Journal of Physics	1916 – 2021	06-Jan	NA
23.	Scopus	V. R. Azhaguramyaa K. Srinivasan	Location-Aware Security System for Smart Cities Using IoT	Advanced Machine Learning Technologies and Applications	1141 – 2020	559 - 569	NA
24.	Scopus	J.Janet, P.Kavitharani, S.Venkata Lakshmi,	Experimental analysis for moisture sensing system on silica sand using IoT approach	Materials Today: Proceedings	45 (2) – 2021	2416 – 2418	NA

25.	Scopus	D. Prabha R. Siva Subramanian	Optimizing Naive Bayes Probability Estimation in Customer Analysis Using Hybrid Variable Selection	Computer Networks and Inventive Communication Technologies	58 – 2021	595 – 612	NA
26.	Scopus	M. Manikandan, R. Subramanian, S. Nagajothi, S.Karthik Anand Paul	The Desiderata of Blockchain and IoT in Medical and Pharmaceutical Enterprises	Blockchain Applications in IoT Ecosystem	978 - 2021	119 - 128	NA
27.	Scopus	D. Mansoor Hussain D. Surendran	The efficient fast-response content-based image retrieval using spark and MapReduce model framework	Journal of Ambient Intelligence and Humanized Computing	12 – 2021	4049 - 4056	NA
28.	Scopus	D. Prabha, K. Sangeetha	Sentiment analysis of student feedback using multi-head attention fusion model of word and context embedding for LSTM	Journal of Ambient Intelligence and Humanized Computing	12 – 2021	4117 – 4126	NA
29.	Scopus	D. Prabha R. Siva Subramanian	Customer behavior analysis using Naïve Bayes with bagging homogenous feature selection approach	Journal of Ambient Intelligence and Humanized Computing	12 – 2021	5105 - 5116	NA
30.	Scopus	G Renugadevi , G Asha Priya , B Dhivyaa Sankari, R Gowthamani	Predict Heart Disease using hybrid machine learning model	Journal of Physics	1916 – 2021	44932	NA
31.	Scopus	K M Majidha Fathima, R Sharan Raj, K Rahul Prasad, S Guru Balan	MEMS Multi sensor Intelligent Damage Detection for Wind Turbines using IoT	Journal of Physics	1916 – 2021	44931	NA
32.	Scopus	V Vijeya Kaveri, V Meenakshi, K A Saran Karthik, S Shri Raam	Classification of malignant melanoma using Convolutional Neural Network	Journal of Physics	1916 – 2021	44934	NA

33.	Scopus	A Priya, M Shalini, T Suganti M Swetha	Assistant for the guest with visually impaired using Deep learning	Journal of Physics	1916 – 2021	44932	NA
34.	Scopus	M SivaKumar, N Saranprasath, N S Sridharan V Shanmuga Praveen	Comparative analysis of CNN and Viola – Jones for Face mask detection	Journal of Physics	1916 – 2021	44935	NA
35.	Scopus	B Sophia, L Jeril, M Kavin Harnesh V Lalith Kumar	A secure remote clinical sensor network approach for privacy enhancement	Journal of Physics	1916 – 2021	44932	NA
36.	Scopus	A Pushpalatha, P Dharani, R Dharini J Gowsalya	Skin Cancer Classification Detection using CNN and SVM	Journal of Physics	1916 – 2021	44932	NA
37.	Scopus	K Senathipathi, K Kiruthika, S Nishanthi , A Rahul	Electromyography in Machine Learning	Journal of Physics	1916 – 2021	44932	NA
38.	Scopus	Sujaritha, Akshara D, Ashfak Ahamed A , Chandhini shri V S	Privacy Preserving Verification Scheme for Cloud Platform using DML	Journal of Physics	1916 – 2021	44931	NA
39.	Scopus	N Kousika, G Vishali, S Sunandhana M Arvind Vijay	Machine Learning based Fraud Analysis and Detection System	Journal of Physics	1916 – 2021	44932	NA
40.	Scopus	Senthil Murugan K R , Kavinraj G , Mohanaprasanth K Ragul Krishnan B	Real – time social distance maintaining using Image Processing and Deep Learning	Journal of Physics	1916 – 2021	44933	NA

Sl. No.	Scopus	Authors	Title	Journal	Vol./Issue	Page	Status
41.	Scopus	N Pooranam, T A Dhivya, R Punitha S Preethi	An Automated Machine Learning Approach for Stroke Prediction	Journal of Physics	1916 – 2021	44932	NA
42.	Scopus	J.Janet, S.Sureshkumar, A. Riyaz Ahamed, R.Kaviyaraj	Indicator for the Water Level using IoT	Journal of Physics	1916 – 2021	06-Jan	NA
43.	Scopus	N Karthikeyan, P Padmanaban, A Prasanth D Ragunath	Machine learning based classification models for Heart Disease Prediction	Journal of Physics	1916 – 2021	10-Jan	NA

List of Books / Book Chapters

Table 5.28 Books/Book Chapters during the academic year 2022 – 2023

Sl. No.	Scopus / WoS/Book	Name of the Faculty	Title of the Book published	Title of the Chapter published	Month & Year of publication	ISBN of the Book/Conference Proceeding	DOI	Name of the Publisher
				Book Chapter				
1	Scopus	Dr. S. Oswalt Manoj Dr. J.P.Ananth Dr. M. Rohini N.Pooranam,	Elsevier(Artificial Intelligence for Renewable Energy Systems)	FWS-DL: forecasting wind speed based on deep learning algorithms	August 2022	ISBN 978-0-323-90396-7	https://doi.org/10.1016/B978-0-323-90396-7.00007-9	
2	Scopus	Dr. S. Oswalt Manoj	IET (Source: Evolving Predictive Analytics in Healthcare: New AI techniques for real-time interventions,2022)	Classification methodologies in healthcare	August 2022	ISBN: 9781839535116 e-ISBN: 9781839535123	http://dx.doi.org/10.1049/PBHE043E_ch4	

3	Scopus	Dr. S. Oswalt Manoj	IET (Source: Evolving Predictive Analytics in Healthcare: New AI techniques for real-time interventions,2022)	Introducing deep learning in medical domain	August 2022	ISBN-13: 978-1-83953-511-6	https://digital-library.theiet.org/content/books/he/pbhe043e	
4	Scopus	Dr.G.Vijaya	"Deep Learning-based Computer-Aided Diagnosis System", (ADLMHMS2022)	Application of Deep Learning Methods in Health Care and Medical Sciences	December 2022	eBook ISBN9781003303855	https://www.appleacademicpress.com/application-of-deep-learning-methods-in-healthcare-and-medical-science-/9781774911204	AAP & CRC Press, A Group of Taylor & Francis Publication
Book								
5	Book	Dr. P. Mohan Kumar	Machine Learning Principles and Applications	NA	August 2022	9786138909767	NA	Scholars Press
6	Book	Dr.V.K.RESHMA	Artificial Intelligence Based Energy Aware Routing Protocol AIEARP for Wireless Sensor Network	NA	October 2022	978-1-63278-940-2	NA	Shineeks Deeper Knowledge Publishers

Table 5.29 Books/Book Chapters during the academic year 2021-2022

Sl. No.	Scopus / WoS	Name of the Faculty	Title of the Book published	Title of the Chapter published	Month & Year of publication	ISBN of the Book/Conference Proceeding	DOI	Name of the Publisher
1	Scopus	M. Manikandan, R. Subramanian, S. Nagajothi, S. Karthik & Anand Paul	Blockchain Applications in IoT Ecosystem	The Desiderata of Blockchain and IoT in Medical and Pharmaceutical Enterprises	June 2021	978-3-030-65691-1	https://link.springer.com/chapter/10.1007/978-3-030-65691-1_8	Springer

2	Scopus	N.Poornam	Biomedical Engineering Tools for Management for Patients with COVID-19	Smart equipment to protect patients and people from COVID disease	June 2021	978-0-12-824473-9	https://www.sciencedirect.com/science/article/pii/B9780128244739000069?via%3Dihub	Elsevier
3	Scopus	K.Sasi Kala Rani N.Poornam	Nature-Inspired Algorithms Applications	Efficiency of Finding Best Solutions Through Ant Colony Optimization (ACO) Technique	November 2021	9781119681748	https://doi.org/10.1002/9781119681984.ch3	Wiley
4	WOS & Scopus	Dr.V.Vijeya Kaveri & V.Meenakshi	Smart Buildings Digitalization	Design and Implementation of Prototype for Smart Home Using Internet of Things and Cloud	February 2022	9781003240853	https://www.taylorfrancis.com/chapters/edit/10.1201/9781003240853-12/design-implementation-prototype-smart-home-using-internet-things-cloud-vijeya-kaveri-meenakshi	Taylor and Francis
5	WOS & Scopus	Dr.V.Vijeya Kaveri V.Meenakshi Anbarasi Jeba Selvi	Smart Buildings Digitalization	Grid-Interconnected Photovoltaic Power System with LCL Filter Feasible for Rooftop Terracing	February 2022	9781003240853	https://www.taylorfrancis.com/chapters/edit/10.1201/9781003240853-17/grid-interconnected-photovoltaic-power-system-lcl-filter-feasible-rooftop-terracing-meenakshi-vijeya-kaveri-anbarasi-jebaselvi	Taylor and Francis
6	Scopus	S. Oswalt Manoj J.P. Ananth Balan Dhanka Maharaja Kamatchi	Artificial Intelligence for Renewable Energy Systems	Deep Feature Selection for Wind Forecasting-II	February 2022	9781119761693	https://doi.org/10.1002/9781119761686.ch8	Wiley

Table 5.30 Books/Book Chapters during the academic year 2020-2021

Sl. No.	Scopus / WoS	Name of the Faculty	Title of the Book published	Title of the Chapter published	Month & Year of publication	ISBN of the Book/Conference Proceeding	DOI	Name of the Publisher
Book Chapter								

1	Wos & Scopus	Mr.Arulkumar V	Big Data Analytics for Sustainable Computing	Big data Analytics in healthcare industry. An Analysis of Healthcare applications in Machine learning with Big data Analytics	April 2020	ISBN: 1522597506	10.4018/978-1-5225-9750-6.ch010	IGI Global
2	Wos & Scopus	Dr.Illango Krishnamoorthy D. Prabha M.S. Karthika	Systems Simulation and Modelling for Cloud Computing and Big Data Applications	IoT-based smart mirror for health monitoring	April 2020	ISBN:978-0-12-819779-0I	https://www.sciencedirect.com/science/article/pii/B9780128197790000071	Elsevier
3	Scopus	N. Pooranam M. Diwakaran A. Archana S. Agalya A. Anindhitha E. GokulaPriya	Innovations in Electrical and Electronics Engineering	A Smart Machine for Fitness Care Scrutinizing Technique—A Review	March 2020	ISBN : 978-981-15-2255-0	https://link.springer.com/chapter/10.1007/978-981-15-2256-7_75	Springer
4	Scopus	Dr.M.Sujaritha S.Shamuga Priya	Privacy and Security Challenges in Location Aware Computing	Security Attacks on Internet of Things	January 2021	9781799877561	10.4018/978-1-7998-7756-1.ch007	IGI Global
5	Scopus	J. Fenila Naomi M.Kavitha V.Sathyamoorthy	Challenges and Opportunities for the Convergence of IoT, Big Data, and Cloud Computing	Machine and Deep Learning Techniques in IoT and Cloud	January 2021	9781799831112	10.4018/978-1-7998-3111-2	IGI Global
Book								
6	Book	S.Suresh Kumar Dr.J.Janet APS. Anandaraj	Introduction to Mobile Computing	NA	August 2020	1649831986	NA	Notion Press

7	Book	Dr.G.Ignishia Rajathi S.Nagajothi Dr.P.Balamuru gan Dr.R.Johny Elton	Conceptualizati on of Computer Networks	NA	August 2020	ISBN No. 978-81-942938-5-9	NA	Centivent s Institute of Inovation Research
8	Book	Dr.M.Sujaritha Dr.J.Janet Ms.N.Kousika	Theory of Computation	NA	March 2020	ISBN No. 978-81-942267-5-8	NA	Sri Krishna Hitech Publishin g Company Pvt Ltd.,
9	Book	Dr.G.Ignishia Rajathi S.Nagajothi Dr.R.Johny Elton	Introduction to Python Programming	NA	April 2020	ISBN No. 978-93-89515-26-8	NA	Bonfring

List of Conference Publications

Table 5.31 Conference Publications during the academic year 2022 – 2023

S.No	Name of the Faculty	Title of the Paper
1.	Dr. Vijeya Kaveri V, Hari Prasath P, Kamalika M M, Devadharsika A Arthik Sankar S	Machine Learning-Based Hybrid Movie Recommendation System
2.	Dr.G.Vijaya, Balachandiran P, Inbavanan R, Harish U, Amrutha Varshini P	Real time secure clickbait and biometric ATM user authentication and multiple bank transaction system

Table 5.32 Conference Publications during the academic year 2021 – 2022

S.No	Scopus / WoS	Name of the Faculty	Title of the Paper	Title of the Conference Proceedings	Month & Year of publication	DOI
1	Scopus	Dr.K.Senathipathi Gokulavasan S Gokul G Hari Priya M J	SIGPID For Machine Learning based Android Malware Detection	International Conference on Trends in Electronics and Informatics (ICEI)	June 2021	https://doi.org/10.1109 /TII.2017.2789219

2	Scopus	Gowthamani K.Sasi kala Rani	Efficient detection and prediction of flood severity using machine learning algorithm	National Conference on Recent Advancements in Biomedical Engineering	June 2021	https://doi.org/10.1016/j.matpr.2021.04.571
3	Scopus	S. Mohana Gowri G Sharang Ramana M Sree Ranjani T Tharani	Detection of Telephony Spam and Scams using Recurrent Neural Network (RNN) Algorithm	International Conference on Advanced Computing and Communication Systems (ICACCS)	June 2021	https://doi.org/10.1109/ICACCS51430.2021.9441982
4	Scopus	V.R. Azhaguramyaa J. Janet V. Tharuneshwar S. SriRam T. Siva Kumar	An Efficient Approach Towards Surrogate Node Selection For Container Migration In Fog Computing	International Conference on Advanced Computing and Communication Systems (ICACCS)	June 2021	https://doi.org/10.1109/ICACCS51430.2021.9442046
5	Scopus	M. Kavitha M Suba Ranjani Ra Theepavishal A Vishal	Agro Chain - The Life of Wealth in Agriculture	International Conference on Advanced Computing and Communication Systems (ICACCS)	June 2021	https://doi.org/10.1109/ICACCS51430.2021.9442005
6	Scopus	J.Fenila Naomi V Shivaani V Sri Devi Abhirami T Thiruvarasu	Scrutinizing Students Performance using Machine learning	7th International Conference on Advanced Computing and Communication Systems	June 2021	https://doi.org/10.1109/ICACCS51430.2021.9442030
7	Scopus	B Sophi R Rajaraman S Mathan G Ravi Shankar	Semantic Approach To Live Data Mining Using Clustering Technique	7th International Conference on Advanced Computing and Communication Systems	June 2021	https://doi.org/10.1109/ICACCS51430.2021.9442049
8	Scopus	K.Sasikala Rani S. Vishali	Blockchain driven IoT based Delish2Go Decentralized Food Delivery Application	7th International Conference on Advanced Computing and Communication Systems	June 2021	https://doi.org/10.1109/ICAIS50930.2021.9395873
9	Scopus	M Rohini K.R Naveena G Jothipriya S Kameshwaran M Jagadeeswari	A Comparative Approach To Predict Corona Virus Using Machine Learning	7th International Conference on Advanced Computing and Communication Systems	June 2021	https://doi.org/10.1109/ICAIS50930.2021.9395827

| 10 | Scopus | K M Majidha Fathima N. Santhiyakumari | A Survey On Network Packet Inspection And ARP Poisoning Using Wireshark And Ettercap | 7th International Conference on Advanced Computing and Communication Systems | June 2021 | https://doi.org/10.1109/ICAIS50930.2021.9395852 |

Table 5.33 Conference Publications during the academic year 2020 - 2021

S.No.	Scopus / WoS	Name of the Faculty	Title of the proceedings of the conference	Name of the conference	Month & Year of publication	DOI
1	Scopus	K M Majidha Fathima; N. Santhiyakumari	2021 Third International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV)	ICICV 2021	March 2021	10.1109/ICICV50876.2021.9388639
2	Scopus	K.Sasikala Rani ; S. Vishali	International Conference on Artificial Intelligence and Smart Systems	ICAIS-2021	April 2021	DOI: 10.1109/ICAIS50930.2021.9395873
3	Scopus	M Rohini; K.R Naveena; G Jothipriya; S Kameshwaran; M Jagadeeswari	International Conference on Artificial Intelligence and Smart Systems	ICAIS-2021	April 2021	DOI: 10.1109/ICAIS50930.2021.9395827
4	Scopus	K M Majidha Fathima; N. Santhiyakumari	International Conference on Artificial Intelligence and Smart Systems	ICAIS-2021	April 2021	10.1109/icais50930.2021.9395852
5	Scopus	S. Mohana Gowri; Aysha Rafeeq; S Devipriya	5th International Conference on Intelligent Computing and Control Systems	ICICCS - 2021	May 2021	DOI: 10.1109/ICICCS51141.2021.9432242
6	Scopus	N. Kousika; Deepa. S; Deephika. C; Dhatchaiyine. B M; Amrutha. J	5th International Conference on Intelligent Computing and Control Systems	ICICCS - 2021	May 2021	DOI: 10.1109/ICICCS51141.2021.9432096

List of Patents Filed / Published / Granted during the assessment period

Table 5.34 Patents Filed/Published/Granted during the academic year 2022 - 2023

S.No.	Name of the Faculty	Title of the Patent	Status	Filled Date
1.	Dr.G.Vijaya	Intelligent Charging Station based on Internet of Things	Granted from Germany	May 2023
2.	Dr.G.Vijaya	IoT Based Agricultural Drone for Pesticide Spray	Granted from UK	March 2023

S.No.	Name of the Faculty	Title of the Patent	Status	
3.	Dr.J.Janet Dr.G.Vijaya Dr.P.Mohan Kumar	An IOT Based Drainage Pipes Cleaning Robot System	Granted from South African Utility Patent Grant	February 2023
4.	Ms.S.Biruntha Ms.S.Abirami Ms.G.Renugadevi	Design and Implementation of Survillance system based on IOT	Published	May 2023
5.	Ms.S.Biruntha	Design and Evaluation of an IOT systems machine learning security	Published	May 2023
6.	Dr.V.Vijeya Kaveri	IOT Integrated Printer	Granted	December 2022
7.	Dr.Reshma V.K	Portable Smart External Harddisk drive	Granted	December 2022
8.	Dr.J.P.Ananth	Smart IOT Based Women Safety Detecting Wrist Band	Granted	August 2022
9.	Mr.S.Palani	Humidity Detection Sensor System	Published	August 2022
10.	Dr. P. Mohan Kumar	Systems For Monitoring and Diagnostics of Cyber/Network Security Remotely Using Machine Learning Feature	Granted	June 2022
11.	Dr. J. Janet Dr. K. Sasikala Rani Ms. A. Priya	ShikaayantSamathan	Published	December 2022
12.	Dr. J. Janet Dr. K. Sasikala Rani Dr. M. Sujaritha	AI based tool to get information about 5 good institutes based on AISHE	Published	December 2022
13.	Mr.M.Vengateshwaran	Ai Based Automatic Sea/Lake Cleaning Robot	Published	November 2022
14.	Dr.D.Rasi	High Performance Computing (HPC) integration of IOT and Big Data Analytics Design and Experimental Evaluation of HPDA Framework for e-science at scale	Published	August 2022
15.	Dr. G. Sathish Kumar	IoT Based Smart Switches with Child Lock and Voice Control Facility	Published	July 2022
16.	Ms.G.Renugadevi	Deep Learning based Intelligent Weather Prediction for Future Agriculture	Published	July 2022
17.	Dr.G.Vijaya	Smart Handheld device	Under Review for Grant	

Table 5.35 Patents Filed/Published/Granted during the academic year 2021- 2022

S.No.	Name of the Faculty	Title of the Patent	Status	Filled Date

1.	Dr.J.Janet	An Efficient Air Conditioner with Self Sanitizing Techniques	Published and Granted from the Australian Patent Journal	October 2021
2.	Dr.J.Janet	An Intelligent Acoustic Serenity using Self Adjustable User Friendly iot Embedded Microphone	Published and Granted from the Australian Patent Journal	January 2021
3.	Ms.A.Priya	Machine Learning Based Automatic Electrodiagnosis of Carpal Tunnel Syndrome	Published	April 2022
4.	Ms.B.Kriuba	AI based Prediction and Analysis of Key Performance Indicators (KPI) For Students using Data Science	Published	March 2022
5.	Dr.T.A.Selvan Ms.M.Rohini Mr.S.MadhanKumar	Artificial Intelligence Employed to Create a Revolutionary Energy efficient Intelligent Device for Weather Observation	Published	December 2021
6.	Ms.S.Biruntha Ms.N.Pooranam Ms.S.Nagajothi Ms.J.Boopala Mr.T.Vignesh Dr.K.RamaAbirami Ms.R.Indhu	IOT Based Smart Hands Talk	Published	December 2021
7.	Ms.R.Gowthamani	Advanced traffic light violation monitoring system based on GSM technology	Published	October 2021
8.	Mr. RajibGuhathakurta Ms. S. S. Saranya Ms. R. Gowthamani Dr. Mudita Sinha Dr. R. Swaminathan Dr. K. Praghash Dr. Nihar Ranjan Nayak Dr. Beaulah David Dr. M. Mythily Mr. M. Manikandan Mr. R. Regin Dr. S. Sudhakar	Real-Time smartphone tracking app of virtual cloud server based healthcare monitoring system for emergency service using wbsn	Published	August 2021

9.	Dr. G. Edwin Prem Kumar Dr. M. Lydia Mr. S. C. Boobalan Mr. K. Arun Patrick Dr. E. Bijolin Edwin Dr. M. Roshni Thanka Dr. B. Arun Kumar Dr. K. Senathipathi Mr. Mansoor Hussain	An Artificial Intelligence Based Water Management System Ensuring Uniform Distribution And Monitoring Water Leakage	Published	August 2021
10.	Dr. D. Prabha Dr. A. Pushpalatha Ms. K. Devipriya Dr. T. LathaMaheswari Dr. K. Rama Abirami Ms. Sophia. B Dr. V. Vijeya Kaveri Ms. S. Mohana Gowri Ms. P. Anitha Ms. Sruthi Anand	Fabric defect detection using deep convolutional neural network and monitoring with industrial internet of things	Published	July 2021
11.	J.Omana R.Meena Dr.S.S.Arumugam A.Subbarayudu Brahmdutt Bohra Nikhil Rajan Dr.R.Arokia Paul Rajan Dr.K.Sankar Dr.V.Vijeya Kaveri N.Nagarajan	Automatic Smart Attendance Management System Based on Face Recognition using Deep Learning	Published	June 2021
12.	Mr.S.Palani	Sensor based smart belt	Published	June 2021
13.	Dr.K.Srinivasan Ms.N.Vijayalakshmi Dr.G.M.Tamilselvan Mrs.V.R.Azhaguramyaa	Intra - Body Communication in Biomedical Applications	Published	March 2021
14.	Dr. L. Selvam Dr J. Visumathi Dr. K.Jayashree Dr. J. ArokiaRenjith Dr. P. Mohan Kumar	Cloud based Emergency Patient monitoring system	Published	March 2021

| 15. | Dr.D.Prabha
Dr.J.Janet
Dr.K.Sasi Kala Rani
Mr. ShaliqNigal

Ms. Sadhana Sri S A S
Ms. Sanmugapriya K
Mr. Adithya Menon S
Mr. Jeganprakash B
Mr. Aswin A R | Personal Assistant System and Wearable Gadget for Elderly People and Alzheimer Patients | Published | February 2021 |
| 16. | V.Meenakshi
Dr.V.Vijeya Kaveri
Dr.Anbarasi | Modelling of an Efficient Solar Module Using Pervoskite | Filed | January 2021 |

Table 5.36 Patents Filed/Published/Granted during the academic year 2020- 2021

S.No.	Name of The Faculty	Title of the Patent	Status	Filled Date
1.	Dr.J.Janet Mr.Krishnamurthy Mr.Vinoth Kumar	An Efficient Air Conditioner with Self Sanitizing Techniques	Published and Granted from the Australian Patent Journal	October 2020
2.	Mr.S.Sureshkumar Dr.J.Janet Dr.P.Kavitha Rani Dr.S.Venkatalakshmi	A New 2R Approach: The Mobile Electronic Waste in INDIA'S Automotive	Published	November 2020
3.	Dr.J.Janet	Non-isolated bi-directional converters with coupled inductor for hybrid electric vehicle applications	Published from US Patent Journal	September 2020
4.	Mr.V.Arulkumar, Dr.P.Vivekanandan Dr.C.Selvan Dr.Albert raj Dr.K.N.Sivabalan Dr.V.Anandkumar	An efficient feature selection for color face recognition using hidden Markov model and particle swarm optimization with image key generation	Published	September 2020
5.	Mr.V.Arulkumar Dr.P.Vivekanandan Dr.C.Selvan Dr.Albert raj Dr.K.N.Sivabalan Dr.V.Anandkumar	An intelligent technique for uniquely recognizing face and finger image Using learning Vector Quantization (IVQ)- based template key generation	Published	September 2020

6.	Ms.V.R.Azhaguramyaa Dr. J. JANET Ms.J.Fenila Naomi, Mr.Ra.Theepavishal Mr.K.S.Madhuaravindh Mr.V.Tharuneshwar, Mr.T.Sivakumar	Smart accessible ATM for Visually Imparied	Published	April 2020
7.	Ms.S.Biruntha Ms.J.Boopala Ms.K.Devipriya Dr.D.Prabha Ms.A.Pushpalatha Ms.R.Gowthamani Mr.R.Balaji Mr.R.Manikandan	IoT based Border Alerting System for Tamilnadu Fisherman	Published	February 2020
8.	Dr.J.Janet, Mr.S.Sureshkumar Dr.K.N.Sivabalan Ms.D.Srivaishnav I Mr.KR.Senthil Murugan Mr.R.Siva Subramaniyan Ms.P.Anitha,	Intelligent Wheelchair With Voice User Interface (VUI) System for Disabled and Elderly using iot	Published	February 2020
9.	Dr. M. Karpagam Ms. P. Vinesha Dr. D. Prabha Mr. D. Ananda Kumar Dr. A. Mohan Raj Ms. D. Devi	Smart Air and Noise Pollution Monitoring Kit	Published	February 2020

Sample Patent

Fig 5.17 Utility Patent Grant by Dr.J.Janet

Fig 5.18 Patent Grant by Dr.J.P.Ananth

Fig 5.19 Patent Grant by Dr.P.Mohan Kumar

B. PhD awarded during the assessment period while working in the institute

The following table shows the list of faculty members Ph.D. awarded during the assessment period while working in the Institute.

Table 5.37 PhD awarded during the assessment period

Academic Year	No. of PhD Graduates	
	Internal	External
2022-2023	5	7
2021-2022	1	5
2020-2021	2	1
Total	**8**	**13**

Table 5.38 Internal Faculty PhD awarded over three assessment years

S.No.	Name of the Scholar	Title of the Research	University & Year of Completion	Supervisor
1	Dr.M.Kavitha	Predictive Analysis in the Agriculture Industry	Anna University & Feb 2023	Dr.M.Sujaritha SKCET
2	Dr.P.D.Mahendran	Novel Approaches for Multimodal Sentiment Analysis using Deep Learning	Anna University & November 2022	Dr.S.Kannimuthu Karpagam University

3	Dr. N. Kousika	Certain Investigation on Data Perturbation Techniques for Privacy Preserving Data Mining	Anna University & October 2022	Dr.N.Premalatha Bannari Amman institute of technology
4	Dr.A.Arun Kumar	Certain Investigations in Detection of Autistic Traits Using Machine Learning and Deep Learning Models	Anna University & June 2022	Dr. D. Surendran KPR Institute of Engineering and Technology
5	Dr.M.Rohini	Prognosis and Classification of Neurodegenerative Diseases using Machine Learning Framework	Anna University & June 2022	Dr. D. Surendran KPR Institute of Engineering and Technology
6	Dr.S.Oswalt Manoj	Analysis and Prediction of Rainfall in Agriculture Based on Deep Learning Framework	Anna University & June 2021	Dr. J.P. Ananth SKCET
7	Dr. A. Pushpalatha	Sink Relocation Schemes for Increasing the Network Lifetime of Wireless Sensor Networks	Anna University & June 2020	Dr.G.Kousalya Coimbatore Institute of Technology
8	Dr.C.S.Shylaja	Identification and Prognosis of Lung Cancer by Multi Image Optimization Technique	Vel's University & June 2020	Dr.Anand

Table 5.39 External Faculty awarded over three assessment years(Department Research Centre)

S.No.	Name of the Scholar	Title of the Research	University & Year of Completion	Name of the Guide
1.	Dr.E.Fenil	Traceback Of Distributed Denial Of Service Attacks in Software Defined Networking	Anna University & April 2023	Dr.P.Mohan Kumar

2.	Dr.L.K.Shoba	Enhancement in the Vision of Central Serous Chorioretinopathy using Different Classification Approach - An Ophthalmic Evaluation	Anna University & April 2023	Dr.P.Mohan Kumar
3.	Dr.P.Manivannan	Implementation Of Multi-Layered Nosql Database Enabling Deep Learning Technique for Retail Business	Anna University & Feb 2023	Dr.D.Prabha
4.	Dr.A.Francis Alexander Raghu	An Improved Agent Based Approach to Object Localization	Anna University & December 2022	Dr.J.P.Ananth
5.	Dr.R Vinoth	Multi Agent based Intelligent data mining in Bigdata	Anna University & October 2022	Dr.J.P.Ananth
6.	Dr.M.G. Dinesh	Hybrid Optimal Feature Selection Models for Improving Classification Accuracy in Healthcare Domain	Anna University & July 2022	Dr.D.Prabha
7.	Dr.N.Rageswari	Scheduling of Domestic Loads in Smart Grid using Wireless Sensor Network.	Anna University & May 2022	Dr.J.Janet
8.	Dr.M.Dilli Babu	An intuitive method of retrieval of large data from the data lake using data analytics	Hindustan University & May 2022	Dr.K.Ramesh
9.	Dr..R.Siva Subramanian	Optimizing Naive Bayes Prediction in Customer Behavior Analysis Using Efficient Variable Selection Methodologies	Anna University & January 2022	Dr.D.Prabha

10.	Dr.N.Bhaskar	Optimal Query Plan Selection Using Meta Heuristics Algorithms in Crowd Sourcing Systems	Anna University & October 2021	Dr.P.Mohan Kumar
11.	Dr.K.Sangeetha	Perception Analysis of Students Feedback Using Enhanced Sentiment Analysis Through Deep Learning Techniques	Anna University & September 2021	Dr.D.Prabha
12.	Dr.D.Sudharson	An Optimized Machine Learning Approach for Fault Detection and Reliability Estimation of Software Testing	Anna University & October 2020	Dr.D.Prabha

Table 5.40 External Faculty PhD awarded over three assessment years (Internal Supervisor)

S.No.	Name of the Scholar	Title of the Research	University & Year of Completion	Supervisor
1.	Dr.Vimala Mathew	Deep Learning-Based Facial Expression Recognition from Surveillance	Hindustan University & May 2023	Dr.K.Ramesh

Ph.D. Guided during the assessment period while working in the institute

The following table shows the list of faculty members guiding Ph.D. during the assessment period while working in the institute.

Table 5.41 List of Supervisors

S.No.	Name of the Supervisor	Supervisor Recognition No.	University
1.	Dr.J.Janet	1240110	Anna University
2.	Dr.J.P.Ananth	2840023	Anna University
3.	Dr.K.Sasi Kala Rani	3140026	Anna University
4.	Dr.M.Sujaritha	2940094	Anna University
5.	Dr.D.Prabha	200444	Anna University
6.	Dr.P.Mohan Kumar	2340198	Anna University
7.	Dr.K.Ramesh	CSF79	Hindustan University
8.	Dr.S.Oswalt Manoj	4140147	Anna University
9.	Dr.D.Rasi	4140177	Anna University

Table 5.42 Ph.D. Scholar details of the Supervisor Dr.J.Janet

S.No.	Name of the Scholar	University & Year	Category of Registration	Status
1	Dr.N.Rageswari	Manonmaniam Sundaranar University	Part Time	Completed
2	Ms.V R Azhaguramyaa	Anna University January 2020	Part Time	Confirmation Completed

Table 5.43 Ph.D. Scholar details of the Supervisor Dr.J.P.Ananth

S.No.	Name of the Scholar	University & Year	Category of Registration	Status
1	Dr.Oswalt Manoj	Anna University July 2015	Part Time	Completed
2	Dr.R Vinoth	Anna University January 16	Part Time	Completed
3	Dr.A.Francis Alexander Raghu	Anna University January 17	Full time	Completed
4	Mr.Jimson	Anna University January 17	Part time	Confirmation completed
5	Mr.G.L Infant Cyril	Anna University January 18	Full time	Confirmation completed
6	Mr.J.Daniel Francis Selvaraj	Anna University January 2021	Part Time	Course Work completed
7	Mr.T.Thiruselvan	Anna University January 2021	Part Time	Course Work completed

Table 5.44 Ph.D. Scholar details of the Supervisor Dr.K.Sasi Kala Rani

S.No.	Name of the Scholar	University & Year	Category of Registration	Status
1	Ms.R.Gowthamani	Anna University July 2019	Part Time	Confirmation Completed
2	Ms.G.Renuga Devi	Anna University January 2021	Part Time	Course Work Completed

Table 5.45 Ph.D. Scholar details of the Supervisor Dr.M.Sujaritha

S.No.	Name of the Scholar	University & Year	Category of Registration	Status
1	Dr.M.Kavitha	Anna University July 2018	Part Time	Completed
2	Ms. S. Shunmuga Priya	Anna University July 2018	Part Time	Confirmation Completed

Table 5.46 Ph.D. Scholar details of the Supervisor Dr.D.Prabha

S.No.	Name of the Scholar	University & Year	Category of Registration	Status
1.	Dr.M.G.Dinesh	Anna University June 15	Part Time	Completed
2.	Dr.R.Siva Subramanian	Anna University June 15	Part Time	Completed
3.	Dr.K.Sangeetha	Anna University July15	Part Time	Completed
4.	Dr.P.Manivannan	Anna University March 16	Part Time	Completed
5.	Ms.P.Ponni	Anna University December 16	Part Time	Confirmation Completed
6.	Ms.P.Akila	Anna University July 17	Part Time	Nil
7.	Ms.K.Devi Priya	Anna University December 17	Part Time	Confirmation Completed
8.	Ms.Sruthi Anand	Anna University January 2021	Part Time	Course Work Completed
9.	Mr.C.Karthikeyan	Anna University January 2022	Part Time	Course Work Completed

Table 5.47 Ph.D. Scholar details of the Supervisor Dr.P.Mohan Kumar

S.No.	Name of the Scholar	University & Year	Category of Registration	Status
1.	Dr.L.K.Shoba	Anna University July 2015	Part Time	Completed

2.	Ms.A.Vidhya	Anna University January 2016	Part Time	Synopsis Submitted
3.	Mr.E.Fenil	Anna University January 2016	Part Time	Synopsis Submitted
4.	Mr.J.Gnana Jeslin	Anna University January 2016	Part Time	Synopsis Submitted

Table 5.48 Ph.D. Scholar details of the Supervisor Dr.K.Ramesh

S.No.	Name of the Scholar	University & Year	Category of Registration	Status
1.	Ms.B.Prabha	Hindustan University 2019	Part Time	Synopsis Submitted
2.	Ms.S.Aiswarya	Hindustan University 2020	Part Time	2nd DC Completed
3.	Ms.A.Lakshna	Hindustan University 2020	Part Time	2nd DC Completed
4.	Ms.D.Sheema	Hindustan University 2016	Part Time	Thesis Submitted
5.	Dr.Vimala Mathew	Hindustan University 2018	Part Time	Completed
6.	Mr.M.Dilli Babu	Hindustan University 2019	Part Time	Viva Completed on 27.4.2022

5.8.2 Sponsored Research (20)   Institute Marks : 20.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Design and Developmer	1	SEED-TIDE	5519644.00
			Total Amount(X): 5519644.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Developing Women Entr	1	SEED	3540625.00
Design of personal Assi	1	SEED/ TIDE	5737723.00
Building Cyber Physical	1	AQIS-STTP	124000.00
Augmented Reality and	1	AICTE AQIS	186667.00
Intelligent Computing in	1	ATAL FDP	93000.00
Deep Learning for Visua	1	ATAL FDP	93000.00
			Total Amount(Y): 9775015.00

2019-20 (CAYm3)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Entrepreneurship Aware	1	DST NIMAT	60000.00
Unification of Newness :	2	DST- NSTMIS - CHORD	2984000.00
			Total Amount(Z): 3044000.00

Cumulative Amount(X + Y + Z) =   18338659.00

5.8.3 Development activities (15)   Institute Marks : 15.00

A. Product Development

Students are provided with proper training and infrastructure to develop software products useful to the student community, corporates and society. Students along with the support of faculty members convert their projects into products and participate in National and International Level competitions. Students have bagged laurels in events like L&T Techgium, Smart India Hackathon, Pune Smart health Hackathon, RU Hacks, Make Harvard etc. The products developed have also been converted as patents.

Table 5.49 Products developed during the assessment period

S.No	Name of the Student	Product category	Details of the Product
1	Dr.J.Janet Dr.K.Sasi Kala Rani Ms.A.Priya K.G.Shametha H.Aswathy F.Prithika Andrea Angelina T.Kumaraguru R.Sasidharan T.G.Bhuvanesh	Patent	Shikaayat Samarthan
2	Kumaraguru T	Product-Mask	MakeHarvard - Konnex Face Mask
3	Dharshini A	Product	Wireless Biometric Lock
4	Kumaraguru T	Webpage	RU Hacks - Air Doodle
5	Azhaguramyaa V. R Fenila Naomi J Prabha D Madhuaravindh K S Theepavishal Ra Tharuneshwar V Sivakumar T	Webpage	Break the Outbreak, SAMADHAN, MHRD Mega online challenge
6	Ms.M.Kavitha Ms.S.Birundha M.Manojkumar A.Ragul S.Madhan	App Development	Grocery National Bio Informatics Hackathon for Full Stackers

Fig 5.20 Patent published for Shikaayat Samarthan
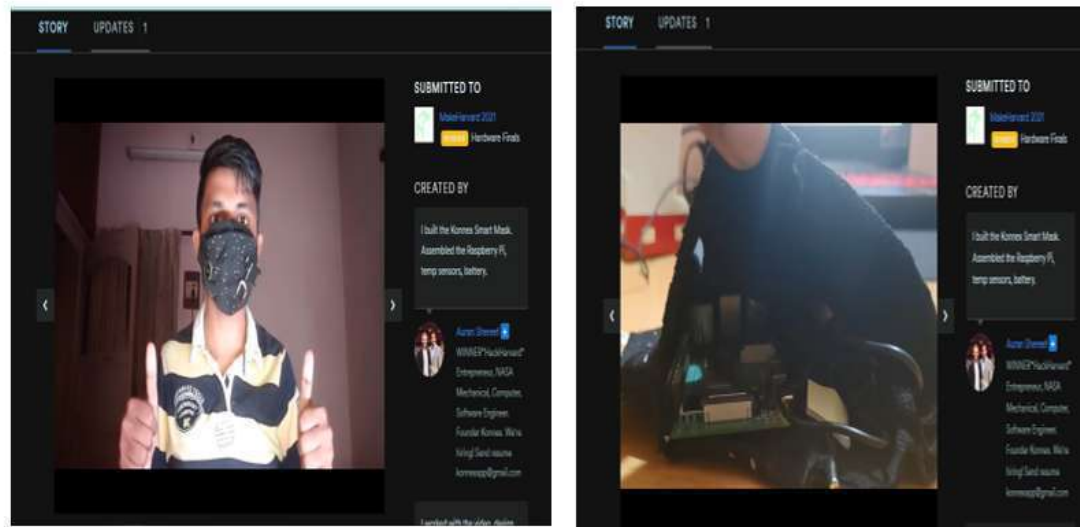
Fig 5.21 MakeHarvard - Konnex Face Mask
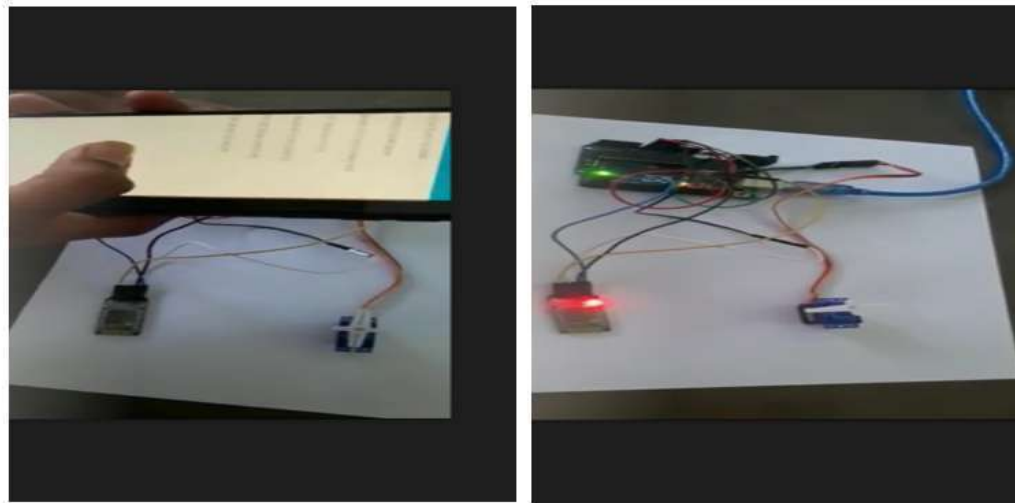
Fig 5.22 Project: Wireless Biometric Lock
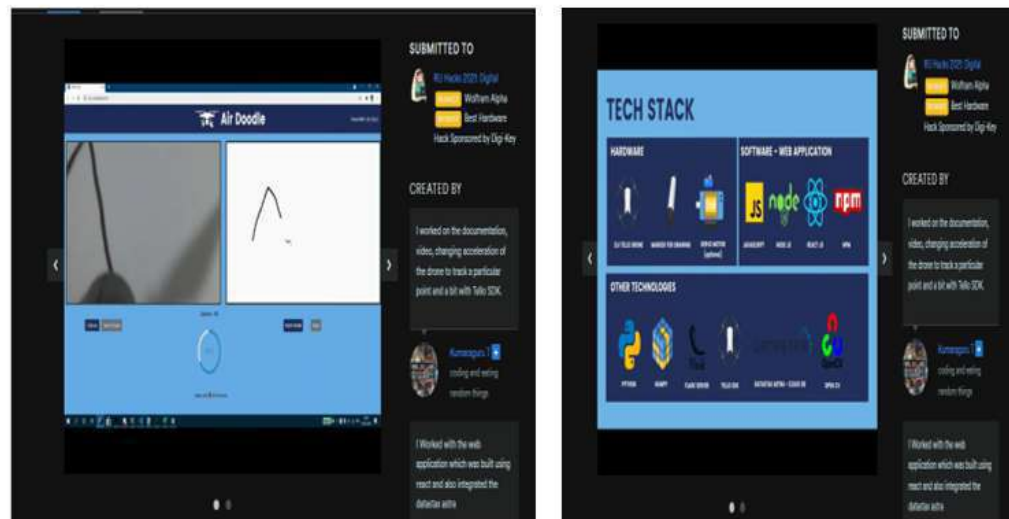
Fig 5.23 RU Hacks - Air Doodle

Fig 5.24 Break the Outbreak, SAMADHAN, MHRD Mega online challenge
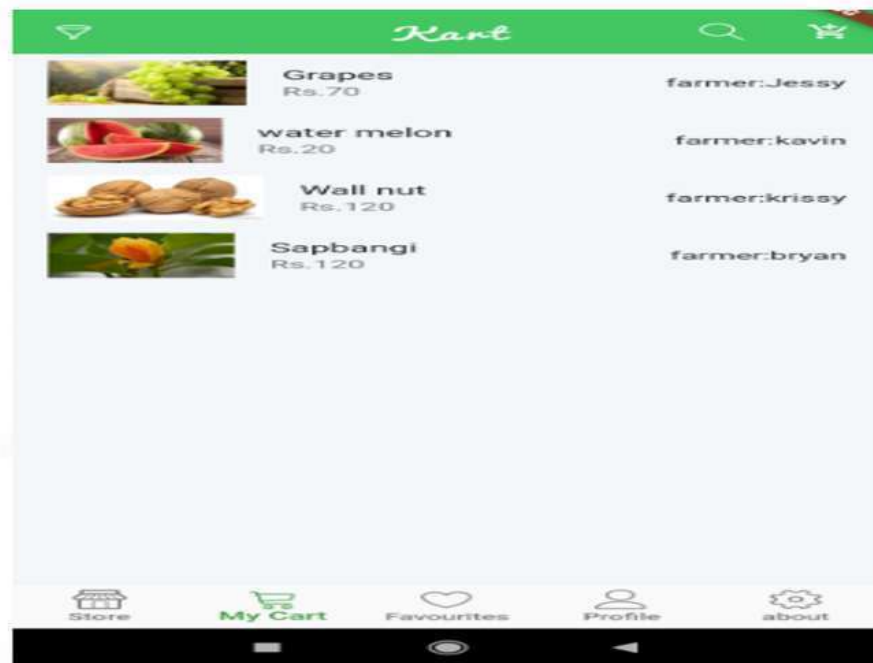
Fig 5.25 App: Grocery

B. Research laboratories

The department presently has a laboratory required for research in addition to other computer laboratories. The laboratory facilities are continuously being enhanced to cater the ever expanding academic and research needs in the areas of image processing, Big data analytics, cloud computing, Machine Learning, Deep Learning, Networking etc.,

The department has state-of-the-art computer facilities in the form of dedicated linux and windows labs. The current day standard IT tools used in various functional areas act as resource multipliers.

Table 5.50 Research Lab

Technical Specifications	Lenovo think CentreE73 Intel Core i3, 4GB RAM, 500GB HDD	No. of Systems: 28

Centre for Deep Learning and Data Science
Detailed Specification: Equipment – Dell Server R740

Table 5.51 Technical Specification – Dell Server R740

Technical Specifications	**Processor:** 2* Intel® Xeon® Gold 6130 2.1 GHz up to 16Core / 32 T 10.4 GT/s, cores per processor **GPU:** 2 * NVIDIA Tesla V100 32GB Passive GPU, 6 * 32 GB RDIMM 2666 MT/s Dual Rank **Storage:** Chassis with up to 16 x 2.5" SAS / SATA Hard / Riser Config 4, 3 x 8, 4 x 16 Slots. 2 * 1.92TB SSD SATA Mix use 6Gbps 512 2.5in Hot – plug AG Drive, 3 DWPD, 10512 TBW. 6 * 1.2 TB 10K RPM SAS 12 Gbps 512n 2.5in Hotplug Hard Drive Internal controllers: PERC H730p RAID Controller, 2GB NV / 6 Performance Fans for R740/740XD

Detailed Specification: Equipment – Dell Server R750

Table 5.52 Technical Specification –Dell Server R750

Features	Technical Specifications

Technical Specifications	**Processor:** 2* Intel® Xeon® Gold 6226R 2.9G GHz up to 16Core / 32 T 10.4 GT/s, cores per processor
	GPU: 1 * NVIDIA Ampere A100, PCIe, 250W, 80GB Passive, Double Wide, Full Height GPU – 1 No, 8" 32GB RDIMM, 3200MT/s, Dual Rank
	Storage: Chassis with up to 8x2.5" SAS/SATA Hard Drives for 2 CPU PERC11 Configuration / Riser Config 15, 3x8, 4x16 slots, 8" 32GB RDIMM, 3200MT/s, Dual Rank 16 GB Base x 8.
	2 * 1.92TB SSD SATA Read Intensive 6 Gbps 512, 2.5in Hot – plug AG Drive, 1 DWPD / 4 * 1.2 TB 10K RPM SAS 12 Gbps 512n 2.5in Hotplug Hard Drive
	Internal controllers: PERC H750 Adapter, Low Profile, 6 Performance Fans, for R750/750 XD

Table 5.53 Projects executed in the Research Laboratory

Sl. No	Name of the project	Funding Agency	Status: ongoing/ completed	Investigator
1	Design of Personal Assistant System for Alzheimer Patients	Department of science and Technology	Completed	PI – Dr.D.Surendran Co PI – Dr.D.Prabha
2	Design and Development of a Smart Pen for Dyslexics	Department of Science and Technology (TIDE)	Ongoing	PI – Dr. J. Janet Co-PI: Ms. Majidha Fathima K M Dr. J.P. Ananth

Fig 5.26 Deep Learning Servers Dell EMC R740 and R 750

Outcome of the Research Laboratory:

- **High-Performance Computing Infrastructure:** The research lab is equipped with a powerful computing infrastructure comprising high-performance servers, GPUs, and specialized hardware accelerators. This infrastructure enables the researchers to train complex deep learning models and process large-scale datasets efficiently.
- **Data Repository and Management:** The lab establishes a comprehensive data repository, carefully curated and anonymized, to support research initiatives. This repository will include diverse datasets, encompassing various domains and types of data, ensuring researchers have access to the resources necessary to explore the full potential of deep learning and data science.
- **Experimentation and Prototyping Area:** The lab provides dedicated spaces for experimentation and prototyping. These areas will be equipped with development kits, software frameworks, and tools required for rapid prototyping and testing of deep learning models. Researchers have the opportunity to collaborate, share ideas, and iterate on their projects in a collaborative environment.
- **Collaboration and Knowledge Exchange:** The research lab fosters a collaborative ecosystem, encouraging researchers, students, and industry professionals to engage in joint projects, share expertise, and exchange knowledge. This includes hosting workshops, seminars, and conferences, as well as establishing partnerships with other research institutions, industry leaders, and academic organizations.
- **Training and Education:** The lab offers training programs and educational resources to support the development of skilled professionals in deep learning and data science. These programs caters to researchers, students, and industry professionals, providing them with the necessary tools, theoretical foundations, and practical expertise to excel in the field.

Table 5.54 List of Publication Outcomes from the Research Laboratory

S No	Authors	Title of paper	Name of the Journal	Volume	Pages	Year

S No	Authors	Title of paper	Name of the Journal	Volume	Pages	Year
1	D.Surendran, J.Janet, D.Prabha, E.Anisha	A Study on devices for assisting Alzheimer patients	Proceedings of IEEE International Conference on IoT in Social, Mobile, Analytics and Cloud (I-SMAC)	978-1-5386-1441-9	620 – 625	Aug 2018
2	D.Surendran, M.Rohini	BLE Bluetooth Beacon based Solution to Monitor Egress of Alzheimer's Disease Sufferers from Indoors	Procedia Computer Science, Elsevier	165	591-597	2019
3	M.Rohini, D.Surendran	Classification of neurodegenerative disease stages using ensemble machine learning classifiers	Procedia Computer Science, Elsevier	165	66 - 73	2019
4	D.Surendran, V.R.Kiruthika	Smart Wearable Device for Elderly Dementia People	International Journal of Engineering and Advanced Technology (IJEAT)	Vol. 9, Issue 4	430 -433	April 2020
5	Janet J, Ananth JP, Majitha Fathima KM	A Survey on Artificial Intelligence based assisted writing device to support Dyslexia affected children	First International conference on EMMA-2021 (Engineering, Medicine, Management, Arts and Sciences)	-	-	24-26 December, 2021

Fig 5.27 International Conference Certificate

Table 5.55 List of Patent Outcomes from the Research Laboratory

S.No	Details of the Patent	Patent Number	Date	Status
1	Personal Assistant System and Wearable Gadget for Elderly people and Alzheimer patients [Utility Patent]	202141006321 A	19/02/2021	Published
2	Smart Pen [Design Patent]	370743-001	12/09/2022	Granted
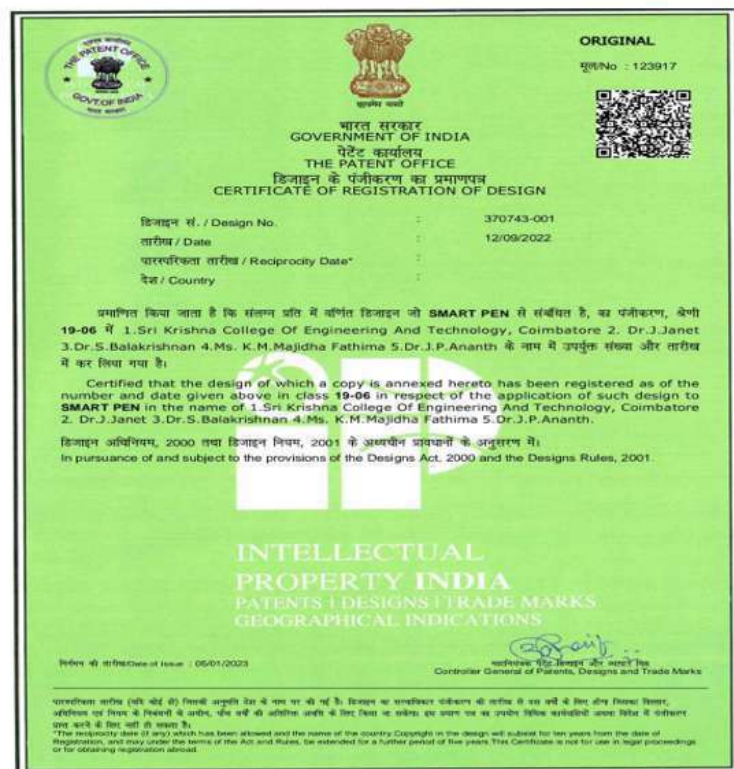
Fig 5.28 Design patent Grant – Smart Pen

Table 5.56 Workshops/Seminars Organized

S.No	Title of program	Category	Date	Resource Person
1	FDP on Research Advancements in Intelligent Computing Technologies	FDP	19-12-2022 to 23-12-2022	Dr.R.Sudha Dean/CSE VIT
2	Innovation in Computer Vision	Seminar	26.06.2021	Mr.Dhyakesh S, Machine Learning Engineer, Optisol Datalabs, Coimbatore
3	Innovative Applications in Big Data	Seminar	29.06.2021	Ms. Sharadha Murugappan, Senior Software Engineer, Robert Bosch, Coimbatore
4	ATAL FDP on "Deep Learning for Visual Computing	FDP	12.07.21 to 16.07.21	Dr.J.Janet Principal

5	Innovation in Recent Technologies - Application of Artificial Intelligence and Machine Learning	Seminar	15.02.2022	Ms.Vijay Varshini Lakshmi Narayanan,MS Artificial Intelligence, Saint Louis University, St Louis, Missouri, USA
6	IEEE International Level conference on Advanced Computing Technologies and Applications	International Conference	4.3.2022 & 5.3.2022	Dr.N.Kumarappan

Chairman, IEEE Madaras Section |
7	Innovation in Technology -Codeless Data Science	Seminar	05.03.2022	D.Sudharson, Data Engineer, Forge, Coimbatore
8	Innovation in Technology - Spring Boot Framework	Workshop	05.03.2022	S. Subhasri, Senior Software Engineer, Rakuten, Bangalore
9	Business plan Preparation Workshop	Workshop	18.3.2022	Mr. Manoj, Founder Tripledart
10	Workshop on Intellectual Property Rights	Workshop	22.3.2022	Mr. B.Vivek, Head-Admin Murugappa Groups Coimbatore.
11	Recent Trends & Innovation in Natural Language Processing	Workshop	13.05.2022	Dr.S.Dhivya Senior Data Scientist, Dun & Bradstreet Technologies, Chennai

Fig 5.29 Workshop on Deep Learning and Data Science (NVIDIA DLI)

Table 5.57 PG/PhD Research work

The following are the research scholars utilized the lab for their research work

S.No.	Name of the Scholar	Title of the Research	University & Year of Completion
1.	Dr.C.S.Shylaja	Identification and Prognosis of Lung Cancer by Multi Image Optimization Technique	Vel's University & June 2020
2.	Dr.S.Oswalt Manoj	Analysis and Prediction of Rainfall in Agriculture Based on Deep Learning Framework	Anna University & June 2021
3.	Dr.A.Arun Kumar	Certain Investigations on Detection of Autistic Traits Using Machine Learning and Deep Learning Models	Anna University & June 2022

4.	Dr.M.Rohini	Prognosis and Classification of Neurodegenerative Diseases using Machine Learning Framework	Anna University & June 2022
5.	Dr.P.D.Mahendran	Novel Approaches for Multimodal Sentiment Analysis using Deep Learning	Anna University & November 2022
6.	Dr.D.Sudharson	An Optimized Machine Learning Approach for Fault Detection and Reliability Estimation of Software Testing	Anna University & October 2020
7.	Dr.K.Sangeetha	Perception Analysis of Students Feedback Using Enhanced Sentiment Analysis Through Deep Learning Techniques	Anna University & September 2021
8.	Dr.P.Manivannan	Implementation Of Multi-Layered Nosql Database Enabling Deep Learning Technique for Retail Business	Anna University & Feb 2023

Table 5.58 List of Student Projects Executed in the Research Lab

S.No	Reg No	Name	Project Title
1	19EUCS010	Ambarish V C	Enhancing cardiovascular disease prediction using Hard Voting Technique in Machine Learning
	19EUCS024	Binesh J	
	19EUCS049	Jayanth C R	
	19EUCS053	Jeba Regan Raj B	
2	19EUCS001	Abiraj R	Image description generator using Deep Learning
	19EUCS012	Aparna K	
	19EUCS026	Darwesh Fazil A	
	19EUCS036	Grace Ebenezer R	
3	19EUCS046	Ida Winona AJ	Crime type and Occurrence Prediction using Machine learning Algorithm
	19EUCS028	Dharshini M	
	19EUCS016	Ashok Aadhav R R	
	19EUCS013	Aravindhan S	
4	19EUCS027	Devadharshika A	Machine Learning based Hybrid Movie Recommendation System
	19EUCS014	Arthik Sankar	
	19EUCS180	Hari Prasath P	
	19EUCS057	Kamalika M M	
5	19EUCS048	Janani A	Spam Mail Detection using Machine Learning

	19EUCS039	Harine M	
	19EUCS044	Harshine M	
	19EUCS031	Dhivyadharshini T	
6	19EUCS015	Arun T	Detection of cyberbullying on social media using machine learning and big data analysis
	19EUS017	Ashwat P Murthy	
	19EUCS008	Akash M	
	19EUC022	Barath Kumar R	
7	19EUCS041	Harish NJ	Bitcoin Price Prediction Using Machine Learning
	19EUCS058	Kanishka D	
	19EUCS020	Azhagu Venkatesh K	
	19EUCS023	Bharath V	
8	19EUCS032	Dinesh Kumar S	Liver Cancer Detection using Machine Learning algorithm
	19EUCS029	Dharun S	
	19EUCS051	Jaya Shimman	
	19EUCS006	Akash Kumar	
9	19EUCS084	Menaga M	Stock Trend Prediction Using Candlestick Charting And Ensemble Machine Learning Techniques
	19EUCS115	Renuga Devi V	
	19EUCS102	Nivethidha R V	
	19EUCS070	Krithika A	
10	19EUCS083	Mellwyn Juben S	Determine Alzheimer's Disease Using Artificial Bee Colony Algorithm
	19EUCS067	Kowshik S	
	19EUCS071	Kumaraguru T	
	19EUCS072	Kumaresan K	
11	19EUCS074	Logeshkumar R	Crop harvest - analysis and prediction
	19EUCS077	Madhumitha N	
	19EUCS082	Mehavarthini K	
	19EUCS114	Razeen J	
12	19EUCS080	Manjunathan V	Liver Disease Prediction
	19EUCS063	Kevinkerubakar M	
	19EUCS076	Madhivadhanan B R	
	19EUCS069	Krishnakumar V	
13	19EUCS095	Mugilanandam R	Recommendation System Using Fuzzy Logic for Tourism Management Using Django Framework
	19EUCS065	Kishore Raj D	
	19EUCS098	Naveen Anend S	

	19EUCS091	Mohana Sowdesh R	
14	19EUCS079	Manish P	Brain Tumour Classification using Deep Learning
	19EUCS073	Liju Daniel M	
	19EUCS086	Mohamed Afsal S	
	19EUCS088	Mohammed Safwan S	
15	19EUCS112	Raajeev Chandran S	Lung cancer detection and classificaton using deep learning algorithm
	19EUCS107	Pranesh S	
	19EUCS110	Praveen Kumar S P	
	19EUCS106	Poovarasan K	
16	19EUCS096	Muthukumaran M	Blood pressure prediction using machine learning algorithms
	19EUCS119	Sanjeev Bhagavath V	
	19EUCS093	Mounisha J	
	19EUCS113	Ramya J	
17	19EUCS099	Naveen M	Diabetes Prediction Using Machine Learning
	19EUCS097	Navaneeth K B	
	19EUCS101	Nithin G S	
	19EUCS103	Obed Samuel J	
18	19EUCS100	Navin Jagadish P	Fake Job Posting Detection
	19EUCS075	Madhan Raj M	
	19EUCS090	Mohan J	
19	19EUCS062	Kavya R	Deep Learner Based Sign Language Recognition using CNN for Covid19 Prevention
	19EUCS066	Kokila P S	
	19EUCS081	Martina Romisha D	
	19EUCS118	Sandhiya P	
20	19EUCS121	Santhosh P	Early detection of ALZHEIMER'S Disease with EEG using Machine Learning Models
	19EUCS124	Sathish Kumar P	
	19EUCS173	Vinoth Kumar R	
	19EUCS125	Sathiya Narayanan V	
21	19EUCS166	Varuna K	Captcha Recognition using Convolutional Neural Network with low structural complexity
	19EUCS150	Subashini K	
	19EUCS137	Shubhashree P	
	20EUCS509	Surya Prakash K	

22	20EUCS505	Nithya S	Microaneurysms detection for Diabetic Retinopathy using Pretrained Convolutional Nural Networks
	19EUCS160	Thenmozhi S A	
	19EUCS059	Karaneesvar M	
	19EUCS129	Shailesh B	
23	19EUCS128	SELVANAYAKI G	AI based accident detection and alert system
	19EUCS154	SUJI PRIYA R	
	19EUCS174	VINOTHINI M	
24	19EUCS147	Srinath K	Deep learning based Smart Healthcare System
	19EUCS136	Shiyamabhisak N V	
	19EUCS131	Shankar M	
	20EUCS508	Sudharson SP	
25	19EUCS156	Surya V	Crime type and occurence prediction using Machine learning Algorithm
	19EUCS146	Sri Varshan M	
	19EUCS149	Subash R	
	19EUCS159	Tamil Selvan A	
26	19EUCS140	Sivaavanish K	Deep learning based image encryption and decryption network for internet of medical things audio
	19EUCS161	Thirupathi N	
	19EUCS158	Syam Krishna K	
	19EUCS120	Santhosh Kumar A	
27	19EUCS164	Vaishnav M A	A Machine Learning Based Cyber Attack Detection Model for Wireless Sensor Networks in Microgrids
	19EUCS170	Vignesh M	
	19EUCS177	Yash P A	
	19EUCS179	Yatheeswar Karthick R	
28	19EUCS153	Sudharshan H	Diseases Prediction Using Graph Neural Networks
	19EUCS167	Vignesh A	
	19EUCS152	Sudhakar T	
	19EUCS155	Surya Sidhesvar R	
29	19EUCS127	Satish Kumar V	Heart disease prediction using Machine Learning algorithms
	19EUCS123	Saran Karthik V	
	19EUCS145	Srisai M	
	19EUCS162	Udith Ragav S	

C. Instructional materials:

Table 5.59 List of Instructional Materials

S.No	Details

1	Lecture Materials
2	Lab Manual
3	Video Lecturers
4	PPT
5	Working Materials
6	Question Bank
7	Virtual Labs

- The faculty members brand use of modern multi-media teaching utilities like LCD projectors, high speed Internet enabled computers are deployed in classroom.
- The college has also providing facilities with high speed internet connection across the campus which enables access of open e-resources, free journals, e-books to the students and faculty members.
- The faculty members make use of NPTEL videos and lecture materials to improve the student quality in teaching-learning process.
- Black boards are provided in every class rooms for the smooth conduct of the class.
- Lab Manuals are prepared by faculty members which helps the students to get guidelines about the Lab experiments.
- Lecture Notes for theory subjects are also provided to the students in intranet server and provide access to the students.

LECTURE MATERIALS

All classrooms in the department are installed with smart boards which are more flexible and interactive way of presenting the lectures aided with pictures and videos. Students find it interesting and help since entire lecture delivery through the smart board can be converted and saved as PDF. The saved format could be sent to students for their reference and therefore it would benefit the absentees as well.

Fig 5.30 Lecture Materials in GCR

Fig 5.27 Lab Manual for Compiler Design Laboratory

Fig 5.31 Lab Manual for Compiler Design Laboratory

VIDEO LECTURES: - INTERACTIVE: ANYTIME LEARNING

You tube channels are introduced to the students where they can explore the resource materials for the various subjects thought. This equips the students for a better understanding of the subject. Video lectures enable the students to access anytime, learn anywhere from their mobile devices: laptops, tablets or smartphone, and learn whenever they want. Learning at an individual pace, an opportunity for self-study and a chance for self-testing is made possible. Video lectures provides an effective learning environment and prepares them for facing the placement assessments.

Table 5.60 List of Video Lectures in online

S.No	Course Name	No. of Videos	Link
1	Data Structures	75	https://www.youtube.com/playlist?list=PL_UqaR55i17_2Pb8iBJEu90ZjhIzCdQsZ
2	C Programming	32	https://www.youtube.com/playlist?list=PL_UqaR55i17_E-bkW6gmFrMag2k_V6jaZ
3	Cryptography	14	https://www.youtube.com/playlist?list=PL_UqaR55i178lRFLiva63WXMEWbgglAPy
4	Unix basics and commands	5	https://www.youtube.com/playlist?list=PL_UqaR55i1791juc93RHHuXS-xHiydpEQ
5	Unix shell scripting	6	https://www.youtube.com/playlist?list=PL_UqaR55i1782xK-OEKBO-vt4MryicqV3

Fig 5.32 Published Comments for Lecturer materials

POWER POINT PRESENTATION

A PowerPoint presentation must be interesting. No one wants to read about a boring subject or something mundane. They want to listen to an exhibition that is packed full of interesting facts and figures. From the PowerPoint presentation Students strengthen their vocabulary, grammar, speaking, and writing skills. Besides, students gain more confidence and good communication skills.
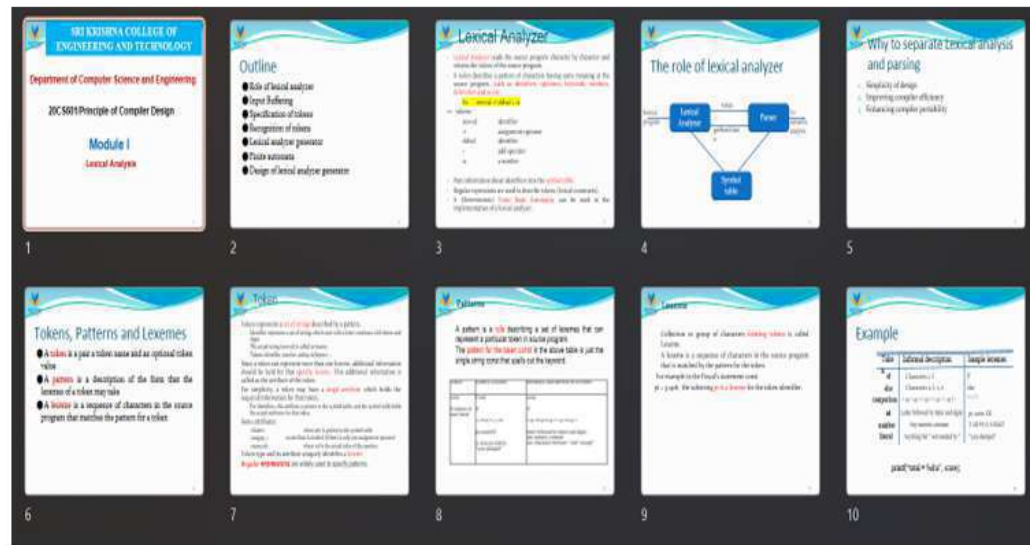

Fig 5.33 Power point Presentation

WORKING MATERIALS

The google classroom created for a subject encloses the following:

- Audio Learning – Materials are provided for *podcasts, videos, lectures, and speeches*
- Visual Learning – Tools like simulators, IDE, mind maps, flow charts, and visually organized notes.
- Audio Visual Learning - PowerPoint presentations that complement the standard lecture. Video clips with voiceover, moving or stationary footage.
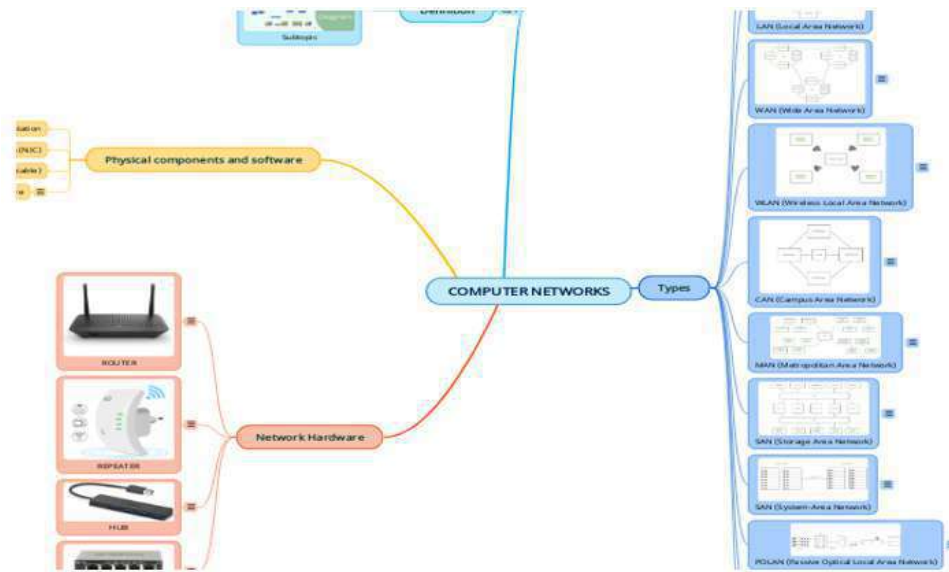
Fig 5.34 Simulation

QUESTION BANK

The question bank provided as a teaching aid to the students comprises of

- Previous year CIA question papers
- Previous year University question papers
- Two marks questions with answers
- Elaborated questions with answer key.
- Module-wise coverage of questions

VIRTUAL LABS

Virtual labs incorporate various pedagogical techniques that help learners to better understand the theoretical information. These techniques include visual learning, active learning, recall-based learning, gamification & storytelling. It **allows learning flexibility**. Since all virtual labs are cloud-based or accessible via the web, they offer students unhindered access to the platform whenever they want. Students can also access the laboratory on any device from any location, making them indispensable for contactless learning.
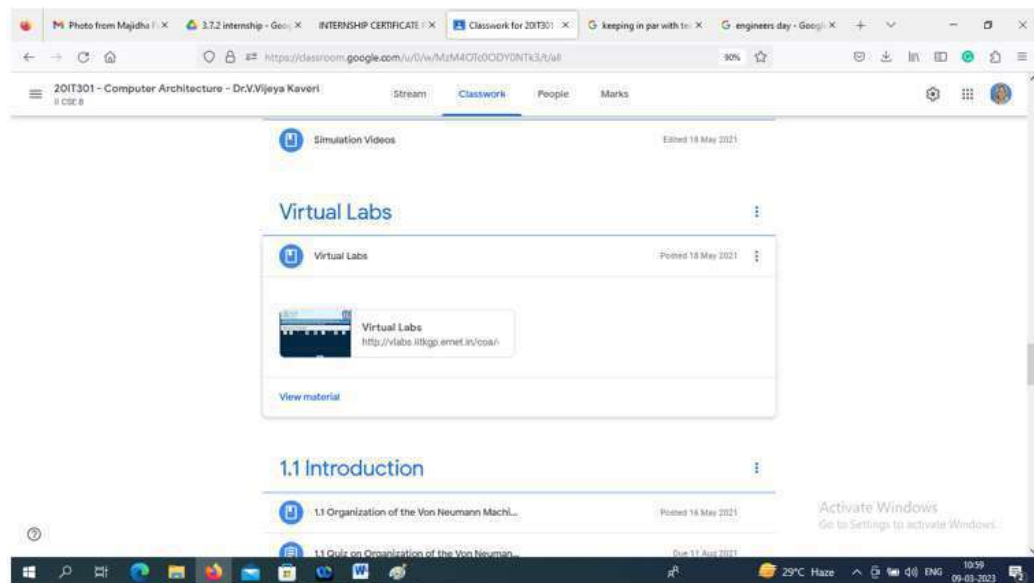
Fig 5.35 Virtual Lab details in GCR

D . Working models/charts/monograms:

Table 5.61 Working models

S.No	Details
1	Animations

- Application package developed to train the students to get knowledge in aptitude and also in technical areas.
- The various technical charts are available in the laboratories to give the perception knowledge about the lab experiments, pertaining to the lab experiment.

ANIMATIONS

Animation is a method of photographing successive drawings, models, or even puppets, to create an illusion of movement in a sequence. Because our eyes can only retain an image for approximately 1/10 of a second, when multiple images appear in fast succession, the brain blends them into a single moving image. To get a clear insight knowledge for students about the topics, faculty members create animated videos.

III CSE A
18CS501 - THEORY OF COMPUTATION - Ms.S.BIRUNTHA

Fig 5.36 Animated video for CFG

5.8.4 Consultancy (from Industry) (20)   Institute Marks : 20.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount(in Rupees)
IoT based Safe	1	Maxbyte Techn	110000.00
Reducing side-	1	Datinfi Pvt Ltd	100000.00
			Total Amount(X): 210000.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Automated Sel	1	Comtustec Indi	126500.00
SIGPID for And	1	Innovare Cons	85000.00
An Open-Ende	1	Eron Techno S	90000.00
			Total Amount(Y): 301500.00

2019-20 (CAYm3)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Hospital Patient Feedba	2	Sree Abirami H	150000.00
Sri Maha Ganapathi Jev	1	Product Advert	150000.00
Driver Drowsing Detecti	1	Maverick Globa	100000.00
IOT Based Gesture Rec	1	Grey Tech Con	120000.00
			Total Amount(Z): 520000.00

Cumulative Amount(X + Y + Z) =   1031500.00

5.9 Faculty Performance Appraisal and Development System (FPADS) (10)   Total Marks 10.00

Institute Marks : 10.00

A. A Well-defined Performance Appraisal and Development System instituted for all the assessment years

The self-appraisal report is necessary to assess the performance of every faculty at the end of every academic year and apply appropriate corrective measures to ensure a quality teaching learning process. Faculty members are instructed to fill the appraisal form and submitted to the HOD. Appraisal is based on the following criteria,

- Academic Results
- Research Projects
- Publications
- Experience (Teaching & Industry)
- Qualification upgradation
- Events attended
- Course materials preparation
- Activities and contribution made in academic and administration (Institution level& Department level)
- Student feedback

The faculty member may submit any additional information to be appended to this self-appraisal form.

FACULTY PERFORMANCE ASSESSEMENT INDEX [FPAI]

ACADEMIC YEAR : 2022-23

Name of the Faculty : Majidha Fathima K M   Designation : Assistant Professor

S.No	Performance Metric	Max. Score	Odd Sem (Subject Name with %) Nov/Dec 2022	Even Sem (Subject Name with %) April/May 2022
1	Pass Percentage	36	Operating Systems (II CSE C - 95.45%)	C and Data Structures (I CSE A - 100%) C and Data Structures Lab (I CSE A - 100%)
			Data Warehousing and Data Mining Problem Solving using C++	Network Design and Technologies (I ME - 75%)
2	Research	10	DST TIDE funded sponsored project: Design and Development of a Smart Pen for Dyslexics 1. Co Investigator 1 Funded Amount: Rs.55,19,644. 2. Paper presentation at International Conference EMMA 2021, Chennai organized by "Panipet Institute of Engineering and Technology. "Outstanding Contribution" certificate was given 3. Received Design Patent Grant	

| 3 | Publications | 5 | Indexed in Scopus: Blockchain Based Government Tender Allocation in Cloud June 2022 https://ieeexplore.ieee.org/document/978511 6 | Indexed in Scopus: 1. Augmentation of Intelligent Agent for Multiple Access Protocols in Wireless Sensor Networks March 2022 https://ieeexplore.ieee.org/document/9742944 2. Three papers in march,april,may 2021. All indexed in scopus 3. A Survey on Artificial Intelligence Based Assisted Writing Device to Support Dyslexia Affected Children Dec 2021 |
4	Additional Assignments	4	1. ARIIA Coordinator 2. Department Library In-charge 3. Communication to digital library. 4. Consultancy 5. Deep Vision Tech hackathon Coordinator 6. IamNEO training 7. Final Year Advisor 8. Final Year Project Coordinator 9. Lab Manuals/Lesson Plan 10. Collecting certificates - co-curricular and extra-curricular activities - IV CSE B	
5	Experience	10	Industry : 2 years 3 months SKCET: 5 years 10 months Other Engg College: 3 years Arts: 10 months Total: 11 years 1 month	
6	Qualification upgradation	5	Provisional Registration Confirmation Received Reviewer Comments for Annexure 1 Journals. Incorporated the changes and sent.	
7	Faculty Development Programme/	5	1. Attened FDP on "Information Security: Analytics, Tools, Use cases and Demo" by VIT , Chennai 2. Attended FDP on "Artificial Intelligence" by ICT Academy 3. Attended FDP at PSG iTECH for "Cloud Computing" in Naan Mudhalvan scheme. 4. Attended FDP on "Collective Technologies on AI and IOT with Security" by at Care College of Engineering, Trichy.	
8	Course Plan and Material/ Classroom practice	5	1. Simulators. 2. Certification and Job oriented Inputs. 3. Demonstration of topics by real time tools. 4. Role play by the students for understanding of the concepts.	
9	Participation in Development process	10	1. Mentored students for hackathons. 2. Conducted gmeet for developing chatbot (using RASA tool) by the students. 3. Assisted in developing working model for IBM Nalaiya Thiran project selected in regional level. 4. NPTEL certification on "Leadership and Team Effectiveness". 5. Oracle Certification on "Oracle Cloud Infrastructure".	
10	Student feedback (Evaluated by HoD)	10		
	TOTAL MARKS	100		

Faculty Signature

Dr. K. SASI KALA RANI, M.E.,Ph.D.,
Professor & Head
Dept. of Computer Science & Engg.
Sri Krishna College of Engineering and Technology,
Coimbatore - 641 008.

Fig 5.37 Performance Appraisal

B. Its implementation and effectiveness

- All faculty members are evaluated using self- appraisal system at the end of every academic year.
- HOD evaluates the score of the faculty and prepares a report based on the score.
- The final report given by the HOD are analyzed by the principal and effective measures are instructed through HOD
- The faculty will be notified with the performance and encourage them to come out of the weakness if any. The faculty members who have good score are also appreciated.
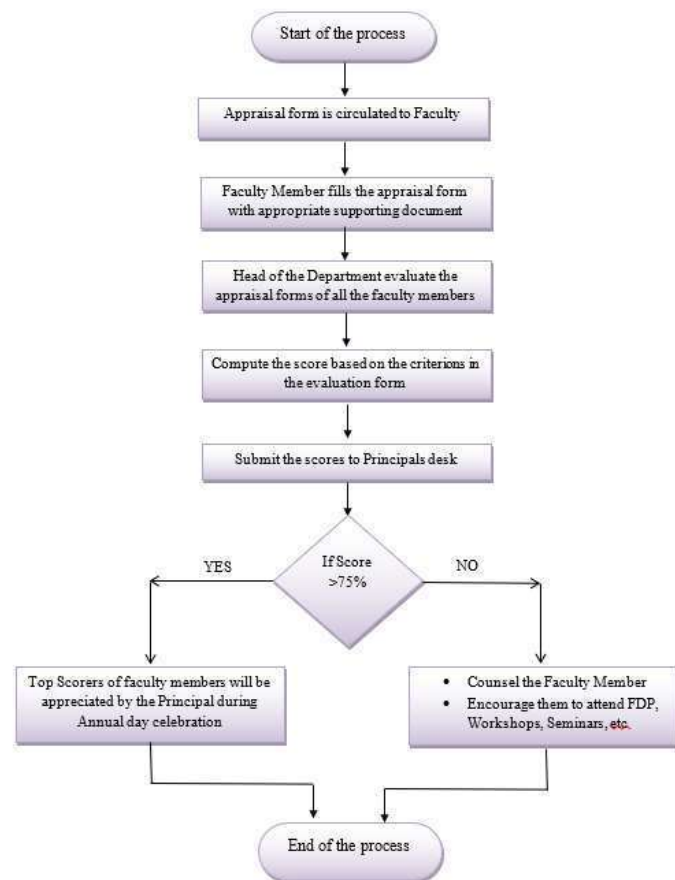
Fig 5.38 Self Appraisal Form Evaluation Process

5.10 Visiting/Adjunct/Emeritus Faculty etc. (10)   Total Marks 10.00

Institute Marks : 10.00

Visiting/Adjunct/ Emeritus Faculty

Table 5.62 Visiting faculty during the academic year 2022-2023

S.No	Name of the Visiting Faculty	Name of the Company	Area of Specialization	Subject Handled
1	Ms.S.Pramila	Accenture, Chennai	Network	• Computer Networks • Serverless Computing

Table 5.63 Visiting faculty during the academic year 2021-2022

S.No	Name of the Visiting Faculty	Name of the Company	Area of Specialization	Subject Handled
1	Mr.A.Ramesh	HCL Technologies Limited, Bangalore	Artificial Intelligence	• Artificial Intelligence & Expert Systems • Data Analytics

Table 5.64 Visiting faculty during the academic year 2020-2021

S.No	Name of the Visiting Faculty	Name of the Company	Area of Specialization	Subject Handled
1	Mr.A.Ramesh	HCL Technologies Limited, Bangalore	Artificial Intelligence	• Artificial Intelligence & Expert Systems • Data Analytics

6 FACILITIES AND TECHNICAL SUPPORT (80)

Total Marks 80.00

6.1 Adequate and well equipped laboratories, and technical manpower (40)

Total Marks 40.00

Institute Marks : 40.00

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Alan Kay Lab	70	PC- i3/ 500GB	Odd: 18 Even:	Mr.B. Chandru	Lab Technician	MCA
2	Edger F Codd	70	Lenovo laptop	Odd: 15 Even:	Ms.S. Keerthi	Lab Technician	MCA
3	Niklaus Wirth L	70	Lenovo laptop	Odd:18 Even:	Ms.V. Krithika	Lab Technician	M.Sc(CS)
4	John Walker L	70	PC- i3 2nd Ger	Odd: 30 Even:3	Mr. Siva Chand	Lab Technician	B.Sc(CS)
5	IoT Lab	25	PC- Core 2 Du	Odd: 9+9 (R) E	Ms. G.Dharani	Lab Technician	B.Sc(CS)
6	Research Lab	30	Lenovo Think c	Odd: 15 Even:	Ms. G.Dharani	Lab Technician	B.Sc(CS)

6.2 Laboratories maintenance and overall ambiance (10)

Total Marks 10.00

Institute Marks : 10.00

Maintenance of Laboratory Equipment

The laboratory equipment's are maintained in the following ways:

- The maintenance of computers is managed by the System Admin and Team.
- Regular check-ups of the efficiency of the equipment's are conducted on a weekly basis.
- A maintenance register is kept in the laboratories to keep tab of the work.
- The lab technical staff is responsible for minor repairs in the system and printers.
- Major repair works are undertaken through outsourcing by following the institutes procedure.
- The UPS and AC are covered under an Annual Maintenance Contract, and the appointed team carries out regular checks.
- The PCs are refurbished at the end of every semester.
- The Gateway antivirus is installed in the Firewall to filter unnecessary activities through the internet.
- The Security software is installed to restrict and block unnecessary activities.
- General guidelines to safeguard users are displayed in the laboratories.

Overall Ambience

The complete ambiance of the laboratory facilities can be adeptly depicted as follows:

- The laboratories are equipped with sufficient computers and latest software's to meet the requirements of the curriculum.
- The furnishings of the labs are in good condition, and individual seatings are provided for students while in lab.
- The systems are structured in a cubic form to have a good visual perception by the faculty in order to focus on the lab- oriented teaching
- The laboratory has a list of rules and regulations that, every student must follow dutifully. They are mandated to sign in the entry register with their system number, in-time, and out-time.
- The aeration is regulated with adequate windows that facilitate ventilation and natural lighting, and every lab has an emergency exit.
- The cupboards are available in each lab for students to keep their belongings.
- Each lab is equipped with abuilt-in projector,whiteboard,internet, and amenities such as WiFi.
- A project laboratory is available for all faculty and students to conduct project and research work.
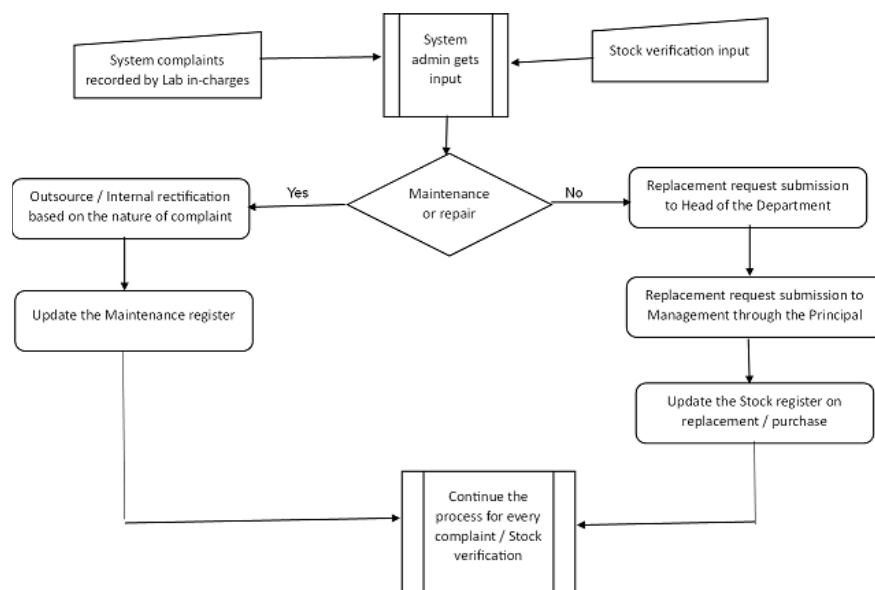
Fig.6.1 Lab Maintenance process

Fig.6.2 Printer Service Register

Fig.6.3 Equipment Service Register

6.3 Safety measures in laboratories (10)																Total Marks 10.00

Institute Marks : 10.00

Sr. No	Laboratory Name	Safety Measures
1	Alan Kay Lab	• Proper insulation of electric power lines is ensured. • Specific safety rules for students are displayed prominently. • First aid boxes and fire extinguishers are available in the lab. • Laboratory is maintained in an organized way. • A gateway antivirus is installed in the firewall to filter unnecessary activities. • Cell phone usage is prohibited in the laboratory.
2	Edger F Codd Lab	• Proper insulation of electric power lines is ensured. • Specific safety rules for students are displayed prominently. • First aid boxes and fire extinguishers are available in the lab. • Laboratory is maintained in an organized way. • A gateway antivirus is installed in the firewall to filter unnecessary activities. • Cell phone usage is prohibited in the laboratory.
3	Niklaus Wirth Lab	• Proper insulation of electric power lines is ensured. • Specific safety rules for students are displayed prominently. • First aid boxes and fire extinguishers are available in the lab. • Laboratory is maintained in an organized way. • A gateway antivirus is installed in the firewall to filter unnecessary activities. • Cell phone usage is prohibited in the laboratory.
4	John Walker Lab	• Proper insulation of electric power lines is ensured. • Specific safety rules for students are displayed prominently. • First aid boxes and fire extinguishers are available in the lab. • Laboratory is maintained in an organized way. • A gateway antivirus is installed in the firewall to filter unnecessary activities. • Cell phone usage is prohibited in the laboratory.
5	IoT Lab	• Proper insulation of electric power lines is ensured. • Specific safety rules for students are displayed prominently. • First aid boxes and fire extinguishers are available in the lab. • Laboratory is maintained in an organized way. • A gateway antivirus is installed in the firewall to filter unnecessary activities. • Cell phone usage is prohibited in the laboratory.
6	Research Lab (JB Lab)	• Proper insulation of electric power lines is ensured. • Specific safety rules for students are displayed prominently. • First aid boxes and fire extinguishers are available in the lab. • Laboratory is maintained in an organized way. • A gateway antivirus is installed in the firewall to filter unnecessary activities. • Cell phone usage is prohibited in the laboratory.

6.4 Project laboratory (20)																Total Marks 20.00

Institute Marks : 20.00

- Computer Science and Engineering Department allocates lab facilities to the students based on the project requirements.
- The labs are well equipped with sufficient hardware and licensed/open-source software to execute their project ideas
- Technical support is provided by the central hardware and software team.
- The project teams are assigned to the faculty members based on domain expertise
- The students are encouraged to utilize the project lab for Hackathons and project competitions. They effectively make use of this space and other available facilities.
- Design projects and final year in-house projects are conducted by students in the project lab.
- Students working on embedded hardware models utilize IoT components and simulators available in the IoT lab.
- Each student is provided with an individual computer for their project work.
- The department provides students 1 Gbps internet access to facilitate their innovations.
- **Separate lab (Alan Kay Lab)** is allotted to do Final Year students in-house projects in Even semester.

Table 6.1 Project Lab specifications

Name of the project Lab	Number of Systems	Specification
Alan Kay Lab	70	PC- i3 2nd Gen, 4GB RAM/ 500 GB HDD

- Two special servers are available for student's project and Hackathon preparations in **Centre for Deep Learning and Data Science**
  - ○ **Dell Server R740 (Specifications in Table 6.2)**
  - ○ **Dell Server R750 (Specifications in Table 6.3)**

Table 6.2 Technical Specification – Dell Server R740

Technical Specifications	**Processor:** 2* Intel® Xeon® Gold 6130 2.1 GHz up to 16Core / 32 T 10.4 GT/s, cores per processor **GPU:** 2 * NVIDIA Tesla V100 32GB Passive GPU, 6 * 32 GB RDIMM 2666 MT/s Dual Rank **Storage:** Chassis with up to 16 x 2.5" SAS / SATA Hard / Riser Config 4, 3 x 8, 4 x 16 Slots. 2 * 1.92TB SSD SATA Mix use 6Gbps 512 2.5in Hot – plug AG Drive, 3 DWPD, 10512 TBW. 6 * 1.2 TB 10K RPM SAS 12 Gbps 512n 2.5in Hotplug Hard Drive Internal controllers: PERC H730p RAID Controller, 2GB NV / 6 Performance Fans for R740/740XD

Table 6.3 Technical Specification –Dell Server R750

Features	Technical Specifications

Technical Specifications	**Processor:** 2* Intel® Xeon® Gold 6226R 2.9G GHz up to 16Core / 32 T 10.4 GT/s, cores per processor
	GPU: 1 * NVIDIA Ampere A100, PCIe, 250W, 80GB Passive, Double Wide, Full Height GPU – 1 No, 8" 32GB RDIMM, 3200MT/s, Dual Rank
	Storage: Chassis with up to 8x2.5" SAS/SATA Hard Drives for 2 CPU PERC11 Configuration / Riser Config 15, 3x8, 4x16 slots, 8" 32GB RDIMM, 3200MT/s, Dual Rank 16 GB Base x 8.
	2 * 1.92TB SSD SATA Read Intensive 6 Gbps 512, 2.5in Hot – plug AG Drive, 1 DWPD / 4 * 1.2 TB 10K RPM SAS 12 Gbps 512n 2.5in Hotplug Hard Drive
	Internal controllers: PERC H750 Adapter, Low Profile, 6 Performance Fans, for R750/750 XD

Fig 6.4 Deep Learning Servers Dell EMC R740 and R 750

Outcome of the Research Laboratory:

- **High-Performance Computing Infrastructure:** The research lab is equipped with a powerful computing infrastructure comprising high-performance servers, GPUs, and specialized hardware accelerators. This infrastructure enables the researchers to train complex deep learning models and process large-scale datasets efficiently.
- **Data Repository and Management:** The lab establishes a comprehensive data repository, carefully curated and anonymized, to support research initiatives. This repository will include diverse datasets, encompassing various domains and types of data, ensuring researchers have access to the resources necessary to explore the full potential of deep learning and data science.
- **Experimentation and Prototyping Area:** The lab provides dedicated spaces for experimentation and prototyping. These areas will be equipped with development kits, software frameworks, and tools required for rapid prototyping and testing of deep learning models. Researchers have the opportunity to collaborate, share ideas, and iterate on their projects in a collaborative environment.
- **Collaboration and Knowledge Exchange:** The research lab fosters a collaborative ecosystem, encouraging researchers, students, and industry professionals to engage in joint projects, share expertise, and exchange knowledge. This includes hosting workshops, seminars, and conferences, as well as establishing partnerships with other research institutions, industry leaders, and academic organizations.
- **Training and Education:** The lab offers training programs and educational resources to support the development of skilled professionals in deep learning and data science. These programs caters to researchers, students, and industry professionals, providing them with the necessary tools, theoretical foundations, and practical expertise to excel in the field.

Fig 6.5 Application project implementation

Hackathon outcomes:

Students are encouraged to utilize lab facilities for various project contests and Hackathons. Our students have actively participated in several project / Hackathons as given in Table 6.3

Table 6.4 Students participation in Project / Hackathons

YEAR	2022-2023		2022-2021		2020-2021	
Event	Won	Participated	Won	Participated	Won	Participated
Hackathons / Project Contests	67	64	53	47	49	23

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7 CONTINUOUS IMPROVEMENT (75)   Total Marks 75.00

7.1 Actions taken based on the results of evaluation of each of the COs, POs & PSOs (30)   Total Marks 30.00

Institute Marks : 30.00

POs Attainment Levels and Actions for Improvement- (2021-22)

POs	Target Level	Attainment Level	Observations

PO 1 : Engineering Knowledge

PO 1	70%	82.2%	The PO1 attainment for the batch (2018-22) is Attained. The PO1 attainment for the course titled "Digital Principles and System Design(18EC311)" is comparatively lesser. Video materials and Simulation Labs are suggested for the next batch.

The following actions are taken to improve the attainment level further: Action 1. The Video Materials and Animated PPTs will be posted in the Google Classrooms. Action 2. Simulation Labs and Tutorials will be conducted to improve the knowledge in mathematics. In addition, technical quizzes, seminars, case studies and mini-project components will be added for the design courses.

PO 2 : Problem Analysis

PO 2	70%	80.6%	Attained.

The following actions are taken to improve the attainment level further Action 1. Compared to previous regulation, current regulation has more number of lab component courses to improve the analyzing capacity of the student. Action 2. Project courses have been increased to provide the students a platform to review the real world problem, analyze it and provide IT based solution. Action 3. Internship training is encouraged among students to build analytical skills on real time industrial and application oriented problems and to find effective solutions. 4. Mandatory course called Quantitative aptitude and soft skills course is introduced to enhance the problem solving skills of the students.

PO 3 : Design/development of Solutions

PO 3	70%	80.2%	Attained

The following actions are taken to improve the attainment level further Action 1. Students are motivated to display their project works in Hackathon related competition organized by government and private sector organizations. Action 2. Students are encouraged to do technical projects to understand the database and mobile applications concepts to design the products based on health, safety and societal needs. Action 3. To improve students interest towards design and development of product/software, students are continuously motivated to participate in various activities like project design contest, idea presentation, Hackathon, Smart India Hackathon, etc.

PO 4 : Conduct Investigations of Complex Problems

PO 4	70%	82.6%	Attained

The following actions are taken to improve the attainment level further Action 1. Students are encouraged to present their final project work in conferences or journals to further improve the research knowledge. Action 2. New courses in emerging thrust areas like artificial intelligence & expert systems, information retrieval and data analytics have been introduced to enhance the knowledge of students to investigate complex problems and to provide solutions to it. Action 3. Students are encouraged to do investigations on complex problems by doing surveys on recent research publications. Action 4. Assignments are given based on recent research methodologies to motivate the students to learn research complexity and understandability.

PO 5 : Modern Tool Usage

PO 5	70%	81.3%	Attained

The following actions are taken to improve the attainment level further Action 1. More number of laboratory component courses has been introduced with modernized tools. Action 2. Students use different tools while creating mobile and web based applications, IoT projects during project development. Action 3. Students are trained to utilize the modern engineering and IT tools like Anaconda, Github, Python libraries, Google Colab, Rapid Miner, Visual Studios, MySql, NetBeans in their project work and other technical events. Action 4. Students are encouraged to participate in National level design contests like Smart India Hackathon, Technical competitions, Idea Presentation and Project Expo to expose and improve their tool handling skills.

PO 6 : The Engineer and Society

PO 6	70%	81.7%	Attained

The following actions are taken to improve the attainment level further Action 1. Students are provided with opportunities to incubate their business ideas in college premises utilizing necessary infrastructure and knowledge partners to transform into business model. Action 2. Students are provided a platform to express their skills and knowledge with respect to social behaviours. Action 3. Students are continuously encouraged to participate in hackathons and to develop the products/projects related to health and safety. Action 4. Students are encouraged to visit more industries to understand the safety aspects and social concerns in simplifying risk and threat assessment.

PO 7 : Environment and Sustainability

PO 7	70%	82.3%	Attained

The following actions are taken to improve the attainment level further Action 1. A mandatory course named environmental science course has been included to provide knowledge on pollution, climate change and need for sustainable development. Action 2. Students are tangled to understand the societal needs and encourage them in identifying the software solutions. Action 3. Students are emphasized to do projects addressing societal and industrial needs with the concern on end-to-end solutions and security. Action 4. Through clubs like NSS, NCC opportunities are given to students for plantation and cleanliness drive to make them aware of current environmental issues.

PO 8 : Ethics

PO 8	70%	82.2%	Attained

The following actions are taken to improve the attainment level further Action 1. A mandatory course named Ethics In Engineering Practice, Universal Human Values is introduced as the personal effectiveness course to improve the ethical values of the students. Action 2. Students are provided with opportunities to interact with industrial persons to know more about the work ethics and policies. Action 3. Students are encouraged to publish their original research/project works in the journal by adhering to the publication ethics. Action 4. Employability enhancement skills has been introduced to teach the ethical principles to the students.

PO 9 : Individual and Team Work

PO 9	70%	80.1%	Attained

The following actions are taken to improve the attainment level further Action 1. Mini projects and project works are taken up by students in groups with similar ideas. Action 2. Students are motivated to participate in the hackathon events in groups to up-skill their team work capabilities. Action 3. Students undergoing internship and industry projects to enhance their knowledge and function as a team. Action 4. Students are encouraged to work with multi-disciplinary projects to learn teamwork and interact with other department students and domains. Action 5. Students are accord with responsibility of professional associated and Co-curricular activities towards improving organizing skill, team dynamics and leadership qualities.

PO 10 : Communication

PO 10	70%	81.3%	Attained

The following actions are taken to improve the attainment level further Action 1. Skill development activities like group discussions, snap talk, seminar on technical topics, mock interviews are introduced to improve the confident of a student while communicating. Action 2. Project documentation work has been included to enhance the student's documentation skill set. Action 3. Students are encouraged to develop their communication skills by participating in Paper presentation, Project reviews, Project demonstration and Idea presentation. Action 4. Employability enhancement skills has been introduced to enhance the communication skills of the students.

PO 11 : Project Management and Finance

PO 11	70%	82.7%	Attained

The following actions are taken to improve the attainment level further Action 1. Software engineering and management courses encompass them to coordinate among themselves in making business considerations and its financial management. Action 2. Students are encouraged to participate as a team in the National level project competitions like Darkathon, Smart India Hackathon, MathWorks Minidrone, etc and make them prepare their project development cost and their individual project development contribution. Action 3. Students are motivated to convert their projects into the products for learning and up-lifting their finance and management skills.

PO 12 : Life-long Learning

PO 12	70%	80.7%	Attained

The following actions are taken to improve the attainment level further Action 1. Mandatory online courses have been introduced to improve the self-learning capacity among students community. Action 2. Students are encouraged to do online courses as self-paced learning using massively open online certification web portals such as NPTEL, Udemy, and Spoken Tutorial. Action 3. Students are motivated to do their higher studies as an action for lifelong learning.

PSOs Attainment Levels and Actions for Improvement- (2021-22)

PSOs	Target Level	Attainment Level	Observations

PSO 1 : Apply the fundamental knowledge for problem solving and analysis as well as conduct investigations in computer science and engineering for sustainable development

PSO 1	70%	80.2%	Attained. The number of contributing courses in PSO1 attainment is 47. The significance given to hackathons, Design contest, internships and value added courses has improved the attainment of PSO1.

The following actions are taken to improve the attainment level further Action 1. Students are guided to take societal problem statements to address the real time application requirements. Action 2. Students are highly motivated to participate in the hackathon events, project presentation to improve their problem solving and analysis skill.

PSO 2 : Design and develop the solutions for real time problems and implement them by using modern software tools in lieu of deploying them in the society for its growth.

PSO 2	70%	81.3%	Attained. The number of contributing courses in PSO2 attainment is 35. Coding in Online coding platforms such as HackerEarth, HackerRank, CodeForces has improved their design and development skills.

The following actions are taken to improve the attainment level further Action 1. Students are trained to utilize the recent software tools like Anaconda, NVIDIA, MATLAB, Visual studio, Flutter, Xamarin and so on to develop projects. Action 2. Students are motivated to participate in Seminar / Workshop / Symposium / national and international Competitions to develop their domain skill and to learn recent new tools in use. Action 3. Students are motivated and trained by the center of excellence for using various tools and apply them in developing the projects.

PSO 3 : Communicate effectively, adopt ethics and engage in life-long learning.

PSO 3	70%	80.7%	Attained. The number of contributing courses in PSO3 attainment is 48. Paper publication in Scopus indexed journals or conferences is insisted.

Action 1. Continuous learning is inculcated among the students by involving them in the research projects and publications. Action 2. Students are motivated to learn by self using e-resources like NPTEL, SWAYAM, UDEMY, Coursera, edX, Cognitive AI, Deep Learning.ai , NVIDIA to keep pace with technological advancement. Action 3. Students are encouraged to do their higher studies as an action for lifelong learning. 4. Students are motivated to organize the technical and non-technical events to learn self-ethics and to enhance their communication ability.

7.2 Academic Audit and actions taken thereof during the period of Assessment (15)	Total Marks 15.00

Institute Marks : 15.00

Academic Audit

The process of academic auditing intends to monitor and enhance the quality of technical education to ensure that qualified engineers/researchers pass out of the institution. The Academic Audit is conducted through internal/external faculty members to assess the progress of system performance to ensure the quality in education. The Academic Audit is conducted after every CIA Test. An action plan is developed as a result of the previous Academic Audit. The weakness and areas of improvement are identified and implemented for further development.

Academic audit for the department is conducted by the following bodies in the institution

1. Internal audit

2. External audit
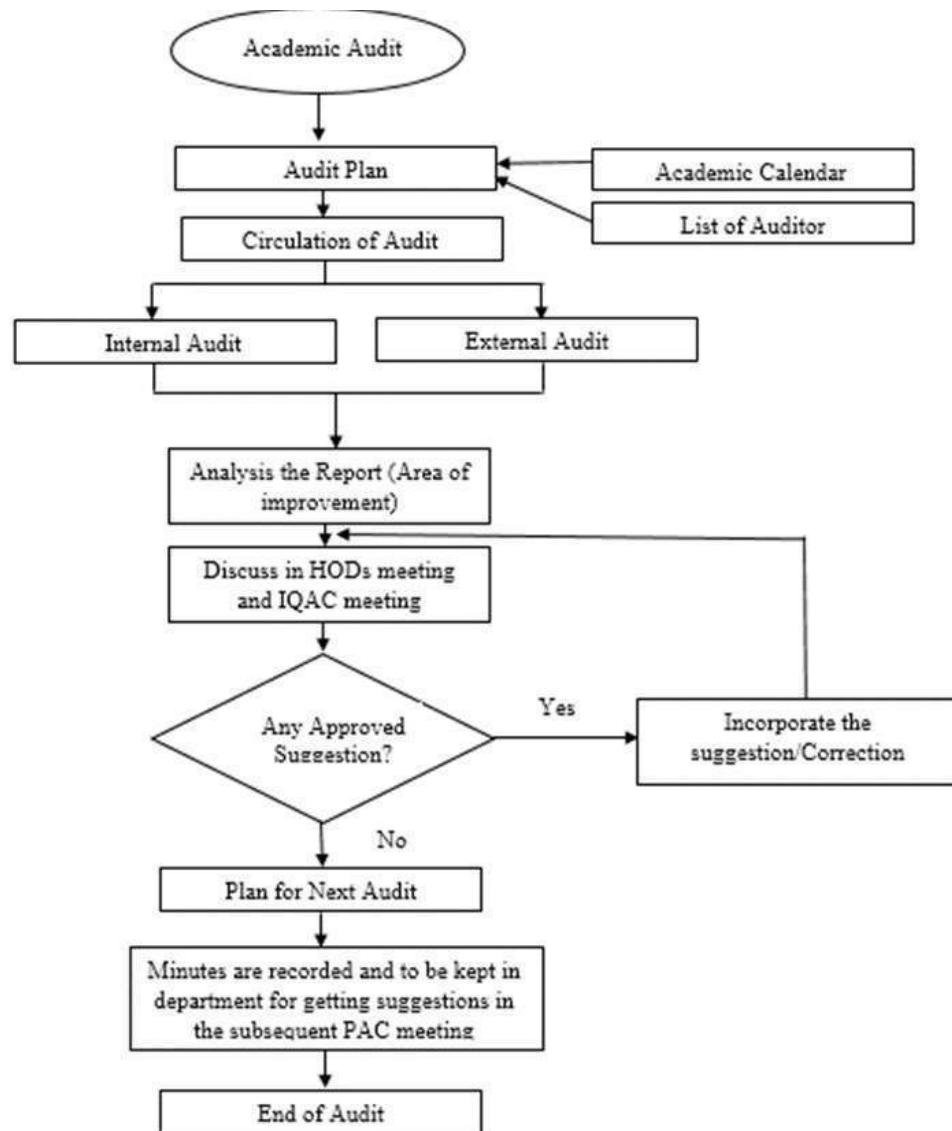
Figure 7.2: Academic Audit Process

Internal Audit

Internal audit will be done by the senior faculty members of the department. In the internal audit is carried to check the files of class committee meeting, course committee meeting, course materials and course plan, course file, board of studies, events organized, performance of the faculty members and students. The auditor's report will be submitted to the department head and to the principal of the college. Based on the audit reports, the action will be taken to improve the performance of the department.

External Audit

The audit will be done by the external faculty members from the reputed institutions. The auditors will check the course files of the faculty members, research progress of the department, students' performance, board of studies files, events organized, PAC and PEC files. The auditor's report will be submitted to the department head and to the principal of the college. Based on the audit reports, the action will be taken to improve the performance of the faculty member's and the department.

Internal auditors and External auditors will review the department with the following parameters:

1. CBCS in the curriculum

2. Feedback form the stakeholders

3. Syllabus revision

4. Board of studies conducted

5. Reforms in the curriculum

6. Faculty deputed to seminars/workshops/FDPs, etc.

7. Appraisal Systems

8. ICT based teaching

9. Research, Consultancy and Extension (Journals/Conference/Patents/Books/Funded Projects/Consultancy

10. Infrastructure and Learning resource

11. Students support and progression.

12. Laboratory stock register

Table 7.1: Observation from Academic Audits - CAY (2022-23)

Sl.No.	Area(s)	Observations(s)/ Suggestions(s)	Action(s) Taken
1	Guest Lectures	Arrangement of subject specific guest lectures.	Subject specific guest lectures were arranged by the department and benefitted by the students.
2	Faculty Training	More training to Faculty members related to recent advancements in the area of their interest needs to be offered.	Faculty members are asked to participate in Seminars/ Workshops/ Internships/ FDP/ STTP Quality improvement programmes to enhance their skills in advanced technologies.
3	Training for Non-Teaching Staffs	Requirement for training / refresher course for non-teaching staff.	Hands-on training programmes on handling laboratory instruments are arranged and provided training.
4	Higher Studies	Less number of students opted higher studies.	Students are motivated to join the higher studies in the reputed institutions.
5	Research	Paper publication in the conference, journals and book chapter should be improved.	Faculty members are motivated to improve their publication.

Table 7.2: Observation from Academic Audits – CAYm1 (2021-22)

Sl.No.	Area(s)	Observations(s)/ Suggestions(s)	Action(s) Taken
1	Learning	Need of maximum attention to slow learners.	Remedial classes and tutorial classes are conducted to improve the performance of the slow learners.
2	Research	Few publication done in the book chapter.	Faculty members are motivated to publish their papers in book chapters.
3	Research	Few publications in journals.	Faculty members are motivated and advised to publish their research work in the reputed journals.
4	IPR	IPR activities can be improved.	Eleven patents have been filed during Academic Year 2021 – 2022.
5	Certification	Industry certification for the faculty members can be improved.	Faculty members are motivated to train on recent technology and to be certified by the reputed industry.

Outcome for the academic audit 2021-22 (Achieved in the year 2022-2023)

- Subject specific guest lectures were arranged for the benefit of the students
- 50 journal publications and 48 conference publications were done by the faculty members.
- 6 book chapters were published by the faculty members.
- 17 patents were filed by the faculty members.

Table 7.3: Observation from Academic Audits – CAYm2 (2020-21)

Sl.No.	Area(s)	Observations(s)/ Suggestions(s)	Action(s) Taken
1	Events	The participation in the national and international events can be improved.	Steps have been taken to improve the student participation.
2	Publication	Students publication counts can be improved.	Initiatives are taken to improve the student publication count.
3	Publication	Less participation the conference presentation and publication.	Faculty members are advised to present their ideas and research work in the national and international level conferences.
4	Entrepreneurship	Students should be encouraged to start their startups.	Awareness was given to the students on Entrepreneurship and startups.
5	Placement	The average package of the students should be improved.	Actions was taken to improve the average salary of the students.
6	IPR	IPR activities can be improved.	Faculty members are advised to improve the IPR activities.
7	Product Development	Students should develop the products from their projects.	Students are motivated to develop their products for the society /industry/ organization.

Outcome for the academic audit 2020-2021 (Achieved in the year 2021-2022)

- 6 book chapters has been published by the faculty members.
- 16 patent has been filed.
- 43 papers published in the reputed journals.
- Average placement package is increased to 6.25L.
- Entrepreneurship status is improved. 5 students has been found as the Entrepreneurs.

<u>Academic Audit Report – Sample Copy:</u>

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

KUNIAMUTHUR, COIMBATORE – 641008

External Academic Administrative Audit

Name of the Department: *Computer Science & Engineering*

Team Member(s): *Dr. Sudha Sadhasivam, Prof., PSG Tech*   Date of Audit: *10/05/2023*
Dr. M. Sangeetha, Asso. Prof., CIT

S. No.	Parameter	Yes	No	Remark
a. Curricular Aspects				
1	CBCS Introduced in curriculum	✓		
2	Feedback from stakeholders obtained: Alumni Students Faculty Employers Parents	✓		
3	Syllabus Revision Carried Out	✓		
4	Board of Studies Conducted	✓		
5	Reforms in Curriculum (if any)			*Industry based curriculum is been followed in the dept.* *→ Subject specific guest lectures can be arranged.*
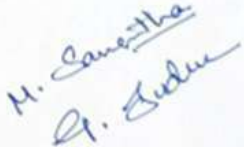
b. Teaching Learning and Evaluation				
1	Faculty deputed to Seminars/Workshops/Conferences	✓		
2	Academic calendar exists	✓		
3	Appraisal systems for teaching/non-teaching staff exists	✓		
4	ICT based teaching practiced	✓		
5	Reforms in teaching-learning process (if-any)	Faculty members can be motivated to attend FDP's related to their area of interests.		
c. Research, Consultancy and Extension				
1	Faculty published papers in referred journals/conferences	✓		Publications can be increased in SCI journal.
2	Patents published	✓		

3	Book published status	✓		
4	Funded projects/consultancy from government/ non-government agencies	✓		Can be Improved
5	Activities (Seminars/Workshops) conducted to promote research	✓		
6	Recognized research Centre/ research supervisors exists	✓		
7	Extension activities conducted (along with NSS/YRC and other department clubs)	✓		
8	Any other R&D activities		—	

d. Infrastructure and Learning Resources				
1	New equipment/new laboratory established	✓		
2	Centre for Excellence established	✓		
e. Students Support and Progression				
1	Students support mechanism exists	✓		
2	Mechanism for students counselling exists	✓		
3	Availability of clubs and associations activates	✓		

4	Placement and higher education training process			Students can be motivated to do higher studies → can increase the count
5	Students welfare scheme exists			
6	Any new innovation from the department			Students can be motivated to do Consultancy & funding projects.

M. Sanertha
A. Sudu
Auditor

Head of the Department

Laboratory stock verification

Laboratory stock verification process is done once per semester to ensure the physical availability of systems, printers, scanners,UPS, AC, Network devices.
The process will help to upgrade the systems as per requirements

Figure 7.3 Stock verification sample report - Alan Kay Lab

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)   Total Marks 10.00

Institute Marks : 10.00

Placement

The Placement Cell has been functioning in our institute since 1998. The cell interacts with various Industries in order to organize the campus interviews in our institute. Also, the Faculty nominated by the department will assist the placement activities in their respective department. In order to improve the language skills of the students, communication skill training are arranged for the students to meet the industry requirements. The placement cell also organizes mock interview sessions for the students to familiarize with the placement related procedures. For the betterment of students industry based learning process, the placement cell also organizes Industry Skill requirement based training for the students. Continuous involvement of placement cell and department placement coordinator and faculty gained above 90% placement in well-established core software MNCs and the details of the students placed over the last three years are given below:

Table 7.4: Placement Details

Sl.No.	Placement Status	CAYm1(21-22)	CAYm2(20-21)	CAYm3(19-20)
1	No. of Students on Roll	190	200	187
2	No. of Students Placed	164	175	151
Pay Package Average (Rs in Lakhs)		**6.25**	**4.94**	**5.06**
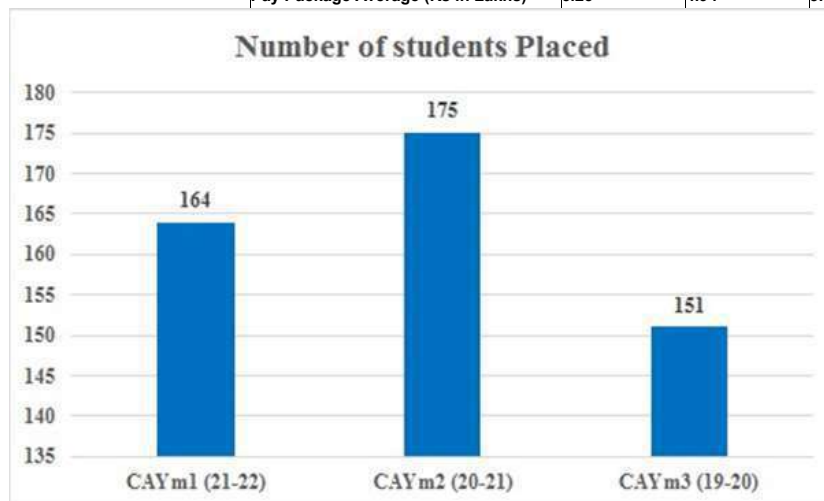
Figure 7.2: Number of students placed

The placement detail shows a continuous improvement in placement over the last three years. Students also got Internship cum placement opportunities with a stipend option.

Higher studies

The higher education cell of the college guides students for appearing in competitive exams such as GRE and GATE, which helps the students to get admission in reputed institutions in India and abroad. The activities of the cell are coordinated by the faculty members, student representatives and volunteers from each department. Coaching classes for competitive exams are conducted regularly. Students are exposed to the opportunities available in higher education in various countries by organizing seminars with support from educational consulting agencies. The following table exhibits the details of higher education during the last three years.

Table 7.5: Performance in Competitive Examinations and Higher Study Details

Sl.No.	Higher Studies Status	CAYm1(21-22)	CAYm2(20-21)	CAYm3(19-20)
1	No. of students admitted to Higher studies with valid qualifying scores (GATE, GRE, GMAT, CAT)	12	12	10
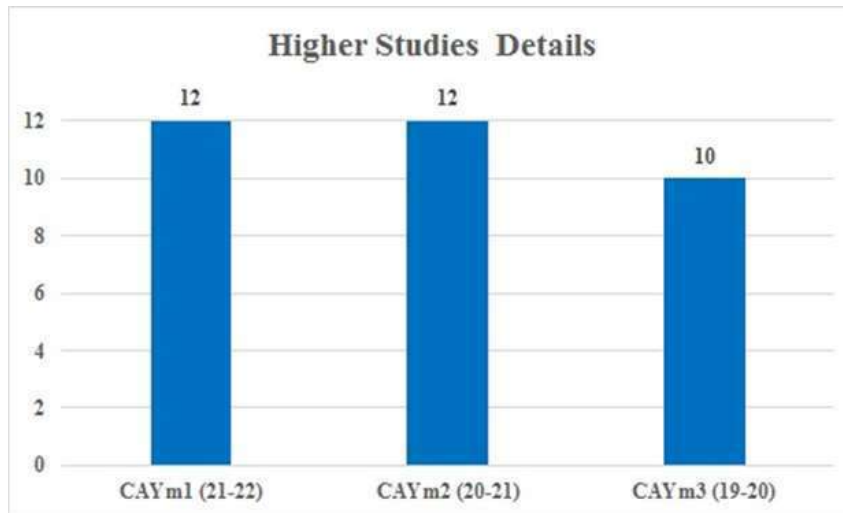
Figure 7.3 Number of students performing higher studies

Entrepreneurship

The entrepreneur development cell (EDC) has been functioning in our institute since 2006. The objective of the cell is to create awareness, impart knowledge about Entrepreneurship among the students and promote the students as an entrepreneur. The activities of the cell are coordinated by faculty members, student representatives and volunteers from each department. EDC conducts in-specific periodic training through seminars, workshops and interaction programmes with entrepreneurs from various industries. During vacation period students are encouraged to undergo training in various industries and get hands-on experience as a motivation to become an entrepreneur. The entrepreneurship details of the last three years are given below.

Table 7.6 Entrepreneur Details

Sl.No.	Entrepreneur Status	CAYm1(21-22)	CAYm2(20-21)	CAYm3(19-20)
1	No. of students turned as Entrepreneurs in Information Technology / other fields	5	3	5
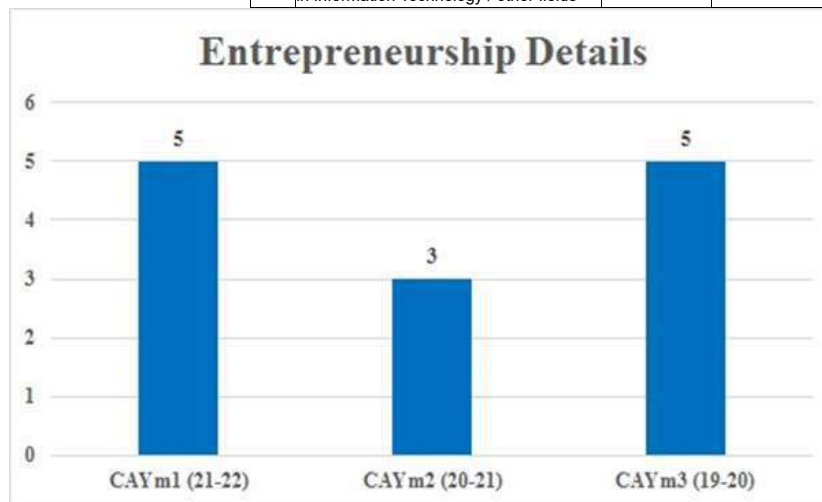
Figure 7.4: Number of students as entrepreneurs

7.4 Improvement in the quality of students admitted to the program (20)

Total Marks 20.00

Institute Marks : 20.00

Item		2022-23	2021-22	2020-21
National Level Entrance Examination	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
State/ University/ Level Entrance Examination/ Others TNEA - Tamilnadu Engir	No of students admitted	209	189	187
	Opening Score/Rank	196.5	193.76	191.5
	Closing Score/Rank	159.5	160.48	129.5
Name of the Entrance Examination for Lateral Entry or lateral entry details	No of students admitted	20	15	9
	Opening Score/Rank	98.09	96.89	92.28
	Closing Score/Rank	70.63	69.8	84.52
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)				

8 FIRST YEAR ACADEMICS (50)

Total Marks 46.58

8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Total Marks 5.00

Institute Marks : 5.00

Please provide First year faculty information considering load

Name of the faculty member	PAN No.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load (%)			Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	Date Of leaving(In case Currently Associated is 'No')
							CAY	CAYm1	CAYm2			
Dr. A. Indhuleka	AEUPI7438G	M.Sc. and PhD	24/01/2014	Biochemistry	Professor	02/07/2014	100	100	100	Yes	Regular	
Ms. N. Sridevi	BQIPS5216F	M.Phil	31/05/2006	Differential Equations	Professor	28/02/2006	50	0	100	Yes	Regular	
Mr. K. Pandiyan	BKEPP1066L	M.Phil	24/11/2009	Fractional differential equation	Assistant Professor	01/07/2009	44	67	50	Yes	Regular	
Mr. B. Kalins	DYHPK8715A	M.Phil	10/09/2009	Graph theory	Assistant Professor	20/07/2009	60	60	75	Yes	Regular	
Ms. A. Jayapra	ASGPJ0401J	M.Phil	04/02/2015	Differential Equations	Assistant Professor	11/07/2008	50	60	53	Yes	Regular	
Mr. D. Anandah	BQOPA3227Q	M.Sc. and PhD	27/03/2023	Queueing theory	Assistant Professor	14/06/2012	47	60	53	Yes	Regular	
Dr. K. Rajalaks	CMFPR4339J	M.Sc. and PhD	31/08/2021	Graph Theory	Assistant Professor	19/08/2013	50	60	75	Yes	Regular	
Mr. S. Pradeep	BNVPP8656G	M.Phil	12/11/2008	Optimal Control	Assistant Professor	04/07/2014	68	60	100	Yes	Regular	
Dr. E. Karuppu	FLHPK1528N	M.Sc. and PhD	07/10/2022	Fuzzy Matrix Theory	Associate Professor	30/07/2014	50	53	53	Yes	Regular	
Ms. B. Logapriy	ACQPL1908G	M.Phil	22/12/2014	Operations Research	Assistant Professor	18/06/2015	44	60	47	Yes	Regular	
Ms. P. Revathy	DCVPR3990A	M.Phil	25/07/2016	Graph Theory	Assistant Professor	12/06/2017	71	60	100	Yes	Regular	
Ms. N. Preethi	DAWPP1797L	M.Phil	16/04/2010	Fuzzy Topology	Assistant Professor	12/06/2017	65	60	30	Yes	Regular	
Mr. K. Kumar	DTIPK2033K	M.Phil	06/07/2012	Queueing theory	Assistant Professor	14/06/2017	58	60	25	Yes	Regular	
Ms. D. Thanga	BPJPT0475H	M.Phil	21/04/2017	Fuzzy Matrix Theory	Assistant Professor	15/06/2017	71	29	52	Yes	Regular	
Dr. R. Suresh	HVDPS6993B	M.Sc. and PhD	10/05/2022	Fuzzy Topology	Assistant Professor	07/12/2020	46	60	52	Yes	Regular	
Dr. A. P. Lavan	BCTPL0609J	M.Sc. and PhD	18/07/2017	Difference Equations	Assistant Professor	06/06/2019	58	55	50	Yes	Regular	

Ms. K. Mahalah	DACPM2831Q	M.Phil	03/04/2004	Difference Equations	Assistant Professor	01/03/2019	35	45	52	Yes	Regular	
Dr. I. Pradeep	EBDPP1942L	M.Sc. and PhD	31/12/2018	Nanotechnology	Associate Professor	03/07/2011	100	100	100	Yes	Regular	
Ms. K. Kalaivar	BNKPK7485D	M.Phil	25/03/2014	Nanotechnology	Assistant Professor	03/09/2012	100	100	100	Yes	Regular	
Ms. L. Jayanthi	BFVPJ1300R	M.Phil	31/05/2012	Nanotechnology	Assistant Professor	10/09/2012	100	0	100	Yes	Regular	
Mr. C. Arunpau	AJKPC3825E	M.Phil	02/07/2013	Nanotechnology	Assistant Professor	13/08/2013	100	100	100	Yes	Regular	
Ms. R. Priyadh	BGPPP5010D	M.Phil	30/03/2010	Nanotechnology	Assistant Professor	13/06/2013	100	100	100	Yes	Regular	
Dr. J. Jayaprak	ATQPJ7428N	M.Sc. and PhD	23/04/2018	Condensed matter physics	Assistant Professor	18/08/2018	100	100	100	Yes	Regular	
Dr. S. Packiara	EFBPS2278A	M.Sc. and PhD	17/12/2015	Inorganic Chemistry	Associate Professor	25/07/2016	100	100	100	Yes	Regular	
Dr. M. Jeyaraj	AISPJ5622P	M.Sc. and PhD	21/06/2018	Chemistry	Associate Professor	03/08/2011	100	100	100	Yes	Regular	
Dr. M. Sangeet	FTSPS5812L	M.Sc. and PhD	24/02/2017	Organic and Medicinal Chemistry	Associate Professor	08/06/2018	100	100	100	Yes	Regular	
Dr. K. Chandra	AUNPC7785M	MS and PhD	31/05/2011	Electrochemistry	Associate Professor	18/06/2018	100	100	100	Yes	Regular	
Dr. K. Banu Pri	BQGPB2132M	M.Sc. and PhD	19/07/2020	Inorganic chemistry	Associate Professor	18/07/2018	100	100	100	Yes	Regular	
Dr. A. Padma	CHAPP7497R	M.Sc. and PhD	30/07/2020	Microbiology	Assistant Professor	24/09/2018	100	100	100	Yes	Regular	
Dr. R.Suraj Beg	CPWPS8544A	M.A and Ph.D	23/09/2015	English Language Teaching	Professor	06/10/2008	89	89	89	Yes	Regular	
Ms. J Suganya	FVRPS3071Q	M.Phil	31/05/2007	Graph Theory	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Dr. A. Amutha	BIVPA9650G	M.A and Ph.D	21/02/2019	English Literature	Associate Professor	15/06/2017	100	100	100	Yes	Regular	
Mr R Karthik	CCYPK6420L	M.E/M.Tech	31/05/2011	Computre Integrated Manufacturing	Assistant Professor	05/12/2012	100	100	100	Yes	Regular	
Ms. G. Rohini S	JWYPS4615G	M.Phil	31/05/2018	English Literature	Assistant Professor	01/07/2015	100	0	100	Yes	Regular	
Dr. T. Anitha	BMRPA1491H	M.A and Ph.D	26/08/2022	English Language Teaching	Assistant Professor	13/07/2017	92	92	92	Yes	Regular	

Mr C Natarajan	CLSPS2378Q	M.E/M.Tech	30/04/2012	Computer Aided Design	Assistant Professor	03/01/2016	100	100	100	Yes	Regular	
Ms. Mary Fabio	JRCPS6145G	MA	15/05/2015	English Language and Literature	Assistant Professor	02/07/2018	100	100	100	Yes	Regular	
Ms. A. Lavanya	BBFPL6575A	M.Phil	31/05/2009	English Literature	Assistant Professor	03/01/2019	100	100	100	Yes	Regular	
Ms. C. Shylin	MKFPS2653J	MA	14/06/2018	English Literature	Assistant Professor	20/12/2020	100	100	100	Yes	Regular	
Ms. P. Subathra	GZFPS6692A	M.Phil	20/04/2009	English	Assistant Professor	26/11/2020	100	100	100	Yes	Regular	
Ms. N. Priya	BVVPP3793A	M.Phil	31/05/2005	English Literature	Assistant Professor	26/11/2020	100	100	100	Yes	Regular	
Dr. Ritu Priyadl	AORPR5701A	M.A and Ph.D	17/07/2019	English	Assistant Professor	26/11/2020	100	100	100	Yes	Regular	
Mr. G S. Pugal	CWDPP4004L	M.E/M.Tech	30/04/2013	Artificial Intelligence cloud computing	Assistant Professor	04/04/2022	100	0	0	Yes	Regular	
Ms. Joshina Rc	BYIPJ0277K	M.Phil	10/12/2021	Fiction	Assistant Professor	06/06/2022	100	0	0	Yes	Regular	
Ms. Antonitta E	AZCPA9254D	MCA	12/06/2007	Image Processing ML DL	Assistant Professor	15/06/2017	100	100	100	Yes	Regular	
Ms. C. Sounda	JOLPS8647B	MCA	31/05/2017	Cloud Computing	Assistant Professor	15/12/2017	100	100	100	Yes	Regular	
Ms. E. Sowmya	FGCPS1398E	M.E/M.Tech	31/05/2016	Sofware Engineering	Assistant Professor	01/03/2022	100	0	0	Yes	Regular	
Ms.A.Glory Sar	BDHPG3359P	M.E/M.Tech	30/04/2011	Cloud Computing	Assistant Professor	03/01/2023	100	0	0	Yes	Regular	
Mr. P. Suresh	EFZPS9029R	MCA	13/05/2015	Master of Computer Applications	Assistant Professor	12/11/2019	100	100	100	Yes	Regular	
Ms. K. Ludi Jar	ATBPL0435E	M.Phil	31/05/2017	Topology	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Mr.M. Poomani	BQCPP0663F	M.E/M.Tech	31/05/2011	Power Systems Engineering	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Mr. K. Balaji	AQUPB9456D	M.E/M.Tech	30/06/2011	Image Processing	Assistant Professor	19/09/2022	100	0	0	Yes	Regular	
Ms.A.Anie Selv	BLSPJ3599J	M.E/M.Tech	30/04/2011	Embedded Systems	Assistant Professor	10/05/2017	100	100	100	Yes	Regular	
Ms.R. Padmap	BMAPP8186P	M.E/M.Tech	31/05/2015	Communication System	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	

Mr. P. Navanee	ATTPN2123K	M.E/M.Tech	30/03/2013	Computer science and Engineering	Assistant Professor	08/06/2022	100	0	0	Yes	Regular	
Ms. S.Abirami	AUYPA4439R	M.E/M.Tech	31/07/2013	Artificial Intelligence	Assistant Professor	05/08/2022	100	0	0	Yes	Regular	
Ms.S.Praseeth	CDUPP5320B	M.E/M.Tech	30/04/2011	Communication Systems	Assistant Professor	15/03/2017	100	100	100	Yes	Regular	
Ms.M.Kirubha	CBDPK3008G	M.E/M.Tech	30/07/2016	Artificial Intelligence	Assistant Professor	07/01/2021	100	100	0	Yes	Regular	
Ms. KSinduja	EHWPS3556L	M.E/M.Tech	22/05/2016	Machine Learning	Assistant Professor	01/07/2022	100	0	0	Yes	Regular	
Mr. P Selvakun	FULPS2940M	M.E/M.Tech	31/05/2012	VLSI Design	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Ms.M.Fathima	ACAPF1628D	M.E/M.Tech	31/05/2013	Software Engineering	Assistant Professor	08/03/2022	100	0	0	Yes	Regular	
Ms.P.Anitha	BCOPA4341K	M.E/M.Tech	31/05/2014	VLSI Design	Assistant Professor	05/06/2017	100	100	100	Yes	Regular	
Ms.P. Rekha	BJZPR4446N	M.E/M.Tech	31/05/2012	Mechanics and Foundation	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Ms.S. Keerthip	CXHPK8895F	MCA	31/05/2012	Master of Computer Applications	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Dr. G. Infant Su	AEPPI8937P	M.Sc. and PhD	29/09/2020	Mathematics	Assistant Professor	15/06/2017	0	100	75	No	Regular	30/06/2022
Dr. P. Shanthi	CJVPS2895B	MCA and PhD	27/06/2016	Deep Learning	Assistant Professor	25/06/2007	73	100	100	Yes	Regular	
Dr.Ragavi	ATZPR8722N	MCA and PhD	13/04/2015	Network Security	Professor	01/12/2016	100	0	0	Yes	Regular	
Mr. B. Chandru	BWBPC7018N	MCA	31/05/2014	Master of Computer Applications	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Dr. M. Gomathi	CCJPG6116Q	M.Sc. and PhD	15/04/2019	Topology	Assistant Professor	17/07/2018	0	60	75	No	Regular	08/08/2022
Ms. MG. Iswary	AFSPI8963F	M.Phil	31/05/2017	English Literature	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Dr. D. Vivek	APPPV2142C	MCA and PhD	02/05/2018	Object Oriented Programming	Assistant Professor	13/06/2018	0	100	92	Yes	Regular	
Mr. S. Palani	CSZPE8770R	M.E/M.Tech	06/01/2013	Cloud Computing	Assistant Professor	06/03/2020	100	100	100	Yes	Regular	
Ms. J. Subasin	AXPNS2141G	M.Phil	31/05/2015	Graph Theory	Assistant Professor	15/06/2017	40	21	75	No	Regular	30/05/2022

Ms. V. Keerthik	BAHPV3351D	M.Phil	29/04/2016	Differential Equation	Associate Professor	21/06/2017	0	60	47	No	Regular	30/06/2022
Ms. V. Vinu	AWYPV9534E	M.A and Ph.D	25/07/2022	English Literature	Assistant Professor	07/12/2020	0	100	100	No	Regular	30/06/2022
Ms.G.V.Sarany	CDPPS2135A	M.E/M.Tech	30/05/2015	Cloud Computing Big Data	Assistant Professor	06/03/2015	0	100	0	No	Regular	30/05/2022
Ms.S. Lavanya	AFPPL0808R	M.E/M.Tech	30/05/2013	Network Management	Assistant Professor	03/06/2013	0	10	0	No	Regular	08/06/2022
Mr.D. Vishwana	AQAPV1859J	M.E/M.Tech	24/04/2017	Machine Learning	Assistant Professor	02/06/2021	0	100	0	Yes	Regular	
Mr. M. Manicka	BEHPM4646E	M.E/M.Tech	31/05/2013	Network and Internet Engineering	Assistant Professor	27/01/2022	66	0	0	Yes	Regular	
Dr. N. K. Geeth	CJQPK6237G	M.Sc. and PhD	19/11/2019	Graph Theory	Associate Professor	27/06/2017	0	0	100	No	Regular	30/04/2021
Mr. M. Selvaku	CFLPS2776B	M.Phil	31/03/2009	Crystal Growth	Associate Professor	26/08/2009	0	0	100	No	Regular	23/04/2021
Dr. W. Regis A	AHQPR7946B	MCA and PhD	16/10/2017	Wireless Sensor Network	Associate Professor	12/06/2009	0	0	100	No	Regular	19/04/2021
Ms. P.K Yamun	AGBPY7443A	MCA	31/05/2009	Master of Computer Applications	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Ms C Jayabhar	ATXPJ2793H	M.E/M.Tech	30/03/2012	Network Management Systems	Assistant Professor	01/06/2012	0	0	100	No	Regular	30/06/2021
Mr K Nagendra	AIOPN8696F	M.E/M.Tech	30/04/2006	Software Engineering	Associate Professor	01/06/2017	0	0	100	No	Regular	14/04/2021
Mr M Mervin G	BFRPM0634R	M.E/M.Tech	25/04/2007	Software Engineering Management	Assistant Professor	11/06/2018	0	0	100	No	Regular	21/05/2021
Ms.N.Saranya	GMGPS0322P	M.E/M.Tech	31/05/2018	Computer Science and Engineering	Assistant Professor	05/10/2020	0	0	100	Yes	Regular	
Mr. J. Daniel Fr	CGDPS0953F	M.E/M.Tech	30/05/2018	Computer Science and Engineering	Assistant Professor	06/06/2018	66	66	66	Yes	Regular	
Ms.M.Anandap	BIAPA7302N	M.E/M.Tech	30/05/2015	Network Data base Management	Assistant Professor	23/06/2016	0	100	100	No	Regular	31/05/2022

Name	PAN	Qualification	Date	Specialization	Designation	Date				Associated	Nature	Date
Ms.V.Priyadhar	BLCPP1032K	M.E/M.Tech	30/05/2008	Artificial Intelligence Data Structures Programming	Assistant Professor	02/05/2017	0	100	100	No	Regular	31/05/2022
Dr. A. Shobana	BUEPS1924G	M.Sc. and PhD	31/03/2017	Graph Theory	Professor	11/07/2008	100	100	100	Yes	Regular	
Dr. A. Karthika	BQNPA7306R	M.Sc. and PhD	12/09/2014	Topology	Professor	05/06/2017	100	100	100	Yes	Regular	
Dr. A. Mohanra	CRSPM6780Q	M.Sc. and PhD	18/02/2017	Differential Equations	Professor	29/12/2014	100	100	100	Yes	Regular	
Dr. R. Ramesh	AQDPR5174P	M.Sc. and PhD	08/12/2015	Differential Equations	Professor	03/06/2019	100	100	100	Yes	Regular	
Dr. D. Vidhya	AHLPV3096M	M.Sc. and PhD	13/02/2027	Topology	Associate Professor	03/06/2019	100	100	100	Yes	Regular	
Dr. N. Subashir	CODPS0450M	M.Sc. and PhD	30/07/2020	Fuzzy Queue	Associate Professor	03/06/2020	100	100	100	Yes	Regular	
DR. RADHAKF	AQVPR2482C	ME/M. Tech and PhD	11/11/2019	Power System	Associate Professor	02/05/2017	100	100	100	Yes	Regular	
DR. VINOTH K	ARMPV6183E	M.E/M.Tech	17/07/2017	POWER ELECTRONICS AND DRIVES	Associate Professor	01/09/2020	100	100	100	Yes	Regular	
DR. RAMJI TIV	AOUPT8055N	ME/M. Tech and PhD	13/08/2019	Electrical and Electronics Engineering	Assistant Professor	01/09/2020	100	100	100	Yes	Regular	
DR. MITHRAN	BUNPM9870J	ME/M. Tech and PhD	21/09/2020	Mechatronics	Assistant Professor	21/01/2015	100	100	100	Yes	Regular	
DR. JUSTIN M	ARVPV6611J	ME/M. Tech and PhD	06/10/2021	Material Science	Associate Professor	03/01/2022	100	0	0	Yes	Regular	
DR. MANIKAN	BXBPM9492H	ME/M. Tech and PhD	17/07/2020	Material Science	Associate Professor	17/06/2021	100	100	0	Yes	Regular	
DR. EZHILKUM	ABFPE4549L	ME/M. Tech and PhD	17/06/2022	Civil Engineering	Assistant Professor	03/06/2019	100	100	100	Yes	Regular	
Mr.B.J.ASHOK	AHOPJ8746M	M.E/M.Tech	31/07/2006	Mechanical Engineering	Assistant Professor	21/06/2018	100	100	100	Yes	Regular	
Ms.S.Dhivya	BJPPD8498A	M.E/M.Tech	31/05/2016	Artificial Intelligence Image Processing Software Engineering	Assistant Professor	03/06/2019	100	100	100	Yes	Regular	

Year	Number Of Students(approved intake strength) N	Number of Faculty members(considering fractional load) F	FYSFR (N/F)	*Assessment=(5*20)/FYSFR(Limited to Max.5)
2020-21(CAYm2)	1200	70	17	5
2021-22(CAYm1)	1140	63	18	5
2022-23(CAY)	1422	79	18	5
Average	1254	70	17	5

AverageFYSFR: 0.00

Assessment [(5 * 15) / AverageFYSFR]:   5.00

8.2 Qualification of Faculty Teaching First Year Common Courses (5)

Total Marks 3.00

Institute Marks : 3.00

Year	x (Number Of Regular Faculty with Ph.D)	y (Number Of Regular Faculty with Post graduate Qualification)	RF (Number Of Faculty Members required as per SFR of 20:1)	Assessment Of Faculty Qualification [(5x + 3y) / RF]
2020-21	21	27	60	3.00
2021-22	25	29	57	3.00
2022-23	27	34	71	3.00

Average Assessment: 3.00

8.3 First Year Academic Performance (10)

Total Marks 8.58

Institute Marks : 8.58

Academic Performance	CAYm1(2021-22)	CAYm2(2020-21)	CAYm3 (2019-20)
Mean of CGPA or mean percentage of all successful students(X)	7.84	9.10	8.79
Total Number of successful students(Y)	183.00	187.00	179.00
Total Number of students appeared in the examination(Z)	183.00	187.00	179.00
API [X*(Y/Z)]	7.84	9.10	8.79

Average API[(AP1+AP2+AP3)/3] : 8.58

Assessment = Average API : 8.58

8.4 Attainment of Course Outcomes of first year courses (10)

Total Marks 10.00

8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)

Institute Marks : 5.00

The assessment of course outcomes is one of the most important part of Outcome-Based Education (OBE). The Course Outcomes (COs) for each course are developed at the start of OBE implementation based on the Programme Outcomes (POs) and other needs. The COs are examined and evaluated at the conclusion of each course to see whether or not they have been accomplished. Attainment is defined as the standard of academic achievement as measured by exam or assessment results. The process used for measuring the CO attainment is given below:

Step 1:   The course coordinator (senior faculty member taking course) analyses each course outcome and identifies the different abilities specified in the outcome and the blooms taxonomy level defined for each ability.

Step 2:   The faculty incharge of the course, defines the technical components as assessment criteria and fixes their targets, with the guidance of the course coordinator. These information are documented in the course information file and maintained in HoD's office**.**

Step 3:   The course coordinator collects the qualitative and quantitative data and analyzes the collected data. If the assessed data meets the performance targets which are specified in step 2, the outcome is attained. Otherwise, consider Step 4.

 Step 4: The Programme Advisory Committee (PAC) recommends content delivery methods / technical components/ course outcomes / curriculum improvements as needed.
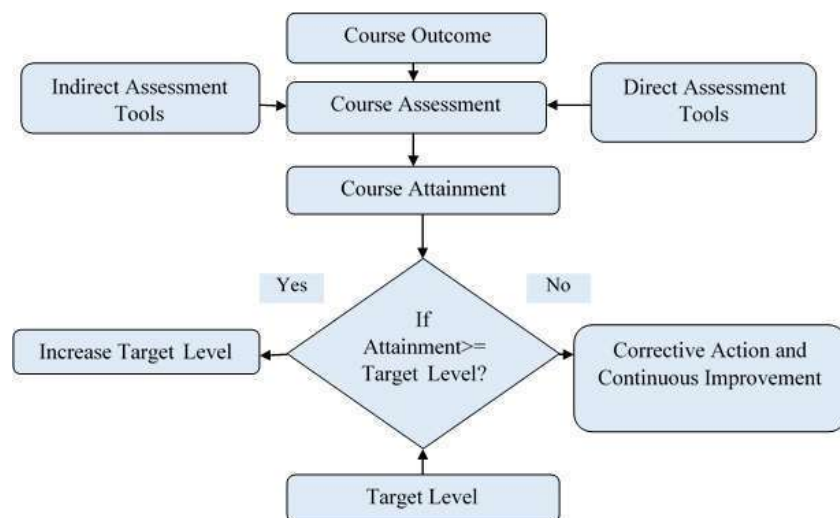

Figure 8.1 Process for assessing CO Attainment

The student batch 2021-25 and regulation R2021 are considered in this section. There are 15 courses (of four different types) in the first year of this regulation. The four different types are:

1. Theory
2. Theory with Lab Component
3. Lab Course
4. Mandatory course (No credit)

The data collection process and rubrics formulated for assessing these four types of courses are given below:

1. **Data Collection methods and rubrics for Theory courses:**

Two internal tests and four internal technical assessment components and one end semester examination have been conducted to assess the performance/knowledge obtained by the student through the course. The scheme of evaluation for theory courses consists of three criteria. They are internal test, technical components and end semester exam. The details of these criteria are given below:

Table 8.1 Data Collection methods and rubrics for Theory courses

Assessment based on Continuous and End Semester Examination

Continuous Assessment (40%) [200 Marks]						End Semester Examination (60%) [100 Marks]
CA 1 : 100 Marks			CA 2 : 100 Marks			
CIA 1 (60 Marks)	FA 1 (40 Marks)		CIA 2 (60 Marks)	FA 2 (40 Marks)		
	Component - I (20 Marks)	Component - II (20 Marks)		Component - I (20 Marks)	Component - II (20 Marks)	

The assessment criteria for theory courses are explained below:

1. **CIA (Continuous Internal Assessment):**

> Continuous Internal Assessment is conducted for the time frame of 3 hours for 100 marks. The question paper is examined by the course coordinator whether it is strictly adheres to the prescribed format and appropriate mapping of course outcomes to the respective blooms taxonomy level are done. In case of inappropriation the question paper is subjected for revision. The above process will be approved by the HOD. The prescribed format of the question paper has been detailed below.

Objective	To examine the level of knowledge or skill that students have acquired through lectures and materials.
Product	Answer scripts
Frequency	Monthly
Format	Part –A 10 x 2 = 20 marks Part –B 5 x 16 = 80 marks Total marks = 100 Duration : 3 Hours

ii) End Semester Theory examination:

Objective	To examine the level of knowledge or skill students have acquired throughout the semester.
Product	Answer scripts
Frequency	Once in a semester
Format	Part –A 10 x 2 = 20 marks Part –B 5 x 16 = 80 marks Total marks = 100 Duration : 3hours

iii) Technical Components:

In addition to the continous Internal assessment (CIA) there are other components to assess the expertise to students in the course. They are:

- Group Discussion
- Case study
- Seminar
- Technical Presentation

- Tutorial
- Assignment
- Technical Quiz/Test

Any 4 of the above components are given for each course in a semester.

1. **Group Discussion:**

Objective	To make the students effectively communicate on complex engineering and social activities at large.
Product	Peer to Peer Communication
Frequency	Once in a semester after completion of core concepts
Format	Give the technical topics and context in which they have to be discussed
Evaluation	Based on the expressiveness, interest, involvement and defending capacity of the students
Expected level of attainment of CO	75%
Criteria	State or Art Technique and to be conducted on the scheduled date

2. Case study:

Objective	To use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.
Product	Document or working model
Frequency	Twice in a semester
Format	Give the domain, in which the student can apply his knowledge (idea) obtained through that course and provide solutions.
Evaluation	Based on the design of experiments, analysis and interpretation of data, and synthesis of the information
Expected level of attainment of CO	75%
Criteria	To be submitted on or before last date of submission

3. Seminar:

Objective	To train students with good scientific and engineering breadth through self learning
Product	Awareness on Recent trends

Frequency	Twice in a semester
Format	Oral Presentation
Evaluation	Based on self learning, information gathering and knowledge sharing
Expected level of attainment of CO	75%
Criteria	Present on the allotted date and time on the specific topic

4. Technical Presentation:

Objective	To develop an ability to visualize and work on multi-disciplinary tasks
Product	Independent thinking and creativity
Frequency	Twice in a semester
Format	PowerPoint Presentation Slides
Evaluation	Based on knowledge representation and understanding on a particular topic
Expected level of attainment of CO	75%
Criteria	Present on the scheduled day

5. Tutorial:

Objective	To gain thorough knowledge in the analytical courses by working out more problems
Product	Solutions to different types of Analytical problems
Frequency	Three tutorial tests for assessment.
Format	Solving problems or writing programs in tutorial hour
Evaluation	Based on the methods used to solve problems, submission within a stipulated time and quality of presentation.
Expected level of attainment of CO	75%
Criteria	To be submitted after 5 weeks of tutorial hour

6. Assignment:

Objective	To enhance students understanding of a particular reading
Product	Program/Algorithm/Document/Assignment outcome

Frequency	Monthly or after completing one unit
Format	Problem solution format
Evaluation	Based on the performance of the approaches / design methods
Expected level of attainment of CO	75%
Criteria	Submit on or before the last date of submission

7.Technical Quiz/Test:

Objective	To measure knowledge, abilities and skills.
Product	Script for Questions and Answers
Frequency	Thrice in a semester
Format	Objective type questions or Short answers
Evaluation	Based on the understanding of the students /answers given by the students
Expected level of attainment of CO	75%
Criteria	Multiple choice questions

A. **Data Collection methods and rubrics for Practical courses:**

The scheme of evaluation of Laboratory courses are detailed in Table 8.2:

Table 8.2 Data Collection methods and rubrics for Practical courses

Continuous Assessment				End Semester Examination	Total
Formative Assessment	Summative Assessment	Total	Total Continuous Assessment		
75	25	100	60	40	100

The pivotal role played by this assessment tools and their connection towards the attainment of CO and PO are explained below:

1. **Regular Lab Class:**

Objective	To Assess pragmatic skills pertains to the course
Product	Record & Observation
Frequency	Weekly Once

ii.Model Lab Examination

Objective	To Assess the theoretical and practical knowledge

Product	Answer sheets and Output
Frequency	Once in a semester

iii. End Semester Practical Examination

Objective	**To examine the pragmatic knowledge obtained in a semester**
Product	Answer sheets and Actual Output
Frequency	Once in a semester

C. The Data Collection methods and rubrics for Theory cum Practical courses:

Table 8.3 Data Collection methods and rubrics for Theory cum Practical courses

Assessment based on Continuous and End Semester Examination							
Continuous Assessment (50%)							End Semester Examination (50%)
CA 1 (100 Marks)			CA 2 (100 Marks)			Practical Exam (100 Marks)	Theory Examination (35%)
SA 1 (60M)	FA 1		SA 2 (60M)	FA 2		FA (75M)	SA (25M)	Practical Examination (15%)
	Component-I (20 Marks)	Component-II (20 Marks)		Component-I (20 Marks)	Component-II (20 Marks)			

The modality for conducting regular lab class and model exam criteria are identical to lab courses

COURSE OUTCOME ATTAINMENT CALCULATION PROCESS

In this process, Course Outcomes and Course Articulation Matrix have to be formulated for each course.
Course Outcomes Attainment is measured through 2 steps as

1. Direct Attainment

2. Indirect Attainment

1. **Direct Attainment of course outcomes for each course**

It is determined how many students achieve the course outcome at the required knowledge level. The average degree of achievement for each CO is then determined based on the association with the questions from the continuous assessment, internal components, end semester examination and laboratory assessments. In order to determine the achievement level of a course in all components, the average of all COs for that course is determined..

II. **Indirect Assessment:**

Course exit survey is conducted at the end of the semester by the faculty in-charge of the course. The survey questions are formulated towards course outcomes and used to assess the attainment of course outcomes.

8.4.2 Record the attainment of Course Outcomes of all first year courses (5)

Institute Marks : 5.00

8.4.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels

Attainment of Cos is measured from the performance of students in cumulative internal tests, technical/ lab components and from the course marks of the students in semester end examination.

Course Outcomes and Course Articulation Matrix are formulated for each course.

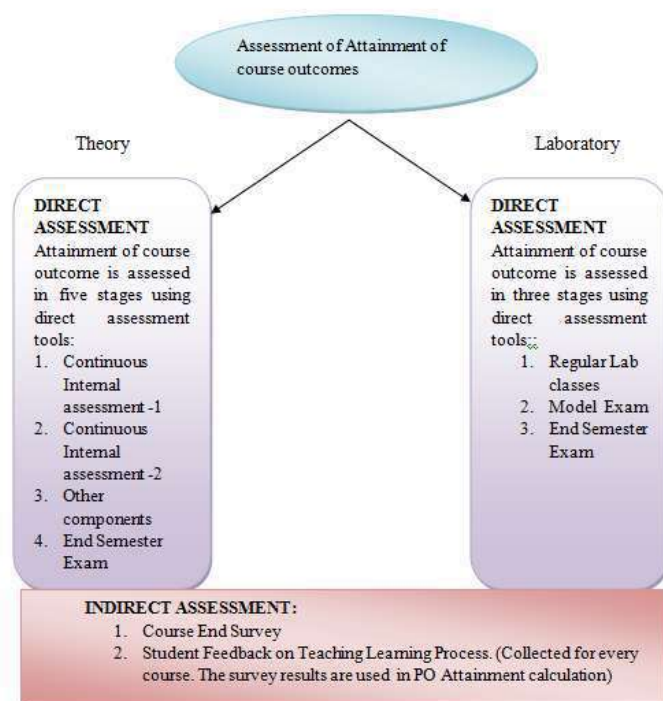Course Outcomes Attainment is processed through 2 steps as

1. Direct Assessment

2. Indirect Assessment

I. **Direct Assessment of attainment of course outcomes for each course**

Three major types of courses are there in the curriculum. They are:

A. Theory
B. Lab
C. Theory cum Lab

These three types of courses are analyzed in different ways.

A. **Evaluation of attainment of Course outcomes in Theory Courses:**

The evaluation of theory courses is based on three continuous assessment tests, other components and end semester exam. The expected level of attainment (in %) for each course is fixed by the course coordinator and cluster head.

1. **Attainment of CO through Continuous Assessment Tests:**

The number of students who meet the expected level of the course outcome is identified. Then, the average level of attainment of each CO is calculated based on the correlation with continuous assessment questions. Later, the average of all COs is calculated for a particular course to find the attainment level of that course in Continuous assessment tests.

The bloomers are also identified from the internal tests and they are given remedial coaching and one more chance for attaining course outcome. This remedial coaching analysis is prepared and maintained.

2. **Attainment of CO through Other Components (Capstone Model):**

The number of students who meet the expected knowledge level of the course is identified. Then, the average level of attainment of each CO is calculated based on the correlation with other component questions. Later, the average of all COs is calculated for a particular course to find the attainment level of that course in other technical components.

3. **Attainment of CO through End Semester Exams:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of each CO is calculated.

The overall attainment of each Course outcome will be calculated by finding the average of the attainment of Course outcome through the above-said stages.

B. **Evaluation of attainment of Course outcomes in Practical Courses:**

1. **Attainment of CO through regular lab classes:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of each CO is calculated based on the correlation with lab exercises. Later, the average of all COs is calculated for a particular lab course to find the attainment level of that course in regular lab classes.

2. **Attainment of CO through model exam:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of CO is calculated .

3. **Attainment of CO through End semester practical Exams:**

The number of students who meet the expected level of the course is identified. Then, the average level of attainment of CO is calculated.

The overall attainment of Course outcome will be calculated based on the given weightage.

Table 8.4 Attainment of CO in the Semester End Examinations (SEE) of all first year courses for the batch (2021-2022) using Direct Assessment										
The target values set for this batch are:										
Knowledge Level, set for each Question (Semester End Exams) : 75%										
Target set for each course : 75%										
Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Target %	overall Attainment %	Attainment Status
Semester I	21MA101	Engineering Mathematics I	77.7	67.0	99.6	83.3	99.6	67.0	75	82	Attained
	21PH104	Physics	80.2	85	82	79.8	82.4	78.6	75	81	Attained
	21EN101	Technical Communication Skills	99.6	97.4	86.4	84.2	89	86	75	90	Attained
	21IT101	Python Programming	84.4	76.2	79.8	86.8	55.4	-	75	77	Attained

	21CS101	Application Development Practices	83.4	65.8	86	75.4	77.6	-	75	78	Attained
	21ME103	Engineering Practices Laboratory	82.4	75.2	79.6	83.4	82.6	82.2	75	81	Attained
Semester II	**21GE201**	Universal Human Values	93	94.4	83.4	79.6	88.8	83.6	75	87	Attained
	21CS201	C and Data Structures	83.4	65.8	89.2	80.6	76	-	75	66	Attained
	21MA201	Engineering Mathematics II	80.4	94.4	80	79.6	82.2	83.6	75	83	Attained
	21CH101	Engineering Chemistry	78.6	82	84.4	77.4	82.2	83.6	75	81	Attained
	21EE111	Basics of Electrical and Electronics Engineering	83.4	65.8	86	75.4	64	-	75	75	Attained
	21ME111	Engineering Graphics	83.4	65.8	86	75.4	-	-	75	78	Attained
	21CS202	Data Structures Laboratory	84	86	79.6	86.8	75	-	75	82	Attained

Table 8.5 A Sample CO Attainment calculation in SEE of 21MA101 - Engineering Mathematics I Course

	Total Number of Students			183														
S.No	Register Number	Q1 (2)	Q2 (2)	Q3(2)	Q4(2)	Q5(2)	Q6(2)	Q7(2)	Q8(2)	Q9(2)	Q10(2)	Q11/12 (16)	Q13/14 (16)	Q15/16 (16)	Q17/18 (16)	Q19/20 (16)	TEST SCORE (100)
	Mapping with CO	C101.1	C101.6	C101.2	C101.2	C101.3	C101.4	C101.5	C101.5	C101.3	C101.4	C101.1	C101.2	C101.3& C101.6	C101.4	C101.5 & C101.6	
1	727721EUCS001	1	2	2	2	2	1	2	2	2	1	6	8	7	6	12	56
2	727721EUCS002	2	0	2	0	1	1	0	2	1	2	9	13	10	10	12	65
3	727721EUCS003	1	0	0	0	2	2	0	0	1	1	10	12	6	13	12	60
4	727721EUCS004	1	0	2	1	1	0	1	0	0	1	12	9	10	12	12	62
5	727721EUCS005	2	2	2	2	2	2	2	2	2	2	16	16	12	14	13	91
6	727721EUCS006	2	1	1	2	2	1	2	2	1	2	12	13	14	10	12	77
7	727721EUCS007	1	1	2	2	2	1	2	1	2	2	14	15	15	15	13	88
8	727721EUCS008	0	0	2	0	2	0	1	2	2	0	6	8	6	8	3	40
9	727721EUCS009	2	2	2	2	2	2	2	2	2	2	16	12	12	13	9	82
10	727721EUCS010	2	0	0	1	2	2	2	0	1	2	12	13	12	13	13	75
11	727721EUCS011	2	2	2	2	2	2	2	2	2	2	12	15	13	13	13	86
12	727721EUCS012	2	2	2	2	2	2	2	2	2	2	12	13	12	13	13	83
13	727721EUCS013	2	1	2	2	2	2	2	2	2	2	14	16	14	16	16	95
14	727721EUCS014	2	0	2	2	2	2	2	0	1	2	15	14	16	15	12	87

15	727721EUCS015	2	0	2	2	2	2	2	0	1	2	16	16	16	16	12	91
16	727721EUCS016	2	1	2	2	2	2	2	0	2	2	12	13	11	13	12	78
17	727721EUCS017	1	1	2	2	2	2	2	0	2	1	10	14	12	16	13	80
18	727721EUCS018	2	0	2	1	2	2	2	2	2	2	12	10	12	13	12	76
19	727721EUCS019	1	0	1	0	2	2	0	0	1	1	12	10	8	12	12	62
20	727721EUCS020	2	2	0	0	2	2	2	0	1	1	10	11	12	4	12	61
21	727721EUCS021	2	2	2	2	2	2	2	2	2	2	13	14	12	13	12	84
22	727721EUCS022	2	2	2	2	2	2	2	2	1	1	11	13	6	13	12	73
23	727721EUCS023	2	2	2	2	2	2	2	2	2	2	12	15	12	14	14	87
24	727721EUCS024	2	2	2	2	2	2	2	2	2	2	15	16	16	15	14	96
25	727721EUCS025	0	0	0	0	0	0	0	0	0	0	10	19	12	8	7	56
26	727721EUCS026	2	0	2	2	2	2	0	0	1	0	10	10	8	9	11	59
27	727721EUCS027	2	2	2	2	2	1	2	2	2	2	10	8	12	10	12	71
28	727721EUCS028	2	2	2	1	2	2	1	2	2	0	10	8	8	13	7	62
29	727721EUCS029	1	1	2	0	2	1	0	0	1	1	8	10	12	13	9	61
30	727721EUCS030	2	2	2	0	2	2	2	2	2	1	12	13	12	13	11	78
31	727721EUCS031	2	0	2	2	2	0	0	0	0	0	6	8	12	13	8	55
32	727721EUCS032	2	1	2	2	2	2	1	2	2	2	10	12	13	13	11	77
33	727721EUCS033	2	0	2	1	1	2	1	2	2	2	14	15	13	8	14	79
34	727721EUCS034	2	2	2	2	2	2	2	2	2	2	14	15	12	13	14	88
35	727721EUCS035	2	2	2	2	2	2	2	2	2	2	14	16	15	15	16	96
36	727721EUCS036	2	2	2	1	2	2	1	0	2	0	14	15	10	5	12	70
37	727721EUCS038	2	2	2	2	2	2	2	2	1	1	16	15	14	15	14	92
38	727721EUCS039	1	1	0	1	2	2	1	0	0	1	12	13	12	10	12	68
39	727721EUCS040	0	0	0	1	1	2	1	1	1	0	12	10	12	10	12	63
40	727721EUCS041	0	0	0	0	2	2	1	1	2	0	11	10	11	13	12	65
41	727721EUCS042	1	0	0	2	2	1	1	0	2	1	12	11	9	13	10	65
42	727721EUCS043	1	0	2	1	2	0	2	0	1	1	10	12	9	13	11	65
43	727721EUCS044	1	1	2	2	2	2	2	2	2	2	15	15	14	14	14	90
44	727721EUCS045	2	0	0	2	2	2	2	0	2	2	15	14	10	13	12	78
45	727721EUCS046	0	0	0	0	0	0	0	0	0	0	11	8	6	7	5	37
46	727721EUCS047	0	0	0	0	0	0	0	0	2	0	9	5	9	11	5	41
47	727721EUCS048	2	0	2	2	2	2	2	2	2	2	14	16	15	10	7	80
48	727721EUCS049	2	0	0	1	2	2	2	0	2	2	15	14	12	10	12	76

49	727721EUCS050	2	0	2	2	2	2	1	2	2	2	12	16	14	14	16	89
50	727721EUCS051	0	0	0	1	2	0	2	1	2	0	15	13	12	10	11	69
51	727721EUCS052	0	0	0	0	2	1	2	0	2	0	7	8	13	9	12	56
52	727721EUCS053	1	0	2	0	2	2	2	2	2	1	9	13	12	11	10	69
53	727721EUCS054	1	0	0	0	1	1	1	0	0	1	12	12	10	13	12	64
54	727721EUCS055	1	0	2	1	2	1	2	0	2	1	10	10	13	9	11	65
55	727721EUCS056	2	1	2	2	2	2	1	2	2	2	12	5	12	13	14	74
56	727721EUCS057	1	0	0	0	2	1	0	2	2	1	12	13	9	7	12	62
57	727721EUCS058	0	0	0	0	2	1	1	2	1	0	9	13	11	13	8	61
58	727721EUCS059	1	0	0	0	2	2	1	1	1	1	16	10	12	14	16	77
59	727721EUCS060	0	0	2	0	2	1	0	0	1	0	10	11	8	12	10	57
60	727721EUCS061	2	0	0	0	2	2	2	2	2	2	16	13	14	15	12	84
61	727721EUCS062	0	0	0	0	2	1	2	2	0	0	7	10	9	9	6	48
62	727721EUCS063	0	0	0	0	2	0	1	0	1	0	6	7	8	11	9	45
63	727721EUCS064	2	0	2	2	2	2	2	2	2	2	14	13	12	16	12	85
64	727721EUCS065	1	2	2	2	2	2	2	2	1	1	16	16	14	14	12	89
65	727721EUCS066	2	2	2	0	2	2	2	2	2	2	16	16	15	14	14	93
66	727721EUCS067	1	0	0	0	2	0	0	0	0	1	10	12	8	13	12	59
67	727721EUCS068	1	2	2	2	2	2	2	2	2	1	16	14	16	13	12	89
68	727721EUCS069	0	2	0	1	2	0	2	1	1	0	14	15	15	13	13	79
69	727721EUCS070	2	1	0	1	2	2	2	2	1	2	12	13	12	13	13	78
70	727721EUCS071	2	2	2	2	2	2	2	2	2	2	13	13	12	15	12	85
71	727721EUCS072	2	2	2	0	2	2	0	2	1	2	10	13	12	16	16	82
72	727721EUCS073	0	2	0	0	0	1	2	0	0	0	14	12	13	13	13	70
73	727721EUCS074	1	1	0	0	2	2	2	1	1	1	15	12	15	13	12	78
74	727721EUCS075	2	1	0	0	2	2	1	2	0	2	16	14	15	16	16	89
75	727721EUCS076	0	0	0	0	2	1	0	0	1	0	9	5	8	8	10	44
76	727721EUCS077	2	2	0	1	1	2	2	1	2	2	16	16	16	16	12	91
77	727721EUCS078	2	0	2	0	2	2	1	2	2	2	16	15	16	15	16	93
78	727721EUCS079	2	2	2	2	2	1	2	2	2	2	16	15	16	14	12	92

79	727721EUCS 080	2	2	2	0	1	2	2	2	2	2	16	16	16	16	16	97
80	727721EUCS 081	1	2	0	0	2	2	2	2	2	1	16	14	16	16	12	88
81	727721EUCS 082	2	2	2	1	2	2	2	2	2	2	16	16	16	13	16	96
82	727721EUCS 083	2	0	0	0	0	1	0	0	0	1	12	9	11	13	10	59
83	727721EUCS 084	0	0	0	0	0	2	2	0	1	0	9	10	9	12	12	57
84	727721EUCS 085	1	2	2	2	2	2	2	2	2	1	15	15	15	13	12	88
85	727721EUCS 086	0	0	0	0	2	0	0	0	1	0	11	13	12	9	12	60
86	727721EUCS 087	2	2	2	2	2	2	2	2	2	2	15	15	12	14	12	88
87	727721EUCS 088	2	2	1	0	2	2	2	1	2	2	12	13	14	16	15	86
88	727721EUCS 089	0	1	1	0	1	0	2	0	2	0	12	13	15	16	16	79
89	727721EUCS 090	0	0	2	0	2	1	2	1	2	1	9	8	8	12	9	57
90	727721EUCS 091	2	0	0	0	2	0	1	2	1	2	12	10	13	13	12	70
91	727721EUCS 092	0	2	0	0	0	0	0	0	2	0	12	16	12	13	6	63
92	727721EUCS 093	2	2	2	1	2	2	2	2	1	2	15	14	15	14	16	92
93	727721EUCS 094	0	0	0	0	0	0	0	0	2	0	7	6	5	8	5	33
94	727721EUCS 095	0	0	0	0	1	0	0	0	2	0	12	13	7	11	9	55
95	727721EUCS 096	0	2	0	0	0	1	0	0	2	0	12	8	12	13	6	56
96	727721EUCS 097	2	1	2	0	2	1	0	2	2	2	13	13	13	13	10	76
97	727721EUCS 098	1	1	2	0	2	0	2	0	2	1	12	15	14	11	12	75
98	727721EUCS 099	2	2	2	2	1	2	2	2	2	2	16	16	16	16	12	95

99	727721EUCS 100	0	2	2	0	1	2	2	2	1	0	14	15	13	12	13	79
100	727721EUCS 101	0	0	0	0	2	2	0	0	1	0	10	12	9	13	7	56
101	727721EUCS 102	2	0	0	2	2	2	0	2	2	2	14	13	12	13	12	78
102	727721EUCS 103	0	0	2	0	0	0	0	0	0	0	8	8	7	6	7	38
103	727721EUCS 104	0	0	0	0	0	1	0	0	1	0	12	13	12	11	11	61
104	727721EUCS 105	2	2	0	0	2	2	2	2	2	2	12	13	15	13	13	82
105	727721EUCS 106	2	2	2	2	2	2	2	2	1	2	16	13	12	15	16	91
106	727721EUCS 107	1	0	0	0	1	2	0	0	1	1	12	15	12	15	16	76
107	727721EUCS 108	2	2	2	1	2	2	2	0	2	2	16	13	15	14	13	88
108	727721EUCS 109	2	1	0	0	1	2	2	0	2	2	15	13	12	15	12	79
109	727721EUCS 110	1	2	1	0	2	2	1	2	2	1	8	8	9	12	10	61
110	727721EUCS 111	1	2	2	0	2	2	1	2	2	1	16	16	16	15	14	92
111	727721EUCS 112	1	0	0	0	0	2	0	0	1	1	12	13	12	13	11	66
112	727721EUCS 113	2	0	2	1	2	2	2	2	2	2	12	9	12	13	13	76
113	727721EUCS 114	1	0	1	0	2	2	2	0	2	1	15	14	12	12	14	78
114	727721EUCS 115	0	0	2	0	2	0	1	0	2	0	8	10	14	13	12	64
115	727721EUCS 116	2	0	0	0	1	2	2	2	2	2	12	12	16	8	16	77
116	727721EUCS 117	0	0	2	0	2	2	2	2	2	0	15	10	16	15	14	82
117	727721EUCS 118	0	2	0	0	2	1	2	0	1	0	14	15	11	13	12	73
118	727721EUCS 119	2	2	2	1	2	2	2	1	1	2	16	16	16	16	9	90

119	727721EUCS 120	1	1	2	0	0	2	2	0	0	1	12	9	12	11	15	68
120	727721EUCS 121	0	0	0	0	2	2	0	0	2	0	15	15	15	15	16	82
121	727721EUCS 122	2	2	0	0	2	2	0	0	0	2	16	12	12	15	16	81
122	727721EUCS 123	1	2	2	2	2	2	1	2	2	2	16	16	16	16	14	96
123	727721EUCS 124	0	0	2	0	0	2	0	0	1	0	12	13	12	15	13	70
124	727721EUCS 125	0	0	0	0	0	2	0	0	1	0	12	13	7	10	13	58
125	727721EUCS 126	1	1	0	0	2	2	1	2	2	1	12	10	14	15	16	79
126	727721EUCS 127	1	1	2	1	2	0	2	0	2	1	12	12	11	13	12	72
127	727721EUCS 128	0	0	0	0	0		1	0	1	0	12	16	12	15	16	73
128	727721EUCS 129	2	0	2	2	2	2	2	2	2	2	16	16	14	15	12	91
129	727721EUCS 130	1	0	1		1	0	0	1	2	1	15	16	12	13	12	75
130	727721EUCS 131	2	0	2	0	1	2	2	2	1	2	12	15	15	16	16	88
131	727721EUCS 132	0	0	2	0	1	2	0	0	1	0	12	12	13	12	13	68
132	727721EUCS 133	0	0	0	0	2	2	2	1	2	0	12	12	8	11	10	62
133	727721EUCS 134	2	0	2	2	2	2	2	0	2	2	16	12	16	16	16	92
134	727721EUCS 135	0	0	0	0	0	2	0	0	0	0	12	14	12	4	12	56
135	727721EUCS 136	0					1		0	0	0	3	5	5	5	6	25
136	727721EUCS 137	0		2		1	2	0	1	1	0	10	9	8	13	12	59
137	727721EUCS 138	2	0	2	2	2	2	2	1	2	2	15	13	16	14	12	87
138	727721EUCS 139		0	2		1				1		10	11	10	10	12	57

139	727721EUCS 140	2	0	2	2	2	0	2	2	2	2	12	15	15	15	4	77
140	727721EUCS 141	1	0	0	0	2	0	1	0	2	1	9	6	12	12	12	58
141	727721EUCS 143	0	0	2	1	2	2	1	2	2	0	16	16	16	16	14	90
142	727721EUCS 144	2	1	0	1	2	2	2	1	1	2	14	14	13	15	15	85
143	727721EUCS 145	0	0	0	0	1	0	0	0	0	0	10	13	10	13	12	59
144	727721EUCS 146	1	0	2	1	2	1	1	0	2	1	10	9	11	8	12	61
145	727721EUCS 147	0	0	0	1	2	2	2	1	2	0	12	16	16	15	13	82
146	727721EUCS 148	1	1	0	1	0	0	2	1	2	1	12	10	12	11	12	66
147	727721EUCS 149	2	1	0	1	1	0		1		2	15	15	12	15	14	79
148	727721EUCS 150	0	1	2	1	1	1	2	0	1	0	10	7	12	11	12	61
149	727721EUCS 151	1	0	0	0	2	0	2	1	1	1	16	13	15	13	12	77
150	727721EUCS 152	2	0	2	2		1		1	1	2	16	13	13	12	12	77
151	727721EUCS 153	2	1	0	1	2	2	2	1	1	2	9	13	9	13	12	70
152	727721EUCS 154	1	0	2	1	1	2	2	2	2	1	16	16	16	16	15	93
153	727721EUCS 155	1		2		1	0		0	1	1	10	13	8	9	11	57
154	727721EUCS 156			0	0		0		0	0		12	13	10	13	9	57
155	727721EUCS 157	1	1	2	1	2	2	2	2	1	1	12	16	15	16	16	90
156	727721EUCS 158	2	1	2	2	1	2	2	1	2	2	16	13	16	13	13	88
157	727721EUCS 159	2	0	2	1	2	2	2	2	2	2	16	13	12	16	12	86
158	727721EUCS 160	0	1	2	2	2	0	2	0	2	1	10	13	12	13	12	72

159	727721EUCS 161	0	0	0	0	1	0	0	0	1	0	10	11	8	9	14	54
160	727721EUCS 162	0			0	0			0	1	0	8	13	6	13	12	53
161	727721EUCS 163		0	0	0	0	0		0			10	16	16	13	7	62
162	727721EUCS 164	1	0	0	0	2	0	2	2	0	1	14	7	8	9	10	56
163	727721EUCS 165	1	0	1	0	2	2	2	0	2	1	15	8	15	6	9	64
164	727721EUCS 167	2	0	1	1	0	2	1	1	2	2	14	13	15	14	15	83
165	727721EUCS 168	1	0	2	2	2	2	2	2	2	1	12	16	15	13	15	87
166	727721EUCS 169	1	1	2	1	2	2	2	1	2	2	16	15	12	15	16	90
167	727721EUCS 170	2	1		2	2	0	2	2	1	2	12	4	11	10	9	60
168	727721EUCS 171	0		0					0	0	0	6	7	5	9	5	32
169	727721EUCS 172	0	0	0	0	0	0	0	0	0	0	12	13	12	13	13	63
170	727721EUCS 173	2	0	2	2	2	2	1	2	2	2	14	13	14	13	12	83
171	727721EUCS 174	2	0	2	1	2	2	2	2	2	2	16	15	16	15	11	90
172	727721EUCS 175	2	1	0	1	2	2	2	2	1	2	14	13	12	13	12	79
173	727721EUCS 176	2	0	1	0	2	2	1	0	2	2	12	16	14	10	12	76
174	727721EUCS 177	0	0	2		2	0	2	0	1	0	13	10	10	13	15	68
175	727721EUCS 178	0	1	2	2	2	0	0	1	2	0	12	10	12	13	10	67
176	727721EUCS 179	0	1			2	2	2	1	1	0	12	8	16	6	12	63
177	727721EUCS 180	0	0	0	0	0	0	0	0	0	0	9	13	10	10	12	54
178	727721EUCS 181											10	10	6	13	12	51

179	727721EUCS 182	1	0	2	1	2	2	2		2	1	12	10	10	14	12	71
180	727721EUCS 183	0	0	0	0	0	2	0	0	1	0	14	10	8	10	9	54
181	727721EUCS 184	2	1	2	2	2	2	2	1	2	2	14	13	12	11	12	80
182	727721EUCS 185	1	2	2	2	2	2	2	2	2	1	14	15	12	13	14	86
183	727721EUCS 186	0	1	2	1	1	0	0	1	2	0	8	4	7	4	4	35
No. of students scores above the expected knowledge level of 70%		79	47	97	53	127	111	100	75	101	74	130	127	127	131	134	
% of Students scoring above the expected knowledge level		44	26	54	29	70	61	55	41	56	41	72	70	70	72	74	
Mapping with COs		C101.1	C101.6	C101.2	C101.2	C101.3	C101.4	C101.5	C101.5	C101.3	C101.4	C101.1	C101.2	C101.3& C101.6	C101.4	C101.5 & C101.6	
Attainment level of each COs		1	0	2	0	4	3	2	4	2	1	4	4	4	4	4	
Course Outcomes		C101.1	C101.2	C101.3	C101.4	C101.5	C101.6										
Attainment level of each COs		78	67	100	83	100	67										

The final CO attainment of all first year courses is given in table 8.6

Table 8.6 Attainment of CO (in both internal and SEE) of all first year courses (for 2021-2025 batch) using Direct (D) and Indirect(I) Assessment methods																								
The target values set for this batch are:
Knowledge Level, set for each Question (in both Internal and SEE)   : 75%
Target set for each CO (Internal tests)   : 75%
Target set for Semester End Exams   : 75%

Sem	Course code	Course title	Target %	CO1			CO2			CO3			CO4			CO5			CO6			Overall attainment	Remarks
				D	I	Avg	D	I	Avg	D	I	Avg	D	I	Avg	D	I	Avg	D	I	Avg		
Semester I	21MA101	Engineering Mathematics I	75.0	72.5	78.9	75.7	76.5	82.3	79.4	88.8	85.2	87.0	75.3	74.3	74.8	78.4	78.9	78.7	80.4	82.3	81.4	79	Attained

	Code	Course																				Avg	Status
	21PH104	Physics	75.0	73.3	85.2	79.2	82.3	80.6	81.4	82.3	82.3	82.3	82.4	87.4	84.9	73.8	85.2	79.5	73.2	83.8	78.5	81	Attained
	21EN101	Technical Communication Skills	75.0	89.2	92.5	90.9	91.2	87.4	89.3	89.8	94.3	92.1	84.6	81.3	83.0	95.2	92.5	93.9	90.0	82.2	86.1	89	Attained
	21IT101	Python Programming	75.0	75.1	80.3	77.7	80.4	71.3	75.8	80.7	66.0	73.4	70.4	82.3	76.3	75.1	80.3	77.7				76	Attained
	21CS101	Application Development Practices	75.0	73.0	83.2	78.1	78.6	81.6	80.1	75.3	80.9	78.1	82.3	78.9	80.6	77.1	81.6	79.4				79	Attained
	21ME103	Engineering Practices Laboratory	75.0	83.6	82.6	83.1	82.3	81.2	81.8	78.9	81.5	80.2	83.8	85.2	84.5	83.8	81.2	82.5	82.6	84.3	83.5	83	Attained
Semester II	21GE201	Universal Human Values	75.0	91.6	89.4	90.5	88.9	81.8	85.4	83.8	83.6	83.7	82.2	92.5	87.3	87.9	91.8	89.9	84.4	83.5	83.9	87	Attained
	21CS201	C and Data Structures	75.0	70.2	76.9	73.6	75.6	78.6	77.1	82.6	77.9	80.2	88.7	80.3	84.5	78.6	82.3	80.5				79	Attained
	21MA201	Engineering Mathematics II	75.0	81.2	85.4	83.3	80.3	82.3	81.3	89.4	81.8	85.6	80.5	83.2	81.9	82.3	83.8	83.0	83.2	77.8	80.5	83	Attained
	21CH101	Engineering Chemistry	75.0	80.3	88.4	84.4	78.4	77.8	78.1	82.6	74.0	78.3	83.6	82.6	83.1	88.9	82.2	85.5	71.8	79.5	75.7	81	Attained
	21EE111	Basics of Electrical and Electronics Engineering	75.0	71.6	70.3	71.0	73.8	82.3	78.1	75.9	72.8	74.4	75.4	73.6	74.5	75.6	75.7	75.7				75	Attained
	21ME111	Engineering Graphics	75.0	77.6	70.5	74.1	95.2	71.3	83.3	85.8	77.3	81.5	81.6	82.4	82.0							80	Attained
	21CS202	Data Structures Laboratory	75.0	82.3	84.3	83.3	89.5	74.3	81.9	88.6	78.1	83.4	71.5	86.4	79.0	80.6	80.6	80.6				82	Attained

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8.5 Attainment of Program Outcomes from first year courses (20)   Total Marks 20.00

8.5.1 Indicate results of evaluation of each relevant PO and/or PSO if applicable (10)

Institute Marks : 10.00

POs Attainment:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
21MA1	2.34	2.35	2.38	2.58	2.58	PO6	PO7	PO8	2.21	PO10	PO11	2.58
21PH1	2.38	2.35	2.27	2.46	PO5	2.47	PO7	PO8	2.41	PO10	PO11	2.41
21EN1	PO1	PO2	PO3	PO4	PO5	PO6	PO7	2.84	2.73	2.69	PO11	2.66
21IT10	2.29	2.29	2.29	2.29	2.29	2.29	PO7	PO8	2.29	2.29	PO11	2.29
21CS1	2.35	2.34	2.34	2.34	2.35	2.41	PO7	PO8	2.34	2.34	PO11	2.34
21ME1	2.56	2.56	PO3	PO4	2.57	PO6	PO7	PO8	2.56	2.56	PO11	PO12
21MC1	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	2.25	PO11	2.32
21GE2	PO1	PO2	PO3	PO4	PO5	2.62	2.59	2.6	2.57	2.57	PO11	2.57
21CS2	2.39	2.39	2.39	2.4	2.39	2.42	PO7	PO8	2.39	PO10	PO11	2.39
21MA2	2.31	2.31	2.31	2.27	2.27	PO6	PO7	PO8	2.27	PO10	PO11	2.27
21CH1	2.42	2.43	2.42	2.2	PO5	2.59	2.2	PO8	2.2	PO10	PO11	PO12
21EE1	2.24	2.25	2.26	2.26	2.24	2.26	PO7	PO8	PO9	PO10	PO11	2.24
21ME1	2.33	2.42	2.37	PO4	2.42	PO6	PO7	2.42	PO9	2.33	PO11	2.42
21CS2	2.47	2.47	2.47	2.46	2.47	2.48	PO7	PO8	2.47	2.47	PO11	2.47
21MC2	PO1	PO2	PO3	PO4	PO5	PO6	2.25	PO8	PO9	PO10	PO11	PO12

PO Attainment Level

PSOs Attainment:

Course	PSO1	PSO2	PSO3
21MA1	2.35	PSO2	2.58
21PH1	2.39	2.46	PSO3
21EN1	PSO1	PSO2	2.84
21IT10	2.29	2.29	2.29
21CS1	2.35	2.35	2.34
21ME1	PSO1	2.54	2.55
21MC1	PSO1	PSO2	2.29
21GE2	PSO1	PSO2	PSO3
21CS2	2.39	2.39	2.39
21MA2	2.31	PSO2	2.27
21CH1	2.2	PSO2	PSO3
21EE1	2.24	2.24	PSO3
21ME1	2.42	PSO2	2.42
21CS2	2.46	2.47	2.47
21MC2	PSO1	PSO2	PSO3

PSO Attainment Level

Course	PO1	PO2	PO3
Direct Attainment	2.34	2.39	2.44
PSO Attainment	2.34	2.39	2.44

8.5.2 Actions taken based on the results of evaluation of relevant POs and PSOs (10)

Institute Marks : 10.00

POs Attainment Levels and Actions for Improvement- (2021-22)

POs	Target Level	Attainment Level	Observations

PO 1 : Engineering Knowledge

POs	Target Level	Attainment Level	Observations
PO 1	75%	79%	Attained. Out of 15 courses, 11 courses are contributing to the PO1 attainment. Matlab simulation tool is used to implement the mathematical concepts. Industry training was given for the courses "C and Data structures" and "Data structures Laboratory"

The actions taken for Continuous improvement are: Action 1: Assignments based on real life applications are given to enhance their fundamental knowledge. More significance is given to the application of mathematical concepts in computing field. Action 2: Industry Training is given for the course "Application Development Practices", in order to handle web designing projects. Core courses such as Java Programming, C++, "Database Management Systems" were taught in the first year (for 2022-26 batch) , in order to prepare the students for the hackathons. • More lab sessions will be conducted to improve their practical knowledge.

PO 2 : Problem Analysis

POs	Target Level	Attainment Level	Observations
PO 2	75%	79.3%	Attained. Totally, 11 courses are contributing to the PO2 attainment. Scenario based questions are discussed and solved in each course.

Action 1 : Smart India Hackathon Problems are discussed and analyzed in the class. Action 2 : Students are encouraged to observe the environment, identify the issues and analyze it in the class during the snap talk. Action 3: Role play activities are conducted to understand the basic concepts in data structures.

PO 3 : Design/development of Solutions

POs	Target Level	Attainment Level	Observations
PO 3	75%	78.3%	Attained. Participation in "Design contests" are insisted to improve the design and development of solutions skills.

Action 1: Coding Contests are conducted for the courses, handled by the industry. Action 2: Block teaching is followed to get the thorough knowledge in computing courses.

PO 4 : Conduct Investigations of Complex Problems

POs	Target Level	Attainment Level	Observations
PO 4	75%	78.6%	Attained. The online coding platforms such as HackerRank, HackerEarth and CodeForces are used to train the students in analyzing the complex problems.

Action 1: Video materials and animated PPTs are used to strengthen the knowledge of the students. Action 2: Flipped classrooms are practiced for peer learning.

PO 5 : Modern Tool Usage

POs	Target Level	Attainment Level	Observations
PO 5	75%	80%	Attained. Students are encouraged to explore the recent tools and learn tools for front end development.

Action 1: Front end Development tools such as Bootstrap, Flask, jQuery, java Script are introduced to develop the implementation skill. Action 2: Students and Faculty members are insisted to undergo online certificate courses from NPTEL,MOOC, Skillathon, Courseera, etc.

PO 6 : The Engineer and Society

POs	Target Level	Attainment Level	Observations
PO 6	75%	81.3%	Attained. Case studies are introduced to relate the engineering concepts with the societal issues.

Action 1: Seminar presentation components are used to improve the student's ability in defining the societal, health, safety, legal and cultural issues . Action2: Students are motivated to develop an application for a societal problem in the " Application Development Practices" course,

PO 7 : Environment and Sustainability

POs	Target Level	Attainment Level	Observations
PO 7	75%	78.3%	Attained. "Science Expo" is conducted for the first year students to create awareness on Environment and Sustainability.

Action 1: Outreach programmes are conducted to make the students to observe the environment and take responsibility in environmental stability and general safety.

PO 8 : Ethics

POs	Target Level	Attainment Level	Observations
PO 8	75%	87.3%	Attained.

Action 1: Professional Ethics is discussed in three courses such as "Technical Communication skills", "Universal Human Values" and "Engineering Graphics", to make the students as responsible citizens of our society . Action 2: Activities like guest lectures, Alumni interactions are organized to inculcate ethical values and sense of responsibility in students

PO 9 : Individual and Team Work

PO 9	75%	80%	Attained.

Action 1: Inter department and inter college level programs such as "Youth talk" and "Handloom Fashion Show" are organized to help the students to develop their individual and team skills. Action 2: Students are encouraged to enroll themselves in various clubs like "Innovative club", "Eco club", "English Club" etc., and take part in team events.

PO 10 : Communication

PO 10	75%	81.3%	Attained.

Action 1: Students are given chance to do snap talk during class hours for all the courses in order to improve their communication skills. Action 2: Peer learning and Group discussions are encouraged to share their thoughts and views to their fellow mates in an effective manner.

PO 11 : Project Management and Finance

PO 11	NIL	NIL	This Outcome is not selected for the first year students.

PO 12 : Life-long Learning

PO 12	75%	80.3%	Attained.

Action 1: Students are encouraged to register their entrepreneurial ideas and develop their start up. Students are given Library orientation to realize the Importance of referring magazines, newsletters, research articles etc. Action 2: Awareness programmes are conducted to write competitive exams such as GATE, TOEFL, GRE, etc.

PSOs Attainment Levels and Actions for Improvement- (2021-22)

PSOs	Target Level	Attainment Level	Observations

PSO 1 : Apply the fundamental knowledge for problem solving and analysis as well as conduct investigations in computer science and engineering for sustainable development

PSO 1	75%	78%	Attained.

Action 1:Industry training is given for the core courses such as " Problem Solving and C++", "Java Programming" and "Database Management Systems". Action 2: In order to get knowledge on recent trends, fundamental computing courses are taught in the first year. • Alumini Interaction will be arranged for students, So that they can get aware of current scenario and work on their goals.

PSO 2 : Design and develop the solutions for real time problems and implement them by using modern software tools in lieu of deploying them in the society for its growth.

PSO 2	75%	79.7%	Attained

• Students will be insisted to take part in projects and contribute their work with their senior fellows. • Students self-learning skills will be honed via workshops and interactive sessions.

PSO 3 : Communicate effectively, adopt ethics and engage in life-long learning.

PSO 3	75%	81.3%	Attained

• Students will be given Library orientation to realize the Importance of referring to newspaper, information from books and how to improve the reading skill in to a learning habit. • Students will be motivated to undergo internships in reputed construction industry

9 STUDENT SUPPORT SYSTEMS (50)

Total Marks 50.00

9.1 Mentoring system to help at individual level (5)

Total Marks 5.00

Institute Marks : 5.00

Tutor Ward System

Tutor ward system of our Institution bridges the gap between the student and teaching community, moulding and guiding their wards in all academic & personal fronts. Tutors direct those who require professional assistance to qualified counselors and also help the students set long-term career goals and short-term learning objectives.

We follow an efficient and systematic tutor-ward system that helps in the teaching learning process to reach new heights. Each Tutor is allotted with 20-35 students. Every activity of the assigned wards is closely monitored by the corresponding tutors. This helps the students in improving their academic capabilities and extra-curricular developments.

Tutor's roles and responsibilities:

- Establish a close rapport with the students.
- Help the students set long-term and short-term career goals.
- Cater to the individual needs of the students.
- Instil confidence in them.
- Provide guidance regarding the academic and personal issues.
- Pay more attention to slow learners.
- Inspire and motivate the advanced learners towards innovation and creativity in thought and actions.
- Resolve the personal issues/problems during their transition period and provide timely counselling.

Tutor ward system has been implemented for the students of first, second, third and final year students. The role of tutor is explained in **Fig.9.1** given below:
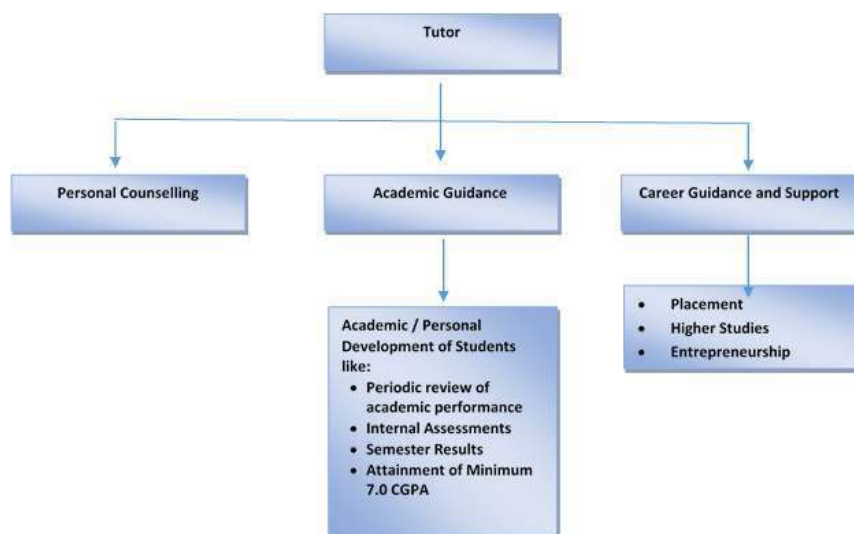
Fig.9.1 Role of Tutor in Tutor Ward Systems

Table.9.1 Tutor Ward System

Tutor ward System	Yes
Type of Mentoring	Academic, Curricular, Extra–curricular activity monitoring and guidance
Number of faculty tutors	3 per class
Number of students per tutor	20-25

Frequency of meeting	Weekly once or as per need

- Through the tutor ward, the Academic performance, Co-curricular and Extra-Curricular activities and Social activities are personally monitored and addressed by the tutors. For this purpose, a separate tutor ward book is maintained by individual tutors. Each Faculty member is a tutor for 20-25 students.
- Tutor ward meetings are conducted regularly, to ensure good academic performance as well as to address personal grievances students.
- Tutors maintain a separate whatsapp group with their wards and their parents to keep them updated about their academic performance, daily tasks, upcoming technical events organised by premier Institutions etc.,
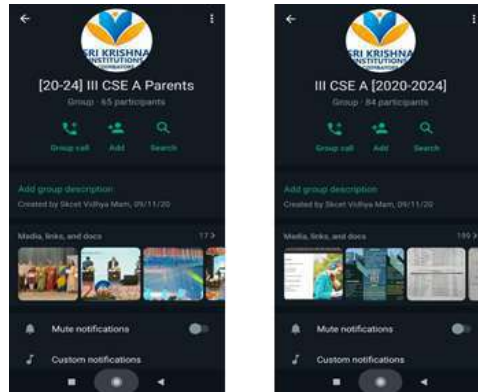
Fig 9.2 Screenshot for Official whatsapp group

Myklassroom exclusively designed for the TWS has been established provides the academic information (CGPA, Non- CGPA, attendance, etc.,) of the students with regular updates. The academic and personal information of the students are available in the Myklassroom for tracking the students. Sample screen-shot of Myklassroom software showing the academic information of wards under the tab 'Tutor Ward' is given in Figure 9.3.
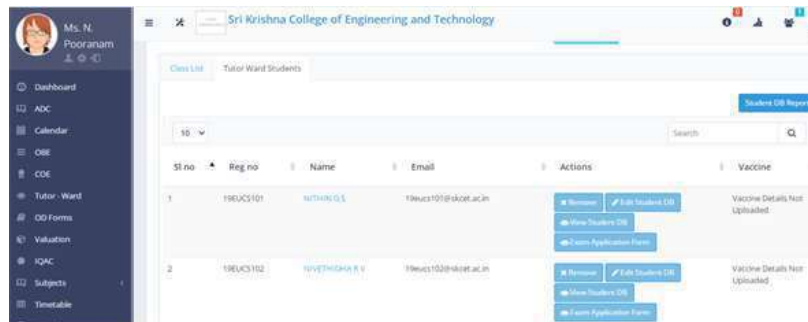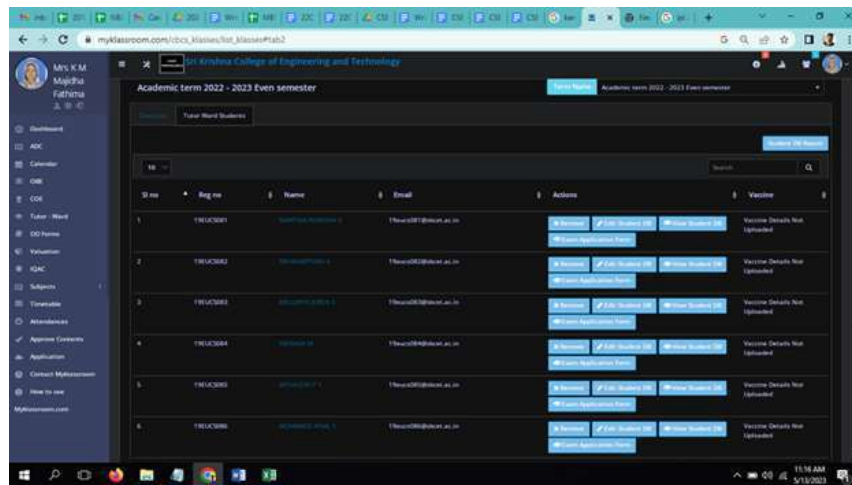
Fig 9.3 Sample Screenshot of the Academic Information of Wards under Tutorward Students in Myklassroom

Any discrepancy in students' performance like lack of attendance, poor academic performance etc., will be addressed and informed to their parents by the respective tutors. Status of tutor ward of individual tutors is verified by the Head of the department once in two weeks and corrective measures are suggested. If necessary, discussions with the Parents and Medical Counsellor are also arranged.

Impact of Tutor Teaching-Learning system

- Improvement in performance of weak students.
- Improvement in campus selection ratio.
- Reduced absenteeism.
- Improvement in overall performance.
- Improvement in personality.
- Increased participation in co- curricular activities.
- Improvement in behavior and attitudes
- Improved interpersonal relationship.
- Becoming conscious and worthy citizen.
- Receiving awards and recognition.

Frequency of meeting:

- **Attendance Monitoring:** Daily
- **Academic review meeting,** result analysis and diary updating: 1 Per Semester
- **Any other guidance:** Any time based on student's requirement
- **Class Committee Meeting :** Thrice per semester
- **Tutor Week Meeting :** One per week
- **Class Feedback for course handling faculty :** Twice per Semester

Supporting Weak students and Encouraging Bright Students

The students **who secure below 50% marks** in their Continuous Internal Assessment and having more than three arrears are identified and considered as academically weak students. Students who **secure above 75% marks** in their Continuous Internal Assessment in all subjects are considered as academically bright students. Weak students are given counselling for their career guidance.

Fig 9.4 Supporting Weak students and Encouraging Bright Students

Assistance For Weak Students:

- **Tutors regularly follow their progress** and counsel them to attend the classes, and also check their course notes periodically.
- Subject handling Faculty members **conduct special coaching classes**. During academic review meetings, the parents meet their ward's tutor and discusses the steps and actions that needs to be taken to improve the performance.
- **Tutorial Classes and Bridge courses** are conducted for Lateral Entry students to cope up with the syllabus.

Encouraging Bright Students:

- Top three students in continuous internal assessment for each class are identified and **awarded in Academic Review Meeting.**
- Students securing First and Second rank in the end semester examination are awarded **with a certificate and cash prize in the college day function.**
- Students are motivated to participate in **competitive examinations and Hackathons**.
- Students are motivated for attend workshops, seminars, paper presentation and paper publications in national and international conferences in premier Institutions like IITs, NITs, and BITS etc.
- Students are encouraged to undergo **International and National level Internships.**

Fig 9.5 Tutor – Ward Meeting minutes sample

9.2 Feedback analysis and reward /corrective measures taken, if any (10)   Total Marks 10.00

Institute Marks : 10.00

Feedback collected for all courses (Yes/No)	Yes
Percentage of students participating	100%

Table.9.2 Feedback Analysis Description

Feedback process is implemented in 3 stages:

- Feedback collection
- Feedback analysis
- Reward /corrective measures

Various Feecback collection mechanisms of students are:

- Feedback about course handling faculty
- Class Committee Meeting
- Tutor Ward Meeting
- Course exit survey

Other Feedbacks

- Alumni feedback
- Parents feedback
- Employer feedback

A. FEEDBACK COLLECTION

Feedback about course handling faculty

Students' feedback for various courses is collected through online mode. A standard questionnaire is framed and circulated to the students for which they are asked to submit their responses online. This feedback is obtained twicw per semester.

The response for each question is on a scale of 1 to 5 with the following interpolation.

- **Excellent   - 5**
- **Very Good   - 4**
- **Good   - 3**
- **Satisfactory - 2**
- **Poor   -1**

The questionnaire consists of the following list of questions:

1. Reporting to the Class on time.
2. Delivering Lecture Effectively.
3. Discussing the topic clearly.
4. Clearing Doubts Effectively.
5. Student Participation.
6. Communicating effectively in English.
7. Discussion of CIA Questions in class.
8. Audio Clarity.
9. Is the faculty Motivating the Students
10. Cordial relationship with the students/approachable to the students.

Figure 9.6 Sample Feedback form

Class Committee Meeting:

Every Department conducts Class Committee meetings periodically (once in a month) with class committee chairman and students of different categories in every class. Students are invited to express their view on subjects and other grievances in the department which are communicated by the chairman of the Committee to the HOD for further actions.

Fig 9.7 Class Committee Meeting Sample

Figure 9.8 Class Committee Meeting Minutes

Tutor Ward Meeting

Tutor ward meeting is conducted once in two months form all the students to improve teaching learning methods and to address grievances of students.

Fig 9.9 Tutor – Ward Meeting minutes

Course Exit Survey

Course exit survey is taken at the end of each semester for each course which can be used an input to improve pedagogical methodologies. A sample course exit survey is given in Figure 9.10

Figure 9.10 Course exit survey sample

Feedback from Alumni:

1. Alumni fill feedback forms whenever they visit the Department or the Institute.

2. Alumni feedback collected during Alumni meet which held biannually.

3. Alumni feedback is used constructively for the professional development of the students

Sample of Alumni feedback form is shown in Figure 9.11

Figure 9.11 Alumni Feedback sample

Feedback from Industry

Feedback from Industries are collected

1. During on campus placements drives
2. From Industry personnels where our Alumnus are employed
3. From industry during MoUs and other tie ups.
4. From industry and academic expert during seminar, workshop organized by institute.
5. From industry experts while framing syllabus

Sample Industry feedback is given in Figure 9.12

Figure 9.12 Industry Feedback sample

Institute level Feedback Form and Oral Feedback
- Apart from this, feedback is collected from all students for all subjects once every 15 days to improve teaching learning methods and to address grievances of students. All the students will submit the online feedback every semester and 25% of students (5 fast learners, 5 medium learners and 5 slow learners) attend the above mentioned oral feedback.
- At the end of every semester online feedback is collected for all subjects including laboratories. The feedback is consolidated and communicated to Faculty members to help them improve their teaching learning methods for forthcoming semesters. This feedback is obtained from all students of the Institution.
- Principal and HOD addresses student representatives from each year to obtain feedback and suggestions regarding academic and co-curricular activities directly. This feedback is then shared with concerned faculty members for remedial actions.

B.FEEDBACK ANALYSIS PROCESS:
Getting and analysing students feedback involves process that is represented in flow in flowchart Fig. 9.13 shown below.
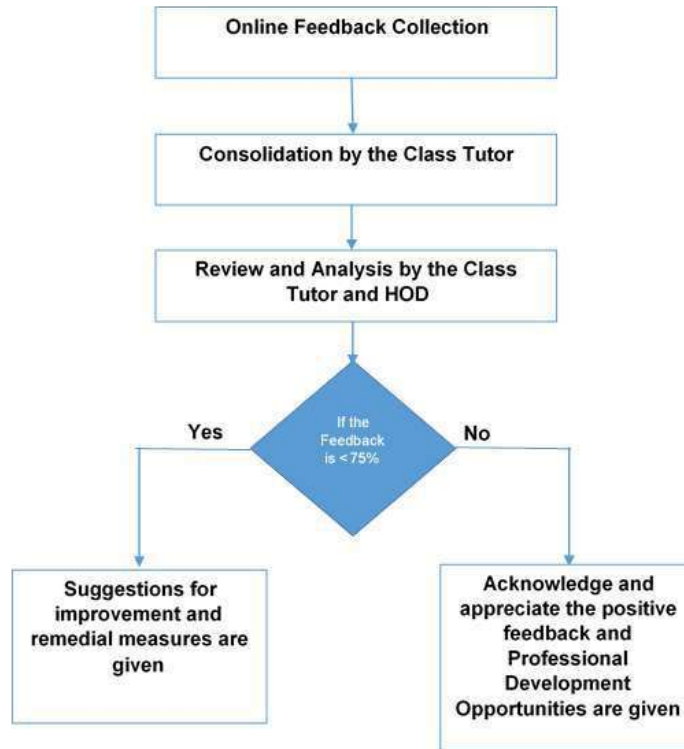
Fig 9.13 Flowchart for Feedback Analysis Process

A Sample of feedback analysis for all classes is shown below Fig. 9.14
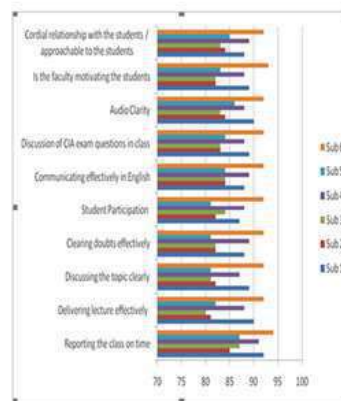

Fig 9.14 Sample Feedback Analysis

C. CORRECTIVE ACTIONS TAKEN BASED ON FEEDBACK

The feedback about faculty are collected, consolidated and analyzed. Based on the reports the faculty members are informed about their performance. T

Based on feedback analysis, most difficult courses are identified from each semester and corrective actions are taken.
- Special care is given to students during regular class hours; coaching classes are conducted for those courses which are identified as difficult.
- Students are advised to take online courses and allowed to undergo internships, industrial visit, and projects related to the course etc. for better understanding of those subjects.
- Head of the Department counsel the faculty members who perform not well as per the department/ college standards for efficient class room delivery.
- Based on the feedback given by students, parents, alumni and employers and improvements required in facilities are done.
- Encouraging faculty members to attend more Faculty Development Programs, Seminars and certification courses.

The following table 9.4 shows details of corrective actions taken for difficult courses based on student feedback

S. No	Subject Name (Difficult paper identified)	Feedback from the Student	Corrective actions taken
1	C++ and Advanced Data Structures	Advanced concepts are hard to understand. Special coaching is required.	Extra Coaching classes were provided on the topics Red Black, Splay Trees and AVL Trees.
2	Digital Logic and Design	Require additional materials and also need extra problems to solve.	Additional materials were provided. Extra classes were taken for slow learners for problem based questions.
3	Design and Analysis of Algorithms	Algorithm analysis part and NP complete ness problems need clarity.	Additional materials were provided. Extra classes were taken for NP and NP-Complete Problems. Animated videos were given to the students for better understanding.

Table.9.4 Corrective Actions Taken

D. BASIS OF REWARD

The feedback is considered part of Annual Performance Appraisal of the faculty member. Besides the faculty members who perform well are appreciated and awarded along with the monitory benefit of increment/ certificates of appreciations in recognition of their commendable efforts for:

- Quality lecture notes, instructional material etc.
- Innovations in teaching and learning methods
- Academic mentoring work done by faculty and mentoring students in National / International Hackathons
- Research projects, publications, patents
- Academic results produced
- Commendable contributions to the Department and Institution
- Self-development activities like certification course, FDP attended, conferences participated etc
- Hack Winners award is given to students and Faculty members.

- Special Contributor award, Best Tutor award, Industry certification award is given.

Students:

- Department toppers are appreciated for academic excellence.
- Class toppers are appreciated for Continuous Internal Assessment performance.
- Students with 100% attendance are awarded with certificate.
- Best outgoing student award and outstanding student award are also given.

Fig 9.15 Academic Toppers were appreciated during Academic Review Meeting

Fig 9.16 Top performing students, Faculty and Hack Winners are honoured during Darshan 2023.

9.3 Feedback on facilities (5)

Total Marks 5.00

Institute Marks : 5.00

Institute takes feedback on facilities from the students, parents, alumni and passing out students in the feedback forms. Apart from these department use departmental complaint registers also to be filled by the students, faculties etc. for the feedback. These facilities include library, training & placement, transportation, hostel, laboratories, medical facility and other general facilities etc. on Excellent, Good, Average basis. The evaluation process on facility feedback shall also be automated, then the corrective actions are taken by institute for the improvement.

1. Facility feedback taken from all the stake holders such as the employers, alumni, parents and students which the Program Objectives have been achieved.
2. Feedback on facility taken through departmental complaint registers by the students, faculty members, parents and aluminise.

Table 9.5 List of facilities at Departmental/Institute level for support of the students

S.NO	FACILITY	REMARKS
1	Students with physical disabilities	Provide facility of the wheel chair, college van, ramp and hand bar in toilet etc.
2	Medical assistance to students	· Facility of Medical room, Nurse Facility, doctor visits as per need.
3	Ambulance	· Availability of Ambulance in the campus
4	AC Hostel	Hostel with Air condition facilities were provided.
5	Wi-Fi facility in college hostel	Wi-Fi connectivity in hostel must be improved
6	Classroom facility	Additional classroom block was constructed for conducting tutorials and tests.
7	Rest Room	restrooms needs to be renovated
8	Availability of software and working condition of equipment	Latest software packages needs to be installed in Laboratories
9	Transport facilities	Provide AC Transport facility
10	Food courts	Food Stalls needs to be improved
11	Car Parking	New parking slot need to be established
12	Sports &Gym facility for students	Increase usuage timings

Based on feedback from students, alumni and parents the following corrective actions were taken is mentioned in Table 9.6.

Table 9.6 Corrective measures

S.NO	FACILITY	FEEDBACK PARAMETERS	REMARKS

1	Hostel	1. Entry in the register 2. Discussion with warden 3. Written application	1. Entry/Exit Timing are fixed but on demand as per permission is provided. 2. Maintenance Entry in register and corrective action will take. 3. Medical facility is provided. 4. Hostel rooms are equipped with air condition and sophisticated Infrastructure
2	Lab Maintenance	1.Safety guidelines and instructions 2. Sign the manual /rough record 3. Cleaning and repairing of equipment's	1. Visited by service team for maintenance. 2. It is checked before being put back to use. 3. Proper cleaning of equipments has been done two times in a week.
3	Transportation	1. Written application 2. Meeting with Bus In charge. 3. Committee for monitoring discipline and ragging in buses	1. Recorded with bus in charge and appropriate action is Taken. 2. Collect the report from committee and corrective actions is taken 3.College Transport for long routes specifically Tirupur&Mettupalayam has been arranged.
4	Library	1. Time Management 2. Manage Entry register 3. Departmental feedback	1. Appropriate action taken by Library in-charge.
5	Sports	1.Assigned coordinators 2. Requirements of kits 3. Sports in-charge	1.Sports in-charge takes appropriate decision 2.Repairing and replacements of kits

The Following new Facilities were added/Modified during the recent years

Table 9.7 New facilities added based on feedback

S.NO	Facility	Corrective actions taken
1	AC Hostel	Hostel with Air condition facilities were provided.
2		Apart from Hostels with AC facility, buses with AC facility are being plied from Pollachi and Mettupalayam.
3	Wi-Fi facility in college hostel	Wi-Fi connectivity in hostel has been improved with 12 Jio routers in each block.

4	Classroom facility	All the classrooms were changed to smart classroom with LCD projector and interactive smart board. Additional classroom block was constructed for conducting tutorials and tests.
5		Few classrooms are being tested with Smart TV with a browsing facility.
6		All the contents will be posted in Google ClassRoom (GCR) which enables the student to revise the classes and not miss any class.
7	Bank and ATM facility	Axis bank extension counter was started at college campus, SBI and Axis bank ATM placed inside college campus
8	Rest Room	Renovations of restrooms are happening in all blocks.
9	Availability of software and working condition of equipment	Latest software packages are installed in Laboratories. Lab equipment services were carried out to retain the working condition of equipment.
10	Transport facilities	Issues were resolved.
11	Food courts	New food stalls were started inside the college campus.
12	Car Parking	New car parking slots are established near classroom block 5
13	Sports &Gym facility for students	Facilities were improvised.

Figure 9.17 Sample Feedback form on facilties

9.4 Self-Learning (5)

Total Marks 5.00

Institute Marks : 5.00

The academic system in the Institution facilitates students to learn beyond the syllabus contents. Our curriculum offers courses like project based laboratory, industry field training, project work, MOOC certification course, value added course, technical presentation etc. The facilities and components of self-learning are evaluated in these areas.

A. Scope for self-learning

The following methods are used for self-learning:

- Central Library, Departmental Library, and Digital Library Materials in campus
- Learning through projects, internships, summer trainings etc.
- Web based learning (teaching-learning course online NPTEL, SWAYAM, Webinars etc.)

Table 9.8 Self learning Facility

Facility	Description
Library	Enough volumes on core and application areas, technology books and journals
Digital Library	Computers with Internet and intranet facilities to access all kinds of E-books and E-journals
Smart classrooms	Classroom with LCD projector and interactive board
E-learning resources	NPTEL, EBooks, videos through OPAC, Springboard, Cisco Net Academy.
Events that encourage self-learning	1. Seminars 2. Workshops 3. National and International Conferences 4. Guest Lectures 5. Webinars 6. Paper presentations outside the institution 7. Industrial Visits 8. Industrial field training 9. Hackathon and Project presentation

B. Facilities and schemes to encourage self -learning:

The details of facilities and schemes available in the institution and the department to encourage self-learning in students are explained as follows:

1. Web based learning:

Web based learning is enabled through sophisticated computer labs with high speed internet in the Institution for students. Course materials and video lectures are available through Intranet. Google Classroom is incorporated in our teaching learning process to interact with students 24X7 by posting technical contents, updated technologies etc.,
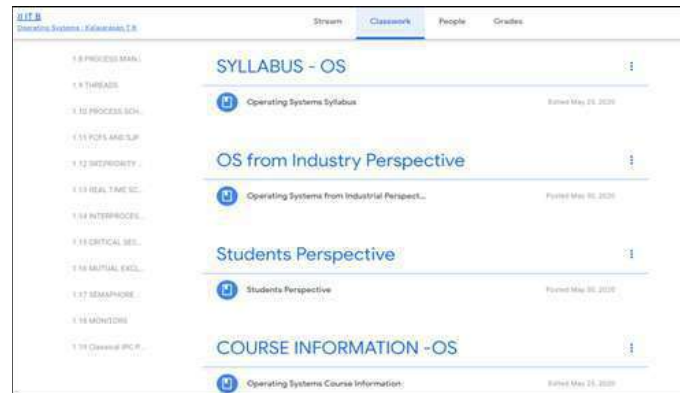
Fig 9.18 Web Based Learning

2.Smart Boards:

All the classrooms in our department are equipped with smart boards and LCD projectors. Smart boards are more flexible compared to the white boards as it facilitates explanation of the concepts in a lucid manner to the students with the help of pictures and videos. It makes the learning environment more interactive. In the classroom teaching learning process, flipped classroom model is followed. Smart boards allow integration of various technologies in order to improve the learning experience.

Figure 9.19 Smart Classroom

It is enriched to integrate the interactive learning tools with a wide range of software applications. The entire lecture delivery through the smart board can be converted and saved as PDF. The saved format could be sent to students for their reference and therefore it would benefit the absentees as well. Tutorial videos and simulation videos can be played to give more clarity for the students in understanding complex topics.

3. Flipped Classroom

For every course, a Google Classroom is created and communicated to the students. Faculty members add all students to it before commencement of every semester for every course.

The Google Classroom of our courses provide the students with the following features:

1. Course Description

2. Syllabus

3. Course Information

4. Subject Module with presentation, quiz, high-order thinking questions and relevant videos

5. Internal marks and attendance details

6. Higher Education perspectives of the subjects including Jobs and Studies

7. Assignment questions with CO-PO mapping

8. Research perspectives with information on Journals and Conference for further study

9. Details on Virtual Labs, Certification courses, Competitive Exam Question Banks

10. Class recordings, Simulation tools and Animations.

The platform integrates with Googles other tools like Docs, Drive, Forms, Meet, and Calendar, hence there are many built-in "shortcuts" for classroom-management tasks. It easily manages classes, post announcements, task or question during the lecture and getting feedback on the topics.
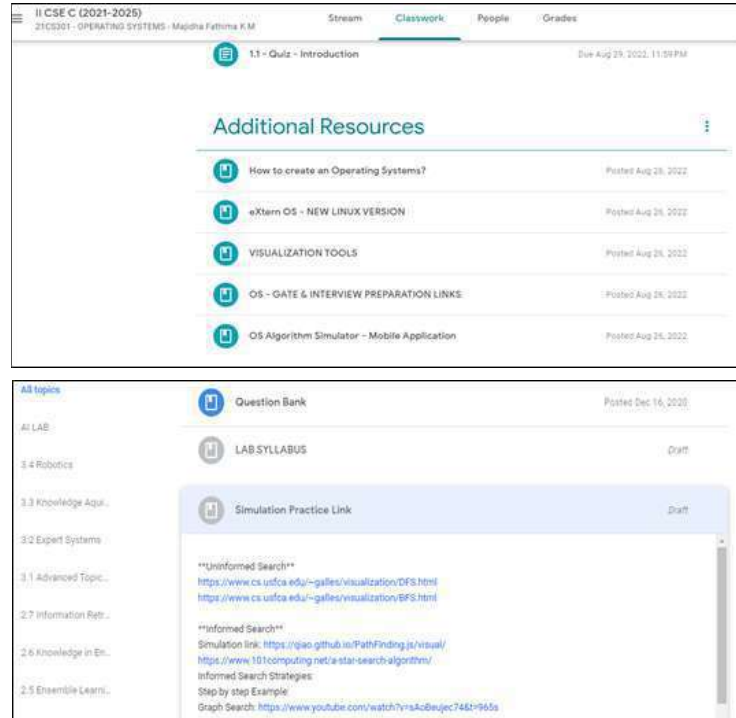
Figure 9.20 Google Classroom

4. Blended Learning

- Blended learning, often referred to as technology-mediated instruction, web-enhanced instruction, or mixed-mode instruction.
- It is a teaching strategy that mixes in-person classroom activities with online educational resources and chances for online participation.
- We dividing blended learning in three categories
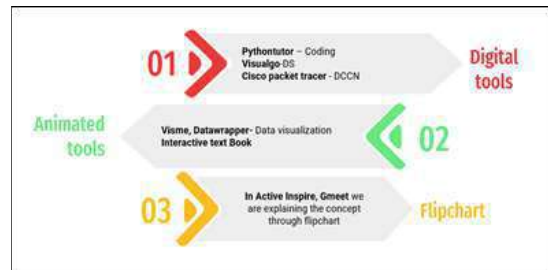
Fig 9.21 Blended Learning example

5. Digital Tools

- Faculty members using digital tools to understand the coding as well as concepts using the tools like python tutor for coding, visualgo for data structures and Cisco packet tracer for DCCN Course, Crypt tool for cryptography and network security.
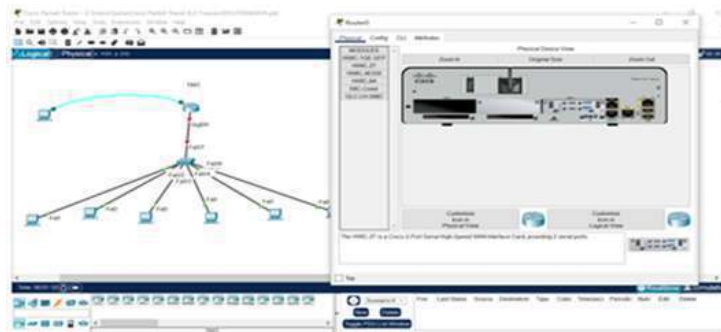
Fig 9.22 Screenshots of tools

6. MOOC certification course

Faculty and Students are encouraged to register for at least one online course from online learning portals such as Udemy, Coursera, Edx and NPTEL. The participation of faculty members and students in NPTEL and other online courses is enhancing their self-learning capabilities. These enable them to enrich their subject knowledge with current trends, and also helps in equiping themselves with inter-domain subjects. It is also considered as a key for lifelong learning.

Fig. 9.23 Certificates under various E-learning platforms by Faculty and Students

7. NERD Test

- NERD Test is the test conducted for the students daily evening in the NEOPAT portal
- It will make the students to analyse themselves and results posted on the next day morning.
- Through this regular practice of NERD Test ,they can solve code easily during their placements
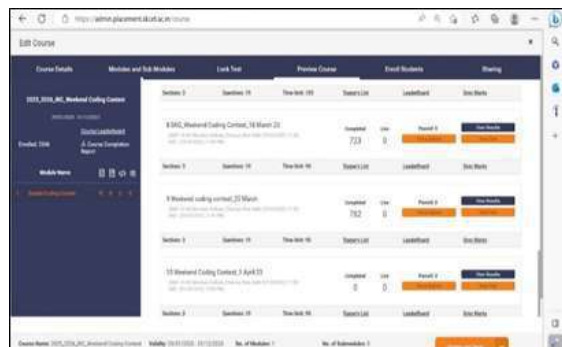
Fig 9.24 Screenshot of NERD test

8. ICT Learnathon and Springboard courses

Online courses through leading content providers like ICT academy's Learnathon, Cisco Networking Academy and Infosys Springboard provides to the students with their own choice from wide range of titles.

Fig 9.25 Online short-term course certificates

9. Snap talk

Faculty members conduct 5 minutes snap talk in the middle of their lecture hour and review it to help students understand where they stand. Snap talk is a technique that helps the students to improve their English communication and overcome stage fear. Snap talk videos are recorded in the respective students' mobile phones. The students are allowed to choose their own topic or topic given by the faculty members for their snap talk sessions. Both technical and non-technical topics are chosen and effectively delivered in the classroom that enhances the students' skill development and learning.

Fig 9.26 Snap talk Sessions

10. Project presentation mode of self –improvement

Theory subjects and project-based laboratories are provided in the course curriculum with assignment presentation for each semester where the students demonstrate the prototype model or/and do oral presentation that helps them learn beyond their curriculum.

Fig 9.27 Project Presentations

11. Mentoring Hackathons

A hackathon, also known as a codefest, is a social coding event that brings students together to improve upon or build a new software program. Hackathons mainly focus on application of technology, primarily coding to **accomplish an objective or solve a problem**. Students participating in Hackathons solve some of the pressing problems and inculcate a culture of product innovation and a mindset of problem solving. Our students are motivated to take part in Codeathons and hackathons as much as possible. This enables the students' **ability to work as a team, problem solving capabilities and programming skills.** Our faculty members are mentoring the student teams and have received many prizes in hackathons. Winning hackathons enriches the students profile to **get job offers from leading tech giants and admissions in reputed Universities for higher studies.**

Internal Hackathon is one of the best practices followed in the Department where our students would get expertise in tools which they use in various hackathons like Smart India hackathon, Harvard hackathon to develop their product to create dynamic web pages with good UI/UX.

Fig 9.28 External Hackathon team with certificate

Fig 9.29 Award from Honorable Home Minister

12. Outside Classroom Learning

Hands-on learning has its own importance in the career of a student pursuing a professional degree. We organize industrial visits to provide students an insight regarding internal working of companies.

Fig 9.30 Industrial Visit

13. Project based Courses and Mandatory Internship

Project based courses are introduced in the curriculum where students have to complete a mini project and a main project during the program. As learning is not complete unless the students understand the requirements of industry, 21 days mandatory internship is also prescribed in the curriculum.

Fig 9.31 Project presentation by Students

14. Seminars and Workshops

Seminars and workshops provide students with exposure to new and emerging topics that are not covered in their regular curriculum. This helps to broaden their horizons and give them a better understanding of the latest developments in the field. Seminars and workshops provide a platform for students to interact with professionals and experts in their field of study. This networking opportunity can lead to potential collaborations, internships, and job opportunities
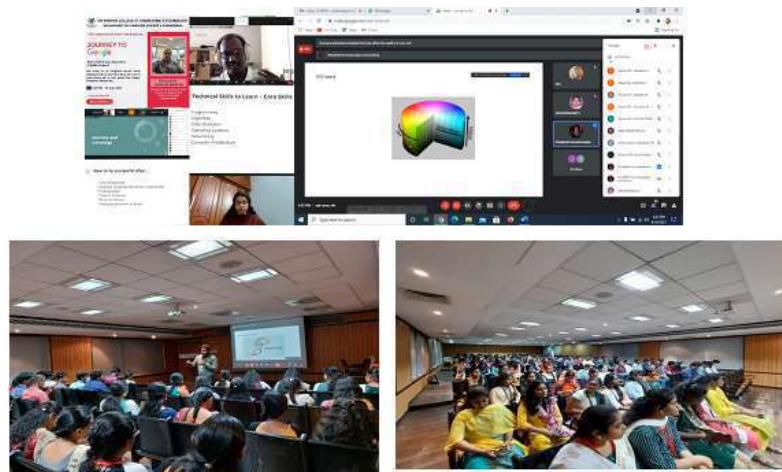
Fig 9.33 Workshops and Seminars from Industry experts

Workshops often provide hands-on experience that allows students to put their theoretical knowledge into practice. This helps to reinforce their understanding of the concepts they have learnt in the classroom and develop their practical skills. Emerging topics are often associated with new technologies, tools, and techniques.

Attending seminars and workshops can help students to develop new skills and stay up-to-date with the latest developments in their field. Exposure to new and exciting topics can motivate students to pursue further education or research in the field. This can help to cultivate a passion for their chosen field of study and encourage them to become lifelong learners.

15. Library Facility

The Vankatram Learning Centre – Central Library of Sri Krishna College of Engineering and Technology is one among the best Libraries in this part of the Country, in terms of Scholarly and Rare Resources, User Centric Services, Technology, Architecture, Infrastructure, Facilities, Size and Green concepts. There is a qualified Librarian administering the Library.

The Library, as a member in Indian Access Management Federation (INFED) of INFLIBNET– an autonomous Inter University Centre of UGC, disseminates the e – resources of **IEEE Digital Library, ASME Digital Collection, ASCE Digital Library, Science Direct Journals**, **Science Direct E-Books, Scopus Citation Database, Proquest ABI/INFORM Collection and DELNET** database among the Students, Faculty Members and Researchers, on and off the campus, irrespective of the places of the users, through the Shibboleth software.

The Wi-Fi Central Library that sprawls in 55,000 Sq.feet area, in a centrally air-conditioned environment caters to the information and knowledge needs of all its users through its scholarly resources of 80,363 books, thousands of Journals and Magazines available in print and digital modes, 12,742 CDS/DVDS/VCDs, 4,666 back volumes and NPTEL / TEQIP / NMEICT - Spoken Tutorials / British Council Video Lectures and Web Contents. In addition, the library houses 6012 rare resource collections that include Palm Leaves of Tamil Literature, Special Books and Back volumes assets.

9.5 Career Guidance, Training, Placement (10)   Total Marks 10.00

Institute Marks : 10.00

Availability of career guidance facilities

- Based on the interest from the students, career guidance is divided as three groups namely Placement, Higher studies and Entrepreneurship
  - Students are given pre-placement training, Competitive exams guidance and entrepreneurship awareness to students based on their preference and choice of career.
  - Organize seminar for students to provide information about Career/Education related opportunities (current trends of industries, emerging areas, scholarship for higher studies India or abroad).
  - Help in building the self-confidence of students and develop aptitude solving ability.
  - Conduct motivational address time to time for students and faculty those who are involved with students for the purpose of guiding.
  - Tutors motivate and guide the students in their path of career selection and proceeding towards their choice of career in a confident way

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Table 9.9 Career guidance programs

</div>

2022-23		
S. No	**Name of the Event**	**No. of Students participated**
1	Webinar on Entrepreneurship and innovation as career opportunity in Bioinformatics	35
2	Webinar on Higher studies and opportunities	55
3	Webinar on Innovations and Startup Policies	45
4	Webinar on Corporate Entrepreneurship	50
5	Innovations and Startup Policies	45
6	Placement Readiness-Expectations from industry perspective	90
7	Webinar on Career Opportunities in Software Testing skills	90
2021-2022		
S. No	**Name of the Event**	**No. of Students participated**
1	Webinar on Grow Your Career with IEEE	180
2	Webinar on Life as a Full Stack Developer and Insights on Hacking	175
3	Webinar on Innovation in Service Industry	220
4	Webinar on Innovation in Technology - Growth of SaaS industry in India	68
5	Webinar on Employment for Engineers in Defence Sector	50
6	Webinar on Career options after under graduation	179
7	Webinar on How to launch a successful startup	50

S. No	Name of the Event	No. of Students participated
8	Webinar on Startup vs Corporate: What's the best your career	32
9	Webinar on Entrepreneurship for Successful Startups	180
10	Webinar on Motivational Talk	160
11	Webinar on Impact of Covid-19 on B-Schools & Career Guidance for the Post Covid Period	120
12	TCS Career Orientation Session	47
13	Webinar on Traditional Pipeline and Wave Pipeline	184
14	Webinar on Innovation in Cybersecurity Domain	160
15	Webinar on Pitching Event for PoCs Developed and Linkage with Innovation Ambassadors for Mentorship Support	190
16	Webinar on Innovation of latest technologies-A company Perspective	188
2020-2021		
S. No	Name of the Event	No. of Students participated
1	Bootcamp Training on Advanced Programming	125
2	Training on Essentials and Programming	175
3	Training on Quantitative and Technical Aptitude	160
4	Capgemini Company Specific training	135
5	TCS Company Specific training	165
6	Accenture Company Specific training	153
7	Webinar - Mentorship on Self-Assessment for Career Planning	99
8	Webinar on innovation in design aspects of Sports fields	100
9	How to plan for Start-up and legal & Ethical Step	79
10	Webinar on Trends and Outlook for Entrepreneurship	168
11	Webinar on Placements & Entrepreneurship	168
12	Webinar on Knowledge Transfer Session on Interviews	60

13	Webinar on Career Options after Under Graduation	97

Placement Initiatives

- Based on the interest from the students, career guidance is divided as three groups namely Placement, Higher studies and Entrepreneurship
- Placement training programs focus on developing the skills and knowledge required by industries, making students more employable.
- A team works and team consists of Institution placement officer and team, Department placement coordinator, Year Coordinators are involved in coordination of various training activities. Each section of final year has a separate placement whatsapp group for sharing information regarding placements.
- Students are divided into three groups according to their programming knowledge and interest, and based on their ability basic, advanced and intensive training were given to the students
- These programs provide industry-relevant training, and soft skills development, enabling students to meet the expectations of potential employers.
- Students are also exposed to aptitude and soft skill training to clear the interview process.

Table 9.10 Training programs organized and no. of students participated.

Academic Year	Period	Training Name	No of Students
2020 -2021	Oct 2020 to March 2021	Intensive Training	39
	Oct 2020 to March 2021	Advanced Training	69
	Oct 2020 to March 2021	Basic Training	175
	06/09/2021 to 10/09/2021	TCS Company Specific Training by SixPhrase	175
	28/08/2021 to 30/08/2021	Wipro Company Specific Training by SixPhrase	175
	12/08/2021 to 17/08/2021	Capgemini Company Specific Training by SixPhrase	175
	18/08/2021 to 23/08/2021	TCS Ninja Company Specific Training by SixPhrase	175
	15/03/2021 to20/03/2021	SixPhrase Training	179
	Aug 2021 to March 2022	Intensive Training	91
	Oct 2021 to March 2022	Advanced Training	49
	Oct 2021 to March 2022	Basic Training	39
	22.03.2021	INFYTQ	47
	12.08.2021 to14.09.2021	Wipro Talen Next	49

			01.06.2021 to 04.06.2021	Aptitude Training	179
2022-2023			Sept 2022 to Apr 2023	Intensive Training	44
			Oct 2022 to Apr 2023	Advanced Training	76
			Oct 2022 to Apr 2023	Basic Training	67
			26/08/2022 to 02/09/2022	Aptitude Training	187

Industry interaction for training/internship/placement

The department has been taking many initiatives to collaborate with industries for curriculum revision, internship and summer training. Faculty members frequently visit industries for the same. Internship/ in-plant training and mini project are included in our curriculum to enhance student's practical knowledge and to help students know the recent advancement in industries.

Table 9.11 Glimpse of Internship Details

S.No	Year	Company offers Internship	No of Students Benefitted	Type of Interaction
2019-2020				
1	2019-20	Azetech Solutions	2	Internship/Placement
2		KaashivInfotech	1	Internship/Placement
3		IPCS	3	Internship/Placement
4		Cyber Crime Cell,Gurugram	1	Internship/Placement
5		Cubiksoft Technologies	1	Internship/Placement
6		SchliverseEducarePvt.Ltd	2	Internship/Placement
7		Skillsharesloutions	1	Internship/Placement
8		Litztech	6	Internship/Placement
9		Techvolt Software Pvt.Ltd	2	Internship/Placement
10		Insource Technologies	4	Internship/Placement
11		IIT Delhi	1	Internship/Placement

12		Cognizance	2	Internship/Placement
2020-2021				
1		Subzero Technologies	4	Internship/Placement
2		MyCaptain	1	Internship/Placement
3		NDimensionZ solutions Pvt.Ltd, Kerala	1	Internship/Placement
4		Vision Plus Solutions	1	Internship/Placement
5		K S Globals Tech Solutions	3	Internship/Placement
6		Zeboto Solutions	1	Internship/Placement
2021-2022				
1		ADF DATA SCIENCE PVT.LTD	6	Internship/Placement
2		Amazon Development Center India Pvt Ltd,	1	Internship/Placement
3		APPIN TECHNOLOGY LAB	3	Internship/Placement
4		ASCENTZ Technologies	7	Internship/Placement
5		Athena Health Technology Pvt. Ltd.	1	Internship/Placement
6	2021-2022	Bolt IoT	1	Internship/Placement
7		Codingmart Technologies	2	Internship/Placement
8		Cognizant Technology Solutions India Pvt. Ltd.	19	Internship/Placement
9		Evive Software Analytics Pvt. Ltd.	1	Internship/Placement
10		Fourkites INDIA PRIVATE LTD	2	Internship/Placement
11		Freshworks Technology Pvt. Ltd.	2	Internship/Placement
12		IBM India Private Limited	1	Internship/Placement

13		Intain Technologies Private Limited	4	Internship/Placement
14		Mr.Cooper	3	Internship/Placement
15		Odessa Solutions Private Limited	2	Internship/Placement
16		Quin Bay Technologies Pvt Ltd	4	Internship/Placement
17		Rently Software Development Ltd.	2	Internship/Placement
18		Striim Engineering Services India Private Limited	3	Internship/Placement
19		ThoughtWorks Technologies (India) Pvt Ltd.	1	Internship/Placement
20		Trimble Information Technologies India Private Limited	7	Internship/Placement
21		Ugam Solutions SEZ Pvt. Ltd.	1	Internship/Placement
22		Vuram Technology Solutions Private Limited	2	Internship/Placement
23		ZOHO CORPORATION PRIVATE LIMITED	1	Internship/Placement
24		ZoomRx Healthcare Technology Solutions Pvt. Ltd.	1	Internship/Placement
2022-2023				
1		Aptean, Chennai	2	Internship/Placement
2		Athenahealth	1	Internship/Placement
3	2022-2023	Crystal Delta	1	Internship/Placement
4		DOCPROS	1	Internship/Placement
5		FourKites	2	Internship/Placement
6		Enquero Global	1	Internship/Placement

7	Hewlett Packard Enterprise	4	Internship/Placement
8	Indie Spirit Technologies, Chennai	1	Internship/Placement
9	Informatica	1	Internship/Placement
10	QuinBay	7	Internship/Placement
11	OpenText Technologies Pvt Ltd, Hyderabad	22	Internship/Placement
12	3 Sided Coin, Ahmedabad	4	Internship/Placement
13	Latlon Technologies, Coimbatore	1	Internship/Placement
14	Yexle Digital Services India, Pvt Ltd, Hyderabad	4	Internship/Placement
15	CodingMart Technologies PvtLtd,Coimbatore	1	Internship/Placement
16	CloudArmee Technologies Pvt Ltd, Coimbatore	4	Internship/Placement
17	Hippo Videos, Chennai	1	Internship/Placement
18	Super ops	3	Internship/Placement
19	ZOHO Corporation Pvt Ltd, Chennai	13	Internship/Placement
20	Cloud Assert	1	Internship/Placement
21	Enquero/ cognizant genc pro	2	Internship/Placement
22	Food Hub, Coimbatore	1	Internship/Placement
23	HP Inc, Chennai	1	Internship/Placement
24	Hexaware Technologies Ltd, Mumbai	1	Internship/Placement
25	ITC/ Capgemini	1	Internship/Placement

26		Mr Cooper Services Pvt Ltd, chennai	1	Internship/Placement
27		Presidio	1	Internship/Placement
28		Yexle	1	Internship/Placement
29		Trimble	1	Internship/Placement

Higher Studies Initiatives

Various programs are organized by the department to encourage students interested in higher education
World education fair - Students were given opportunities to visit Representatives from foreign universities and had a knowledge on various opportunities for higher studies in various countries around the globe

Seminar on GATE Awareness Program - Students were given awareness on opportunities by clearing GATE exams in Public sector and higher education at IITs, NITs

Benefits of pursuing MBA program after engineering - Students were given awareness about the benefit of pursuing a management program after engineering graduation in India and abroad.

Figure 9.34 - Seminar on "Higher Education & Research Opportunities"

Students are also given guidance for Higher Studies and also for competitive examinations. Table 9.10 gives the details of the same.

Table 9.12 Details of Guidance for competitive examination

2022 – 2023		
S.NO	**Name of the Event**	**No of students participated**

1	Higher Education opportunities in Abroad	50
2	Higher education and employment opportunities at Australia	45
3	Seminar on GATE Awareness Program	62
4	Australian education fair	45
5	Career Development & Study Abroad	60
6	Benefits of Young Technocraft program at abroad	78
7	Seminar on Overseas Education and Personality development	110

2021 – 2022

S.NO	Name of the Event	No of students participated
1	Workshop on IELTS and GRE	160
2	Higher Studies Training by Australia Education Fair	155
3	Seminar on GRE & IELTS	55
4	Higher Education in the UK - Prospects and Possibilities	45
5	Seminar on Higher education opportunities at Abroad	185

2020-2021

S.NO	Name of the Event	No of students participated
1	Webinar on Awareness Programme on Opportunities after Engineering through GATE & ESE	85
2	Webinar on Scopes to study Abroad	65
3	Webinar on How to Crack CAT / GATE Exams	66
4	Webinar on Study Abroad	62
5	Webinar on Higher Education Opportunities in Abroad	65

Table 9.13 – Placement and Higher Studies

Item	CAYm1 2021-22	CAYm2 2020-21	CAYm3 2019-20
Total No. of Final Year Students (N)	190	200	187

No. of students placed in companies or Government Sector (x)	164	175	151
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)	12	12	10

9.6 Entrepreneurship Cell   Total Marks 5.00

Institute Marks : 5.00

Entrepreneurship Cell

The Entrepreneurship Development cell of Sri Krishna College of Engineering and Technology is actively organizing various activities every year to inculcate Entrepreneurship culture among students. The following events are regularly organized by the cell under the aegis of Department of Science and Technology, Entrepreneurship Development Institute, India and Tamil Nadu:

    i. Entrepreneurship Awareness Camp
    ii. Design thinking Workshops
    iii. Idea Contest
    iv. Software and Hardware Hackathons
    v. Project Contest
    vi. Webinars
    vii. Industry visits and Field visits
    viii. Interaction with successful Entrepreneurs

The following funded programmes have been successfully implemented in the campus. The details are tabulated below:

Table 9.14- Funded programmes of EDC

S.No	Programme	Amount in (Rs.)	No. of Camps	Programme Coordinators	Period
1	DST NIMAT Project-(2017-18)/ Entrepreneurship Awareness Camp	80,000	4	Dr.J.Janet Dr. M.Sujaritha	2017-18
2	DST NIMAT Project-(2018-19)/ Entrepreneurship Awareness Camp	40,000	2	Dr.J.Janet Dr. M.Sujaritha	2018-19
3	DST NIMAT Project-(2018-19)/ Entrepreneurship Awareness Camp	60,000	3	Dr.J.Janet Dr. M.Sujaritha	2019-20
4	EDII-TN Promotional Activities on Entrepreneurship under IEDP 2021-2022	10,000	5	Dr.J.Janet Dr.P.Thamaraiselvi Dr. M.Sujaritha	2021-2022
5	Innovation Voucher Programme	5,000	1	Dr.J.Janet Dr. M.Sujaritha	2022-2023

Ecell of SKCET comprises of a student team playing roles such as CEO, Secretary, Treasurer, Event Manager and Magazine Editor. This team inspires the students by conducting Contests such as Ideation, Design thinking and marketing. They also organize seminars and webinars to the Entrepreneurship interested students and involve in social networking. The Ideas selected in the contests will be submitted for hackathons, NIDHI schemes and other funding schemes offered by incubators.

A. Entrepreneurship initiatives

Institute has a cell which improves entrepreneurship development skills in the students by doing activities as seminar, workshops and awareness camps.

The entrepreneurship cell has following roles & responsibilities:

- To nurture the student ideas and to develop innovative products.
- To support the student projects with funding.
- To establish & maintain incubation centre.
- To create entrepreneurs echo system for students.
- To maintain data relevant to entrepreneurship program.

The ED cell includes the training modules are developed to describe employer requirements, behavior and environment of different industries. This module covers the following skills:

    1. Leadership Skills

    2. Business Development skills

    3. Marketing skills

    4. Managerial skills

    5. Communication /Soft skills

    6. Team- building skills.

- Entrepreneurship Development Cell (EDC) has been functioning in our institution from 2005 and various events were organized under this cell to help students to know the importance of being an entrepreneur and ways to get financial assistance to become a successful entrepreneur. Innovative and Entrepreneurship Development Cell (IEDC) was set up with a fund of Rs.13.80 Lakhs given by Department of Science and Technology (DST), New Delhi with an aim of nurturing the spirit of entrepreneurship among talented and ambitious students. It fosters creativity and awareness of self-employment among students, and offers support in translating an idea into business. It organizes entrepreneurship awareness camp every year which is attended by all willing students who opted entrepreneurship irrespective of their discipline, and also opens to students from other colleges.

Effectiveness in encouraging entrepreneurship and incubation

Entrepreneurship Awareness camp (EAC) programmes have been organized to create awareness to students, alumni and Faculty members. During these camps successful entrepreneurs from various industries were invited as resource persons including prominent alumni also. Under EDC every year innovate projects were submitted for funding. Innovation and Entrepreneurship development centre (IEDC) allotted fund for students to carry out their projects.

Funded projects under IEDC

    The following table shows the details of funded projects through EDC in the near past:

Table 9.15 Received Funded projects through EDC

Sl.No	Project Name	Fund sanctioned	Academic year
1.	EDII-TN Promotional Activities on Entrepreneurship under IEDP 2021-2022	10,000	2021-2022
2.	Innovation Voucher Programme	5,000	2022-2023

Table 9.16 List of Programmes Organized for Entrepreneurships

2022-2023			
S.No	Name of the Programme& Venue	Resource Person	Number of Participants
1	An Innovative Leasing Platform for Improved Business Performance **Hybrid Mode**	Mr. Nithin Bharathi, Senior Software Engineer, Odessa Technologies , Bangalore	135
2	Innovations in Amazon Business Architecture models	Mr. Vikas , Data Engineer, Amazon	65

S.No	Name of the Programme& Venue	Resource Person	Number of Participants
3	Essential Characteristics of Social Entrepreneurs	Mr. Sudir Krishna R S, Publicis Sapien	115
4	Angular Technologies for Tech Startup	Ms. Varshini , Angular Developer, Accenture	122
5	Innovative Web design Frameworks for Business	Mr. R Raghul Krishna , React JS Consultant, Virtusa	65
6	IPR Awareness Workshop	Mr. Vasanthageethan A Associate Software Engineer,Virtusa Consultancy, Hyderabad	66

2021-2022			
S.No	**Name of the Programme& Venue**	**Resource Person**	**Number of Participants**
1.	Startup Showcase **Online Mode**	Mr.Mathanraj S, Founder & CEO, The Savouries shots.	185
2	Design Thinking Workshop **Venue : Digital Library**	Mr. Aruljothi Sivakurunathan Google, Dublin, Ireland Mr.J.Arun , Member Technical Staff, Zoho Corporation	132
3	Workshop in the Institution Council **Venue:Digital Library**	Dr. Venkateshwaran Loganathan, Principal Consultant, Hexaware Technologies	125
4	Business plan Preparation Workshop **Venue: Convention Centre**	Mr. Manoj, Founder Tripledart	220
5	Workshop on Intellectual Property Rights **Venue: BS-03**	Mr. B.Vivek, Head-Admin Murugappa Groups Coimbatore.	185

Figure 9.35 EDI Tamilnadu& AU Hub Sponsored - Essential Characteristics of Social Entrepreneurs

Figure 9.36 Seminar on"Entrepreneurship and Innovation" as Career Opportunity

Item	CAYm1 2021-22	CAYm2 2020-21	CAYm3 2019-20

No. of students turned entrepreneurs	5	3	5

9.7 Co-curricular and Extra-curricular Activities   Total Marks 10.00

Institute Marks : 10.00

Institute has always been playing a leading role in co-curricular and extra-curricular activities in multiple directions, such as social services including rural development and up-liftment, extension of literacy and issues related to national and international importance, games and sports, blood donations, promotion of cultural activities, arts and science, welfare and promotional activities related to different classes of society.

 Teaching in SKCET is not confined to class-rooms. Emphasis is also given on overall development of students through extra and co-curricular activities. Policies and strategies of the institution are framed in such a way to promote participation of students in these activities. Every academic year, awards are given to department toppers and college topper based on academic records, participation in extra and co-curricular activities and contribution towards community causes.

Co -Curricular Activities:

- Every year, number of activities such as value added course, seminars/conferences which involve paper presentation, quiz contest, project competition, robotic competition etc., are organized by the student chapters of professional bodies and department associations.
- Students exhibit their skills by participation while others show their organizing skills through these programs. Students, with the help of Faculty member carry out all the tasks required for the success of these events. This provides a platform for nurturing the talents, passion and interests.
- Development of various skills like professional, technical, financial, ethical, Team Work, etc., are the major outcomes of these programs.
- The following table shows the list events for Co-Curricular activities

Students Co curricular activities

Table 9.17 Co- Curricular activities participation

YEAR	2022-2023		2022-2021		2020-2021	
Event	Won	Participated	Won	Participated	Won	Participated
Co-Curricular	67	64	53	47	49	23
Extra -Curricular	3	8	1	-	8	-

Academic Year 2022-23

S.No	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1.	Prithika Andrea Angelina F	II CSE	Techgium	L&T	2.5.2023-4.5.2023	First Runner up with cash award of Rs.5,00,000
2.	Monish Kumar A	II CSE	Techgium	L&T	2.5.2023-4.5.2023	First Runner up with cash award of Rs.5,00,000

3.	Shwetha Harini	III CSE	Techgium	L&T	2.5.2023-4.5.2023	Employee Choice award with cash of Rs.50000
4.	Prithika Andrea Angelina F	II CSE	Techgium	L&T	2.5.2023-4.5.2023	Employee Choice award with cash of Rs.50000
5.	Kumaraguru T	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
6.	Monish kumar A	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
7.	Rahul R N	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
8.	Prajwal pandi	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
9.	Priyadharsini B	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
10.	Mohammad Suhail J	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
11.	Prajeet kumar	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
12.	Yeshika S	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
13.	Prithika F	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
14.	Kumaraguru T	IV CSE	Darkathon 2022	NCB	19.7.2022	First Prize with cash award of 2.5 lakhs
15.	Samuel Wycliffue	IV CSE	Darkathon 2023	NCB	19.7.2022	First Prize with cash award of 2.5 lakhs

16.	Aswathy H	III CSE	UNESCO INDIA AFRICA HACKATHON	AICTE, MIC	22.11.22 - 25.11.22	Winner with cash award of 3 lakhs
17.	Kumaraguru T	IV CSE	UNESCO INDIA AFRICA HACKATHON	AICTE, MIC	22.11.22 - 25.11.22	Winner with cash award of 3 lakhs
18.	Prithika Andrea Angelina F	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of 75000
19.	Nagasundar	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of 75000
20.	Monish Kumar A	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of 75000
21.	Shwetha Harini	III CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	First Prize with cash award of 75000
22.	Priyadharsini B	III CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of 50000
23.	Rajkumar T	III CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of 50000
24.	Naveen M	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of 50000
25.	Madhumitha R	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of 50000
26.	Priyadharsini U	II CSE	Smart Pune Health Hackathon	Pune smart city corporationIIT,Pune	13.2.23 -14.2.23	Second Prize with cash award of 50000

27.	Aswin B	III CSE	Electhon 23	Election Commission of India	15.4.2023-16.2.2023	Runner up with cash award of Rs.50000
28.	Devadharsana S	III CSE	Electhon 23	Election Commission of India	15.4.2023-16.2.2023	Runner up with cash award of Rs.50000
29.	Ashwin K Biju	III CSE	Electhon 23	Election Commission of India	15.4.2023-16.2.2023	Runner up with cash award of Rs.50000
30.	Aswathy H	III	Cubethon	Cubet techno labs	June 10	First Prize
31.	Shametha K G	IV	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
32.	Aswathy H	III	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Winner with cash prize one lakh
33.	Anwisha Zaman	III	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Winner
34.	Samyukta K	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Winner
35.	Sanjay R	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Winner
36.	Prithika Andre Angelina F	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
37.	Monisha	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
38.	Priyadharshini	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
39.	Madhumitha	I	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7
40.	Samuel Wycliffue	III	Taiwan Presidential Hackathon	Taiwan Govt	May - July 2022	Finalist top 7

41.	Shametha K G	IV CSE	Darkathon 2022	NCB	19.7.2022	Top 15
42.	Prithika Andrea Angelina F	II CSE	Darkathon 2022	NCB	19.7.2022	Top 15
43.	Aswathy H	III CSE	Darkathon 2022	NCB	19.7.2022	Top 15
44.	Siddesh Aggarwal	II CSE	Powering STEM Hacks	Devpost	28.12.2022-02.01.2023	Best Overall Hacks
45.	Kumaraguru T	IV	Cubethon	Cubet techno labs	June 10	First Prize
46.	Shrihari M	III	National Level Hackathon	Sri Eshwar College of Engineering and Technology	Nov 4 -5 2022	1st Prize
47.	Suganth M	III	National Level Hackathon	Sri Eshwar College of Engineering and Technology	Nov 4 -5 2022	1st Prize
48.	Sushanthika M	III	National Level Hackathon	Sri Eshwar College of Engineering and Technology	Nov 4 -5 2022	1st Prize
49.	Vinishah N	III	Technical Event	KCT	14th - 30th May 2022	Runner Up
50.	Priyadharsini B	III	Emids Helathcare Hackathon	IIIT Sricity	11th-12th Nov, 2022	Top 5
51.	Raj Kumar T	III	Emids Helathcare Hackathon	IIIT Sricity	11th-12th Nov, 2022	Top 5
52.	Anwizha Zaman	III	Emids Helathcare Hackathon	IIIT Sricity	11th-12th Nov, 2022	Top 5
53.	Rakshapriyan	II	Trident Hacks	Devpost	11.4.2023	Winner
54.	Rasiha	II	Trident Hacks	Devpost	11.4.2023	Winner
55.	Prithika Andrea Angelina F	II	Tech-a-Thon 2.0	Shaheed Rajguru College of Applied Sciences for Women, University of Delhi	26.3.2023	Winner in Healthcare Track

56.	Nagasundar	II	Tech-a-Thon 2.0	Shaheed Rajguru College of Applied Sciences for Women, University of Delhi	26.3.2023	Winner in Healthcare Track
57.	Siddesh Agarwal	II	Capture the Flag	Jansons Institute of Technology	25.2.2023	First Prize
58.	Prathiba S	II	Binance Ideathon	I4c	August 2022	Winner
59.	Shruthiga K	II	Binance Ideathon	I4c	August 2022	Winner
60.	Vidhyalakshmi S	II	Binance Ideathon	I4c	August 2022	Winner
61.	Siddhesh Agarwal	II	Binance Ideathon	I4c	August 2022	Runner
62.	Yashu Venkat	II	Binance Ideathon	I4c	August 2022	Runner
63.	Sneha Janarthanan	II	Binance Ideathon	I4c	August 2022	Runner
64.	Prithika Andrea Angelina F	II	Impractical Hackers 2 Hackathon	Major League Hacking	18.09.2022	Best Track Prize
65.	Nagasundar N	II	Impractical Hackers 2 Hackathon	Major League Hacking	18.09.2022	Best Track Prize
66.	Monishkumar A	II	Impractical Hackers 2 Hackathon	Major League Hacking	18.09.2022	Best Track Prize
67.	Prathiba S	II	Pragyan Startup Arena	National Institute of Technology, Trichy	23.3.2023 to 26.3.2023	First Prize

Co-Curricular Participation:

S.No	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1.	Barath R R	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
2.	Ashwin B	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated

3.	Keerthi Raajan K M	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
4.	Bhavikk D patel	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
5.	Sneha Janarthanan	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
6.	Madhubala S	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
7.	Ashwin K Biju	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
8.	Jason Jose	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
9.	Katyayini	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
10.	Devadharshana	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
11.	Harini	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
12.	Johans Olivia	III CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
13.	Rakshapriyan	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
14.	Raj Narayanan	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
15.	Rasiha	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
16.	Priyanga	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
17.	Phooja	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
18.	Madhupriya	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
19.	Rithik Raj K S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
20.	Ravikrishna B	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
21.	Prathiba S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
22.	Nithya S	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated

23.	Mrinalini K	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
24.	Akil Prasath R	IV CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
25.	Mounika Sri	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
26.	Moumitha	II CSE	Smart India Hackathon	AICTE, MIC	25.08.2022-26.08.2022	Participated
27.	Prithika Andrea Angelina F	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
28.	Nagasundar	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
29.	Monish kumar A	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
30.	Shwetha Harini	III CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
31.	Praveen T	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
32.	Rahul L	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
33.	Rahul R N	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
34.	Nandha Kumar	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
35.	Navaneethan	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
36.	Pranav Kumar	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
37.	Bala Velan M	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
38.	Ajay K	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
39.	Dharanidharan S	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
40.	Abishek Girish	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
41.	Dhanush Tharan M	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated
42.	Dharun C	II CSE	Startup TN Hackathon	Startup TN, TCE	27.01.2023	Participated

43.	Siddesh Aggarwal	II CSE	Reva Hacks	Reva University	13.11.2022	Participated
44.	Prathiba S	II CSE	Reva Hacks	Reva University	13.11.2022	Participated
45.	Mohammed Asif	II CSE	Reva Hacks	Reva University	13.11.2022	Participated
46.	Siddesh Aggarwal	II CSE	Courier Hacks	Devpost	10.12.22	Participated
47.	Prathiba S	II CSE	Courier Hacks	Devpost	10.12.22	Participated
48.	Rithik Raj	II CSE	Courier Hacks	Devpost	10.12.22	Participated
49.	Asif J	II CSE	Courier Hacks	Devpost	10.12.22	Participated
50.	MohanaPrasasd	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
51.	Navadin Nehru	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
52.	Maginesh	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
53.	Mark Felix	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
54.	Larwin	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
55.	Nigitha	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
56.	Kiruthika	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
57.	Methuna	I CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
58.	Prajwal pandi	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
59.	Rahul R N	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated

60.	Prajeet kumar	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
61.	Mohammed Suhail	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
62.	Dharanidharan S	II CSE	Smart Pune Health Hackathon	IPune smart city corporationIIT,Pune	13.2.23 -14.2.23	Participated
63.	Rakshapriyan	II CSE	Kumari Hackathon	Naan Mudalvan and Startup TN	5.5.23-6.5.2 023	Participated
64.	Rasiha	II CSE	Kumari Hackathon	Naan Mudalvan and Startup TN	5.5.23-6.5.2 023	Participated

ACADEMIC YEAR (2021-2022)

Co-Curricular Achievements:

S.NO	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1	Shametha	III	Superposition Hackathon	STEM Organization, Canada	13.8.21- 15-8.21	Winner of Best Mobile App category
2	Ashwathy	II	Superposition Hackathon	STEM Organization, Canada	13.8.21- 15-8.21	Winner of Best Mobile App category
3	Abirami S	II	Superposition Hackathon	STEM Organization, Canada	13.8.21- 15-8.21	Winner of Best Mobile App category
4	Mridula Kalaiselvan	III	Creatica Hackathon	Newyork City Virtual Hackathon	20.8.21- 22.8.21	Best Impact Hack
5	Emma Thomas	III	Creatica Hackathon	Newyork City Virtual Hackathon	20.8.21- 22.8.21	Best Impact Hack
6	Abirami S	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh

7	Barath R R	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh
8	Ashwin K Biju	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh
9	Aswathy	II	Script4her Hackathon	Dhritti, Nasscom foundation, Ministry of skills and devlopment	27.9.21-30.9.21	Second prize with cash award of Rs. 1 lakh
10	Anwisha ZAMAN	II	peace out hacks	MLH,USA	17.8.21-19.8.21	First overall winner and best domain name winner
11	Angelin Varghese	II	peace out hacks	MLH,USA	17.8.21-19.8.21	First overall winner and best domain name winner
12	Kumaraguru T	III	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Best Financial Hack
13	Adithya menon	IV	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Best Financial Hack
14	Samuel Wycliffue	III	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Best Financial Hack
15	Nivetha.A	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winners
16	Arthika G	II	Manthan 2021	AICTE,Bureau of Police Research and Development	08.12.21-10.12.21	Winners

17	Arshath B	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winners
18	Nandhini V	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winners
19	Priyadharshini V	II	Manthan 2021	AICTE,Burea of Police Research and Development	08.12.21-10.12.21	Winners
20	Aparna K	III	Envirothon	Wolfarm Award- Under various Contries	1.10.21-12.10.21	Winner
21	Abiraj R	III	Envirothon	Wolfarm Award- Under various Contries	1.10.21-12.10.21	Winner
22	Darwesh Fazil A	III	Envirothon	Wolfarm Award- Under various Contries	1.10.21-12.10.21	Winner
23	Grace Ebenezer R	III	Envirothon	Wolfarm Award- Under various Contries	1.10.21-12.10.21	Winner
24	Aparna K	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
25	Abiraj R	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
26	Darwesh Fazil A	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
27	Grace Ebenezer R	III	Azconf2021-covid19 hackathon	Microsoft	10.11-21- 21.11.21	Winner
28	Kumaraguru T	III	Hack Bells	Hack Club, Budha College, Azhapuzha	10.12.2021-12.12.2021	Runner up

29	Prithika Andrea Angelina	I	Hack Bells	Hack Club, Budha College, Azhapuzha	10.12.2021-12.12.2021	Runner up
30	Madhumitha	I	Hack Bells	Hack Club, Budha College, Azhapuzha	10.12.2021-12.12.2021	Runner up
31	Nivetha.A	II	Snow Hacks	Devpost	11.2.2022-13.2.2022	Overall winner
32	Priyadharshini B	II	Snow Hacks	Devpost	11.2.2022-13.2.2022	Overall winner
33	Nandhini V	II	Snow Hacks	Devpost	11.2.2022-13.2.2022	Overall winner
34	Shametha K G	III	Kurinji Hacks	Super Position	11.2.2022-13.2.2022	Overall winner
35	Aswathy	II	Kurinji Hacks	Super Position	11.2.2022-13.2.2022	Overall winner
36	Abirami S	II	Kurinji Hacks	Super Position	11.2.2022-13.2.2022	Overall winner
37	Aswathy	II	Y Hacks	Yale University, MLH	8.4.2022 - 10.4.2022	Best travel Track - Second Prize
38	Ashwin K Biju	II	Y Hacks	Yale University, MLH	8.4.2022 - 10.4.2022	Best travel Track - Second Prize
39	Aswin B	II	Y Hacks	Yale University, MLH	8.4.2022 - 10.4.2022	Best travel Track - Second Prize
40	F. Prithika Andrea Angelina	I	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
41	Madhumitha	I	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
42	S.Aravindhan	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer

43	Ashok Aadhav R R	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
44	Ida Winona A J	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
45	Dhiksha S	III	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
46	Anwisha Zaman	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
47	Angelin Varghese	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Participated and Internship Offer
48	Priyadharsini	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
49	ANEES FATHIMA S	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
50	Nivetha.A	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
51	Nandhini V	II	Open Challenge Program on AR VR	IIT Bhubaneshwar	1.3.2022-3.3.2022	Financial Support
52	Siddesh Agarwal	I	InnoHacks	KIET Group of Institutions	15.05.2022-16.05.2022	Second Runner-Up
53	Yashu Venkat	I	InnoHacks	KIET Group of Institutions	15.05.2022-16.05.2022	Second Runner-Up

Co-Curricular Participation:

S.NO		NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD

1		Harish Shunmugam J	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
2		Keerthi Rajan K M	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
3		Akash	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
4		Dhivya Bharathi	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
5		Kaushik M	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
6		Hariharan R	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
7		Adithya Menon	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
8		Yogeshwar B K	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
9		Kumaraguru T	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
10		Samuel Wycliffe	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
11		Theophila Vaiz	IV	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
12		Barath R R	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
13		ANWISHA ZAMAN	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
14		ANEES FATHIMA S	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated

15		GEETHA	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
16		ANGELIN VARGHESE	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
17		Adithya Menon	IV	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist
18		Yogeshwar B K	IV	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist
19		Kumaraguru T	III	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist
20		Shametha	III	Presidential Hackathon	Government of Taiwan	Aug 18-oct14 2021	Finalist
21		Vaishal Krishna	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
22		Varun	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
23		Vinisha	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
24		Valan Antony	I	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
25		Barath R R	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
26		Abirami S	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
27		Aswin B	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
28		Jason Jose	II	Slam Dunks Hackathon	MLH,USA	20.8.21-22.8.21	Participated
29		Pranesh S	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
30		Mohana Sowdesh R	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
31		Ponnaiah Karthik R M	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated

32		Logeshkumar R	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
33		Navaneeth K B	III	Toycathon - Digital Category	MIC, AICTE	22.6.21-24.6.21	Participated
34		Kumaraguru T	III	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated
35		Adithya menon	IV	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated
36		Samuel Wycliffue	III	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated
37		Yogeshwar B k	IV	Pinnacle Hackathon	Pinnacle, USA	17.9.21-18.9.21	Participated
38		Abirami S	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
39		Barath R R	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
40		Keerthi Rajan K M	IV	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
41		Bhavik D Patel	IV	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
42		Aswathy H	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
43		Ashwin K Biju	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
44		Johans Olivia	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
45		Ajay Ganesh	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
46		Jason Jose	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated
47		Aswin B	II	Hack Harvard 2021	Harvard University	08.10.21-10.9.21	Participated

ACADEMIC YEAR (2020-2021)

Co-Curricular Achievements:

S .NO	Name of the Student	YEAR OF STUDY	Event Name	INSTITUTION	DATE	POSITION HELD
1	Keerthi Raajan K M	III	ASEAN INDIA Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	WINNER
2	Harish Shunmugham	III	ASEAN INDIA Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	THIRD
3	Akhilesh.R	III	ASEAN INDIA Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	THIRD
4	Parvathynathan. S	III	ASEAN INDIA Hackathon	AICTE MoE	1.2.2021 To 3.2.2021	THIRD
5	Kumaraguru T	II	Make Harvard	HARVARD UNIVERSITY USA	13.2.2021&14.2.2021	FIRST
6	Kumaraguru T	II	Steel Hacks	PITTSBURGH UNIVERSITY USA	19.2.2021 To 21.2.2021	FIRST
7	Samuel Wycliffue	II	Steel Hacks	PITTSBURGH UNIVERSITY USA	19.2.2021 To 21.2.2021	FIRST
8	Adithya Menon	III	Steel Hacks	PITTSBURGH UNIVERSITY USA	19.2.2021 To 21.2.2021	FIRST
9	Yogeshwar B K	III	Steel Hacks	PITTSBURGH UNIVERSITY USA	19.2.2021 To 21.2.2021	FIRST
10	Kumaraguru T	II	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	FIRST
11	Samuel Wycliffue	II	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	FIRST
12	Adithya Menon	III	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	FIRST

13	Yogeshwar B K	III	Hue Hacks	MLH USA	27.3.2021 & 28.3.2021	FIRST
14	Kumaraguru T	II	Calvin Hacks	CALVIN UNIVERSITY USA	26.3.2021 & 27.3.2021	SECOND
15	Samuel Wycliffue	II	Calvin Hacks	CALVIN UNIVERSITY USA	26.3.2021 & 27.3.2021	SECOND
16	Adithya Menon	III	Calvin Hacks	CALVIN UNIVERSITY USA	26.3.2021 & 27.3.2021	SECOND
17	Yogeshwar B K	III	Calvin Hacks	CALVIN UNIVERSITY USA	26.3.2021 & 27.3.2021	SECOND
18	Jeganprakash B	III	Smart India Hackathon 2020 Hardware Edition	AICTE MoE	21.12.2020	FIRST
19	Keerthi Raajan K M	III	Smart India Hackathon 2020 Hardware Edition	AICTE MoE	21.12.2020	FIRST
20	Parvathynathan S	III	Smart India Hackathon 2020 Hardware Edition	AICTE MoE	21.12.2020	FIRST
21	Aparna K	II	Assam Police Hackathon	ASSAM POLICE	24.7.2020 to 30.9.2020	FIRST
22	Grace Ebenezer R	II	Assam Police Hackathon	ASSAM POLICE	24.7.2020 to 30.9.2020	FIRST
23	Darawesh Fazil A	II	Assam Police Hackathon	ASSAM POLICE	24.7.2020 to 30.9.2020	FIRST
24	Abiraj R	II	Assam Police Hackathon	ASSAM POLICE	24.7.2020 to 30.9.2020	FIRST
25	Harish Shunmugham J	III	Py Hack	SAAMA TECHNOLOGY	13.3.2021	Internship with Rs.2000 per month

26	Jegan Prakash B	III	Guvithon	GUVI	25.1.2021	Top 20 developers
27	Shameer B	III	Guvithon	GUVI	25.1.2021	Top 20 developers
28	Kumaraguru T	II	Open Innovation Challenge	NIT WARANGAL	23.11.2020	HONOURABLE AWARD
29	Samuel Wycliffue	II	Open Innovation Challenge	NIT WARANGAL	23.11.2020	HONOURABLE AWARD
30	Adithya Menon	III	Open Innovation Challenge	NIT WARANGAL	23.11.2020	HONOURABLE AWARD
31	Yogeshwar B K	III	Open Innovation Challenge	NIT WARANGAL	23.11.2020	HONOURABLE AWARD
32	Vijayalayan	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 TO 3.8.2020	FIRST PRIZE
33	Swetha V	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 TO 3.8.2020	FIRST PRIZE
34	Sanjaiy Kumar	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 TO 3.8.2020	FIRST PRIZE
35	Nithin	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 TO 3.8.2020	FIRST PRIZE
36	Naveen Kumar	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 TO 3.8.2020	FIRST PRIZE
37	Kiran Subramanian S	III	Sih 2020 Software Edition	AICTE MoE	1.8.2020 TO 3.8.2020	FIRST PRIZE
38	Vijayalayan	III	Oxford Hack	OXFORD UNIVERSITY, UK	14.11.2020 TO 16.11.2020	FIRST PRIZE
39	Sanjaiy Kumar	III	Oxford Hack	OXFORD UNIVERSITY, UK	14.11.2020 TO 16.11.2020	FIRST PRIZE

40	Nithin	III	Oxford Hack	OXFORD UNIVERSITY, UK	14.11.2020 TO 16.11.2020	FIRST PRIZE
41	Naveen Kumar	III	Oxford Hack	OXFORD UNIVERSITY, UK	14.11.2020 TO 16.11.2020	FIRST PRIZE
42	Kiran Subramanian S	III	Oxford Hack	OXFORD UNIVERSITY, UK	14.11.2020 TO 16.11.2020	FIRST PRIZE
43	Kumaraguru T	II	Hack Princeton	PRINCETON UNIVERSITY	3.4.21 & 4.4.21	SECOND
44	Samuel Wycliffue	II	Hack Princeton	PRINCETON UNIVERSITY	3.4.21 & 4.4.21	SECOND
45	Adithya Menon	III	Hack Princeton	PRINCETON UNIVERSITY	3.4.21 & 4.4.21	SECOND
46	Yogeshwar B K	III	Hack Princeton	PRINCETON UNIVERSITY	3.4.21 & 4.4.21	SECOND
47	Kumaraguru T	II	Make Harvard	HARVARD UNIVERSITY	13.2.21& 14.2.21	FIRST
48	Kumaraguru T	II	Jini Hotel Hacakthon	BOOKING JINI	MAY 2020	FIRST
49	Samuel Wycliffue	II	Jini Hotel Hacakthon	BOOKING JINI	MAY 2020	FIRST

Co-Curricular Participation:

S.NO		NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1		INFANT RASHMI	III	FIGHT CORONA IDEATHON	MOE,AICTE	27TH TO 29TH MARCH 2020	PARTICIPATED

2		MADHU BALA	III	FIGHT CORONA IDEATHON	MOE,AICTE	27TH TO 29TH MARCH 2020	PARTICIPATED
3		MEHAVARTHINI	II	FIGHT CORONA IDEATHON	MOE,AICTE	27TH TO 29TH MARCH 2020	PARTICIPATED
4		MENAGA	II	FIGHT CORONA IDEATHON	MOE,AICTE	27TH TO 29TH MARCH 2020	PARTICIPATED
5		ELAKKIYA R	III	FIGHT CORONA IDEATHON	MOE,AICTE	27TH TO 29TH MARCH 2020	PARTICIPATED
6		HASANTHI M M	III	FIGHT CORONA IDEATHON	MOE,AICTE	27TH TO 29TH MARCH 2020	PARTICIPATED
7		SHAMETHA	II	HACT THE CRISIS	MYGOV	2ND AND 3RD APRIL 2020	PARTICIPATED
8		SHOBHANA	II	HACT THE CRISIS	MYGOV	2ND AND 3RD APRIL 2020	PARTICIPATED
9		SHUBHIKSHA	II	HACT THE CRISIS	MYGOV	2ND AND 3RD APRIL 2020	PARTICIPATED
10		VAISHNAV	II	HACT THE CRISIS	MYGOV	2ND AND 3RD APRIL 2020	PARTICIPATED
11		PARVATHY NATHAN	III	HACT THE CRISIS	MYGOV	2ND AND 3RD APRIL 2020	PARTICIPATED
12		JAWAHAR M M	III	5G HACKATHON	MINISTRY OF TELECOMMUNICATIONS	AUGUST 2020	PARTICIPATED
13		INDERAJITH K	III	5G HACKATHON	MINISTRY OF TELECOMMUNICATIONS	AUGUST 2020	PARTICIPATED
14		KEERTHI RAAJAN K M	III	5G HACKATHON	MINISTRY OF TELECOMMUNICATIONS	AUGUST 2020	PARTICIPATED
15		AKIL PRASATH	III	5G HACKATHON	MINISTRY OF TELECOMMUNICATIONS	AUGUST 2020	PARTICIPATED
16		ADITYA MENON	III	GLOBAL CYBER PEACE-A-THON	GLOBAL CYBER CHALLENGE	16.2.2021	PARTICIPATED

17		ADITYA MENON	III	OCTA HACKS 3.0	CHITKARA UNIVERSITY	20.11.2020 TO 22.11.2020	PARTICIPATED
18		ADITYA MENON	III	RECURSION 2.0 HACKATHON	RAJIV GANDHI INSTITUTE OF TECHNOLOGY	20.3.2021&21.3.2021	PARTICIPATED
19		AKIL PRASATH R	III	INFATHON	INFORMATICA	FEB 2021	PARTICIPATED
20		AKIL PRASATH R	III	COVID 19 HACKATHON	ANNA UNIVERSITY	APRIL 2020 TO JAN 2021	PARTICIPATED
21		AKSHAYA VARSHINI	III	COVID 19 HACKATHON	ANNA UNIVERSITY	APRIL 2020 TO JAN 2021	PARTICIPATED
22		ABHISHEK GANESH	III	COVID 19 HACKATHON	ANNA UNIVERSITY	APRIL 2020 TO JAN 2021	PARTICIPATED
23		KUMARAGURU T	II	DISHATHON	INCUBATE IND,DISH TV	19.6.2020 TO 21.6.2020	PARTICIPATED

Extra Curricular Activities

The institution has a good supportive environment to encourage students to participate in the extra -curricular activities of their interest. The cultural and sports team give opportunities for the students to display their talents. Activities are undertaken throughout the year.

- Involvements in various extracurricular activities are listed below.

- Participation in annual day and sports day events
- Participation in NSS
- Participation in sports
- Participation in road safety programs, blood donation camps etc.,

Availability of sports and cultural facilities

Extracurricular activities form a vital part of experience in institute, creating unique opportunities for students. They get plenty of platforms for representing the college and to develop sporting skills. As an integral part of the curriculum there is a balanced Scheme of Physical Education which teaches skills, develops overall fitness and complements the games programme. College aims to help students to understand benefits and enjoy regular Yoga, Kho-kho, and exercise to get confidence in team and individual sport. The playing fields for basketball, football, cricket or athletics are used according to the season.

2022-23

O	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
	Meenakshi	II	4th CIT COVAI TIES	Coimbatore Institute of Technology	25.02.2023 to 03.03.2023	First
	Madhumitha	II	4th CIT COVAI TIES	Coimbatore Institute of Technology	25.02.2023 to 03.03.2023	First

Academic Year 2020-21

S.NO	NAME OF THE STUDENT	YEAR OF STUDY	EVENT NAME	INSTITUTION	DATE	POSITION HELD
1	Yash P. A	III	TCFC 5A side Football Tournamnet	TDFC	30.01.2021	First
2	Yash P. A	III	5-A side Football Tournament	Socceroos F.C	3rd & 4th April 21	Runners
3	Yash P. A	III	Independence Day Football Trophy	Dream Lights	15.08.2021	First
4	Ajay Ganesh G M	II	RR T20 Trophy	RR	December 2020	Runners
5	Ajay Ganesh G M	II	Parasivam T20 memorial Tournament	Parasivam Memorial Tournament	November 2021	Runners
6	Ajay Ganesh G M	II	GPT T20 Tournament	GPT	January 2021	Winners
7	Ajay Ganesh G M	II	COBA T20 Tournament	COBA	June 2021	Runners
8	Ajay Ganesh G M	II	U-19 State level Inter Academy Cricket Tournament		May2021	Runners

EXTENSION ACTIVITIES

Sri Krishna College of Engineering and Technology promotes institution - neighborhood - community network and student engagement, contributing to good citizenship, service orientation, adopting a number of villages and holistic development of students.

- The Institute provides the students with an opportunity to extend their classroom knowledge into practical experience and to sensitize students to social issues through its **diverse community-oriented programmes and activities** focused at holistic development of students with community.
- The institution strongly believes in Service to Mankind is Service to God. Imparting such values and attitude into students, the institute carries out a number of extension activities in the neighborhood community. Thus, the institute has **adopted 12 villages** aiming at transformational change in rural development processes to help build the architecture of an Inclusive India.

The Institution has **vibrant clubs and associations** involving the student and faculty members in various societal development causes.

- National Service Scheme (NSS)
- USVA
- Institution Innovation Council (IIC)
- Youth Red Cross (YRC)
- Red Ribbon Club (RRC)
- Energy Audit Cell
- Eagai Club
- Women Empowerment Cell
- Social Service Cell
- Creative Club

- Fitness Club
- Innovative Club
- Eco Club

The extension activities of the college aim at:

- Developing a sense among students about **attachment** to the community.
- Learning to utilize their knowledge in **finding solutions** to community problems.
- **Acquiring leadership** qualities and democratic attitude.
- Developing **capacity and skills** to meet emergencies and natural disasters.
- The College encourages student participation in **community service** by actively involving them in various campaigns and programmes.

The clubs and associations of the Institution often contribute to the society through their scheduled programmes and impress them to be the responsible citizens of this country.

Impact and sensitizing students to social issues for their holistic development:

- All the activities conducted have a **positive impact** on the students and it developed **student community relationship**, **leadership skill** and **self-confidence** of students.
- These activities in turn help them to become **good leaders** and **well-mannered citizens**. It also helped in cultivating the hidden personality of students and created awareness among students.
- With the involvement in these extension and outreach activities, the students develop critical thinking skills and time management. This benefits the students in developing **all-round personality**.
- Working outside the college campus and with diversified social groups of people allows students to gain more self-confidence, autonomy, and appreciation for others. Such extension activity helps students in their holistic development, develop leadership qualities, **spirit of nationalism** and cooperation.
- These activities have helped to acquire leadership qualities, democratic attitude and a sense of national integration and social harmony among the students.
- The institute has conducted activities for the **customization of solutions** and **development of new technology for societal issues** in each adopted village.
- The institute has **initiated ideas to implement** in the villages for the technology development and also **conducted surveys** among the community and neighborhood areas.

Outcomes:

- The institution is moving forward with a **promising goal** to ensure the **growth of the society and environment**.
- The interventions through extension activities have resulted in **personal hygiene, health awareness, Hygienic surroundings** and **cleanliness among students**.
- This impact also leads to the achievements of **Institutional Honourable Awards** -**AICTE Clean & Smart Campus Awards 2020 - National Level 3rd Rank** under **Outstanding Clean and Smart Campus** for using the best and smart technology to keep the campus pollution-free, controlling water wastage, using natural resources and inculcating Indian tradition in young aspiring minds from **Swachh Bharat Mission Council**, New Delhi.
- The interventions through various extension activities have also resulted in **Institutional Prominent Awards - AICTE Lilavati Award 2020** in the Sub-theme **'Sanitation and Hygiene'** and **AICTE Lilavati Award 2021-22** in the sub-theme **'Technology for Women'** by presenting unique intervention carried out under the theme **Women Empowerment** and also **received grants from various Government agencies** for the technology development among the community and neighborhood areas.

Table 9.19 Annual students' activities - USVA

Sl No	Name of the Event	Date / Year	Associated Club	No of Inter-Institute Events participated by students
1	FLASH A CARD – Guess Who?	05.05.2020	USVA	150
2	A Drill on COVID-19, "An Online Quiz"	02.05.2020	USVA	201

3	FUN WITH MATHZ	27.04.2020	USVA	469
4	"THE QUICK CHEF"-Fighting against covind-19	30-04-2020	USVA	50
5	MALARUM NINAIVUGAL	28-04-2020	USVA	23
6	STORY TELLING COMPETITION	29-04-2020	USVA	100
7	Express yourself with Pencil	04-05-2020	USVA	30
8	Drawing/Painting	25.4.2020	USVA	20
9	FASHION CONTEST- EARTH -"AM BACK"	30-04-2020	USVA	10
10	College Connect	24.04.2020	USVA	50
11	School Connect	24.04.2020	USVA	50
12	Artist of the future - Discover about Energy Conservation.	13.01.2021	USVA	25
13	Pamphlet distribution- Safety measures / Dos and Donts dealing with electricity	10.01.2021	USVA	General Public
14	Power - up Idea Submission contest for Energy Management and conservation.	12.01.2021	USVA	35
15	STTP - Energy management and advanced Techniques for a Sustainable Future	09.01.2021 to 12.01.2021	USVA	35
16	NetajiSubhash Chandra Boses contribution to Indias freedom Struggle-Webinar	23.01.2021	USVA	30
17	Photographic Contest-No Carbon Emission	19.03.2021	USVA	10
18	Quiz for World Water Day	22.03.2021	USVA	25
19	Webinar on the topic "Importance of Water Management"	17.04.2021	USVA	84
20	Water and Waste Management Engineering	07.05.2021	USVA	45
21	Wastewater Management System	05.05.2021	USVA	40
22	The World Day for Safety and Health at Work 2021	30.04.2021	USVA	40
23	Pledge-taking ceremony-World No Tobacco Day	31-05-2021	USVA	30
24	World Environment Day 2021	05-06-2021	USVA	30

25	Plantation of Sapling with absorb CO2	10-08-2021	USVA	740
26	Hackathon among students and start-ups to promote innovation in the areas of recycling	01.09.2021	USVA	50
27	The World Day for Safety and Health at Work 2021	30.04.2021	USVA	General Public
28	Hackathon among students and start-ups to promote innovation in the areas of recycling	31.03.2021	USVA	50
29	Enlighten by Yoga	19.06.2021	USVA	15
30	Awareness program – Electricity safe	11.01.2021	USVA	10
31	Flag Distribution	12-08-2022	USVA	50
32	Selfie with Flag	12-08-2022	USVA	50
33	World Literacy Day	08-09-2022	USVA	10
34	Swachh Bharat Diwas – leanliness in Villages	27.10.2022	USVA	11
35	Essay Writing Competition	06.01.2023	USVA	70

10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120) Total Marks 120.00

10.1 Organization, Governance and Transparency (55) Total Marks 55.00

10.1.1 State the Vision and Mission of the Institute (5)   Institute Marks : 5.00

- **Vision of the Institution**

     To produce globally Competitive Engineers with high Ethical values and Social responsibilities.

- **Mission of the Institution**

     · To impart highest quality state-of-the-art technical education by providing impetus to innovation, Research and Development and empowering students with Entrepreneurship skills.

     ·   To instill ethical values, imbibe a sense of social responsibility and strive for societal wellbeing.

     ·   To identify the needs of society and offer sustainable solutions through outreach programs.

- **Available Places of Vision Mission Statements**

     Vision and Mission of the institute has been published and disseminated in:

     •   Institution website (www.skcet.ac.in (http://www.skcet.ac.in))

     •   Principal Office, Central Library and Computer Centre

     •   Department Offices, Faculty rooms and Laboratories

     •   Student Handbooks

     •   To all stakeholders through faculty meetings, induction programs, orientation programs and parents meetings

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10.1.2 Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (25)   Institute Marks : 25.00

The Strategic plan of SKCET for the period 2019-2023 could be attributed to various factors, including demand for effective higher education driven by economic progress, employability issues and the need for human resources that would make our region and state to steer up in engineering and technology, both, at a National and International levels. Fig 10.1.2 shows the Strategic Plan
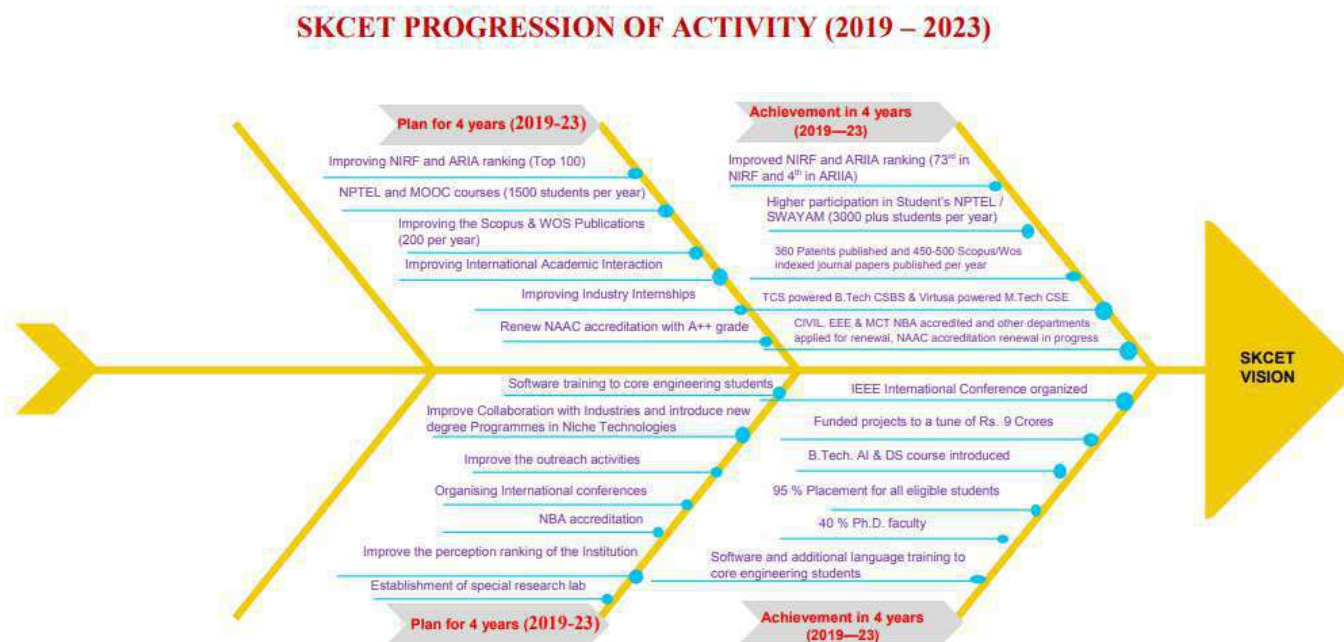

Fig.10.1.2 Strategic Plan

Strategic Plan

Strategic Plan	Target Year	Implementation Road Map	Achievements

Improve NIRF and ARIIA Rankings: Improve the NIRF and ARIIA ranking for the academic year 2019-2020	2019-2020	IQAC shall set up teams to follow-up the parameters required for improving ARIIA and NIRF rankings. Review meeting shall be conducted periodically.	Separate teams were formed for periodical review of the NIRF and ARIIA parameters. SKCET has won the prestigious 83rd Rank in the Ministry Education's NIRF rankings 2020 under Engineering category and Top 100 in Management category. It is a phenomenal ascent for SKCET from the previous 97th rank last year in 2019. SKCET proves its prowess in the prestigious Atal Ranking of Institutions on Innovation Achievements (ARIIA) by securing Second Rank in National Level among private HEIs for its excellence in innovation and entrepreneurship. This excellence in ranking metrics reverberates as the Institution has moved up to the Top 2nd position at the National level from the previous Top 100 league in 2019.

Improve International Academic Interaction: To promote International academic interaction further.	2019 - 2020	The higher education cell shall identify the foreign universities which are willing to tie up with the institution. MoUs may be signed during the forthcoming year. Depute students to participate in international events to provide them world class exposure.	The Institution strives hard to improve the linkages with the International Universities through MoUs for twinning programmes and by participating in Hackathons. SKCET has signed MoUs with Valparaiso University to promote twinning programme. The students of SKCET actively participate in the International Hackathons like 1. Oxford Hack by Oxford University, UK 2. Hack Harvard by Harvard University, Boston 3. Hack Roll 2020 by National University of Singapore 4. Hackcamp 2020 by Major League Hacking, Microsoft Tech, Kochin 5. Hack Princeton by Princeton University to get International exposure.

Improve the Collaboration with Industries and Introduce New Degree Programmes in Niche Technologies: Increase the Centres of Excellence by collaborating with leading Industries and introduce new programmes in niche technologies like Artificial Intelligence and Data Science.	2019-2020	Identify industries willing to partner with institution for offering programmes. MoUs to be signed Stand-alone programmes to be started with the industries.	MoUs were signed with leading MNCs to establish centres of excellence (CoE) in upcoming technologies. Some of the recently established CoEs are. • AI,ML, DS and RPA by Talentsprint • Full Stack Programming by Virtusa Corp • External Research and Academic Alliance, Data Science and Big Data Analytics by Dell EMC Corp • ZOHO Inc Incubation Centre • Cloud Computing by VMware Inc • Big Data by Cloud Bull Inc • VLSI by Cadence Design Systems Inc • Building Information Modelling by Bentley Systems India Pvt. Ltd • Antenna Design by ANSYS Inc • Automotive Design by Seine Aerospace Products Design, Dubai • Materials Processing and Testing Lab funded by AICTE and DST • Automobile Lab sponsored by Pricol Ltd • Robotics Lab by ABB Corp A new B.Tech programme in Artificial Intelligence and Data Science has been started since the academic year 2020, in-tune with the changing industry scenario.

Improve the Outreach Activities: To improve the outreach activities in order to promote societal well being as part of the Institutional Social Responsibility (ISR).	2019-2020	Swachhta Action Plan under the guidance of MGNCRE shall be followed The NSS team shall closely work with the targets set based on SAP. The college shall participate in USVA awards.	The Institution is determined to improve the outreach activities to promote societal well being as part of the Institutional Social Responsibility (ISR). The target was achieved through the following means. Swachhta Action Plan (SAP) Under the guidance of the Mahatma Gandhi National Council of Rural Education (MGNCRE) initiated the development and implementation of Swachhta Action Plan (SAP) to help the HEIs to inculcate the sense of cleanliness among the students community. The Institution vibrantly participated in the SAP activities by enforcing a Standard Operating Manual for a clean and green campus thus spreading awareness on environmental Hygiene, Sanitation and Waste Management. Awareness programmes were also conducted to spread the importance of cleanliness among the local communities and other universities/colleges. The SAP team celebrated various days of National importance throughout the year to inculcate patriotism among the students. Utkrisht Sansthan Vishwakarma Award (USVA) SKCET actively participated in Utkrisht Sansthan Vishwakarma Award (USVA) 2020 and conducted various programmes under the theme "INDIA FIGHTS CORONA". The Institution initiated many steps to ensure that the spread of virus is slowed down or

			stopped and had helped the society and authorities by providing a helping hand during the lockdown period through the conduct of awareness programmes, free Counselling, tele-support, manufacturing and distribution of hand sanitizers, masks, shelter/food/materials for the needy, developing e-material for managing online classes, educating school students and involving them in development of essential solutions. Over 100 outreach programs were conducted throughout the year, thus benefiting the society, students and the country, at large.
Further improve the NIRF Rank: To obtain 70th rank in NIRF	2020-2021	IQAC shall set up teams to follow-up the parameters required for improving NIRF rankings. Review meeting shall be conducted periodically.	The college has improved consistently in NIRF ranking since 2019. The college moved from 97th Rank in NIRF 2019 to 78th in NIRF 2021 under Engineering Category. However, the target is to reach the Top 70th rank and appropriate corrective measures are taken to secure the target position during the year 2022. The Institution has planned to improve the Research and Professional Practice (RP) score by securing more research funds and increasing the publications in quality Scopus / WoS journals.

Promote Innovation Culture: To promote the culture of innovation among the students and faculty	2020-2021	Conduct hackathons inside the campus. Identify potential students and depute them to participate in international hackathons.	Sri Krishna College of Engineering and Technology is the only Institution in South India to have organized the world's largest product building contest, viz, Smart India Hackathon for four consecutive years from 2017 to 2020 and Toycathon during 2021. The importance of product building and the need for innovation has been inculcated in the minds of all the students. The students of SKCET actively participate in the National and International level Hackathons organized by premier Institutions and Industries. During the year 2021-2022, the students have actively participated in several International Hackathons and won laurels for the Institution. Some of the prominent International/National Hackathons were students won accolades are as follows. Asean India Hackathon by AICTE - MOE Make Harvard by Harvard University USA Steel Hacks by Pittsburgh University USA Hue Hacks by MLH USA Calvin Hacks by Calvin University USA Smart India Hackathon 2020 Hardware Edition by AICTE – MOE Assam Police Hackathon by Assam Police PY Hack by Saama Technology Guvithon by GUVI

				Open Innovation Challenge by NIT Warangal
				SIH 2020 Software and Hardware Edition – 3 First Prizes each worth Rs.1,00,000
				Oxford Hack by Oxford University, UK
				Hack Princeton by Princeton University
				Fight Corona Ideathon by MHRD, AICTE
				HACT The Crisis by MYGOV
				5g Hackathon by Ministry of Telecommunications
				Global Cyber Peace-A-Thon by Global Cyber Challenge
				OCTA Hacks 3.0 by Chitkara University
				Recursion 2.0 Hackathon by Rajiv Gandhi Institute of Technology
				Covid 19 Hackathon by Anna University
				Jini Hotel Hacakthon by Booking Jini
				Dishathon by Incubate Ind, Dish TV
				Bitcamp by University of Maryland
				Women Hacks 3.0 by University of California
				Hello World Hackathon by UcBerkely
				Patriot Hacks by George Mason University, USA
				CIV Hacks by UcBerkely, USA
				Facebook F8 Hackathon by Facebook
				CAT Hacks by University of Kentucky

			Hack Med 2021 by University of Sheffield, UK
			Climate Hacks by Minority Programmers Association, USA
			Ryerson University Hacks by University of Toronto, Canada

			The Institution has won several Awards of National importance during the year 2021-2022. The students also participated in contests of National and International importance and won many laurels. The perception score of the institution has improved from 17.35 in NIRF 2020 to 12.29 in NIRF 2021. The following are the Rankings and Awards won by the Institution during the year 2021-2022.
Improve the Perception Ranking of the Institution: Improve the perception of the Institution and there by improve the brand value.	2020-2021	Depute teams to participate in various national and international awards. Apart from NIRF and ARIIA, the college shall participate in all AICTE awards and contest.	● Ranked 78th in NIRF Ranking 2021 under Engineering Category. ● Achieved All-India 3rd Rank in ARIIA 2021 ● Recognized as the Top 5th Private Engineering College with best value for money by India Today MRDA Rankings 2021. ● Conferred with the 3rd Rank in AICTE- Clean and Smart Campus Award 2021 ● Secured the 2nd runner-up prize in the prestigious AICTE- Lilavati award organized by the Ministry of Education (MoE) for the sub-category Sanitation and Hygiene. ● Recognized as the Best Engineering College of the Year 2020 by EDUCATIONAL EXCELLENCE 2020 - A prime International Education Awards group ● Proud recipient of Learnathon Awards 2020 by ICT Academy for training our students in Industry 4.0 courses. ● SKCET is chosen as one

| | | | among the elite Institutions for organizing the MoE-AICTE sponsored Toycathon 2021 –Digital Edition. The Prime Minister of India interacted with the participants at our venue through virtual mode.

● The Institutions Innovation Council (IIC) of SKCET is declared as one of the top Institutions across the country in Annual Performance ratings for the year 2020 – 2021. The IIC of SKCET has been bestowed with 4 star ratings for its outstanding performance.

● SKCET is rated one among top 10 partnering Institutes with Infosys for campus connects Programme. The Institution also received the Infosys Silver Partner Award.

● Secured National level Third Rank for the One Student-One Tree Initiative in Jal Shakti Abhiyan for the exemplary green cover ventures initiated with Mega Plantation of 10,050 trees at SKCET campus. | |

Promote Self Learning among Students through MOOC: To encourage students and faculty to participate in MOOC courses and engage in self learning.	2020-2021	IQAC shall map MOOC course to the mandatory course offered in the curriculum All students shall complete atleast two courses during their course of study Review meetings shall be conducted to follow-up the process.	The Institution encourages the students and faculty members to take-up online courses that add value to their regular curricular content. Online learning is encouraged through globally reputed platforms including SWAYAM NPTEL, Coursera, edX, MIT Opencourseware. The students learn and complete at least two NPTEL courses as part of their Mandatory study. They also pursue courses from eDX and Coursera platforms. Faculty members pursue MOOC and AICTE-NITTTR 8 module courses. The certifications earned both at the national and international levels result in profile enrichment for the students leading to improvement in employability. SKCET has been recognized as the **Star-Local Chapter** with **AA rating** by **NPTEL during 2021**. The Institution obtained **25th rank at National Level** and 3rd in District level in Jan-Dec 2021 NPTEL Exams. A total of 11,918 online MOOC certificates have been obtained by the students and faculty in the past 5 years.
Renew NAAC Accreditation with A++ Grade: To obtain the highest grade of A++ in NAAC second cycle Accreditation	2021-2022	IQAC has set up teams to follow-up the parameters required for improving the NAAC score. Special training and audit sessions are planned	Criteria wise NAAC teams are formed to achieve the target of obtaining A++ grade in NAAC cycle 2. In this regard, a special training cum audit session was conducted on 24th October 2021. NAAC documents are uploaded and the DVV process is under progress

Conduct IEEE Conference: Conduct International IEEE Conference to improve the Scopus / WOS Publication	2021-2022	A conference organizing team is constituted. HoD of CSBS department shall be the head of the committee. Faculty and students are encouraged to publish their research concepts in the conference as per the IEEE standards.	SKCET IEEE International Conference on Advanced Computing Technologies and Applications 2022 (ICACTA 2022) was conducted on 4th March, 2022 through online mode. Around 230 Papers received from the Researchers and faculty members from the countries like Finland, Bangkok, Oman, Dubai and 82 papers selected for presentation. This conference focused on the fast leaps and technical breakthroughs that are presently being seen in the areas of Computer Science, Information Technology, Computer Science and Business Systems, among other subjects. The selected papers will be published in IEEE, a digital xplore conference proceeding, which is indexed in SCOPUS. A total of 590 research papers have been published so far in 392 scopus indexed international journals, 88 Web of Science Journals and 78 book chapters for the academic year 2021-2022. Faculty and students have jointly filed 63 patents so far which includes 3 international patents.

Improve the Internships: Improving the Industry offered Internships to the prepandemic level	2021-2022	Heads of the departments are requested to sign more MoUs with industries for improving the internships. Internships shall be made mandatory in the curriculum and credits shall be allotted	During the 2021-2022 academic year, the number of internships offers has increased from 298 to 314, marking a notable improvement from the previous year. Key MoUs have been linked with prominent companies and associations such as Trimble Inc, Nineleaps Technology Solutions, Brakes India, Urjanet Energy Solutions Pvt. Ltd., ADF Inc and AICRA to augment student internship prospects. The institution strongly encourages its students to take up internships in renowned industries.

			A total of 50 students in the T1 category and 240 students in the T2 category have received the training. In addition, 9 core engineering students, including those studying Mechanical, Civil and MCT departments have received advanced programming training through a special bootcamp. The training covers the areas of Java, SQL, Web Development and data structures.
		Students shall be categorized into various groups based on their performance in the special test, viz, T1, T2 and Bootcamp.	
Software Training to Core Engineering Students: Offer additional training to the core engineering students in software coding	2021-2022	Trainings shall be provided to the groups based on their learning ability. In addition, core training hours shall be included in the regular time table and trained faculty shall handle the classes. Industry experts shall also be invited to deliver talks to the students.	In addition, core training hours are included in the time table and the students are trained for attending core company placements. Industry experts were invited to the campus to share their experience with the students. Some of the experts who delivered talk during 2021-2022 are as follows 1.Mr. Sasikumar- Grootan 2.Ms.Priyadharshini - AppviewX 3.Mr. Shankar – Zoho Corp. 4.Mr.Aasif – Thoughtworks 5.Ms. Anijas Robert - Amadeus 6.Mr. Sujith - Musigma 7.Mr.Vignesh -Enquero 8.Mr. Deepak - Maersk

Offer Industry Based Training to Students: Invite industry experts to teach curriculum courses to the UG students	2022-23	Identify Experts in the domain of emerging fields Inviting them to train our students Assess the performance of our students	Students of various departments have been trained by the experts from the industries such as Virtusa, Aspire, Intain, Hexaware, Capgemini, Crystal delta, Quinbay, and IamNeo in the domain of full stack, Dot net, Block chain, Java, Softskills and C++.
NBA Accreditation: Apply for 4th cycle NBA accreditation for CSE, IT, ECE and Mechanical Engineering programmes	2022-23	Prequalifier preparation and submission Preparation of SAR report	The departments have submitted the pre-qualifier documents for fourth cycle NBA Accreditation and preparing e-SAR document.
Establishment of Special research labs: Establish research labs through the funds obtained from various agencies	2022-23	Identification of thrust area Applying for funding Receiving grants and establishment of labs.	The department of Mechanical Engineering established Centre for Excellence in Smart foundry for enhancing the research activities of faculty members and students with the funds received from DST SEED The department of ECE established Centre for Excellence in Embedded systems for enhancing the research activities of faculty members and students. Mr.Vishal, Business Unit Head and Ms.Charumathi, HR Head from Valeo Labs Company visited the labs to get acquainted with the lab facilities for collaborative research

10.1.3 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

Institute Marks : 10.00

List the governing, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; and attendance therein, in a tabular form. A few sample minutes of the meetings and action-taken reports should be annexed.

The published rules including service rules, policies and procedures; year of publication shall be listed. Also state the extent of awareness among the employees/students.

GOVERNING BODY

Functions of the Governing Council:

· Monitor the functioning of Autonomous system

· Frame directive principles and policies

· Amend and approve policies from time to time

Table 10.1 Governing Body Members

Sl.No	Member	Nature	Category
1	Mrs. S. Malarvizhi, Chairperson & Managing Trustee, Sri Krishna Institutions Kovaipudur, Coimbatore – 641 042.	Management	Chairperson
2	Mr. K. Adithya Trustee, Sri Krishna Institutions Coimbatore – 641 042.	Management	Member
3	Dr. K. Sundararaman, CEO, Sri Krishna Institutions Coimbatore – 641 009	Management	Member
4	Sri.C.Raviselvan Director GEM Equipments Ltd., Arasur, Coimbatore – 641 407	Management	Member
5	Prof. Bhuvan S Parekh Professor Department of Computer Science and Engineering The M S University of Baroda Vadodara, Gujrat-390001	Nominated by UGC	Member

6	Dr.K.Parthiban Professor Mechanical Engineering Thanthai Periyar Government Institute of Technology, Vellore.	Nominated by the Anna University	Member
7	Dr.N.K.Ambujam Professor Centre of Water Resources Anna University, Chennai	Nominated by the Anna University	Member
8	Mr. V. Udaya Shankar Regional Lead at NASSCOM, Chennai	Educationist/ Industrialist, Nominated by the Management	Member
9	Mr. MahendraRamdas Managing Director, Mahendra Pumps Pvt., Ltd., Coimbatore	Educationist/ Industrialist, Nominated by the Management	Member
10	Sri.C.Raviselvan Director GEM Equipments Ltd., Arasur, Coimbatore – 641 407	Educationist/ Industrialist, Nominated by the Management	Member
11	Shri.P.Mahesh Kumar Advocate No.49, West Club Road, Race Course Coimbatore-641 018	Educationist/ Industrialist, Nominated by the Management	Member
11	Dr. J. Janet, Principal, Sri Krishna College of Engineering and Technology, Kuniamuthur Coimbatore - 641 008.	Principal	Ex-Officio Secretary

13	Dr. S.Sophia Professor and Head, ECE Dept., Sri Krishna College of Engineering and Technology, Kuniamuthur Coimbatore - 641 008.	Senior Faculty	Member
14	Dr.J.P.Ananth Dean – Academics & Controller of Examinations Sri Krishna College of Engineering and Technology, Kuniamuthur Coimbatore - 641 008.	Senior Faculty	Member
15	Dr.P.AshokaVarthanan Professor & Head Department of Mechanical Engineering Sri Krishna College of Engineering and Technology, Kuniamuthur Coimbatore - 641 008	Senior Faculty	Member

Minutes of the Meeting

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by the AICTE and affiliated to Anna University)

Accredited by NAAC with "A" Grade & Accredited by NBA (CSE, ECE, IT, MECH & MCT)

KUNIAMUTHUR, COIMBATORE - 641008

TAMIL NADU, INDIA.

MINUTES OF THE TWELFTH GOVERNING BODY MEETING (FOR AUTONOMOUS) OF SKCET, HELD ON TUESDAY 21ˢᵗ SEPTEMBER 2021 AT 11.00 A.M VIA ONLINE MODE

The Chairperson and Managing Trustee, Smt.S.Malarvizhi addressed the members of the Governing Body and outlined the substance of the meeting.

The Principal presented the summary of the Governing body report to the august body. Consequently, the Agenda was deliberated and took the following decisions.

SUBJECT NO.	DESCRIPTION	SUGGESTION / RESOLUTION
PART – A (Submitted for information to Governing Body)		

Subject 1	Action taken for the Minutes of 11ᵗʰ Governing Body Meeting	The principal highlighted the following points with regard to the suggestions provided during the 11ᵗʰ Governing Body meeting.
		
		1. To increase the Centres of Excellence for the Civil and Mechanical Engineering departments, three Centres of Excellence have been established namely:
		  a. Centre for Research in Materials and Manufacturing
		  b. Centre of Excellence in Auto components Design
		  c. Centre of Excellence with Robotics and Automations
		  d. Centre of Excellence in Geo-Environmental Research
		
		2. Consultancy projects in non-circuit branches have been strengthened using

| | | Institution's Annual Quality Assurance Report (2020-21) and ERP reports are submitted for approval. It is planned to start the following new UG courses, namely, B.E Computer Science and Design, B.E Computer Science and Technology and B.E Computer Science and Engineering (Cyber Security) during the next academic year. **Academic progression** during Covid-19 pandemic. Curriculum Revamping was executed by taking inputs from 200+ industries through online mode. The stakeholder's feedbacks were incorporated in Curriculum and syllabus revamping. Academic Council Meeting was conducted on 12.06.2021. Internal and External Academic Audits were also conducted on a regular basis. 24/7 virtual learning takes place through Google Classrooms. Online project reviews, quizzes, assignments, and internal exams were conducted as per Anna University Norms. Proctored online end semester examinations were conducted during Nov/Dec 2020 and April/May 2021. A total of 395 Webinars, 284 Guest lectures, 4 FDPs and 3 STTPs were conducted during the period Jan- Sept 2021. |

		Student Progression 2422 student MOOC certifications were successfully completed - SKCET students participated in 42 International and National hackathons and won 36 hackathons. - Our students have won a cash prize accounting to Rs. 25 lakhs within a period of 9 months (Jan 2021-September 2021) 13 students from ECE, MCT and MECH have attended 2 months internship at DRDO's Microwave Tube Research and development Centre, Bangalore - A total of 326 Internships from 2021 batch and 216 Internships from the current final year batch (2022) have been converted to placements. **Faculty Progression** - During the academic year 2020-2021, a total of 21 faculty were relieved and 28 faculty were recruited, accounting to 344 teaching and 126 non-teaching staff. - Out of 344, 118 faculty are doctorates and 197 faculty have registered for Phd. - Our faculty have been conferred with 726 FDP/STTP certifications from premier Institutions. **Research** - The Institution's Research policy was highlighted.

- o Research grants worth 5.23 crores has been carried out in SKCET since Jan 2021.
- o IPR front:
  - 47 patents- published,
  - 2-registered Copyrights granted and
  - 3 Design patents- published
- o A total of 240 papers have been indexed in scopus, 84 papers in Web of science, and 50 book chapters were published in 2020 which has improved to 320 Scopus Indexed papers and 129 Web of Science papers published in 2021 till date.
- o 29 Faculty members have been conferred their doctoral degrees.

- **Results**
  - o Nov/Dec 2020 - Overall pass percentage - 94.65%.
  - o Apr/May 2021- Overall pass percentage - 95.25%

- **Placement**
  - o 2017-2021 batch: 978 total offers, 93.2% students placed. Highest package - 28LPA, and Average package - 4.8 LPA.
  - o 13 start-ups were established as an outcome of the Entrepreneurship Development Cell.
  - o Virtual Placement training programs Exclusively for Super Dream Companies, Dream Companies, Cognitive Skill Training, Wipro PRP, Wipro Future

- o Top 60 - 70 band in the National Institute Ranking Framework (NIRF)
- o Top Rank in Atal Ranking of Institutions on Innovation Achievements (ARIIA)
- o 1st Rank in AICTE Swachhata Ranking and Utkrisht Sansthan Vishwakarma Award (USVA)
- o Top Rank in AICTE Clean and Smart Campus Award 2021
- o To score A++ in National Assessment and Accreditation Council (NAAC)
- o Gearing for QS ranking for all Circuit Departments
- o UGC Autonomous Extension

The Governing Body approved the introduction of new UG courses, namely, B.E Computer Science and Design, B.E Computer Science and Technology and B.E Computer Science and Engineering (Cyber Security). The Governing Body also appreciated the following remarkable achievements of the Institution:

Mr.V.Udaya Sankar placed on record the following points:

- He appreciated the excellent practices followed to groom students to be industry-ready professionals when they graduate.
- He appreciated Dr.J.Janet, Principal, SKCET and team for hand-holding the students and mentoring them to win

	• He also appreciated the clear cut presentation of future goals and the execution plan to attain them. Dr.K.Parthiban placed on record the following points: • He appreciated the scholarships offered by the management to aid the students who have lost their parent due to the pandemic • He appreciated the Mechanical department for the good quantum of contribution large to the overall publication record. • He also appreciated the improvement in the number of faculty who are pursuing their doctoral degree.
Observations and Suggestions	**Governing Body suggested the following:** • Mr.V.Udaya Sankar suggested SKCET to mentor other institutions through their Best practices • Dr.Bhuvan S. Parekh suggested that students should be scouted for internships in Microsoft- Azure , in Oracle India which offers an internship of up to Rs.1,00,000. • Dr.K.Parthiban motivated SKCET to secure a position in the 60-70 band in NIRF 2022. • He also requested SKCET to initiate a Sri Krishna coaching centre for civil services which will enable students to prepare for Civil service examination. • He insisted that non-placed UG graduates can be motivated to pursue PG, resulting in improvement of the PG admission.

		• He also said that collaboration with foreign universities for PG programmes will lead to better admissions. • He also appreciated the 'Matram foundation' • Talks are in way to • Industry supported PG courses
	Others	An interactive deliberation on ways to improve the PG admissions. Suggestions were also made on collaborating two or three institution to offer PG courses

APPROVED

S. Malarvi

Smt.S.MALARVIZHI

CHAIRPERSON

GOVERNING BODY

ACADEMIC COUNCIL

Table 10.2 Academic Council Members

Member	Category
Dr.J.Janet Principal Sri Krishna College of Engineering and Technology Kuniamuthur, Coimbatore -641 008	Chairperson
Dr.V.Natarajan Former Professor, Department of Instrumentation Engineering, MIT Campus, Anna University, Chennai	University Nominee
Dr.M.DuraiSelvan Professor, Production Technology, NIT, Trichy	
Dr.S.Tharves Mohideen Professor & Head Mechanical Engineering, IRTT , Erode	

Mr.Kirthivasan Sivaramakrishnan **Lead (Associate Manager)-India Campus Hiring, Virtusa**	**Nominated by Governing Body**
Mr.G.Deepak **Regional Manager** **Focus Academy of Career Enhancement ,Coimbatore**	
Mr.P.Mahesh Kumar **Advocate**	
Mr.Murugavel **Director** **GE Oil & Gas, Coimbatore**	
Dr. S. Sophia , **Dean – R&D and Ranking**	**All Department Heads of the Institution**
Dr. V. Ragavi , **Dean – Student Affairs**	
Dr. P. AshokaVarthanan **Prof & Head, MECH**	
Dr. M. Lydia , **Prof & Head , MCT**	
Dr. K. C. Ramya , **Prof & Head , EEE**	
Dr. K. Sasi Kala Rani , **Prof & Head , CSE**	
Dr. N. Susila , **Prof & Head , IT**	
Dr. S. Balakrishnan , **Prof & Head , CSBS**	
Dr. P. Kavitha Rani , **Prof & Head , M.Tech CSE**	
Dr. S. Venkata Lakshmi , **Prof & Head , AI&DS**	
Dr. D. Maruthachalam , **Prof & Head , CIVIL**	

Dr.S.Sasipriya, Prof & Head, ECE	
Dr.M.Karpagam, Professor,ECE	**All Internal Senior Faculty Members**
Dr.N.Balaji, Professor, MECH	
Prof. N. V. Krishnamoorthy, Asso. Prof, MECH	
Dr. J. Granty Regina Elwin, Asso. Prof, IT	
Dr.J.P.Ananth	Dean – Academics & Controller of Examinations
Dr.Jayasudha Subburaj, Placement Officer	Special Invitee

STANDING COMMITTEE

Table 10.3 Standing Committee Members

Sl.No.	Member	Category
1	Dr. J. Janet	Principal Chairman
2	Dr. J.P. Ananth	Controller of Examinations, SKCET
3	Dr. P. AshokaVarthanan	Chairman, BOS, Department of Mechanical Engineering
4	Dr. S. Sasipriya	Chairman, BOS, Department of Electronics and Communication Engineering
5	Dr. K. Sasikala Rani	Chairman, BOS, Department of Computer Science Engineering
6	Dr. K.C.Ramya	Chairman, BOS, Department of Electrical and Electronics Engineering
7	Dr. N. Susila	Chairman, BOS, Department of Information Technology
8	Dr. M.Lydia Edwin	Chairman, BOS, Department of Mechatronics Engineering
9	Dr. D. Maruthachalam	Chairman, BOS, Department of Civil Engineering

10	Dr. A.Indhuleka	Chairman, BOS, Department of Science and Humanities
11	Dr.S.Balakrishnan	Chairman, BOS, Department of Computer Science and Business Systems
12	Dr.S.Venkata Lakshmi	Chairman.BOS, Department of Artificial Intelligence and Data Science
13	Dr.P.Kavitha Rani	Chairman, BOS, Department of M.Tech Computer Science Engineering
14	Dr.K. Nagarajan	Chairman, BOS, Department of MBA

BOARD OF STUDIES – DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The following Board of Studies is at present. The Board of Studies is constituted as per UGC guidelines for autonomous colleges and includes external experts and expert nominated by the University. Special invitees from academia, industry and alumni also included to obtain their suggestions. Every board meets at least for every six months.

Table 10.4 Board of Studies Members

SL.No.	NAME & DESIGNATION	NATURE
1.	DR. K. Sasi Kala Rani Prof & Head , Department of Computer Science and Engineering SKCET	Chairperson
2.	Dr.J.RAJA SEKAR Professor Department of Computer Science and Engineering MepcoSchlenk Engineering College, Sivakasi.	University Nominee
3.	Dr.R.S.LOVELYN ROSE Associate Professor Department of CSE PSG College of Technology Coimbatore	Academic Expert

4.	Dr.G.SUGANYA Associate Professor Department of CSE VIT, Chennai.	Academic Expert
5.	Dr.ADITYA POTHANRAJ Manager - Lead Architect Technology Cognizant Technology Solutions Chennai	Industry Expert
6.	Mr. V.MAHESWARAN Data Science Engineer IBM, Kyndryl, Chennai	Alumni

COMMITTEES FOR AUTONOMOUS EXAMINATIONS

Table 10.5 Autonomous Examinations Committee members

Sl.No.	Member	Designation	Category
1	Dr. J. P.Ananth	Controller of Examinations, SKCET	Controller
2	Mr. S. Bagavathy	Asst. Prof, EEE	Member
3	Dr.A.Sajeev Ram	Asso. Prof, AI&DS	Member
4	Dr.S.Premnath	Asst. Prof, ECE	Member

INTERNAL QUALITY ASSURANCE CELL

Table 10.6 Internal Quality Assurance Cell members

Sl.No.	Name	Designation	Category / Role
1.	Dr.S.Sundararaman	CEO	Management Representative – IQAC
2.	Dr.J.Janet	Principal	Chairperson-IQAC
3.	Dr.J.P.Ananth	Dean - Academics & Controller of Examinations	Coordinator – IQAC
4.	Dr.S.Sophia	Dean – R&D and Ranking	Admin Member
5.	Dr.P.AshokaVarthanan	HoD,MECH	Admin Member
6.	Dr.N.Susila	HoD, IT	Senior Faculty Member

7.	Dr. D. Prabha	Professor /CSE	Senior Faculty Member
8.	Dr.M.Vigneshkumar	Asso.Prof.,MECH	Senior Faculty Member
9.	Mr.S.S.Vignesh	Alumni	Alumni Member
10.	Mr.A.Pavan Kumar	III MECH B - Student	Student Member
11.	Ms.R.Anuradha	Parent of Mr.A.Pavan Kumar,III Mech B	Parent Member
12.	Mr. Gowtham Siddhartha	Director, Linga Technologies, Coimbatore	Industrial Expert
13.	Mr.A.Gomathinayagam	DGM - Design &Analysis, Larsen &Toubro Ltd., Coimbatore	Industrial Expert
14.	Ms.S.Malliga Devi	Vice President, Cosiema Coimbatore	Industrial Expert

Research and Development (R&D) Committee

Table 10.7 RESEARCH ADVISORY COMMITTEE (include External Member)

Sl.No.	Name	Designation
1.	Dr. Janet J	Head (Ex-Officio), Principal
2.	Dr. Sophia.S	R&D Coordinator (Proposals), Professor & Dean
3.	Dr. Balakrishnan S	R&D Coordinator (Publications)
4.	Dr. Ragavi.V	Dean Student Affairs
5.	Dr. Ananth J.P	Controller of Examinations, Dean Academics
6.	Dr. Ashokavarthanan P	Professor & Head, Mechanical
7.	Dr.Lydia Edwin M	Professor & Head, MCT
8.	Dr.Sasipriya S	Professor & Head, ECE
9.	Dr. Ramya K C	Professor & Head, EEE
10.	Dr. Sasikalarani K	Professor & Head, CSE
11.	Dr. Susila N	Professor & Head, IT
12.	Dr. Maruthachalam D	Professor & Head, Civil
13.	Dr. Indhuleka A	Professor & Head, S&H
14.	Dr. Kavitha Rani P	Professor & Head, M.Tech CSE

| 15. | Dr. Venkata Lakshmi S | Professor & Head, AI&DS | |

Table 10.8 ANTI-RAGGING COMMITTEE

S.No	Name of the member	Designation	Mobile Number
1.	Dr.J.Janet	Principal	9952966826
2.	Dr.J.P.Ananth	Dean -Academics	9500082524
3.	Dr. V. Ragavi	Dean -Student Affairs	9940629899
4.	Dr. S.Sophia	Dean -R & D –Ranking & Accreditation	9894063373
5.	Mr. K.Raghupathi Raja	Assistant Commissioner of Police -South	9498161777
6.	Mr.V.Pandarinathan	Revenue divisional officer-South	0422-2300424
7.	Ms.R.Kalpana Alamelu	Tahsildar	9445000570
8.	Dr.D.Maruthachalam	Prof. & Head, Civil Engineering	9498161777
9.	Mr.R.Muthukrishnan	Asso.Prof. School of Management	9842013576
10.	Dr. K. Senathipathi	Asso.Prof., CSE	9944301356
11.	Dr. S. Raja	Asso.Prof., Mechanical Engineering	9698919000
12.	Mr.M.Vigneshwaran	Asst. Prof., Mechatronics Engineering	9791773129
13.	Ms.R.Hemavathi	Asst. Prof., Civil Engineering	9944551247
14.	Dr.V.Karthik	Asso.Prof., ECE	9629434057
15.	Mr.N.Loganathan	Asst.Prof., EEE	9345927989
16.	Mr. K. Jothibasu	Non teaching, Lab instructor	9994125655
17.	Mr.A.Sundaram	Parent	9842214724
18.	Mr. U. Brammanathan.	Parent	7904039156
19.	Mr. J. E. Andrew Jesudoss	Parent	9443326365
20.	Mr. R.Dhushyantha Kumar	Parent	9842649754
21.	Mr. N. Madhavan.	Parent	9865111184
22.	Mr.S.Libanesh	Student-IV Year, Civil Engg.	9578886744
23.	Ms. A. J. Ida Winona	Student-IVYear, CSE	7540040844
24.	Mr. R. Vikram	Student-IV Year,ECE	9361233077
25.	Ms. D. Reethika.	Student-IV Year,IT	9865139280

26.	Mr.B. Mugesh Raja	Student-IV Year, Mech Engg.	9361391551
27.	Mr.P.R.Abhijith	Student-IV Year, MCT	9787726609
28.	Mr.M.Mathan Gopal	Student-IV Year, EEE	8760184858
29.	Mr.M.Tharun	Student-IV Year,CSBS	7540040844
30.	Mr.S.Rehan Krishnan	Student-IV Year ,M.Tech -CSE	9047444404

ANTI RAGGING SQUAD AND STUDENTS MONITORING COMMITTEE

Table 10.9 Anti Ragging Squad and Students Monitoring Committee Members

Sl.No	Faculty In-Charges	Designation	Mobile No.
1.	Dr. J. Janet	Principal	9952966826
2.	Dr.J.P.Ananth	Dean -Academics	9500082524
3.	Dr. V. Ragavi	Dean -Student Affairs	9940629899
4.	Dr. S.Sophia	Dean -R&D –Ranking & Accreditation	9894063373
5.	Dr. D. Maruthachalam	Prof. & Head, Civil Engineering	9843169584
6.	Ms.R.Hemavathi	Asst.Prof., Civil Engineering	9944551247
7.	Dr. S. Raja	Associate Professor, Mechanical Engineering	9698919000
8.	Ms. M. Kavitha	Asst.Prof., CSE	8148485765
9.	Ms. N.Subhashini	Asst.Prof., EEE	9003497252
10.	Dr.V. Karthik	Asst.Prof., ECE	9629434057
11.	Mr. A .M. Ratheesh Kumar	Asst.Prof., IT	9500243738
12.	Mr.R.Muthukrishnan	Asst.Prof., MBA	9842013576
13.	Mr.M.Vigneshwaran	Asst.Prof., Mechatronics Engineering	9791773129
14.	Mr.M.Manicka Raja	Asst.Prof., CSBS	9629107556
15.	Ms.S.Sathya	Asst.Prof., AIDS	8667791885
16.	Mr.S.Sreeraj	Asst.Prof., M.Tech -CSE	9047522852
17.	Mr. B. Kalins	Asst.Prof., S&H	6381500917
18.	Mr. K. Kumar	Asst.Prof., S&H	9952543333

Fig. 10.10 Anti-Ragging Squad and Students Monitoring Committee disseminated in website

INTERNAL COMPLIANCE COMMITTEE (ICC)

S.N0	Faculty In-Charges	Designation	Category
1.	Dr.V.Ragavi	Dean,Student Affairs	Chairperson
2.	Dr.S.Balakrishnan	HoD, CSBS	Member
3.	Ms.Gayathri Radhakrishnan	AGADA(Abishaiaikh Gender and Development Association)	Member
4.	Mr.Ruban	Non Teaching Faculty	Member
5.	Ms. K. Varuna	Student	Member
6.	Mr. Rithick Srinivas	Student	Member
7.	Mr. R. Shakthi Dharun	Student	Member
8.	Ms. Charubala	Student	Member
9.	Ms. T. Nithya	Non Teaching Faculty	Member

GENERAL COMPLAINTS AND GRIEVANCE REDRESSAL COMMITTEE MEMBERS – STUDENTS

Table 10.11 General Complaints and Grievance Redressal Committee Members

Faculty Grievance Redressal Committee Members

Sl.No.	Present Nominee	Position
1.	Dr.J.Janet , Principal	Chairperson
2.	Dr.P.Ganesh Kumar	Senior Professor of Anna University (Nominee)
3.	To be nominated by DOTE	DOTE Nominee
4.	Dr. K Sundararaman , Chief Executive Officer, Sri Krishna Institutions	Special Invitee
5.	Dr.D.Maruthachalam, Professor / Civil Engg	Faculty Member(Male)
6.	Dr. V. Ragavi, Dean,Student Affairs	Faculty Member(Female)
7.	Dr.R.Muthukrishnan, AP/MBA	Faculty Member(Male)
8.	Dr.M.Karpagam, ASP/ECE	Faculty Member(Female)

9.	Dr. R. Soundararajan, ASP / Mech	Faculty Member(Male)

Table 10.12Student Grievance Redressal Committee Members

Sl. No.	Present Nominee	Position
1.	Dr.J.Janet , Principal	Chairperson
2.	Dr.D.Maruthachalam, Professor / Civil	Faculty Member(Male)
3.	Dr. V. Ragavi, Dean, Student Affairs	Faculty Member(Female)
4.	Mr.R.Muthukrishnan, AP/MBA	Faculty Member(Male)
5.	Dr.M.Karpagam, ASP/ECE	Faculty Member(Female)
6.	Dr. R. Soundararajan, ASP / MECH	Faculty Member(Male)
7.	Mr. K. Saran, III Year Civil (20EUCV038)	Student Special Invitee

WEBSITE / NEWSLETTER / MAGAZINE COMMITTEE

Table 10.13 Website / Newsletter / Magazine Committee members

1	Website	Dr.S.Balakrishnan, Prof and Head CSBS Mr.Manicakka Raja, Asso.Prof, CSBS
2	SKCET BUZZ (Newsletter)	Dr.J.Janet, Principal (Editor-in-Chief)
		Dr.S.Venkata Lakshmi, Professor and Head, AI&DS (Co-Editor)
		Mr.M.Diwakaran, Asst. Prof, IT (Editorial Team)
		Mr.G.S.Pugalendhi, Asst.Prof, AI&DS(Editorial Team)
		Ms.N.Pooranam, Asst. Prof, CSE (Editorial Team)
		Ms.S.Mary Fabiola, Asst. Prof, S& H (Editorial Team)

WOMEN EMPOWERMENT COMMITTEE

Table 10.14 Women Empowerment Committee members

S.No.	Member	Designation
1	Dr.V.Ragavi	Chairman
2	Dr.S.Sophia	Prof & Head ECE
3	Dr.Karpagam	Prof ,ECE
4	Dr.A.Indhulekha	Prof. & Head S&H
5	Dr.R.Suraj Begum	Prof,S&H
6	Ms.Geethamani	Asso Prof,EEE
7	Ms.Hiba A	Student of I CSBS
8	Ms. Abinaya S	Student of I IT C
9	Ms Anushna	Student of II CSBS

Table 10.15 ALUMNI ASSOCIATION AND EXTERNAL RELATIONS

S.No	In-Charges	Designation	Mobile No.
1.	Dr.Jayasudha Subburaj	Alumni Coordinator	9442346613
2.	Dr. K.C.Ramya	Alumni Coordinator	9442636334
3.	Dr. K.Shobana	Vice President	9962004041
4.	Mr.S.Thamarai Kannan	Secretary	9894593623
5.	Dr.J.Janet	Ex-Officio Member, Treasurer	9952966826
6.	Mr.S S Vignesh	Executive Committee Member	9894574005
7.	Mr.C.Pranab Shreedhar	Executive Committee Member	9994967573
8.	Dr.S.Karthik	Executive Committee Member	9788719854
	DEPARTMENT COORDINATORS		
9.	Dr. M.Sujaritha	Professor, CSE	9524969345
10.	Dr. G.Shobana	Associate Professor, IT	8825417455
11.	Mr. N.Babu	Assistant Professor, MECH	7373190031
12.	Ms. B.Anishfathima	Assistant Professor, ECE	7598572862
13.	Dr. J.Karthika	Professor, EEE	9443729040

14.	Dr. R Gopinathan	Associate Professor, MCT	9003567752
15.	Mr. S.Sadheesh	Assistant Professor, CIVIL	9095339455
16.	Dr. G.Ignisha Rajathi G	Associate Professor, CSBS	9489621110
17.	Mr. T.Krishnasamy	Assistant Professor, MBA	9952707321
18.	Dr. P.Shanthi	Professor, S&H	6382269898

Table 10.16 PLANNING AND MONITORING COMMITTEE

Name	Designation	Category
Dr J Janet	Principal, SKCET	Chairperson
Dr.J.P.Ananth	Dean – Academics & Controller of Examinations	Member
Dr. S .Sophia	Dean – R&D and Ranking and Accreditation	Member
Dr. P. Ashoka Varthanan	Professor and HoD , MECH	Member
Mr.C Raviselvan	Director, GEM equipments	Member
Mr.P T Krishnan	PTK Architects	Member

Table 10.17 FINANCE COMMITTEE

S.No	Faculty In-charges	Designation	Category/Role
1	Dr.J.Janet	Principal	Chairperson
2	Mr. S. Lakshmipathy	Finance Manager, Sri Krishna Institutions Coimbatore	Member
3	Dr. P. Ashoka Varthanan	Professor & Head, MECH	Member
4	Dr.S.Sophia	Dean – R&D and Ranking	Member

Table 10.18 NATIONAL SERVICE SCHEME (NSS) / YOUTH RED CROSS (YRC)

S.No	Name	Designation	Mobile Number
1.	Ms.R.Geethamani	Asst. Prof EEE	9489919323
2.	Dr.A.Radhika	Asso. Prof EEE	9786848596
3.	Dr.V.Narasimharaj	Asso.Prof, MCT	7598709273

COLLEGE MAINTENANCE COMMITTEE

Table 10.19 College Maintenance Committee members

Sl. No	Description	Faculty In-Charge	Designation
1	Electrical, DG, Solar systems & Lifts	Dr. C. Ramya	HoD, EEE
		Dr. G. Radhakrishnan	Asso.Prof, EEE
2	Smart board, LCD and PA systems	Dr. V. Nandalal	Prof. ECE
		Mr.G.S Satheeshkumar	Lab Technician, ECE
3	Computer systems, Laptops, Networking systems and Internet	Dr. K. Ramesh	Professor, CSE
		Mr. P. Ramesh	System Manager
4	STP (Sewage Treatment Plant)	Mr. S. Sadheesh	Asst. Prof., Civil
5	SWM (Solid Waste Management)	Dr. V. Yogeshwaran	Asst. Prof., Civil
6	Rain water harvesting systems	Dr. M.R. Ezhilkumar	Asst. Prof., Civil
7	Civil works, Painting & Carpentry	Er. R. Kamaraj	Maintenance Supervisor
8	Water supply and Plumbing works	Mr. R. Ranjith	Plumber, Civil
		Mr. A. Ageesh	Plumber, Civil
9	Furniture	Dr. C. Suresh Kumar	Physical Director
10	Air Conditioner systems *(A/C)*&UPS	Dr. S. Balasubramani	Asso.Prof., MCT
11	Food court and Amenities centres – Monitoring	Dr. S.A. Fazlur Rahiman	Librarian
12	Drinking water (RO Plant) - Distribution & Monitoring	Dr .A. Rajesh	AP / Mech
13	Campus cleanliness: over all housekeeping & Washroom	Mr. Ramesh	Maintenance Supervisor
		Ms. N. Meenapriya	Asst. PD

14	All campus boards and sign boards	Mr.J.R.Dhinesh Kumar	Asst. Prof., ECE
15	HoR-Men Maintenance	Dr.R.Jeyakumar	Asso.Prof, MECH
		Dr.V.R.Balaji	Professor, ECE
16	HoR-Women Maintenance	Ms.R.Geethamani	Asst. Prof.,EEE
		Ms. Rukmani	Supervisor

OTHER COMMITTIEES

Table 10.20 Other Committee Members

Sl.No.	Welfare Committees	Faculty In-charges
1	Transport	Dr. P. AshokaVarthanan ,HoD, MECH
		Dr. N. Balaji, Professor, MCT
		Mr. K. JothiBasu,Lab Tech., MECH
2	Alumni Affairs	Dr.Jayasudha Subburaj, Placement Coordinator
		Dr. K.C.Ramya, HOD,EEE
		Dr. K.Shobana, Asso.Professor,IT
3	NSS,YRC & RRC	Ms.R.Geethamani, Asst.Prof, EEE
		Dr.A.Radhika, Asso.Prof, EEE
		Dr.V.Narasimharaj, Asso.Prof, MCT
4	Book Stores	Dr. C. Sureshkumar, Physical Director
5	Academic Calendar	Dr. P. AshokaVarthanan, HoD, MECH
		Mr. S. Ranjith Kumar, Asst. Prof, MECH
6	Time – Table	Dr. S. Sophia, HoD , ECE
		Ms.Muneera Begum, Asst. professor, ECE
7	Software Team	Dr. K.N. Sivabalan, Professor, IT
		Dr. P. Shanthi, Asst. Prof., MCA
		Ms. M. Rohini, Asst. Prof, CSE

Functions and responsibilities, frequency of the meetings and attendance of the above bodies, in tabular form 10.1.3 (n) is as follows:

Table 10.21 Functions and responsibilities, frequency of the meetings and attendance of the above bodies

S.No.	Name of the Statutory Body	Responsibilities of the body	Frequency of the Meetings	Attendance
1	Governing Body	Governing Body will monitor the functioning of the Autonomous system and give its suggestions / recommendations for modifications / changes if any required	Twice in a year	90% and Above
2	Academic Council	The syllabus and curriculum finalized by the Board of Studies will be placed before the Academic Council for approval / suggestion and ratification if any.	Twice in a year	90% and Above
3	Board of Studies	The Board of Studies formed as per the guidelines of the University and UGC will finalize the Syllabus and Curriculum	Twice in a year	90% and Above
4	Committee for Autonomous Examinations	Conduct the Autonomous examination. Evaluation and Result Publications	Twice in a year	90% and Above
5	R & D Committee	Responsible for assisting the Supervisory Board in reviewing and assessing the research and development programs and to perform some functions.	Twice in a year	90% and Above

6	Anti-Ragging Squad and Students Monitoring Committee	Prevent ragging inside the institution and hostel. Group members are informed to make surprise visits to prevent curb the menaces of ragging.	Once in a year	90% and Above
7	Women Empowerment Committee	The responsibilities of the Women Empowerment is to follow the Mandatory Guide lines and directions of the Anna University, Chennai, regarding the security arrangements for Girl Students and Women staff of our Institution	Once in a year	90% and Above
8	College Maintenance Committee	To maintain and ensure the smooth functioning of college infrastructure.	Twice in a year	90% and Above
9	General Complaints and Grievance Redressal Committee	To look into complaints from staff and students in case of any harassment / difficulty.	Twice a year	90% and Above
10	Internal Compliance Committee	To look into complaints of students and faculty .	Twice a year	90% and Above
11	Finance Commitee	To monitor the institution budget and corrective action during the year	Twice a year	90% and Above

12	IQAC	To plan, guide and monitor Quality Assurance (QA) and Quality Enhancement (QE) activities in college	Twice a year	90% and Above
13	Research and Development Committee	To monitor research and development activities in the Institution	Twice a year	90% and Above
14	Planning and Monitoring Committee	To monitor the academic performance, training and placement of the students	Twice a year	90% and Above

B .Defined rules, procedures, recruitment, and promotional policies, etc.

1. **GENERAL INSTRUCTIONS FOR THE STAFF AT THE TIME OF JOINING**

      1.1. Jurisdiction

- The College shall have the jurisdiction over the conduct of the students associated/enrolled with the College. To take cognisance of all acts of misconduct including incidents pertaining to ragging taking place inside/outside the college campus. Violation of ideal student conduct and discipline as laid down in this policy handbook and other related regulations which include

1. Any violations of the Sexual Harassment Policy of this college against other students.
2. Physical assault, threats of violence or conduct that threatens the physical and mental health or safety of any person including other students.
3. Possession or use of weapons, explosives or destructive devices inside/outside college campus.
4. Manufacture, sale or distribution and consumption of prohibited drugs, alcohol etc.
5. Conduct which has a negative impact or constitutes a nuisance to members of the surrounding community.

      The College, while determining whether or not to exercise such off-campus jurisdiction in situations enumerated as above,

- the college shall consider the seriousness of alleged offense
- the risk of harm involved
- whether the victim(s) are members of the campus community
- whether the off-campus conduct is part of series of actions, which occurred both on and off campus.

1. **Campus Code of Conduct**

1. All students should wear college ID card at all times during their stay in college.
2. Students are expected to maintain the highest standards of discipline and dignity on and off the college campus
3. Students should abide by the rules and regulations of the College and should maintain the esteem of the college.
4. All the students are expected to be present in the class as per the scheduled time. Late comers will not be entertained.
5. 75% of attendance is mandatory for all the students.
6. The entire faculty should be addressed as Dr/Prof.or Sir/ Madam. All non-teaching staffs to be addressed as Sir/Madam.
7. No students shall leave the class when the session is on without the permission of the respective teacher concerned.
8. In case of extenuating circumstance with due permission from the tutor or Head of the department, student can leave the campus. The authenticity of the reason, the student is leaving will be checked by the tutor by calling the parent/guardian.
9. Break time should be utilised wisely and should not be extended.

10. Student should strictly adhere to the dress code. The dress code prescribed for boys is formal pant and shirts with formal shoes. The dress code prescribed for girls is churidar with dupatta with loose fitting.
11. All leave application shall be submitted well in advance to the concerned tutors.
12. All kinds of tattooing, body piercing, hair styling or any act against political, social or cultural values, beliefs and norms will be dealt with stringently.
13. Rash driving, wheeling and powered vehicles are not allowed inside the campus.
    - Sounding of horn not permitted within the campus.
    - Students will not be allowed to enter the campus without the Helmet / Seat Belt as mandated by the government.
    - Students vehicles with altered silencers are not permitted inside the campus.
    - Students using two wheelers are strictly advised to travel with one pillion rider only.
    - Any deviation from this rule will result in ousting the vehicle from the campus permanently.
14. Students are expected to maintain decorum in all academic buildings. Hooting, whistling, loitering or any unacceptable act will be treated as deviant behaviour and will be treated as instance of indiscipline.
15. Sitting in staircases or circulation areas where they could interfere with the free movement is prohibited.
16. Students are instructed not to use mobile phones during the class hours.
17. The Campus is known for Swatchtha and it is the responsibility of the students to maintain neat and clean campus.
18. Consumption of intoxicants/banned substances in any form or smoking or using Chewing Gum, Hans, Pan Masala, inhaling whitener, cool lip etc., are strictly prohibited.
19. Refrain from activities such as scribbling on the walls, doors or any furniture which could consequently deface the college and destroy the academic ambiance.
20. Follow safety precautions at all time during the class hours and laboratory hours.
21. Damage to the property of the college as a result of student activities, the students have to bear the cost of replacement/repair with penalty.
22. Students are not allowed to celebrate any unauthorised celebrations inside the college campus.
23. Students are not permitted to distribute or display materials, notices, pamphlets, banners in the campus without the permission of the Principal.
24. Students who intend to represent the college in intercollegiate events shall take prior permission from the concerned head of the department and the selection parameters will be fixed by the respective department.
25. On Duty leave applications should be submitted well in advance for approval by the respective Hods. The supporting proof documents should be submitted to the concerned tutors for record purpose.
26. Political activity in any form is not permitted in the College campus. Unauthorised meetings, religious functions, propaganda work, processions or fund collections are forbidden within the college, hostels and outside the campus.
27. Ragging is an offence and enforceable by law.
28. Misbehaviour towards girl students, like use of threat, physical or psychological harassment will be dealt as per the legal provisions. Above mentioned misbehaviour towards any of the institutional personnel will also be dealt as per legal provisions.
29. Any violation of the above rules will invite penalty in the form of warning, parents meet, corrective measures or punishment by higher authorities of the college and legal authorities of the state.
30. Refrain from engaging disorderly, lewd, or indecent conduct, including creating unreasonable noise; pushing and shoving; inciting or participating in a riot or group disruption inside the College campus.
31. Students are expected not to interact, on behalf of the College, with media representatives or invite media persons in to the campus without the permission of the college management.
32. Students are not permitted to audio or video record lectures in class rooms or actions of other students, faculty or staff without prior permission.
33. Students are not permitted to provide any audio or video clippings of any activity on the campus to media without prior permission.
34. Refrain from posting any derogatory comments about faculty, students, College on any media, social media or website of any nature.
35. Refrain from theft or abuse of the individual and college properties and facilities.

Action on the above

1. Warning – indicating that the action of the student was in violation of the code and any acts of misconduct shall result in severe disciplinary action.
2. Refer the misconduct to the discipline committee, conduct a detailed enquiry and the report of the enquiry will be presented to the higher authority for follow up action.
3. Restrictions on using the various facilities on the campus for a specified period of time.
4. A student may be suspended for a specified period of time which will entail prohibitions on participating student related activities
5. Expulsion of a student from the College permanently
6. Referred to law enforcement agencies in case of criminal offences.

Code of Professional Ethics

Preamble

The main objective of Higher Education is to strive for academic excellence and quality standards to compete at global standards. The responsibility of Higher Education Institution is to produce leaders of society and economy in all areas of manifold activities with a commitment to the aforesaid ideals. The pivotal

objective of education is to create skill, knowledge and awareness of our glorious national heritage. The aim of education is to achieve basic scientific outlook and commitment to the ideals of the principles enunciated in the preamble to our national constitution.

Code of Conduct for the Principal

1. The Principal should exhibit qualities of effective leadership in all academic and administrative activities of the college.
2. Strategic plan to be implemented in line with the execution of vision and mission of the college.
3. Keep the co-ordination and team work in all the activities associated with the college.
4. Provide guidance, leadership, direction to all the stakeholders
5. Oversee and monitor the administration of academic and administration activities.
6. Adapt novel technology and methods for effective teaching learning process
7. Acquaint the students to recent development in the world.
8. Observance and implementation of directives issued by Government/UGC/AICTE/ Anna University/NAAC/MoE and other related statutory bodies.
9. Ensure that the teaching and non-teaching staff follow the code of conduct of the College.
10. Assessing reports /teaching or module plan/ plan of action and action taken reports of teachers/head/deans/coordinators.
11. Assessing and monitoring the academic syllabus /course.
12. To assess the feedback forms of the various stakeholders and take proper action for rectifying the issues.
13. Assessing reports of members of non-teaching, maintenance and other related departments.
14. To inculcate the social, cultural, national and human values among the students through education for their overall development.
15. To provide professional development and continuous professional development activities to both teaching and non-teaching staff.
16. Accountable to the Management for all expenditure incurred in the college by submitting the vouchers and bills as per the time limit specified to the finance department of the Trust.
17. Submitting application to Government for claiming eligible scholarship for students in time and distributing it to students as and when received. The Principal should submit proper accounts to the Government for the scholarship.
18. Formulate and conduct all statutory and non -statutory meetings as prescribed by UGC, AICTE and Anna University as per their regulations and frequency every year.
19. The Principal is also a chief controller of examination, for all exam related activities.
20. The Principal should oversee the maintenance of all infrastructures.
21. The Principal should evolve a system for monitoring the maintenance of the campus so that the whole campus is always neat, clean green and smart.
22. Formulate an eco system in maintaining and retaining quality standards in helping the Institution to elevate its positions in National Institute Ranking Framework (NIRF), ARIIA, National Assessment and Accreditation Council (NAAC), National Board of Accreditation (NBA) and Autonomy standards.
23. To promote industry institute interaction and R& D activities
24. To promote the brand building of the institution by adopting new technologies
25. To make the staff and students aware of rules procedure and regulations laid down by the college and see that they are enforced.

Code of Professional Ethics to Teachers

Professional ethics are personal and institutional regulation that governs the behaviour with the context of respective profession. The professional ethics for the teaching fraternity are as follows:

I. **Teacher and their Responsibilities**

"Teaching" is a Nobel profession with the obligation to conduct the ideals of the professionalism to engrave responsible citizens to the country. The prime responsibility of every teacher is to ensure that there is no incompatibility between his perception and practice. They should be calm, patient and communicative temperament amiable to all stake holders. The teachers should treat students with dignity and mutual respect.

Teachers should

- Develop positive relationships through kindness, care, mentoring through patient attitude.
- Adhere to the standards set by the management in fulfilling their professional duties.
- Manage their private affairs in a manner consistent with dignity of profession.
- Act with honesty and integrity in all aspects of their work.
- Respect the privacy of others and the confidentiality of information gained in the course of professional practice, unless a legal imperative requires disclosure or there is a legitimate concern for the wellbeing of an individual.
- Use their name/names as set out in the Register of Teachers, in the course of their professional duties.

- Commit to continuous professional development in research and higher studies.
- Express free and frank opinion is consistent with the management policy pertaining to the participation at professional meetings, seminars, conference etc.,
- Maintain active membership of professional organisations of his/her domain and strive to improve education and professionalism through them.
- Adhere to the academic workload by following the norms of the respective statutory bodies or institution.
- Cooperate and assist in carrying out academic and its related supporting activities of the Higher Educational Institutions.
- Engage themselves in extension, co-curricular, extracurricular and outreach activities including community services
- Contribute their efforts in maintaining and retaining quality standards in helping the Institution to elevate its positions in National Institute Ranking Framework (NIRF), ARIIA National Assessment and Accreditation Council (NAAC),National Board of Accreditation (NBA) and Autonomy standards.
- To complete the quintessential persona of a teacher is his or her dress code. The **dress code** for the staff

     For Gentlemen – Collared shirts with tailored pants; shirts must be tucked in and shoes are mandatory

     For Ladies – Sarees; neatly draped with all pleats pinned and placed perfectly.

- Wearing **ID-Card** is mandatory when staff is in campus and if travelling ONDUTY to the other places related to official work.
- The duties and responsibilities of the Head of the Department are given in Annexure I
- The duties and responsibilities of the faculty are given in Annexure II
- The duties and responsibilities of Tutors are given in Annexure III
- The duties and responsibilities of the administrative staff are given in Annexure IV
- The duties and responsibilities of Technical Staff are given in Annexure V

II. **Teachers and Students**

   Teachers should

- Respect the right and dignity of the students in expressing their opinion
- Adhere to equality, fairness and impartiality with students regardless of their religion, caste, political, economic, social and physical characteristics
- Identify, mentor and train students based on their capabilities and strive to meet their individual needs
- Improve academic and personal achievements and develop their personalities through community welfare.
- Inculcate research culture among the students by organising, conferences, seminars, incubation and encouraging students.
- Mutual respect, trust and consistent communication for a greater connection and effective learning.
- Refrain from inciting students against other students, colleagues and administration.
- Develop an inclusive approach and stronger alumnus connects for the current students.
- Be affectionate to all the students and avoid vindictiveness against any student.
- Make themselves available beyond the class hours and guide them without any remuneration or reward.
- Maintain a strong teacher student relationship that leads to student engagement and a better learning environment to achieve higher order in the knowledge map.
- Should adopt humane approach in dealing with students who are physically challenged.

III. **Teachers and Colleagues**

   Teachers should

- Treat their fellow teaching fraternity in the same manner as they themselves wish to be treated.
- Speak respectfully of other teachers and render assistance for professional accomplishment.
- Refrain from lodging unsubstantiated allegations against colleagues to higher authorities.
- Refrain from allowing consideration of caste, creed, religion, race or sex in their professional endeavour.
- Avoid creation of toxic work environment through gossips, rumours and grapevine communication.
- Create a professional environment during the working hours and adhere to their professional commitments.
- Refrain from using mobile phones during the working hours and teaching hours in particular.

IV. **Teachers and Authorities**

   Teachers should

- Discharge their professional responsibilities in line with the rules and regulations of the Institution.
- Be consistent with their profession in initiating steps through their own institutional bodies/professional organisation for change of any such rule detrimental to the professional interest.

- Refrain from undertaking any other employment and commitment including private tuitions and coaching classes which are likely to interfere with their professional responsibilities.
- Cooperate in the formulation of policies of the institutions and accept responsibilities, and discharge as required.
- Adhere to the terms and conditions as specified in the service contract/appointment orders.
- Refrain themselves in leaving the institutions during the academic year as it affects the academic schedule of the Institution.
- Refrain from availing themselves on leave except on unavoidable circumstances with prior intimation, keeping in view of their responsibility and academic schedule. They should follow leave and service conditions of the institution.

V. **Academic and non-academic staff**

      Teachers should

- Treat the non-teaching staff as colleagues with equality and respect during their tenure in the Institution.
- Help in the function of joint staff councils covering both academic and non-academic fraternity.

VI. **Teachers and Parents/Guardian**

      Teachers should

- Maintain contact with the parents/guardians and send reports of their wards performance at regular intervals as and when required.
- Meet the parents/guardian as convened for the purpose of exchange of ideas and for the benefit of the Institution.

VII. **Teachers and Society**

      Teachers should

- Recognise that education is a public service and strive to keep the public informed on the educational programmes being provided
- Work to improve education in the community and strengthen the community moral and intellectual life
- Be aware of social problem and take part in such activities as would be conducive to the progress of society and country as whole.
- Perform duties of citizenship, participate in community activities and shoulder responsibility of public offices.
- Refrain from taking part in or subscribing to or assisting in any way activities which tend to promote feeling of hatred among different communities, religions or linguistic groups.However, work for a common and collective goal towards national integration.
- Work for a common purpose in case of national disaster/pandemic situations in supporting the communities through crisis management.

Code of Conduct and Professional ethics for Non-Teaching Staff

1. Every non- teaching staff of the college shall discharge his/her duties efficiently and diligently in line with the required administrative standards as formulated by the Management.
2. Maintain their professional knowledge & skills for the proper discharge of duties assigned to them.
3. Assist in carrying out functions relating to the administrative responsibilities of the college and the Management.
4. Respect the right and dignity of the student for assisting and guidance.
5. Respect and politeness is expected from the non-teaching staff.
6. Fairness and impartiality with the students regardless of their caste, religion, political, economic, social and physical characteristics.
7. Cooperate with the Teaching faculties and students and maintain dignity and decorum at all stages.
8. Avoid conflicts between their professional work and personal interest.
9. Should adopt humane approach in dealing with students who are physically challenged.
10. Every employee should respect the functional superiority of those set in authority over him/her by the Management/Principal.

Annexure I

Duties and Responsibilities of the Head of the Department

1. HoD is responsible for all academic / administrative / students' discipline of the department as per AICTE / University directions.
2. Hod should disseminate the Vision and Mission of the Institution and department PEOs, POs& COs of their respective programmes/courses through different mechanism like posting in Google classroom, mentioning it in the syllabus, website and wherever necessary.
3. HoD is responsible for allocation of subjects / courses to the faculty taking into account the teacher's interests/ specialization and bottomup.
4. HoD is responsible for scheduling the timetable for the courses to provide adequate contact hours and to ensure the completion of the syllabus on time.
5. HoD should take the responsibility to train the Members of Faculty to deliver their course content effectively to the students during theory and practical classes.
6. HoD should improve the students' performance(slowlearners) by motivating them and by taking remedial actions.
7. HoD is responsible for arranging internship to the students.

8. HoD is responsible for arranging Industry / Field visit to the students for real time experience.
9. HoD should ensure that all the classes are held as per the scheduled time table and make alternative arrangement to the teachers during the absence.
10. HoD should verify whether the Members of Faculty covered the lecture topic as per the lecture plan and should verify the students' master attendance every week end.
11. HoD must visit classrooms and laboratory to ensure the discipline of the students and conduct of the classes by the Members of Faculty.
12. HoD should conduct meeting with Members of Faculty regarding the academic progress once in a week.
13. HoD is responsible for arranging guest lecturers for the students by identifying eminent people.
14. HoD should collect the feedback from the students and take necessary action plan to improve the Teaching and Learning process.
15. HoD should prepare budget, well in advance for the requirement of purchasing new equipment, consumable, servicing of equipment etc.
16. HoD should motivate and guide the faculty and students to participate in National and International level contest and enhance the research culture in the department.

<div align="center">Annexure II</div>

Duties and Responsibilities for Teaching Faculty

      A Teacher should

- Give utmost priority to Teaching, Learning process
- Be truthful, ethical and faithful towards the Profession
- Contribute with commitment to the development towards sound education
- Adhere to the policies of the Institution.
- Be a role model to the student's community.
- Motivate the students and inculcate moral practices.

2. The teacher should come to the College at least 15 minutes before the commencement of classes and should leave the college not earlier than 15minutes after end of the last hour.
3. The teacher should lecture in English language only.
4. Whenever a teacher intends to take leave, the teacher should get the leave sanctioned in prior and with proper alternate arrangements made for class/lab/ invigilation and other responsibilities if any. In case of emergency, the HOD or the next senior faculty must be informed with appropriate alternate arrangements.
5. Once the subject(s) / course(s) are allotted, the teacher should prepare the Course plan, Course materials and related documents on time.
6. The teacher should get the Course plan approved by HoD and Principal. After approval they have to create Google Classroom of their course delivery before (at least) a week from the beginning of each semester.
7. The record of class work must be regularly updated and monitored by HoD and Principal.
8. The teacher ideally should recapture for first 5 minutes the lesson of the last lecture.
9. The teacher should sufficiently get trained in handling the classes with interactive board.
10. The teacher should refer to reference books apart from the prescribed text book and prepare his/her detailed lecture notes. The teacher should not dictate notes in the class.
11. The Members of Faculty, in charge of the practical class, are responsible for issuing instructions as how to conduct experiment and follow up with the technical staff for issuing of proper instruments and gadget as required.
12. The teacher should go to class at least 5 minutes before the commencement time.
13. The teacher should be strict but polite. Never use harsh words which might hurt the students.
14. The teacher should make himself / herself available for clearing doubts of the students.
15. Snap talk has to be conducted every hour on a daily basis.
16. A laboratory manual must be prepared detailing the experiments.
17. The laboratory assessment for the experiment done on the day must be corrected then and there or at least by next day as per the rubrics.
18. While setting question paper for CIA, the teacher should also prepare the detailed answer and scheme of evaluation.
19. The test papers must be corrected within 3 days from the date of examination and marks to be submitted to the HoD/Principal and updated in the ERP portal within5days&correctedpapers and marks should be shown to students without fail.
20. During Invigilation, the teacher should be moving around. He/She should be vigil in closely monitoring the candidates allotted to him/her and make sure there is no malpractice in the exams/test.
21. Whenever any malpractice is noticed by the invigilator in examination, they should immediately inform the chief superintendant. In the presence of the chief superintendant a written statement from the candidate should be received. The received statement should be handed over to the COE for further proceedings.
22. The teacher should make himself / herself presentable and show no partiality to any segment /individual student.
23. The teacher should fill the record of class work and must be regularly updated and will be inspected by HoD / Principal as the case maybe.
24. The teacher should interact with the Class Advisor and inform him / her about the habitual absentees, academically weak students, disobeying attitude, misbehaviour or any act of misconduct.
25. In addition to teaching, the teacher should take other responsibilities as assigned by HoD/ Principal in academic, co-curricular, extracurricular activities.
26. The teacher should take care of academically weak students and pay special attention to their needs.

27. The teacher should always aim for 100% pass results (zero arrear) in his / her subjects and work accordingly.
28. The teacher should motivate the students and bring out the creativity /originality in the students.
29. It is mandatory to get the feedback from the students at regular intervals to enhance TLP.
30. The teacher should regularly visit library and read the latest journals / magazines in his / her specialty and keep himself /her self abreast of latest advancements and research outcomes.
31. The teachers should attempt to write textbooks, book chapter and publish / present research papers in reputed international / National Journals /Conferences / SCI / UGC /AICTE.
32. All documents must be prepared and maintained as per the specific formats prescribed.
33. At the end of class works of every semester, the teachers should conduct a course exit survey in his/her class.
34. After the publication of results (both internal & end semester exams) teachers should verify whether each course attain its course outcome, if not, the teacher should take the necessary measures.
35. Teachers should be well aware of Vision and Mission of the Institution and department PEOs, POs& COs of their respective programmes/courses.
36. Teachers should disseminate the information regarding Vision, Mission, PEOs, POs,& COs to students through different mechanism like posting in Google classroom, mentioning it in the syllabus, website and wherever necessary.
37. Teachers should motivate and guide the students to participate in National and International level contest.
38. Faculty should undergo Industry/Field visit for their vertical movement.
39. Research and Consultancy work may be undertaken by the Members of Faculty to bring the application of practices to the class.
40. Members of faculty should engage in consultancy work/industrial interaction/community services without compromising their teaching contact hours.
41. Annual Process of Promotions:

      Promotion of Members of Faculty shall be determined based on the score of 360° feedback system prescribed by UGC / AICTE, New Delhi. Parameters as:

a. Teaching process
b. Students' feedback
c. Departmental Activities
d. Institute Activity
e. ACR
f. Contribution to Society

Annexure III

Duties and Responsibilities of Tutor

1. Tutor should have the direct interaction with the students.
2. He / She should take care of the entire activities & responsibilities of the class
3. He / She should know each student personally well with all their antecedents.
4. He / She should keep all academic records of the students.
5. He / She should meet students at least once every fortnight and get the feedback about the courses/teachers and inform senior class advisor / HOD / Principal about any action that is needed.
6. It is the responsibility of the tutor to conduct the Teacher - Parents Meeting after every test and to give accurate academic information and progress of the students.
7. He / She should give an accurate data like attendance, sectional marks, etc. which is being forwarded to the Controller of Examinations.
8. He / She should conduct periodical "Class Committee meeting" with the concerned course teachers and student representatives in presence of the HOD.
9. He / She should collect the feedbacks from the students' as per the guidance of AICTE/UGC for all subjects and same have to be submitted to the HOD.
10. After conducting monthly test, model test, etc. the tutor should get the marks of all subjects to prepare the rank list and the progress will be communicated to the parents.
11. The attendance particulars of each ward should be monitored by tutors.
12. The master attendance must be regularly updated and should be reviewed every fortnight. The student with 75% or less attendance must be warned and the attendance report should be communicated to the parents.
13. When any student approaches for leave, the tutor should grant leave only for genuine cases.
14. At the end of each semester, the tutor should complete and submit the class log book, master attendance, any other records notified by the student's section of the office.
15. The residential status of Day scholar / hosteller must be maintained.
16. If hosteller (inside the campus) - Room number and block number / name along with the residential address must be maintained and updated.
17. If day scholar - Residential address of parents / Guardian.
18. The details of parent / Guardian such as occupation, mobile number/alternate address/ email/ mobile number should be maintained.
19. The result status of current semester with proof of mark sheet should be maintained.
20. The result status of internal test (CIA) should be maintained.
21. The required guidance and coaching should be given by the tutors for their wards to clear arrear.

22. Ensure that each ward studies regularly, submit the assignment etc., if not try to identify the reasons and help the student overcome the short fall.
23. Understand talent & achievement of each ward.
24. Ensure that each ward remits the college fees/ hostel fees/ exam fees on time. The Tutor should have a continuous follow-up with the office about their wards due if any. They must have the record of unpaid students and should make them pay the fees on time.
25. Take necessary steps and motivate the students to get good academic laurels.
26. Tutor is responsible for improving the performance of his / her wards.
27. He / She should play a pro-active role, be friendly and try to achieve 100% pass of his / her wards.
28. If a ward gets low marks / arrears in any subject the tutor should arrange for remedial action so that the ward is helped to clear the arrear in the next reappearance.
29. Periodical test marks reports must be conveyed to the parents.

Annexure IV

Duties and Responsibilities of Administrative Staff

1. Updating and monitoring the staff attendance register.
2. Sending Biometric attendance report every day to the higher officials.
3. Preparation of Salary every month.
4. Issuing various certificates to staff.
5. Staff Personal file maintenance
6. Receiving and replying letter correspondence on time.
7. Assure that all documents of students and staff are kept safe.
8. Maintain all the keys, key boards and key registers.
9. Communication between college and Trust office.
10. Monitoring and recording all the vouchers for all types of Accounts.
11. Maintain inward and dispatch register.
12. Keeping track of all stock register.
13. Circular preparation.
14. Housekeeping monitoring
15. Update & monitor the office stationeries and its Stock register.
16. Governing   council, AICTE approval, AISHE records preparation.
17. Admission approval process of first year admission.
18. Sending proposal for the Transfer and re-admitting students and Lateral entry admissions.
19. Guiding students on online payments and follow up the unpaid students to make them pay fee on time.
20. Preparing and issuing of TC for all outgoing students.
21. Taking care of scholarship related tasks.
22. Issuing provisional and consolidated mark sheet to the students.
23. Issue Genuineness certificates for the students, whenever requested by the industries.
24. When any parents/students/outsiders approach the office, they have to be treated respectfully and guided properly for the purpose.

Annexure V

Duties and Responsibilities for Technical Staff

The technical staffs are responsible for:

a. Maintaining the stock register for consumable and non- consumable items by making entries then and there, and getting it attested by the faculty member and HOD.
b. Keeping the store room / cupboard wherein the tools, gadgets, etc., are stocked securely and safely and issue to the students on the instruction of the faculty under proper acknowledgement.
c. Helping the faculty in reconciliation of stock of items if any discrepancy pointed out by the stock verification team.
d. Maintenance of register regarding breakage of item by students while doing experiment, preparing the statement duly attested by the Members of Faculty at the end of semester for forwarding to the office
e. Maintaining all instruction manuals and sample record note books
f. The technical staff should contribute in the efforts of the Members of Faculty in developing new experiments as and when needed.
g. The technical staff with the approval of the project guide and the laboratory in charge should help the students in fabricating/assembling the experimental set up or developing gadget using the laboratory facilities.
h. Whenever new equipment/machinery is purchased, the technical staff should ensure their fullest co-operation to the faculty in charge in the installation of equipment.
i. To ensure clean, safe and secure lab environment.

j. To carry out any other work assigned to them by staff in charge, HOD and Principal.

k. Keeping the working tables in their respective labs always in working condition by proper maintenance.

l. After the Practical class is over, the technical staff should ensure that the instruments and equipment used are cleaned properly for subsequent use.

Engineering / Science Laboratories

The technical supporting staffs are employed in the laboratories. As far as practical classes in the laboratory are concerned, the technical staff is responsible for arranging the equipment / instruments for conducting experiments by students in pursuance of the instructions of the faculty member in charge of the practical class.

a. Issuing instruments to the students based on the instructions of the faculty under due acknowledgement of the students for conducting experiments.

b. Receiving the gadgets/instruments issued to students, after checking for any malfunctioning, damage caused etc., and reporting to the Members of Faculty any damages etc., if noticed.

c. The technical support member should take accurate instructions from teaching faculty and refrain from prompting the students.

d. While the students conduct experiment, it is the duty of the technical staff to help the Members of Faculty in ensuring that the students do not cause damage to the equipment due to wrong operation or mishandling.

e. If items/chemicals are harmful, the supporting staff should watch to avoid misuse by students in the interest of the safety of students.

Workshops

The technical staffs such as Instructors and Technicians are employed in the Workshop primarily to coach the students in technical skills involving machining etc. While the Members of Faculty in charge of the Workshop class are responsible for briefing the students about the exercise, and the theory behind it, precaution must be taken.

The technical staffs are responsible for:

a. Issuing of tools and gadgets required for carrying out the exercise assigned to the student and to receive after the class is over.

b. Coaching the students as how to operate the machine, mounting of tool, carrying out machining operation, etc.

c. Helping the students in grinding the blunt tool, so that the students acquire the skill involved in it.

d. Adjusting the machine tool, ensuring that they are kept clean after the students complete their exercises.

e. Coaching the students in handling of hand tools involved in carpentry work, helping the student in learning simple carpentry works.

f. Coaching the students in fitting and welding activities, and in plumbing works.

g. Demonstrating the steps involved in foundry and smithy related activities to the students as per the instruction of faculty in charge of practical class.

h. Keep a watch on the students so that they handle tools safely and securely.

Electrical and Electronics Laboratories

a. To assist the faculty in charge of laboratory practical class for an effective and orderly conduct of practical courses.

b. To ensure whether all the equipment and machineries are in proper working condition before the commencement of practical classes.

c. To ensure the safety of the students during Practical classes carefully by following the safety instructions.

d. To issue the required meters, instruments, components etc., to the students during practical classes and receiving the same back after completion of experiment.

e. To help the students in the circuit debugging measurement observation, etc., in the regular lab classes.

f. To help the students in the fabrication of working models, as a part of their project work.

Computer Laboratories

a. Regular maintenance of all computer systems UPS and other peripherals related to laboratory.

b. Assisting the faculty in charge of practical class, so far as it relates to the hardware and system software problems.

c. If a system is in warranty period or in maintenance contract, when it develops defects, call the concerned company technical staff for rectifying the defects.

d. Maintenance of all computing and networking facilities in the campus

e. Creation and maintenance of login for faculty and students.

f. Regular maintenance of LCD projector in the class room, conference hall, seminar hall, etc., as and when needed. Loading specific software and upgrading of system as and when required.

g. Switching off the systems and air conditioners when not in use.

Assisting Research Scholars

a. Experimental set up needed by the Ph.D., researchers; the technical staff should assist the research scholar with the approval of the laboratory in charge and HOD.

b. The technical staff shall assist the researcher in taking readings/measurements and in the operation of the gadget.

c. As an Institution, emphasis will be on sponsored research projects and consultancy. Many research projects involve experiments, testing etc. Therefore, the technical staff of the laboratory should extend co-operation and help to the project coordinator and project associates in their endeavour.

d. Even if the work involves beyond the working hours of the institution, technical staff will have to render assistance to the project coordinators'.

Repair, maintenance and calibration policy

The institution may get request for testing components, materials etc., for certification from different sources. While conducting test along with the faculty member, the technical staff should take utmost precaution in preparing samples and careful in testing, so that the credibility is ensured in certification.

Practical Examination

The duties and responsibilities during practical examination are as follows:

a. Issue of instruments and other equipment to the students as per the instruction of examiners appointed for the purpose.

b. Desist from revealing to the students regarding any confidential information relating to the content and scope of the practical test given to the students.

c. Desist from giving any prompt or assistance to the students, who are undergoing examination thereby not jeopardizing the sanctity of the examination.

d. Checking all the equipment, machinery and tools for any defect and rectify the same so that the students do not face any difficulty during the examination.

Workload

a. A full-time technical staff should perform a minimum of 34 hours of work per week for the Institution on a 6-day week basis.

b. The Institution has the right to fix the working hours and days depending upon the exigency.

c. 34 hours is only the minimum, but a technical staff is expected to devote more time to help faculty in connection with the execution of sponsored projects, consultancy work, continuing education, summer courses, etc.,

d. It is quite likely in some semesters, there may not be much work in a particular laboratory. Therefore, the HoD concerned will redeploy the technical staff depending on the need so that the workload is even among the staff of the department.

Cleanliness and Maintenance

With regard to cleanliness and maintenance, the duties and responsibilities of technical staff include,

a. Ensuring that the assigned laboratory/workshop is kept clean and neat.

b. All the equipment / machinery should be maintained so that they are in good working condition. In case of any fault/defect, it should be brought to the notice of the faculty in charge of the laboratory and take prompt action to rectify the defects.

c. The Technical Staff should ensure that the garbage accumulated in the laboratory or in the vicinity outside the laboratory are cleared by the cleaning staff of the Institution.

d. All safety items like fire extinguisher etc., should be kept in working condition and first aid materials are kept in the box to be used in case of emergency.

e. Many equipment / measuring devices need periodical calibration. It is the responsibility of the technical staff to do recalibration with the help of faculty in charge or getting it done by outside agencies, wherever it is needed with the approval of the HoD.

f. Maintenance and exhibition of charts and other learning materials of the laboratory as per the instructions of the laboratory in charge is also the responsibility of technical staff.

g. The technical staff should bring it to the notice of faculty in charges about unserviceable items and items to be condemned. He/she should also help them in taking action to dispose them.

h. All the machineries and equipment are to be cleaned regularly by the concern technical staff.

2. LEAVE RULES

1. **Casual Leave(CL)**

a. Calendar year means January to December. In a calendar year teaching and non-teaching staff members are entitled to avail a casual leave of 1 day per month subject to a maximum of 12 days per calendar year. However, CL cannot be claimed as a matter of right. Un-availed CL cannot be accumulated and transferred to next calendar year.

b. Application for any leave must be submitted to the office after getting the signature of HOD and approval of the Principal in the prescribed format by mentioning the necessary alternate arrangements on the reverse side of the application form before the leave is actually availed.

c. Under any unforeseen real emergency condition, oral permission has to be obtained from the respective dean and the dean can inform the Principal and HOD for intimation and permission. Absenting without proper intimation may lead to "Leave on loss of Pay". Availing Leave on loss of pay will affect regular increment, promotion and vacation.

2. **ON DUTY (OD):**

- Leave ON DUTY (OD) during regular working period will be granted to staff for official work only. The vacation period declared at the end of the odd and even semester in academic year will not be reckoned as a regular working period.
- The official work for the teaching faculty include the following:
     1. Attending conference/seminar/workshop/summer school/winter school and similar such programmes approved by the management.
     2. Attending central valuation/project/viva voce evaluation/Practical examination/External Examination/University representative of Parent University outside the college up to a maximum of 5 days in a semester excluding holidays.
- The member of the faculty who are pursuing part-time Ph.D. programmes are eligible for half a day Leave ON DUTY during regular working period if needed
- During an academic year a maximum of 15 days only can be availed as leave ON DUTY.
- The restriction on the maximum number of days vide clause **4(d)**, referred above is not applicable to officials of physical education, placement and training.
- Prior permission has to be taken from the Principal for ON DUTY leave. The member of the staff may not be permitted to avail leave ON DUTY by the Principal, if any academic work is pending or any other work has to be attended to, in the institution.
- Any other categories needing leave ON DUTY will be at the discretion of the Principal. The decision of the Principal is final in all above cases. However, any deputation or work assigned by the management to the faculty will be treated as additional ON DUTY over and above the restrictions prescribed.

3. **Medical/ Maternity leave**
     a. If any staffs are ill, he/ she can avail a medical leave and the limit will be decided upon case to case basis.
     b. Female teaching faculty are eligible to avail approved maternity leave, however the period of Maternity Leave (6 months) will be counted for service. At the time of re-joining also will have to get the approval from Management.
4. **Vacation Leave (VL)**
     a. The vacation period will be declared by the College. Regular Faculty members who have put in a minimum of 1 year of continuous service are eligible for vacation. No on duty leave will be given during the above mentioned vacation period.
     b. No College holidays/ Sundays can be prefixed / suffixed to the vacation. The duration will be calculated from the starting day of vacation till the day of re-joining duty. If it is not possible to permit continuous vacation due to official work, it should be availed within the two spells approved by the Principal.

c. It is mandatory on the part of the staff member to report for duty after completion of their vacation leave. Failure to report without prior communication after the vacation period will result in severe action being taken. However, If the faculty is not able to report due to medical reasons or any acceptable reasons then the case may be treated for late joining after vacation as decided by management and Principal.

d. Vacation leave cannot be combined with any other type of leave except OD. If any other type of leave combined with VL except OD then whole VL availed may be treated as LOP, including holidays / Sundays prefixed / suffixed.

e. Members are requested to proceed on VL only after the Approval / Sanction from the Principal. Also, they are requested to submit the leave form with necessary alternate arrangements and contact address, phone no, email id. etc.

f. Members of Staff having invigilation/examination duties during the vacation period it is mandatory to attend the duty without fail or make proper alternate arrangement with the permission from the Principal/COE.

g. The staff handling the subject has to be present during the end semester examination date of the subject even if he/she is on vacation and is requested to scrutinize the question paper and submit a report to the Principal on the same day. For common subjects / a subject is handled by more than one faculty, at least one faculty marked by HOD, should be available on that day for scrutinizing the Question paper and to submit the report.

    Note: Depending on existing contingencies like pandemic, natural disasters and Government orders, the vacation period may be altered then and there. Any faculty who has been assigned with official work like admission, academic, examination, placement, training etc., during the vacation has to attend the work and they cannot refuse the work because they are on vacation. It is a professional working environment and any rejection to take up the responsibility will cause hardship to the institute and on the individual.

2. **POLICIES FOR PROMOTION**

·   Promotion to higher level of service shall be made subject to availability of the posts, eligibility of the staff, only on the basis of merit and efficiency, besides the commitment of the staff to the cause of all-round development/improvement of the institution.

·   As per 7th pay scale revision, all promotions will be based on performance. The various indices for performance are specified by AICTE / UGC / University and the same is followed. The guideline for promotion is based on AICTE norms.

10.1.4 Decentralization in working and grievance redressal mechanism (5)

Institute Marks : 5.00

List the names of the faculty members who have been delegated powers for taking administrative decisions. Mention details in respect of decentralization in working. Specify the mechanism and composition of grievance redressal cell including Anti Ragging Committee & Sexual Harassment Committee.

Grievance redressal is systematically carried out by various team of faculty members acting as committees under the guidance of Principal.

List of faculty members who are administrators/decision makers/committee members for various responsibilities are shown in the Table 10.22 given below.

TABLE 10.22 INTERNAL COMPLIANCE COMMITTEE (ICC)

S.No	Faculty In-Charges	Designation	Category
1.	Dr.V.Ragavi	Dean,Student Affairs	Chairperson
1.	Dr.S.Balakrishnan	HoD, CSBS	Member
2.	Ms.Gayathri Radhakrishnan	AGADA(Abishaiaikh Gender and Development Association)	Member
3.	Mr.Ruban	Non Teaching Faculty	Member
4.	Ms. K. Varuna	Student	Member
5.	Mr. Rithick Srinivas	Student	Member
6.	Mr. R. Shakthi Dharun	Student	Member
7.	Ms. Charubala	Student	Member
8.	Ms. T. Nithya	Non Teaching Faculty	Member

GENERAL COMPLAINTS AND GRIEVANCE REDRESSAL COMMITTEE MEMBERS – STUDENTS

Table 10.23 General Complaints and Grievance Redressal Committee Members

Faculty Grievance Redressal Committee Members

Sl.No.	Present Nominee	Position
1.	Dr.J.Janet , Principal	Chairperson
2.	Dr.P.Ganesh Kumar	Senior Professor of Anna University (Nominee)
3.	To be nominated by DOTE	DOTE Nominee
4.	Dr. K Sundararaman , Chief Executive Officer, Sri Krishna Institutions	Special Invitee
5.	Dr.D.Maruthachalam, Professor / Civil Engg	Faculty Member(Male)
6.	Dr. V. Ragavi, Dean, Student Affairs	Faculty Member(Female)
7.	Dr.R.Muthukrishnan, AP/MBA	Faculty Member(Male)
8.	Dr.M.Karpagam, ASP/ECE	Faculty Member(Female)
9.	Dr. R. Soundararajan, ASP / MECH	Faculty Member(Male)

10.24 Student Grievance Redressal Committee Members

Sl. No.	Present Nominee	Position
1.	Dr.J.Janet , Principal	Chairperson
2.	Dr.D.Maruthachalam, Professor / Civil	Faculty Member(Male)
3.	Dr. V. Ragavi, Dean, Student Affairs	Faculty Member(Female)
4.	Mr.R.Muthukrishnan, AP/MBA	Faculty Member(Male)
5.	Dr.M.Karpagam, ASP/ECE	Faculty Member(Female)
6.	Dr. R. Soundararajan, ASP / MECH	Faculty Member(Male)
7.	Mr. K. Saran, III Year Civil (20EUCV038)	Student Special Invitee

ANTI RAGGING SQUAD AND STUDENTS MONITORING COMMITTEE

Table 10.24 Anti Ragging Squad and Students Monitoring Committee Members

S.No	Name of the member	Designation	Mobile Number
1.	Dr.J.Janet	Principal	9952966826
2.	Dr.J.P.Ananth	Dean -Academics	9500082524
3.	Dr. V. Ragavi	Dean -Student Affairs	9940629899
4.	Dr. S.Sophia	Dean -R & D –Ranking & Accreditation	9894063373
5.	Mr. K.Raghupathi Raja	Assistant Commissioner of Police -South	9498161777
6.	Mr.V.Pandarinathan	Revenue divisional officer-South	0422-2300424
7.	Ms.R.Kalpana Alamelu	Tahsildar	9445000570
8.	Dr.D.Maruthachalam	Prof. & Head, Civil Engineering	9498161777
9.	Mr.R.Muthukrishnan	Asso.Prof. School of Management	9842013576

10.	Dr. K. Senathipathi	Asso.Prof., CSE	9944301356
11.	Dr. S. Raja	Asso.Prof., MECH	9698919000
12.	Mr.M.Vigneshwaran	Asst. Prof., Mechatronics Engineering	9791773129
13.	Ms.R.Hemavathi	Asst. Prof., Civil Engineering	9944551247
14.	Dr.V.Karthik	Asso.Prof., ECE	9629434057
15.	Mr.N.Loganathan	Asst.Prof., EEE	9345927989
16.	Mr. K. Jothibasu	Non teaching, Lab instructor	9994125655
17.	Mr.A.Sundaram	Parent	9842214724
18.	Mr. U. Brammanathan.	Parent	7904039156
19.	Mr. J. E. Andrew Jesudoss	Parent	9443326365
20.	Mr. R.Dhushyantha Kumar	Parent	9842649754
21.	Mr. N. Madhavan.	Parent	9865111184
22.	Mr.S.Libanesh	Student- IV Year, Civil Engg.	9578886744
23.	Ms. A. J. Ida Winona	Student- IVYear, CSE	7540040844
24.	Mr. R. Vikram	Student- IV Year, ECE	9361233077
25.	Ms. D. Reethika.	Student-IV Year,IT	9865139280
26.	Mr.B. Mugesh Raja	Student-IV Year, MECH	9361391551
27.	Mr.P.R.Abhijith	Student-IV Year, MCT	9787726609
28.	Mr.M.Mathan Gopal	Student-IV Year, EEE	8760184858
29.	Mr.M.Tharun	Student-IV Year,CSBS	7540040844
30.	Mr.S.Rehan Krishnan	Student-IV Year ,M.Tech -CSE	9047444404

○ The policies and procedures are published in Website, Academic calendar and also regular circular will be circulated to both students and faculties for the extent of awareness.

10.1.5 Delegation of financial powers (5)

Institute Marks : 5.00

Institution should explicitly mention financial powers delegated to the Principal, Heads of Departments and relevant in-charges. Demonstrate the utilization of financial powers for each of the assessment years.

 Financial management is done through the college accounts, with Principal as the cheque signing authority for expenditure up to 5 lakhs and managing trustee as cheque signing authority with no limit.

Table 10.25 Delegation of Financial Powers

Sl. No.	Designation	Amount sanction (In Rs)
1.	Managing trustee	No limit
2.	Principal	5 Lakhs
3.	HoD	50,000

10.1.6 Transparency and availability of correct/unambiguous information in public domain (5)

Institute Marks : 5.00

The institute ensures consistency of information available in its public domains. The policies/rules/processes followed in dissemination of information to various stakeholders are listed as follows:

1. Correct and unambiguous program specific information is published through the college website for the general public, like the courses offered, faculty available in each department, college facilities etc. We have weekly HoD Meetings chaired by the Principal where the doubts are cleared if any.

2. Information provisioning in accordance with Right to Information Act, 2005, provide details Mr. N.V. Krishnamoorthy, Administrative Officer is the Chief Information Officer and he takes care of any information sought by RTI Act 2005. The following faculty members are acting as members of RTI.

The list of RTI committee members is shown in the following table 10.9:

Table 10.26 Active Members of RTI

Sl.No.	Name of the Members	Designation
1	Mr. N.V. Krishnamoorthy	Assoc. Professor, Mech & AO
2	Ms. R. Geethamani	Assistant Professor, EEE
3	Dr. N. Balaji	Professor, Mech
4	Mr. K. Jothibasu	Lab Instructor, Mech.

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (15)

Total Marks 15.00

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY : (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 - CFY 2022-2023

Total Income 525523860				Actual expenditure(till…): 633936923			Total No. Of Students 5303
Fee	Govt.	Grants	Other sources(specify) Other & Interes	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify University/Boar	Expenditure per student
459000000	3055819	14744604	48723437	460529250	154932250	18475423	119543.07

Table 2 - CFYm1 2021-2022

Total Income 464129685				Actual expenditure(till…): 485231186			Total No. Of Students 4903
Fee	Govt.	Grants	Other sources(specify) Other & Interes	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify Scholarships to	Expenditure per student
430607199	21772430	10394276	1355780	354354791	123334213	7542182	98966.18

Table 3 - CFYm2 2020-2021

Total Income 454690918				Actual expenditure(till…): 498262169			Total No. Of Students 4873
Fee	Govt.	Grants	Other sources(specify) Other & Interes	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify Scholarships to	Expenditure per student
420869613	22669696	3944400	7207209	345737817	126910519	25613833	102249.57

Table 4 - CFYm3 2019-2020

Total Income 556830577				Actual expenditure(till…): 556830577			Total No. Of Students 4885
Fee	Govt.	Grants	Other sources(specify) Other & Interes	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify Special project	Expenditure per student
415733283	38531465	68842392	33723437	368548285	169485282	18797010	113987.84

Items	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till	Budgeted in 2020-2021	Actual Expenses in 2020-2021 till	Budgeted in 2019-2020	Actual Expenses in 2019-2020 till
Infrastructure Built-Up	2505000	2453375	3000000	2694699	4310000	4216128	8149516	8146515
Library	1200000	1161250	8750000	8866916	7600000	7502821	4700000	4679728
Laboratory equipment	1950000	1650750	1305000	1246823	1239000	1481314	5841200	5831195
Laboratory consumables	2555275	2437500	435575	431468	2665125	3684575	1948000	1947566
Teaching and non-teaching staff	2708000	2670000	2154000	2153058	2134922	2134851	2029886	2028856
Maintenance and spares	6582850	5405625	6891150	6881936	4279000	1667843	2588000	2587565
R&D	1800000	1780042	2887020	2887020	2276000	2266969	2101545	2091645
Training and Travel	3607000	3555750	6050000	6051631	2081000	2079711	5657500	5637427
Miscellaneous Expenses*	1250500	1232137	8465000	8451924	9974500	9823049	8560000	8557715
Others, specify	8059000	8121775	3300000	3295126	5858250	5823944	1909900	1879701
Total	**655443775**	**633936923**	**489117281**	**485231186**	**523934825**	**498262169**	**557713245**	**556830577**

10.2.1 Adequacy of budget allocation (5)   Institute Marks : 5.00

1.In the beginning of every academic year, HoDs meeting is convened to discuss in detail about the budget requirements for various departments for the academic year concerned.

2. Based on the discussions, HoDs are directed to submit a detailed proposal taking into account the increase in intake, revised curriculum and syllabus and the various events planned.

3. The proposals received from all the departments are consolidated and submitted to the Management for the sanction of the budget.

4. The management usually allocates the budget by considering the escalation of the prices. In the past as well as in the current year, sufficient budget has been allocated by the management to fulfil the requirements of various departments.

10.2.2 Utilization of allocated funds (5)   Institute Marks : 5.00

1. Each department HoD after receiving the approved budget convene a meeting and discuss the step by step procedure for procuring the equipment and consumables required for the department.

2. Faculty who are in charge of the laboratories and course coordinators are nominated to in the purchase of equipments.

3. The nominated faculty members identify the companies / agencies to receive the quotations and then prepare a comparative statement.

4. The comparative statement will be submitted to the Purchase Committee to get approval from the management and then place orders to procure the items.

5. The HoD periodically monitor the faculty members involved in the purchase and take necessary efforts to see that the purchase of items is complete in all respects and the allocated funds are fully utilized.

10.2.3 Availability of the audited statements on the institute's website (5)

Institute Marks : 5.00

The following audited statements are available in the college website.

1. Audited Statement for the year 2019-20

2. Audited Statement for the year 2020-21

3. Audited Statement for the year 2021-22

10.3 Program Specific Budget Allocation, Utilization (30)

Total Marks 30.00

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY: (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 :: CFY 2022-2023

Total Budget 10635000		Actual expenditure (till…): 10568763		Total No. Of Students 856
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
7600000	3035000	7424159	3144604	12346.69

Table 2 :: CFYm1 2021-2022

Total Budget 4915000		Actual expenditure (till…): 4626385		Total No. Of Students 825
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
1500000	3415000	1374719	3251666	5607.74

Table 3 :: CFYm2 2020-2021

Total Budget 620000		Actual expenditure (till…): 612845		Total No. Of Students 847
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
230000	390000	239646	373199	723.55

Table 4 :: CFYm3 2019-2020

Total Budget 6555000		Actual expenditure (till…): 7208716		Total No. Of Students 839
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
5070000	1485000	5742696	1466020	8592.03

Items	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till	Budgeted in 2020-2021	Actual Expenses in 2020-2021 till	Budgeted in 2019-2020	Actual Expenses in 2019-2020 till
Laboratory equipment	3000000	2906587	900000	818007	200000	214646	5000000	5087975
Software	100000	175000	100000	105000	100000	100000	100000	125000
Laboratory consumable	50000	352000	65000	100000	15000	12000	40000	38000
Maintenance and spares	2500000	2265693	2900000	2724266	150000	143849	1200000	1162260
R & D	4600000	4517572	600000	556712	30000	25000	70000	654721

Training and Travel	200000	198605	200000	200400	100000	95350	100000	98760
Miscellaneous Expenses*	185000	153306	150000	122000	25000	22000	45000	42000
Total	**10635000**	**10568763**	**4915000**	**4626385**	**620000**	**612845**	**6555000**	**7208716**

10.3.1 Adequacy of budget allocation (10)   Institute Marks : 10.00

A department faculty meeting is convened by the Head of the Department well in advance to discuss and prepare the budget for the forth-coming academic year. The budget requirement statements for Laboratories, Students Association activity, Students Technical Symposium, National Conference and other activities obtained through the concerned faculty in charges are submitted to the Principal through Head of the Department. Principal scrutinizes the same and forwards it to the Management for approval. The deviations if any in the expenditure will be permitted after reasonable justification. In any case the budget increases from the allocated amount due to an additional task, a re- approval is submitted to the Management through the Principal.

        The budget requirement for the academic years 2019-20, 2020-21,2021-22 & 2022-23 were prepared by considering the total number students admitted for the respective years, lab Equipments purchase, equipment maintenance, R&D, Placement training and other activities. Adequate budget is allotted every year towards procurement of various facilities, the details of which are given in Table 10.27

Table 10.27 Budget Allocation

Items	Budgeted in 2022-23	Budgeted in 2021-22	Budgeted in 2020-21	Budgeted in 2019-20
Laboratory equipment	30,00,000	900000	200000	5000000
Software	1,00,000	100000	100000	100000
Laboratory consumable	50,000	65000	15000	40000
Maintenance and spares	25,00,000	2900000	150000	1200000
R & D	46,00,000	600000	30000	70000
Training and Travel	2,00,000	200000	100000	100000
Miscellaneous expenses*	1,85,000	150000	25000	45000
Total	**1,06,35,000**	**4915000**	**620000**	**6555000**

10.3.2 Utilization of allocated funds (20)   Institute Marks : 20.00

Once the budget is approved the required funds are made available to various departments and the expenses related to all the department activities are carried out with the approval of HoD, Principal and finance Committee. Then the equipments are procured as per the rules of management through purchase committee and the steps followed are:

1.Initially a Purchase Request (PR) is raised,

2.After the acceptance of the PR a Purchase Order (PO) is issued from the Head Office,

3.Finally the equipments are purchased using the PO.

Table 10.28 Utilisation table

| Items	Actual expenses in CFY (till Mar 23)	Actual Expenses in 2021-22	Actual Expenses in 2020-21	Actual Expenses in 2019-20
Laboratory equipment	2906587	818007	214646	5087975
Software	175000	105000	100000	125000
Laboratory consumable	352000	100000	12000	38000
Maintenance and spares	2265693	2724266	143849	1162260
R & D	4517572	556712	25000	654721
Training and Travel	198605	200400	95350	98760
Miscellaneous expenses*	153306	122000	22000	42000
Total	**10568763**	**4626385**	**612845**	**7208716**
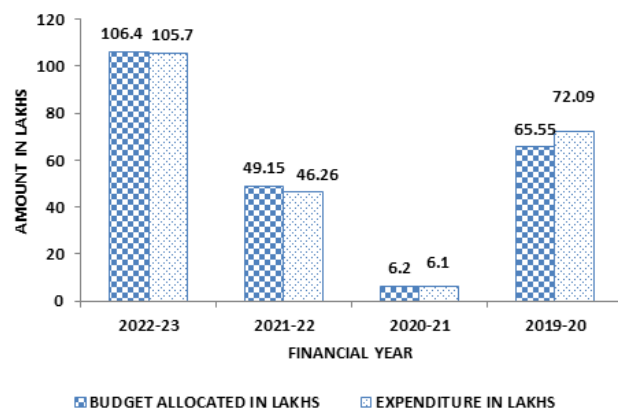
Budget Allocated is almost utilized every year. On an average of 100% of Allocated budget is utilized.

Financial Year	% Utilization of allocated Budget
2022-23	99.38
2021-22	94.13

2020-21	98.85
2019-20	109.97

% Utilization of allocated Budget
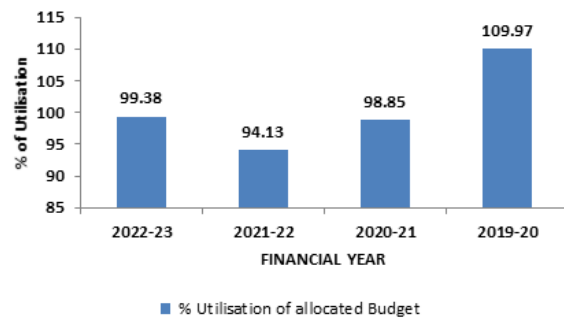
10.4 Library and Internet (20)

Total Marks 20.00

10.4.1 Quality of learning resources (hard/soft) (10)

Institute Marks : 10.00

10.4.1Quality of learning resources (hard/soft) (10)

1. Relevance of available learning resources including e-resources
2. Accessibility to students
3. Support to students for self-learning activities

Adequate budget is allotted for the library and it is fully utilized without any deficiency.

The Vankatram Learning Centre – Central Library of Sri Krishna College of Engineering and Technology is one among the best Libraries in this part of the Country, in terms of Scholarly and Rare Resources, User Centric Services, Technology, Architecture, Infrastructure, Facilities, Size and Green concepts. There is a qualified Librarian administering the Library.

The library is automated using KOHA. RFID Technology, Barcode Technology and Self Issue/Return Kiosks, GSDL Digital Library and Intranet Library Website are the Technology highlights of the Library.

The Wi-Fi Central Library that sprawls in 55,000 Sq.feet area, in a centrally air-conditioned environment caters to the information and knowledge needs of all its users through its scholarly resources of 80,363 books, thousands of Journals and Magazines available in print and digital modes, 12,742 CDS/DVDS/VCDs, 4,666 back volumes and NPTEL / TEQIP / NMEICT - Spoken Tutorials / British Council Video Lectures and Web Contents. In addition, the library houses 6012 rare resource collections that include Palm Leaves of Tamil Literature, Special Books and Back volumes assets.

Meticulous care has been taken to build up the resources continuously in all disciplines. Majority of the books are authored by international authors which serve as reference books on the respective subjects. The library stocks multiple copies of text books prescribed in the syllabus for students. While the Text Books are available for circulation among the students, Reference Books are circulated under Over Night Issues System. In addition, Library circulates Journals / Magazines and CDs/DVDs/VCDs among the Users.

In addition to Text and Reference Books, there are valuable resources such as Encyclopedias, Dictionaries, Thesaurus, Year Books, Hand Books, Standards and Manuscripts available for Users.

Books and resources are purchased based on the recommendations of faculty members and students through recommendation forms.

The Library, as a member in Indian Access Management Federation (INFED) of INFLIBNET– an autonomous Inter University Centre of UGC, disseminates the e – resources of **IEEE Digital Library, ASME Digital Collection, ASCE Digital Library, Science Direct Journals**, **Science Direct E-Books, Scopus Citation Database, Proquest ABI/INFORM Collection and DELNET** database among the Students, Faculty Members and Researchers, on and off the campus, irrespective of the places of the users, through the Shibboleth software.

 RARE AND SPECIAL COLLECTIONS

The Central Library has a rare and special collection of 6012 resources that include

Rare Palm Leaves, Special books collections such as Encyclopedias, Dictionaries,

Thesaurus, Year Books, Hand Books, Standards, Manuscripts and back volumes.

- **Rare Palm Leaves on Tamil Literature: 50**
- **No. of Special Collection Available at the Library: 4659**
- **No. of Special Collection Procured: 1303**

OVER ALL STATISTICS

Library Area   : 55,000 Sq. ft. (5109.667 Sq.mts.)

Seating Capacity   : 500

RESOURCE COLLECTION

  I. Books

 Titles   : 41006

    Volumes   : 80363

  II.a) Periodicals

Journals	: 331
Magazines	: 67
Total	: **398**

b) Back Volumes   : **4666**

c) Project Reports   : **2912**

III.   Digital Library

   a)Science Direct Journals   :   294

   b)Science Direct E – Books   : 13337

   c)Proquest ABI/Information   : 9538

   d)IEEE Digital Library   : 277

   e)ASME Digital Collection   : 26

   f)ASCE Digital Library   : 38

   g)E – News Papers   : 41

                    Total   : **23551**

   e) Scopus Citation Database   : 86.5 Million of Records

   h)DELNET Database   : Millions of Records

   i)National Digital Library   : Millions of Records

                IV. Multimedia Library / E-Learninga)NPTEL

    (National Program on Technology Enhanced Learning)

      Video Lectures   : 398

      Web Courses   : 372

        Total   : **770**

      b) TEQIP – VideoLectures   : **19**

    (Technical Education Quality Improvement Program*)*

      C) Spoken Tutorial (NMEICT)   : **29**

       (National Mission on Education through ICT (http://mhrd.gov.in/nme_icthindi)**)**

      d)   Other E-Learning Course materials   : **684**

LIBRARY AUTOMATION

Library is automated using Integrated Library Management System (ILMS)

ILMS Software	**KOHA**
Nature of Automation	**Fully Automated**
Version	**22.11.01**
Year of Starting	**2022**

REMOTE ACCESS

The e- resources that are subscribed by the Library can be accessed anywhere at Students/Faculty members any time by the access.

1. Procedure

URL: **idp.skcet.ac.in**

User Name: **SKCET domain email/login**

Pass Word: **skcet@1**

2. E – Resources

· Science Direct – E-Journals- https://www.sciencedirect.com/browse/journals-and-books?contentType=JL (https://www.sciencedirect.com/browse/journals-and-books?contentType=JL)

· Science Direct – E-Books- https://www.sciencedirect.com/browse/journals-and-books?contentType=BK (https://www.sciencedirect.com/browse/journals-and-books?contentType=BK)

·IEEE XPlore Digital Library - https://www.ieee.org/ (https://www.ieee.org/)

·ASME Digital Collection - https://www.asme.org/ (https://www.asme.org/)

·ASCE Digital Library - https://www.asce.org/ (https://www.asce.org/)

· Scopus – Bibliographic Database- https://www.scopus.com/search/form.uri?display=basic (https://www.scopus.com/search/form.uri?display=basic)

·Proquest ABI/Inform Collection – www.proquest.com (http://www.proquest.com/)

· DELNET – https://delnet.in/ (https://delnet.in/)

·National Digital Library - https://ndl.iitkgp.ac.in/ (https://ndl.iitkgp.ac.in/)

· NPTEL - https://nptel.ac.in/ (https://nptel.ac.in/)

·Shodganga - https://shodhganga.inflibnet.ac.in/ (https://shodhganga.inflibnet.ac.in/)

·EPG - https://epgp.inflibnet.ac.in/ (https://epgp.inflibnet.ac.in/)

·INFLIBNET - https://nlist.inflibnet.ac.in/ (https://nlist.inflibnet.ac.in/)

3.WEB OPAC

- Web OPAC access at http://117.239.104.60:8081 (http://117.239.104.60:8081/)

Adequate Budget is allotted for the library and it is fully utilized without any deficiency.

Library Services	: Yes
Carpet area of library (in m2)	: 5109
Reading space (in m2)	: 2000
Number of seats in reading space	: 500
Number of users (reading space) per day	: 725
Timings	: During working day, Weekend / and vacation
Working Days	: 8.00 a.m. To 9.00 p.m.

Sundays and Holidays	: 9.30 a.m. to 5.00 p.m.
Vacation	: 8.00 a.m. to 7.00 p.m.
Number of library staff	: 7
Number of library staff with degree in Library	: 5

Table 10.29 Library Resources-Book Titles and Volume Numbers

Year	Number of new Titles Added			Number of new Editions added			Number of new Volume added		
	Print Book	E Book	Total	Print Book	E Book	Total	Print Book	E Book	Total
2019 – 2020	323	3448	3771	167	3448	3615	1076	3448	4524
2020 – 2021	77	3448	3525	41	3448	3489	231	3448	3679
2021 – 2022	92	3448	3540	49	3448	3497	274	3448	3722
2022-2023	184	13,837	14,021	106	13,837	13,943	552	13,837	14,389
2023-2024	324	13837	14161	286	13837	14123	1547	13837	15384

Table 2. Library Resources-Journal Subscription

Year	No of Technical Magazines/periodicals	No. of Total Technical JournalsSubscribed		Scholarly Journal Titles (in originals, Reprints)
		In Hardcopy	In Softcopy	
2019-2020	96	297	7105	2743
2020-2021	102	293	7206	2654
2021-2022	55	101	7223	2662
2022-2023	67	331	9832	2714
2023-2024	50	285	10214	2945

Table 3. Library Resources-Expenditure Details

Year	Book	Expenditure (in Rs.)	Misc.

		Magazines/Journals (for hardcopy subscription)	Magazines/Journals (for softcopy subscription)	Contents
2019-2020	8,56,738.30	5,79,799.00	1346066.00	1,52,255
2020-2021	4,16,793.50	6,14,292.00	3357386.00	-
2021-2022	3,96,719.40	3,14,680.00	2036848.00	1,34,648
2022-2023	11,40,940.80	6,31,138.00	25,27,699.00	15,94,877
2023-2024	4,00,000.00	6,71,576.00	45,15,379.00	2,13,000

RFID – KOHA – BIOMETRICS – REMOTE WEBOPAC TECHNOLOGIES

A Technological Leap at Vankatram Learning Centre in 2022-23:

Implementation of RFID Technology and KOHA International Standard Software with Biometrics Technology

RFID Technology was implemented with KOHA – total library solutions software on International standards with Biometrics Technology during January 2023. The technology includes Remote Access of library. Web OPAC which can be accessed anywhere and at Anytime On and Off the Campus in Desktops, Laptops, and Mobile phones of faculty members and students.

The Technology includes

1. RFID based Surveillance Technology

2. Self Circulation Kiosk Technology

3. Remote access of Web OPAC Technology

4. RFID Conversion Technology

5. KOHA Software Technology

6. RFID Tags

7. Biometrics Technology

It is a "Technological Leap" at Vankatram Learning Centre during the academic year of 2022-23.

DIGITAL INFRASTRUCTURE

The Library has a separate Digital Library section provided with 76 systems with multimedia enabled facility. The Digital Library is well connected with all the thousands of computers throughout the campus.

E-RESOURCES

I. **E-Resources Subscribed**

1. Science Direct –   E-Journals

2. Science Direct –   E-Books

3. Scopus   –   Bibliographic Database

4. Proquest Online Journal Database

5. IEEE Digital Library

6. ASME Digital Collection

    7. ASCE Digital Library

    8. DELNET

II. E- Resources @ Institutional Repository

- E-News Clippings Repository of SKI News in Media
- Question Bank Repository
- Citation of Articles Repository
- Course Materials Repository
- Video Lecture Repository

III. E- Initiatives

- Library Blog
- E-Library Brochure

RESEARCH SERVICES AND SPACES

RESEARCH SERVICES

- Research Articles from High Impact Factor Journals are sent Department wise   every day.
- Citation Analysis
- H-index Analysis
- Organizing Technical Writing Workshops
- Organizing 'Connect with Lead Publishers' Programs
- Updating Authorities on Statistics of Institutional Publications Periodically
- Organizing Hands On Practice on Research   Resources Platforms to Faculty and   Students

SPACES

- Discussion Rooms In Each Section
- Reading Spaces Adjacent To Various Resource Stacks
- Research Scholars Study Space
- E-Resource Access Space at Digital Library
- Project Rooms
- Idea Hubs

BEST LIBRARY PRACTICES

I. <u>Technology Enabled Best Practices</u>

- Intranet Library Website
- Greenstone Digital Library
- Multimedia Digital Library
- Fully automated Library Services

a) Biometric Based Self Issue/ Return Kiosk

b) Biometric Based Circulation

c) Web OPAC

d) Browsing Shelf-Visualizing the Racks

e) Auto E-mail Alerts on

1) New Arrivals

2) Due Reminders

II. <u>Services Oriented Best Practices</u>

•   Knowledge Sharing Communication

1) Selective Research Articles of the Day - sent to all Faculty Every Day Morning.

2) Selective E-Business News of the Day - sent to all MBA Faculty, Members and Students Every Day morning.

- User Education Programs to Students/Faculty Members.
- Best Library User Awards to Faculty Members and Students.
- Hands-On-Practice on E-Resource Platforms to Students and Faculty Members
- Current Awareness Service / SDI Service
- Lending / Reference / Referral Services
- MIS Service / Information Desk
- Question Bank Service etc

UNIQUE FEATURES

= Centralized Air Conditioning

= Innovative Roof Architecture

= Built in area of 55,000 sq. ft.

= Discussion Rooms

= Wi-Fi Connectivity

= Higher Education Centre

= Seating capacity to facilitate 500 students at a time

= Research Scholar Room

SERVICES

= Open Access / Over Night Issues

= Reprographic Service

= Current Awareness Service / SDI Service

= Over due Alert Service

= Lending / Reference / Referral Services

= OPAC / Web OPAC

= MIS Service / Information Desk

= Question Bank Service etc.,

= New Arrival of Books – Intimation through Library Web Site

USER EDUCATION PROGRAM

•   The Library conducts User Education program / Information   Literacy program to the first year students.

- Through this program the library help the students to understand the library services, facility and ensure the maximum possible usage. They are also trained in using the IT enabled services and online resources.

As a **MOTIVATIOANALFACTOR** the library has been recognizing the students with **BEST LIBRARY USER AWARDS TO STUDENTS AND FACULTY EVERY YEAR.**

ELIGIBILITY FOR BORROWING LIBRARY RESOURCES

Users		Books	Periodicals	CDs/Floppies
Students	UG	8 (15 days)	1 (one day)	1 (one day)
	PG	8 (15 days)	1 (one day)	1 (one day
Faculty		10 (3 months)	2 (one day)	2 (one day)

10.4.2 Internet (10)   Institute Marks : 10.00

Internet Services	: Yes
Name of the Internet provider	: BSNL (Wired) & JIO (Wireless)
Available bandwidth	: Wired – 1Gbps & Wireless – 1Gbps
Wi Fi availability	: Yes
Availability of Internet in exclusive laboratories	: Available in all
Availability in most computing laboratories	: Yes
Availability in departments and other units	: Yes
Availability in faculty rooms	: Yes
Institute's own e-mail facility to Faculty/students	: Yes for Faculty members & Students
Security/privacy to e-mail/Internet users	: Sonic wall Firewall – NSA 4600

Annexure I
(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

(B) PROGRAM SPECIFIC OUTCOME (PSOs)
Program should specify 2-4 program specific outcomes.

PSO1	Apply the fundamental knowledge for problem solving and analysis as well as conduct investigations in computer science and engineering for sustainable development
PSO2	Design and develop the solutions for real time problems and implement them by using modern software tools in lieu of deploying them in the society for its growth.
PSO3	Communicate effectively, adopt ethics and engage in life-long learning.

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute
Name : Dr.J.Janet
Designation : Principal
Signature :

Seal of The Institution :

Place : Coimbatore
Date : 08-06-2023 13:29:30