



J.N.N INSTITUTE OF ENGINEERING

AUTONOMOUS

NAAC 'A' Grade | Approved by AICTE | Affiliated to Anna University

90, Ushaa Garden, Kannigaipair, Chennai - Periyapalayam Hwy, Chennai-601102

SELF ASSESSMENT REPORT (SAR)

(Tier II Institution)

Department of Computer Science and Engineering



Submitted to

National Board of Accreditation

**NBCC Place, East Tower,
4th floor Bhisham Pitamah Marg Pragati Vihar,
New Delhi – 110003**

CAY 2022-2023

NBA-SELF ASSESSMENT REPORT

**J.N.N Institute of Engineering
(Autonomous)**

B.E. - Computer Science and Engineering

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PART A: INSTITUTIONAL INFORMATION

1. Name and Address of the Institution:

J.N.N Institute of Engineering (Autonomous),
90, Ushaa Garden, Kannigaipair, Chennai - Periyapalayam Hwy,
Tiruvallur Dist.- TN -601102

2. Name and Address of Affiliating University:

ANNA UNIVERSITY, CHENNAI – 600 025

3. Year of establishment of the Institution:

2008

4. Type of the Institution:

University	☐
Autonomous	☐
Deemed University	☐
Affiliated	☒
Government Aided	☐

5. Ownership Status:

Central Government	☐
State Government	☐
Government Aided	☐
Section 25 Company	☐
Self-financing	☒
Trust Society	☐
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
J.N.N Arts & Science Women's College	2017	B.Com, BBA, B.Sc, B.A.	90, Ushaa Garden, Kannigaipair, Thiruvallur – 601 102

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	2008	2008	60	Yes	90	Applying the first time	--	-	CSE	Yes 4
Sanctioned Intake for Last Five Years for the B.E. Computer Science and Engineering											
Academic Year						Sanctioned Intake					
2022-23						90					
2021-22						90					
2020-21						90					
2019-20						120					
2018-19						90					

8. Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Computer Science and Engineering.

9. Total number of employees in the institution:

A. Regular Employees (Faculty and Staff):

	CAY, 2022-23		CAYm1, 2021-22		CAYm2, 2020-21	
Items	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	29	29	37	37	44	44
Faculty in Engineering (Female)	30	30	26	26	19	19
Faculty in Maths, Science & Humanities (Male)	11	11	10	10	10	10
Faculty in Maths, Science & Humanities (Female)	8	8	8	8	8	8
Non-teaching staff (Male)	7	7	7	7	6	6
Non-teaching staff (Female)	9	9	9	9	10	10

B. Contractual Employees (Faculty and Staff):

	2022-23		2021-22		2020-21	
Items	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	2	2	2	2	0	0
Faculty in Engineering (Female)	1	1	1	1	1	1
Faculty in Maths, Science & Humanities (Male)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities (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	Shift 2
Engineering and Technology- PG	Shift1	Shift 2
Engineering and Technology- Polytechnic	Shift1	Shift 2
MBA	Shift1	Shift 2
MCA	Shift1	Shift 2

Engineering and Technology- UG Shift-1

Items	2022-23	2021-22	2020-21
Total no. of Boys	477	437	413
Total no. of Girls	337	331	319
Total	784	768	732

Engineering and Technology- MBA Shift-1

Items	2022-23	2021-22	2020-21
Total no. of Boys	46	35	25
Total no. of Girls	65	60	45
Total	111	95	70

11 Vision of the Institution:

Lead the transformation of engineering and management learning experience to educate the next generation of innovators and entrepreneurs who want to make the world a better place.

12 Mission of the Institution:

- ✓ To develop the required resources and infrastructure and to establish a conducive ambiance for the process.
- ✓ To nurture professional and ethical values in the students and to instil in them a spirit of entrepreneurship.
- ✓ To encourage a desire for higher learning and research in the students and to equip them to face global challenges.
- ✓ To provide opportunities for students to learn job-relevant skills to make them industry ready.
- ✓ To interact with industries and other organizations to facilitate transfer of knowledge and know-how.

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

Head of the Institution

Name: Dr K GANESAN
Designation: PRINCIPAL
Mobile No. 9087774111
Email ID: principal@jnn.edu.in

NBA Coordinator, If Designated

Name: Dr. Jebaraj Ratanakumar A
Designation: Professor and Head
Mobile No. 8072003100
Email ID cse.hod@jnn.edu.in

PART B: CRITERIA

Name of the Programme: **B.E. COMPUTER SCIENCE AND ENGINEERING**

Criterion No.	Criteria	Marks/ Weightage
	Program Level Criteria	
1.	Vision, Mission and Program Educational Objectives	60
2.	Program Curriculum and Teaching –Learning Processes	120
3.	Course Outcomes and Program Outcomes	120
4.	Students' Performance	150
5.	Faculty Information and Contributions	200
6.	Facilities and Technical Support	80
7.	Continuous Improvement	50
	Institution Level Criteria	
8.	First Year Academics	50
9.	Student Support Systems	50
10.	Governance, Institutional Support and Financial Resources	120
	Total	1000

PART B: PROGRAM LEVEL

CRITERION 1	Vision, Mission and Program Educational Objectives	60
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1.1 State the Vision and Mission of the Department and Institute (5)

Vision of Institute

Lead the transformation of engineering and management learning experience to educate the next generation of innovators and entrepreneurs who want to make the world a better place.

Mission of Institute

- To develop the required resources and infrastructure and to establish a conducive ambience for the teaching-learning process.
- To nurture professional and ethical values in the students and to instill in them a spirit of innovation and entrepreneurship.
- To encourage a desire for higher learning and research in the students and to equip them to face global challenges.
- To provide opportunities for students to learn job-relevant skills to make them industry ready.
- To interact with industries and other organization to facilitate transfer of knowledge and know-how.

Vision of Department

To produce globally competent, quality computer professionals and to inculcate the spirit of moral values for the cause of development of our nation.

Mission of Department

- Establish closer relationship with IT industries and expose the students to the cutting edge technological advancements.
- Provide impetus and importance to beyond curriculum learning and thereby provide an opportunity for the student community to keep them updated with latest and socially relevant technology.
- To impart interpersonal Skills and ethical responsibilities to the students.

Appropriateness/Relevance of the Department Vision statements

Department Vision Statements	Appropriateness / Relevance of the statements
To produce globally competent, quality computer professionals and to inculcate the spirit of moral values for the cause of development of our nation.	The following activities were implemented • Placement Training • Internship • Tie up with Industries • Hackathon • Co-curricular activity • Extra-curricular activity • Centre of Excellence • Guest Lecture/Value Added Course • Seminar/Workshop • Industrial Sponsored Project work • Department based Club Activities • NSS/YRC Activity

Appropriateness/Relevance of the Department Mission statements

Department Mission Statements	Appropriateness / Relevance of the statements
Mission 1 Establish closer relationship with IT industries and expose the students to the cutting edge technological advancements.	We have implemented the following activities in our department to offer closer relationship with IT industries. - Industrial Collaborated Laboratory - Guest Lecture/Value Added Course by Industry Experts - Technical Seminar/Workshops by Industry Experts - Innovative real time Projects - Industrial Sponsored Project work We have implemented the following activities in our department to expose the students to the cutting edge technological advancements. - Industrial Collaborated Laboratory - Guest Lectures - Value Added Courses - Online Certification Courses - Technical Seminars - Innovative real time Projects - Industrial Training

Department Mission Statements	Appropriateness / Relevance of the statements
Mission 2 • Provide impetus and importance to beyond curriculum learning and thereby provide an opportunity for the student community to keep them updated with latest and socially relevant technology.	We implemented the following activities in our department to offer impetus and importance to beyond curriculum learning • Industrial Collaborated Laboratory • Guest Lecture • Value Added Courses • Online Certification Courses • Technical Seminar • Innovative real time Projects • Industrial Training • Internship

Department Mission Statements	Appropriateness / Relevance of the statements
	We implemented the following activities in our department to update with latest and socially relevant technology. • Industrial Collaborated Laboratory • Guest Lecture • E Learning • Technical Seminar • Innovative real time Projects • Industrial Training • Research Centre • Centre of Excellence
Mission 3 • To impart interpersonal skills and ethical responsibilities to the students	We implemented the following activities in our department to offer interpersonal skills and ethical responsibilities • Personality training • Green Initiative and Waste Management • Yoga Class • Cultural Club • NSS

Consistency of the Department statements with the Institute statements

Table 1.1: Justification of mapping of Institute Vision with Department Vision

Institute Vision	Department Vision	Consistency	Justification
Lead the transformation of engineering and management learning experience to educate the next generation of innovators and entrepreneurs who want	To produce globally competent, quality computer professionals and to inculcate the spirit of moral values for the cause of development of our nation.	HIGH	Ensuring that the graduate has access to the necessary learning environment for effective moral leadership of the country.

to make the world a better place.			
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Table 1.2: Justification mapping of Institute Mission with Department Mission

Department Mission Institute Mission	Establish closer relationship with IT industries and expose the students to the cutting edge technological advancements.	Provide impetus and importance to beyond curriculum learning and thereby provide an opportunity for the student community to keep them updated with latest and socially relevant technology.	To impart interpersonal skills and ethical responsibilities to the students.
To develop the required resources and infrastructure and to establish a conducive ambience for the teaching-learning process.	MODERATE Provide the necessary technical guidance to adopt cutting-edge technology	HIGH Provide required resources to update with latest technology.	MODERATE Provide good conducive ambience to development their personality skill.
To nurture professional and ethical values in the students and to instils in them a spirit of innovation and entrepreneurship.	LOW Provide required training to develop innovative and entrepreneurial skills of students	MODERATE Enhance their innovation skill by providing necessary guidance in latest social technology	HIGH Encouraging to find real life solutions to technical problems with ethical responsibility.
To encourage a desire for higher learning and research in the students and to equip them to face global challenges.	MODERATE Encouraging to interact with software industry to equip them globally challengeable	HIGH Encouraging a scientific mind thoughts and prepare them by training them in latest relevant technology	LOW Provide facilities inculcating professionalism and ethical responsibilities
To provide opportunities for students to learn job-	HIGH Provide placement training in advance	MODERATE Enhance the job relevant skills by keep	MODERATE Provide opportunities inculcating

relevant skills to make them industry ready.	technology through industry.	them updated with latest technology through curriculum beyond learning.	professionalism and ethical responsibilities
To interact with industries and other organizations to facilitate transfer of knowledge and know-how.	HIGH Enhance employability by signing MoUs with industries.	MODERATE Enhance the latest programming tool skills through internships.	MODERATE Provide interpersonal development training to transfer the knowledge effectively.

1.2 State the Program Educational Objectives (5)

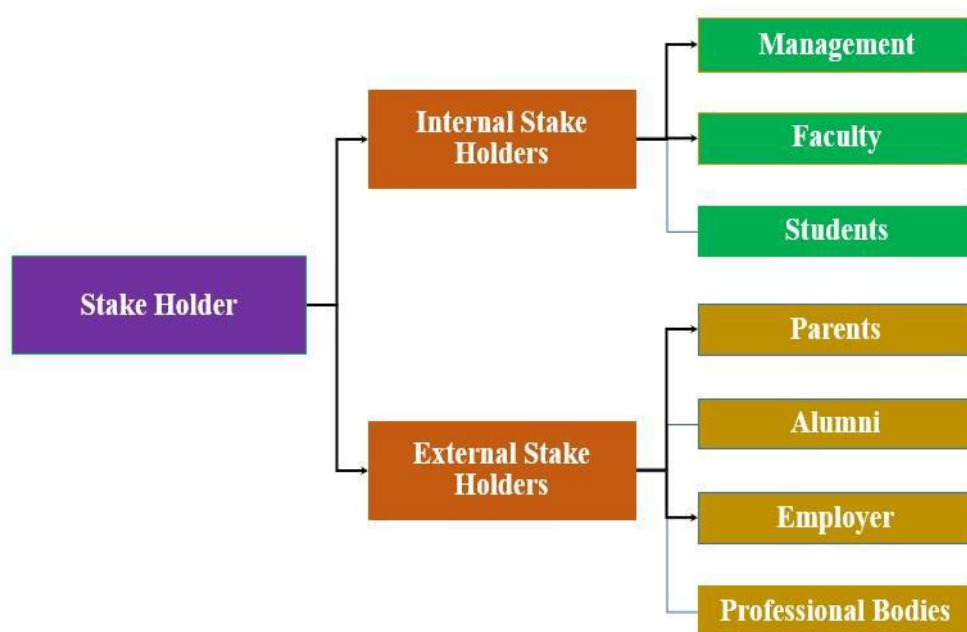
PEOs	Program Educational Objectives Statement
PEO1	Our graduates shall pursue higher education and research, or shall have a successful career in computer and software industries, or shall emerge as entrepreneurs.
PEO2	Our graduates shall have the ability and attitude to adapt to emerging technologies changes.
PEO3	Our graduates shall adapt to the changing career opportunities, assimilate new technologies and work in multi-disciplinary areas with strong focus on innovation and entrepreneurship.

Appropriateness/Relevance of the PEOs statements

PEOs	Appropriateness/Relevance of the statement
Knowledge Based PEO 1: Our graduates shall pursue higher education and research, or shall have a successful career in computer and software industries, or shall emerge as entrepreneurs.	The following activities are implemented • Industry Collaborated Laboratory • Tutorial sessions • Certification Course • Project Laboratories • Career oriented value added programs • Class room presentations • Mini projects
Skill Based PEO 2: Our graduates shall have the ability and attitude to adapt to emerging technologies changes.	The following activities are implemented • Contests on programming • Innovative projects

	• Real world projects • Industrial trainings • Internship
Attitude/ Behavior Based PEO 3: Our graduates shall adapt to the changing career opportunities, assimilate new technologies and work in multi-disciplinary areas with strong focus on innovation and entrepreneurship.	The following activities are implemented • Career based training programs like preparations for placements, Mock interviews, Aptitude sessions, Group discussions etc. • International conferences, Workshops, Industrial trainings, Industry visits, Expert talks etc. • Online certifications • Social activities by technical club
1.3 Indicate where and how the Vision, Mission and PEOs are published and disseminated among stakeholders. (10)	

Department Vision, Mission, PEOs, PSOs and POs are published and widely disseminated via the below mentioned prominent places/mode as mentioned in Table 1.1 and Table 1.2 for internal and external stakeholders respectively. Dissemination is done in a way that all the stakeholders (**Internal & External**) are aware of the program Vision, Mission, PEOs, POs and PSOs. Internal and external stakeholders of the department include Management, Students, Alumni, Parents, Faculty, Employer and Professional Bodies.



Dissemination at gathering: Vision, Mission and PEOs are disseminated to all the stakeholders through faculty meetings, student awareness programs, student induction programs, placement and training activities and parent teacher meetings.

Table 1.1 Details of Dissemination of Vision, Mission and PEOs for Internal Stakeholders

Category	Location	Institute		Department				
		Vision	Mission	Vision	Mission	PEOs	POs	PSOs
	Management							
	Institute Website https://www.jnn.edu.in/	✓	✓					
	Department Website			✓	✓	✓	✓	✓

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Internal Stakeholder	https://www.jnn.edu.in/academics/bachelors/b-e-computer-science-engineering/						
	HOD Room	✓	✓	✓	✓	✓	✓
	Faculty Room	✓	✓	✓	✓	✓	✓
	Department Notice Board	✓	✓	✓	✓	✓	✓
	Main Corridor	✓	✓				
	Central Library	✓	✓				
	Department Library	✓	✓	✓	✓	✓	✓
	Laboratories	✓	✓	✓	✓	✓	✓
	Class Rooms	✓	✓	✓	✓	✓	✓
	Administrator Office	✓	✓				
	Principal Office	✓	✓				
	Reception	✓	✓				
	Board Room	✓	✓				
	Seminar Hall	✓	✓				
	Incubation Centre	✓	✓				
	Placement Office	✓	✓				
	Canteen	✓	✓				
	Boys Hostel (Konidela Block)	✓	✓				
	Girls Hostel (Mother Theresa Block)	✓	✓				
	Faculty						
	Institute Website https://www.jnn.edu.in/	✓	✓				
	Department Website https://www.jnn.edu.in/academics/bachelors/b-e-computer-science-engineering/			✓	✓	✓	✓
	HOD Room	✓	✓	✓	✓	✓	✓

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	Faculty Room	✓	✓	✓	✓	✓	✓	✓
	Department Notice Board	✓	✓	✓	✓	✓	✓	✓
	Main Corridor	✓	✓					
	Department Corridor	✓	✓					
	Central Library	✓	✓					
	Department Library	✓	✓	✓	✓	✓	✓	✓
	Laboratories	✓	✓	✓	✓	✓	✓	✓
	Course Files	✓	✓	✓	✓	✓	✓	✓
	Lab Manuals & Project Reports	✓	✓	✓	✓	✓	✓	✓
	Class Rooms	✓	✓	✓	✓	✓	✓	✓
	Administrator Office	✓	✓					
	Principal Office	✓	✓					
	Reception	✓	✓					
	Board Room	✓	✓					
	Seminar Hall	✓	✓					
	Incubation Centre	✓	✓					
	Placement Office	✓	✓					
	Canteen	✓	✓					
	Boys Hostel (Konidela Block)	✓	✓					
	Girls Hostel (Mother Theresa Block)	✓	✓					
	Newsletter	✓	✓	✓	✓			
	Magazines	✓	✓	✓	✓			
	Students							
	Institute Website https://www.jnn.edu.in/	✓	✓					
	Department Website https://www.jnn.edu.in/academics/bachel			✓	✓	✓	✓	✓

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ors/b-e-computer-science-engineering/							
HOD Room	✓	✓	✓	✓	✓	✓	✓
Faculty Room	✓	✓	✓	✓	✓	✓	✓
Notice Board	✓	✓	✓	✓	✓	✓	✓
Main Corridor	✓	✓					
Department Corridor	✓	✓					
Department Library	✓	✓	✓	✓	✓	✓	✓
Laboratories	✓	✓	✓	✓	✓	✓	✓
Central Library	✓	✓					
Lab Manuals	✓	✓	✓	✓	✓	✓	✓
Project Reports	✓	✓	✓	✓	✓	✓	✓
Class Rooms	✓	✓	✓	✓	✓	✓	✓
Administrator Office	✓	✓					
Principal Office	✓	✓					
Reception	✓	✓					
Board Room	✓	✓					
Seminar Hall	✓	✓					
Incubation Centre	✓	✓					
Placement Office	✓	✓					
Canteen	✓	✓					
Newsletter	✓	✓	✓	✓			
Magazines	✓	✓	✓	✓			
Boys Hostel (Konidela Block)	✓	✓					
Girls Hostel (Mother Theresa Block)	✓	✓					

Table 1.2 Details of Dissemination of Vision, Mission and PEOs for External Stakeholders

Category	Location	Institute		Department				
		Vision	Mission	Vision	Mission	PEOs	POs	PSOs
External Stakeholders	Parents							
	Institute Website https://www.jnn.edu.in/	✓	✓					
	Department Website https://www.jnn.edu.in/academics/bachelors/b-e-computer-science-engineering/			✓	✓	✓	✓	✓
	HOD Room	✓	✓	✓	✓	✓	✓	✓
	Faculty Room	✓	✓	✓	✓	✓	✓	✓
	Notice Board	✓	✓	✓	✓	✓	✓	✓
	Main Corridor	✓	✓					
	Department Corridor	✓	✓					
	Administrator Office	✓	✓					
	Principal Office	✓	✓					
	Reception	✓	✓					
	Board Room	✓	✓					
	Seminar Hall	✓	✓					
	Placement Office	✓	✓					
	Canteen	✓	✓					
	Girls Hostel (Mother Theresa Block)	✓	✓					
	Alumni							
	Institute Website https://www.jnn.edu.in/	✓	✓					
	Department Website https://www.jnn.edu.in/academics/bachelors/b-e-computer-science-engineering/			✓	✓	✓	✓	✓
	HOD Room	✓	✓	✓	✓	✓	✓	✓
	Faculty Room	✓	✓	✓	✓	✓	✓	✓
	Main Corridor	✓	✓					
	Notice Board	✓	✓	✓	✓	✓	✓	✓
	Department Corridor	✓	✓					
	Central Library	✓	✓					
	Administrator Office	✓	✓					
	Principal Office	✓	✓					
	Reception	✓	✓					
	Board Room	✓	✓					
	Seminar Hall	✓	✓					
	Incubation Centre	✓	✓					
	Placement Office	✓	✓					

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Canteen	✓	✓					
Newsletter	✓	✓	✓	✓			
Magazines	✓	✓	✓	✓			
Employer							
Institute Website https://www.jnn.edu.in/	✓	✓					✓
Department Website https://www.jnn.edu.in/academics/bachelors/b-e-computer-science-engineering/			✓	✓	✓	✓	✓
Notice Board	✓	✓	✓	✓	✓	✓	✓
Main Corridor	✓	✓					
Department Corridor	✓	✓					
Canteen	✓	✓					
Board Room	✓	✓					
Seminar Hall	✓	✓					
Incubation Centre	✓	✓					
Placement Office	✓	✓					
Administrator Office	✓	✓					
Principal Office	✓	✓					
Reception	✓	✓					
Professional Bodies							
Institute Website https://www.jnn.edu.in/	✓	✓	✓	✓	✓	✓	✓
Department Website https://www.jnn.edu.in/academics/bachelors/b-e-computer-science-engineering/			✓	✓	✓	✓	✓
HOD Room	✓	✓	✓	✓	✓	✓	✓
Faculty Room	✓	✓	✓	✓	✓	✓	✓
Notice Board	✓	✓	✓	✓	✓	✓	✓
Main Corridor	✓	✓					
Department Corridor	✓	✓					
Canteen	✓	✓					
Administrator Office	✓	✓					
Principal Office	✓	✓					
Reception	✓	✓					
Board Room	✓	✓					
Seminar Hall	✓	✓					
Incubation Centre	✓	✓					
Placement Office	✓	✓					

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (25)

Description of process involved in defining the Vision, Mission of the Department

Vision Statement of the institute

Lead the transformation of engineering and management learning experience to educate the next generation of innovators and entrepreneurs who want to make the world a better place.

Mission Statement of the institute

- To develop the required resources and infrastructure and to establish a conducive ambience for the teaching-learning process.
- To nurture professional and ethical values in the students and to instil in them a spirit of innovation and entrepreneurship.
- To encourage a desire for higher learning and research in the students and to equip them to face global challenges.
- To provide opportunities for students to learn job-relevant skills to make them industry ready.
- To interact with industries and other organization to facilitate transfer of knowledge and know-how.

Vision of the Department

To produce globally competent, quality computer professionals and to inculcate the spirit of moral values for the cause of development of our nation.

Mission of the Department.

- Establish closer relationship with IT industries and expose the students to the cutting edge technological advancements.

- Provide impetus and importance to beyond curriculum learning and thereby provide an opportunity for the student community to keep them updated with latest and socially relevant technology.
- To impart interpersonal Skills and ethical responsibilities to the students.

The following steps are followed in establishing the department Vision and Mission and the same is shown in the Fig.1.1.

Step 1	The department's Vision and Mission are developed in accordance with the Institute's Vision and Mission.
Step 2	The management and faculty members suggestions are used to create the draft of Vision and Mission statements.
Step 3	All stakeholders' suggestions, including employer, professional bodies, alumni, teaching staff, parents, students and management, are collected
Step 4	The acceptable points of view are studied and assessed to ensure that they are consistent with the institute's vision and mission. The Department Advisory Committee (DAC) finalizes the department's Vision and Mission.
Step 5	The Head of the Institute (HEI) will approve the department's Vision and Mission, will be disseminated among the stakeholders.

Note: Feedback and suggestions from all stakeholders are used to revise the department's Vision and Mission if needed.

Flowchart for Formulating/Revising Department Vision and Mission

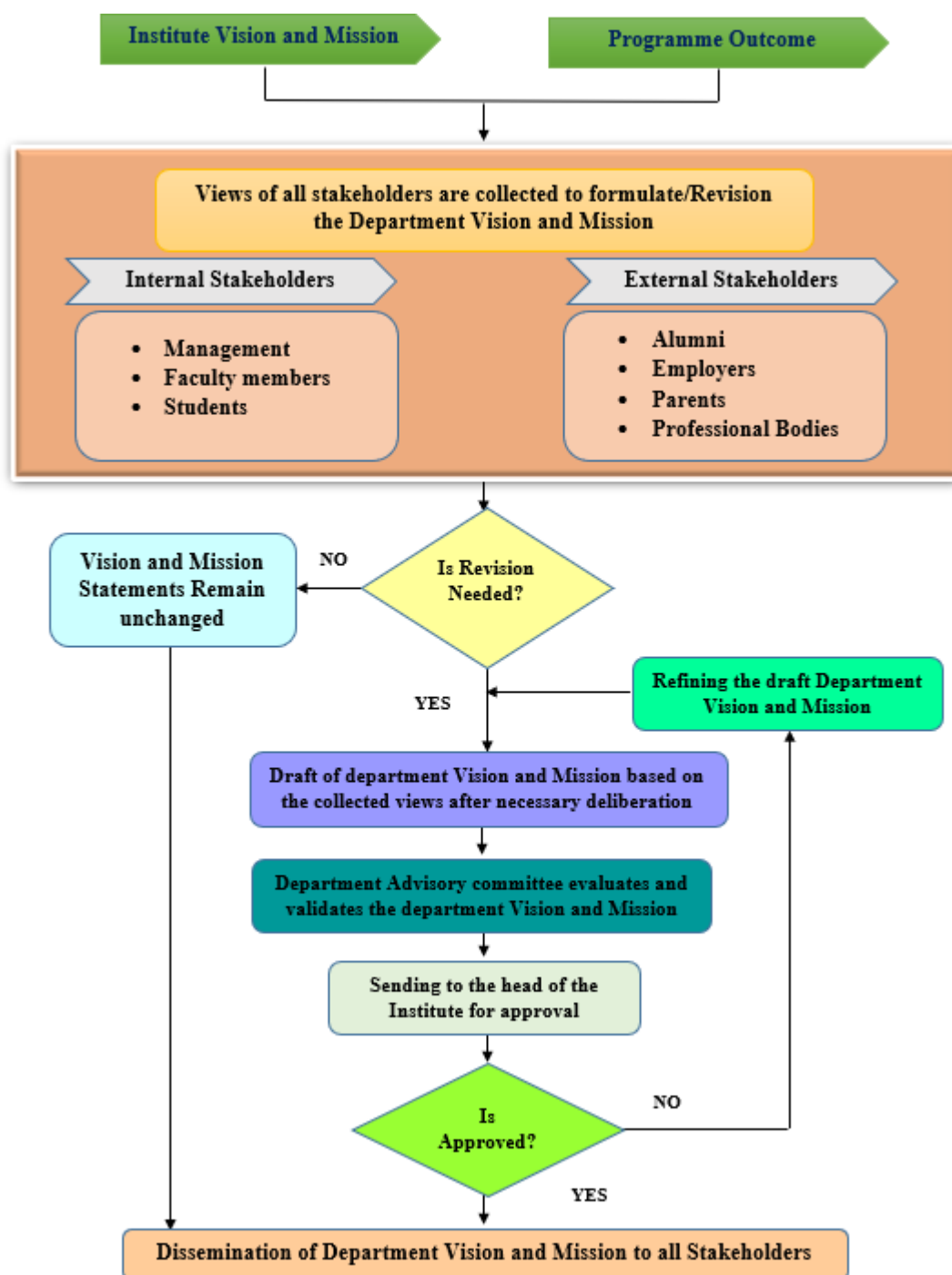


Fig 1.1 Flowchart for Formulating/Revising Department Vision and Mission

Program Educational Objectives Statement

- ❖ **PEO1** Our graduates shall pursue higher education and research, or shall have a successful career in computer and software industries, or shall emerge as entrepreneurs.
- ❖ **PEO2** Our graduates shall have the ability and attitude to adapt to emerging technologies changes.
- ❖ **PEO3** Our graduates shall adapt to the changing career opportunities, assimilate new technologies and work in multi-disciplinary areas with strong focus on innovation and entrepreneurship.

The following steps are followed in establishing the PEOs the same is shown in the Fig.1.2

Step 1	The PEOs are drafted based on the Institute's Vision and Mission, Department's Vision and Mission, and Stakeholders' Suggestions.
Step 2	Brainstorming sessions are undertaken to define PEOs in a global framework.
Step 3	The senior faculty members were responsible for gathering and assessing stakeholders' comments and benchmarking the PEOs.
Step 4	The drafted PEOs are distributed to the department's faculty members for their suggestions.

Step 5	The members of the DAC finalize the PEOs. The Vision and Mission of the Institute and department also provide guidelines for resolving the PEOs.
Step 6	The HEI will approve the PEOs and will be disseminated among the stakeholders.
NOTE	The feedback and suggestions are collected every year to revise the PEOs.

Flowchart for Formulating/Revising Departmental PEOs

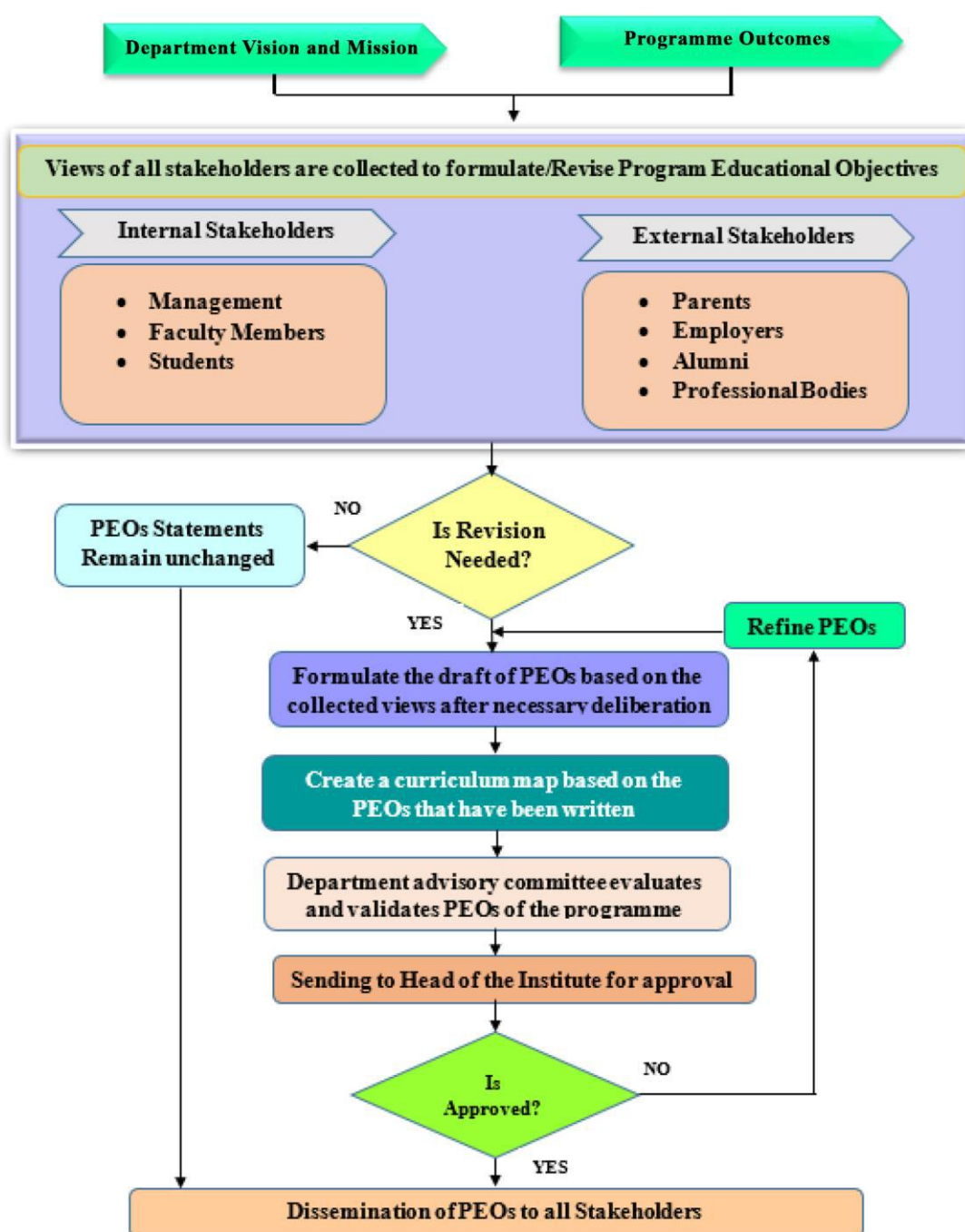


Fig 1.2 Flowchart for Formulating/Revising Departmental PEOs

1.5 Establish Consistency of PEOs with Mission of the Department (15)

Mission of the Department

- **M1** -Establish closer relationship with IT industries and expose the students to the cutting edge technological advancements.
- **M2** -Provide impetus and importance to beyond curriculum learning and thereby provide an opportunity for the student community to keep them updated with latest and socially relevant technology.
- **M3** -To impart interpersonal skills and ethical responsibilities to the students.

Preparation of a matrix of PEOs and elements of Mission statement

PEO Statements	M1	M2	M3
PEO1: Our graduates shall pursue higher education and research, or shall have a successful career in computer and software industries, or shall emerge as entrepreneurs.	3	3	3
PEO2: Our graduates shall have the ability and attitude to adapt to emerging technologies changes.	3	3	2
PEO3: Our graduates shall adapt to the changing career opportunities, assimilate new technologies and work in multi-disciplinary areas with strong focus on innovation and entrepreneurship.	3	3	2

Note: Correlation Levels: 1-Slight, 2-Moderate, and 3-High

Consistency/justification of co-relation parameters of the above matrix

PEO Statements/Mission of the Department	M1: Establish closer and symbolic relationship with IT industries and expose the students to the cutting edge technological advancements.	M2: Provide impetus and importance to beyond curriculum learning and thereby provide an opportunity for the student community to keep them updated with latest and socially relevant technology.	M3: To impart interpersonal skills and ethical responsibilities to the students.
PEO1 -Our graduates shall pursue higher education and research, or shall have a successful career in computer and software industries, or shall emerge as entrepreneurs.	High Level – PEO1 ensures that the graduates are educated with technological advancement knowledge to have successful career in software industries	High Level – PEO1 ensures that the graduates are inculcated with beyond curriculum learning with latest technology to emerge as entrepreneurs.	High Level – PEO1 ensures that the graduates complement their technical knowledge with good interpersonal skills and ethical values.
PEO2 -Our graduates shall have the ability and attitude to adapt to emerging technological changes.	High Level – PEO2 ensures that the graduates are exposed with IT industries to adapt emerging technologies.	High Level – PEO2 ensures that the graduates are capable of handling challenges in their career by adapting latest technology.	Moderate Level – PEO2 ensures that the graduates will have the capabilities to comprehend the broad engineering context with effective communication skills and leadership qualities.

PEO3 - Our graduates shall adapt to the changing career opportunities, assimilate new technologies and work in multi-disciplinary areas with strong focus on innovation and entrepreneurship.	High Level - PEO3 enables the graduates to take a leading role in providing engineering solution by adopting innovative practices.	High Level - PEO3 ensures that the graduates adapt with latest developments to sustain and nurture innovations in their profession.	Moderate Level – PEO3 ensures that the graduates are able to carry out multidisciplinary projects by upholding ethical and human values
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CRITERION 2	Program Curriculum and Teaching –Learning Processes	120
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2.1 Program Curriculum (20)

2.1.1 State the process used to identify extend of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I. Also mention the identified curriculum gaps, if any

(State the process details also mention identified curriculum gaps.)

Note: In case all POs are being demonstrably met through University Curriculum then 2.1.2 will not be applicable and the weightage of 2.1.1 will be 20.

A. Process used to identify extent of compliance of university curriculum for attaining POs and PSOs.

After completion of the course, B.E. Computer Science and Engineering graduates will have the ability to:

Table 2.1.1.1 Program Outcomes for Computer Science and Engineering

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

PO5	Modern tool usage	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
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.
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.
PO8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
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.
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.
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.

Table 2.1.1.2 Program Specific Outcomes for Computer Science and Engineering

PSO1	To apply software engineering principles and practices for developing quality software for scientific and business applications.
PSO2	To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions for existing or novel problems.

Curricular Gap Identification Process for Regulation 2017

Table 2.1.1.3 State the components of the curriculum and their relevance to the POs and the PSOs for Regulation 2017

COURSE COMPONENT	COURSE	CURRICULUM CONTENT (% of total number of credit of the program)	TOTAL NUMBER OF CONTACT HOURS	TOTAL NUMBER OF CREDITS	POs	PSOs
HUMANITIES AND SOCIAL SCIENCE (HS)	Communicative English	7.56	210	14	PO1, PO2, PO3, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
	Technical English					
	Environmental Science and Engineering					
	Principles of Management					
BASIC SCIENCES (BS)	Engineering Mathematics I	16.75	465	31	PO1, PO2, PO3, PO8, PO9, PO10, PO12	PSO1, PSO2
	Engineering Physics					
	Engineering Chemistry					
	Physics and Chemistry Laboratory					
	Engineering Mathematics II					
	Physics for Information Science					
	Discrete Mathematics					
	Probability and Queuing Theory					
	Algebra and Number Theory					

ENGINEERING SCIENCES (ES)	Problem Solving and Python Programming	12.43	465	23	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO9, PO10, PO12	
	Engineering Graphics					
	Problem Solving and Python Programming Laboratory					
	Basic Electrical, Electronics and Measurement Engineering					
	Engineering Practices Laboratory					
	Digital Principles and System Design					
	Communication Engineering					
	Digital Systems Laboratory					
PROFESSIONAL CORE (PC)	Programming in C	44.32	1500	82	PO1, PO2, PO3, PO5, PO6, PO8, PO9, PO10, PO12	PSO1, PSO2
	C Programming Laboratory					
	Data Structures					
	Object Oriented Programming					
	Data Structures Laboratory					
	Object Oriented Programming Laboratory					
	Computer Architecture					
	Database Management Systems					

	Design and Analysis of Algorithms					
	Operating Systems					
	Software Engineering					
	Database Management Systems Laboratory					
	Operating Systems Laboratory					
	Computer Networks					
	Microprocessors and Microcontrollers					
	Theory of Computation					
	Object Oriented Analysis and Design					
	Microprocessors and Microcontrollers Laboratory					
	Object Oriented Analysis and Design Laboratory					
	Networks Laboratory					
	Internet Programming					
	Artificial Intelligence					
	Mobile Computing					
	Compiler Design					

	Distributed Systems					
	Internet Programming Laboratory					
	Mobile Application Development Laboratory					
	Cryptography and Network Security					
	Cloud Computing					
	Cloud Computing Laboratory					
	Security Laboratory					
PROFESSIONAL ELECTIVES (PE)	Elective I	8.10	225	15	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO12	PSO1, PSO2
	Agile Methodologies					
	Elective II					
	Machine Learning Techniques					
	Elective III					
	Human computer Interaction					
	Elective IV					
	Professional Ethics in Engineering					
	Elective V					
	Green Computing					

OPEN ELECTIVES (OE)	Open Elective I	3.24	90	6	PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
	Geographic Information System					
	Open Elective II					
	Supply Chain Management					
EMPLOYABILITY ENHANCEMENT COURSE (EEC)	Interpersonal Skills/Listening & Speaking	7.56	420	14	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
	Advanced Reading and Writing					
	Mini Project					
	Professional Communication					
	Project Work					
TOTAL		99.96	3375	185		

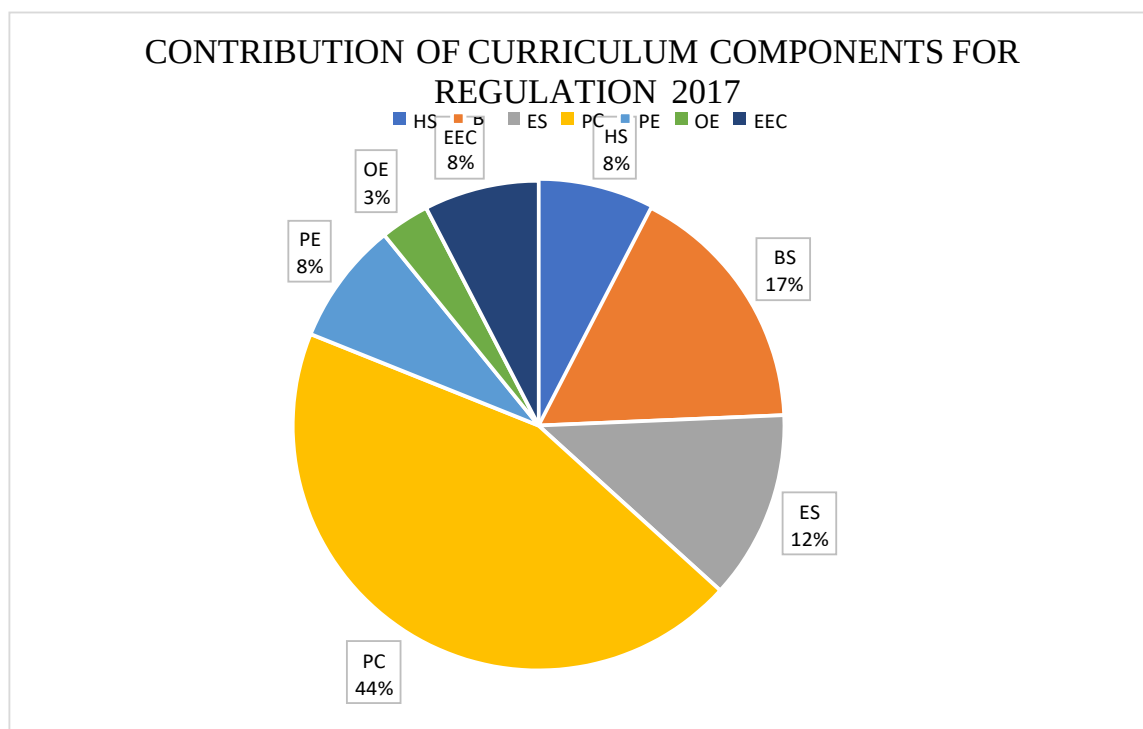


Fig 2.1.1.1 Contribution of Curriculum Components for Regulation 2017

Curricular Gap Identification Process for Regulation 2021

Table 2.1.1.4 State the components of the curriculum and their relevance to the POs and the PSOs for Regulation 2021

COURSE COMPONENT	COURSE	CURRICULUM CONTENT (% of total number of credit of the program)	TOTAL NUMBER OF CONTACT HOURS	TOTAL NUMBER OF CREDITS	POs	PSOs
HUMANITIES AND SOCIAL SCIENCE (HSMC)	Professional English - I	7.40	180	12	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	-
	தமிழர் மரபு /Heritage of Tamils					
	Professional English - II					
	தமிழரும் ததமிழில் நுட்பமும் /Tamils and Technology					
	Human Values and Ethics					
	Elective - Management					
BASIC SCIENCES (BSC)	Matrices and Calculus	15.43	405	25	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	-
	Engineering Physics					
	Engineering Chemistry					
	Physics and Chemistry Laboratory					
	Statistics and Numerical Methods					
	Physics for Information Science					
	Discrete Mathematics					
	Environmental Sciences and Sustainability					

ENGINEERING SCIENCES (ESC)	Problem Solving and Python Programming	11.11	375	18	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
	Problem Solving and Python Programming Laboratory					
	Basic Electrical and Electronics Engineering					
	Engineering Graphics					
	Engineering Practices Laboratory					
	Digital Principles and Computer Organization					
PROFESSIONAL CORE (PCC)	Programming in C	37.65	1020	61	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
	Programming in C Laboratory					
	Foundations of Data Science					
	Data Structures					
	Object Oriented Programming					
	Data Structures Laboratory					
	Object Oriented Programming Laboratory					
	Data Science Laboratory					
	Theory of					

	Computation					
	Artificial Intelligence and Machine Learning					
	Database Management Systems					
	Algorithms					
	Introduction to Operating Systems					
	Operating Systems Laboratory					
	Database Management Systems Laboratory					
	Computer Networks					
	Compiler Design					
	Cryptography and Cyber Security					
	Distributed Computing					
	Object Oriented Software Engineering					
	Embedded Systems and IoT					
PROFESSIONAL ELECTIVES (PEC)	Elective I - Agile Methodologies	11.11	360	18	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO12	PSO1, PSO2
	Elective II - Human Computer Interaction					
	Elective III - Machine Learning Techniques					
	Elective IV - Professional Ethics in Engineering					
	Elective V - Green Computing					

OPEN ELECTIVES (OEC)	Open Elective I	7.40	180	12	PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
	Open Elective II - Supply Chain Management					
EMPLOYABILITY ENHANCEMENT COURSE (EEC)	English Laboratory	7.56	420	18	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
	Communication Laboratory / Foreign Language					
	Professional Development					
	Summer internship					
	Project Work/ Internship					
TOTAL		97.66	2940	164		

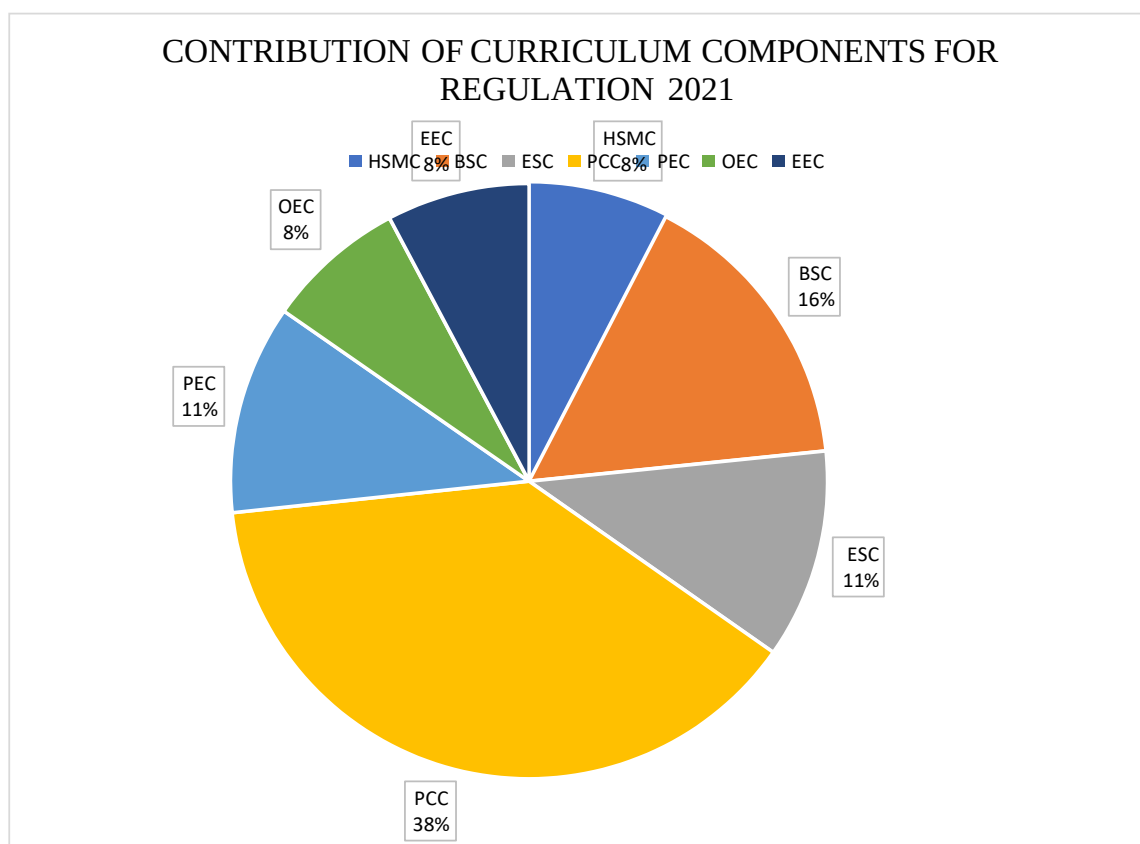


Fig 2.1.1.2 Contribution of Curriculum Components for Regulation 2021

Co-curricular activities**Table 2.1.1.5 List of Co-curricular activities**

Activity	POs Mapping	PSOs Mapping
Guest lecture	PO1,PO2,PO3,PO4,PO6,PO7,PO9,PO10	PSO2
Symposium	PO6,PO8,PO9,PO10,PO11	PSO1,PSO2
Workshop	PO1,PO2,PO3,PO5	PSO2
Mini project	PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO8,PO9,PO10,PO11,PO12	PSO1,PSO2
Seminar	PO1,PO2,PO3,PO4,PO6,PO7,PO9,PO10	PSO2
In-plant training	PO1,PO2,PO3,PO6,PO9,PO12	PSO1
Industrial visit	PO6,PO7,PO8,PO9,PO10, PO12	
Industry oriented training	PO1,PO2,PO3,PO6,PO9,PO12	PSO1
Add on course	PO1,PO2,PO3,PO5,PO6,PO8,PO9	PSO1
Soft skill training	PO8,PO9,PO10	-

Extra-curricular activities**Table 2.1.1.6 List of Co-curricular activities**

Club/Cell	POs mapping
Cultural / Sports	PO6, PO9
NSS/YRC/RRC	PO6, PO7, PO8, PO9, PO10
Entrepreneurship Development cell	PO1, PO2, PO3, PO4, PO6, PO7, PO8, PO10, PO12
Yoga	PO8, PO12

Process used to identify extent of compliance of university curriculum for attaining POs & PSOs

Curriculum compliance is systematic analysis of curriculum, prescribed by university, to identify the degree of competency of syllabi and its contents for attaining the Program Outcomes and program specific outcomes. In this regard, Department Advisory Committee (DAC) is framed which comprises of Head of the Department, senior faculty members, and representatives from Alumni, Industry Experts. The Department Advisory Committee carries out the study/investigation to reveal whether the syllabi and its contents intentionally and systematically provide students with opportunities to attain the appropriate knowledge, skill and attitudes. This process helps to identify the gap between university curriculum and Program Outcomes. The identification leads to rectification remediation.

The procedural training towards Outcome Based Education (OBE) was imparted to the course instructors. Relevant courses are collected based on its contents and grouped them as modules. For each course, the knowledge level of course contents is identified using revised Bloom's taxonomy and corresponding course outcomes are formulated. Curriculum compliance may be verified by organizing the information into a matrix (course-PO matrix) which maps each one to the other. Mapping involves making collective judgments', by Department Advisory Committee, about the link between the course outcomes (COs) and the program outcomes (POs). Mapping not only provides the information of whether curriculum meets the academic and/or professional benchmark requirements (POs) but also manifests the way and possible level of attaining the POs by curriculum. The same process is extended to course-PSOs matrix. From mapping curricular gaps are identified. The entire process is presented as flowchart.

GAP Identification flow chart

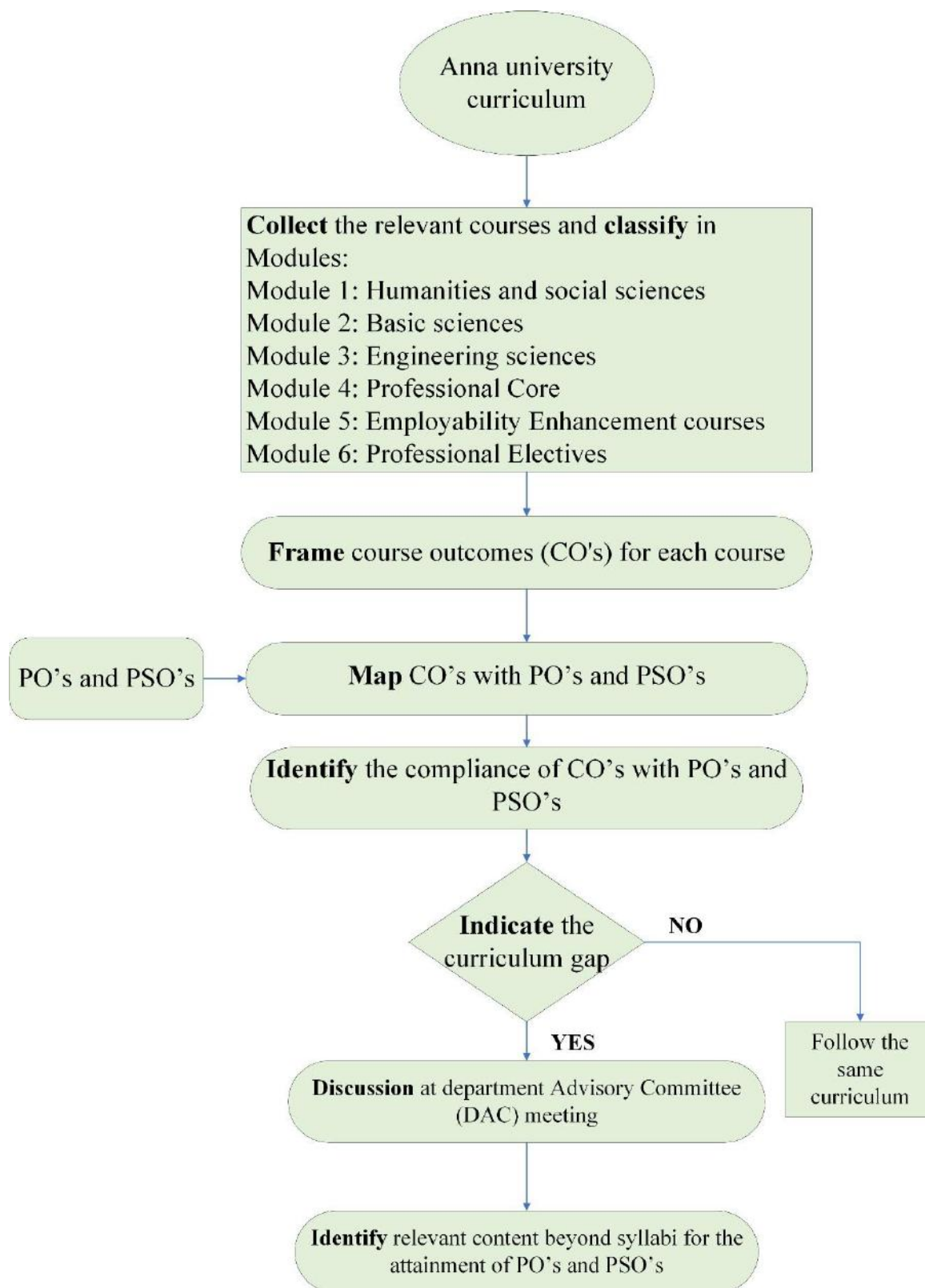


Fig 2.1.1.3 GAP Identification flow chart

MAPPING OF COURSE OUTCOME AND PROGRAMME OUTCOME

Table 2.1.1.7 Mapping of course outcome and programme outcome for Regulation 2017

SEM	COURSE CODE	COURSE CODE	PO												PSO	
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
I	C101	Communicative English	-	-	-	-	-	-	-	-	2.8	2.8	-	2.2	-	-
	C102	Engineering Mathematics - I	2.6	2.6	-	1	-	-	-	-	2	-	2	2	2	-
	C103	Engineering Physics	3	3	2.5	-	-	-	-	-	-	2	-	-	2	-
	C104	Engineering Chemistry	3	2.2	2	-	-	-	-	-	-	-	-	-	-	-
	C105	Problem Solving and Python Programming	3	2.6	2	2.8	2.67	-	-	-	3	2.5	-	-	2.4	2
	C106	Engineering Graphics	2.4	1.8	2	2	2	-	-	-	2.33	2	-	2	2	2
	C107	Problem Solving and Python Programming Laboratory	2.6	2.4	2.2	2.5	2.4	-	-	-	2.33	2	-	2	2.8	2
	C108	Physics and Chemistry Laboratory	2.2	2.2	2	-	-	-	-	-	2	2	-	-	-	-
II	C111	Technical English	-	-	-	-	-	-	-	2.25	2.6	2.4	-	2.2	-	-
	C112	Engineering Mathematics - II	2	2.2	2.2	1	-	-	-	-	-	-	-	-	2	-
	C113	Physics for Information Science	2.2	2	2	-	-	-	-	-	-	-	-	-	2	-
	C114	Basic Electrical, Electronics and Measurement Engineering	2	2	2.25	-	-	-	-	-	-	-	-	-	2	2
	C115	Environmental Science and Engineering	2	2	2.25	-	-	2	2.6	2	2	-	-	2	2	-
	C116	Programming in C	2.4	2.2	2.2	1.8	2	1	-	-	2	2	-	-	2.4	2
	C117	Engineering Practices Laboratory	2.2	2	2	2	1.8	1.8	-	-	1.8	2	-	-	-	-
	C118	C Programming Laboratory	3	2.8	2.25	2	-	-	-	-	1.6	2	-	1.2	2.6	2

SEM	COURSE CODE	COURSE CODE	PO												PSO	
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
III	C201	Discrete Mathematics	2.6	2	2	-	-	-	-	-	2	-	-	-	2	-
	C202	Digital Principles and System design	2.6	2	2	2	2	-	-	-	-	-	-	-	2	-
	C203	Data Structures	2.8	2.4	2.4	2	-	-	-	-	2	-	-	-	2.4	2.5
	C204	Object Oriented Programming	2.8	2.4	2	2	-	-	-	-	-	-	-	-	2.4	2
	C205	Communication Engineering	2	2	2.2	-	-	-	-	-	-	-	-	-	2.4	-
	C206	Data Structures Laboratory	3	2.2	2	2	2	-	-	2	2	2	-	2	2.6	2
	C207	Object Oriented Programming Laboratory	2.6	2.2	2.2	2.33	1.67	2	-	2	1.67	1.67	-	2	2.6	2
	C208	Digital Systems Laboratory	3	2	2	-	-	-	-	-	2	-	-	-	2	-
	C209	Interpersonal Skills/ Listening and Speaking	-	-	-	-	-	-	-	2	2.5	2.6	-	1.8	-	-
IV	C211	Probability and Queueing Theory	2.6	2	1.8	1.67	2	-	-	-	2	2	-	2	2	-
	C2121	Computer Architecture	2.8	2	2	2	2	-	-	-	2	-	-	-	2	2
	C213	Database Management Systems	2.6	2.4	2	2	2	-	-	-	2	2	-	-	2.6	2
	C214	Design and Analysis of Algorithms	2.8	2.4	2	2	2	-	-	-	2	1.75	-	-	2.4	2
	C215	Operating Systems	3	2.4	2.4	2	2	-	-	-	2	2	-	-	2.83	2.33
	C216	Software Engineering	2.83	2.33	2.2	2	1.83	2	-	1.5	1.75	2.33	-	2	2.5	2
	C217	Database Management Systems Laboratory	3	2.4	2	2	-	-	-	2	2	2	-	1.67	2.6	2
	C218	Operating Systems Laboratory	3	2.2	2	2	2	-	-	-	2.4	2	-	2	3	2
	C219	Advanced Reading and Writing	-	-	-	-	-	-	-	-	2.2	1.8	-	2	-	-

SEM	COURSE CODE	COURSE CODE	PO												PSO	
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
V	C301	Algebra and Number Theory	2	2	2	2	2	-	-	-	2	2	-	-	2.2	-
	C302	Computer Networks	2	2	2	2	2	-	-	-	2	2	-	-	2.4	2
	C303	Microprocessors and Microcontrollers	2.4	2.2	2.33	2	2	-	-	-	2	2	-	-	2.6	-
	C304	Theory of Computation	3	2.2	2	2	2	-	-	-	2	1.5	-	-	2.6	2
	C305	Object Oriented Analysis and Design	2.6	2.75	2.75	2	2	-	-	-	1.67	2	-	-	2.6	2
	C306	Geographical Information System - Open Elective I	2.4	2.25	2	-	-	-	-	-	2	2	-	-	2.4	2.33
	C307	Microprocessors and Microcontrollers Laboratory	2.4	2	2	-	-	-	-	2	2	2	-	-	2	-
	C308	Object Oriented Analysis and Design Laboratory	2.8	2.4	2	2	1.8	2	-	2	2	1.67	-	2	2.6	2.67
	C309	Networks Laboratory	2.8	2.4	2.4	2	1.75	-	-	2	2	2	-	2	2.6	2.33
VI	C311	Internet Programming	2.8	2.6	2.6	2	2	-	-	1.67	2	2.25	-	2	2.8	2
	C312	Artificial Intelligence	2.8	2.6	2.75	2	2	2	2	-	2	2	-	-	2.8	2
	C313	Mobile Computing	2.6	2.5	2	2	2	-	-	-	-	-	-	-	2.4	2
	C314	Compiler Design	2.5	2.2	2.2	2	2	-	-	-	1.67	2	-	2	2.5	2
	C315	Distributed Systems	2.4	2.2	2.25	2	2	-	-	-	2	2	-	-	2.2	2
	C316	Agile Methodologies - Professional Elective I	2.2	2.2	2	2	2	-	-	2	2	2	3	1.5	2.33	2
	C317	Internet Programming Laboratory	3	2.4	2.4	2	2.4	-	-	2	2	2	-	2	3	2.6
	C318	Mobile Application Development Laboratory	3	2.4	2.4	2	2	2.5	-	2	2.4	2.25	-	2	3	2.2
	C319	Mini Project	2.67	3	3	2.33	2.33	2	2	2	2.6	3	2.33	2	3	2
	C320	Professional Communication	-	-	-	-	-	-	-	3	2	2	3	3	-	-

SEM	COURSE CODE	COURSE CODE	PO												PSO	
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
VII	C401	Principles of Management	2.6	2.4	2.2	2	2	2	2	2	1.8	2	2	1.5	2.4	2
	C402	Cryptography and Network Security	2	2	2	2	-	2	2	2	2.6	2.4	-	2	2	-
	C403	Cloud Computing	2.6	2.4	2.25	2	-	-	-	2	2	2	-	-	2.6	2.33
	C404	Human Computer Interaction - Professional Elective II	2.67	2.33	2.33	2	2	-	-	2	2	2	-	-	2.83	2
	C405	Machine Learning Techniques - Professional Elective III	2.8	2.4	2.4	2	1.75	2	2	1.75	2	2	-	-	2.6	2.5
	C406	Supply Chain Management - Open Elective II	2.5	2.6	2.4	2	-	-	-	-	2	1.75	-	2	2.4	3
	C407	Cloud Computing Laboratory	2.8	2.5	2.25	-	2.2	-	-	2	2	2	-	2	2.4	2.4
	C408	Security Laboratory	3	2.8	2.4	2	2.2	-	-	1.67	2	2.33	-	2	3	2.4
VIII	C411	Professional Ethics in Engineering - Professional Elective IV	-	-	-	-	-	1.8	2.2	3	2	2.2	-	1.8	2	-
	C412	Green Computing - Professional Elective V	2.6	2.2	2.25	2	2	2	2.5	2	2	2	-	2	2.4	2
	C413	Project Work	2.4	3	3	3	3	2.73	1.33	1.67	3	3	3	3	1.67	2
Average CO - PO - PSO Mapping			2.36	2.10	1.96	1.44	1.22	0.47	0.29	0.82	1.75	1.58	0.24	0.96	2.11	1.37

The analysis of the curriculum map shows that the level of achievement of the PO's 1, 2, 3, 4, 9, 10 and PSO'S 1, 2 is greater than the mean value of 1.33. Hence the achievement of the above stated PO's is possible with the current curriculum to some extent. The percentage of achievement of the PO's – 5, 6, 7, 8, 11 and 12 are less than the mean value of 1.33. This implies that in order to achieve the above PO's the content to be imparted beyond the syllabus should be identified. Based on the above mappings, Department Advisory Committee (DAC) identifies the course gaps to propose an appropriate action to bridge the same.

Table 2.1.1.8 Mapping of course outcome and programme outcome for Regulation 2021

SEM	COURSE CODE	COURSE NAME	PO												PSO	
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
I	C101	Induction Programme														
	C102	Professional English - I	–	–	–	–	–	–	–	–	2.8	2.8	–	2.2	–	–
	C103	Matrices and Calculus	2.6	2.6	–	1	–	–	–	–	2	–	2	2	2	–
	C104	Engineering Physics	3	3	2.5	–	–	–	–	–	–	2	–	–	2	–
	C105	Engineering Chemistry	3	2.2	2	–	–	–	2	–	–	–	–	–	–	–
	C106	Problem Solving and Python Programming	3	2.6	2	2.8	2.67	–	–	–	3	2.5	–	–	2.4	2
	C107	தமிழர் மரபு / Heritage of Tamils	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	C108	Problem Solving and Python Programming Laboratory	2.6	2.4	2.2	2.5	2.4	–	–	–	2.33	2	–	2	2.8	2
	C109	Physics and Chemistry Laboratory	2.2	2.2	2	–	–	–	–	–	2	2	–	–	–	–
	C110	English Laboratory	–	–	–	–	–	–	–	2	2.5	2.6	–	1.8	–	–
II	C111	Professional English - II	–	–	–	–	–	–	–	2.25	2.6	2.4	–	2.2	–	–
	C112	Statistics and Numerical Methods	2	2.2	2.2	1	–	–	–	–	–	–	–	–	2	–
	C113	Physics for Information Science	2.2	2	2	–	–	–	–	–	–	–	–	–	2	–
	C114	Basic Electrical and Electronics Engineering	2	2	2.25	–	–	–	–	–	–	–	–	–	2	2
	C115	Engineering Graphics	2.4	1.8	2	2	2	–	–	–	2.33	2	–	2	2	2

	C116	Programming in C	3	2.8	2.25	2	–	–	–	–	1.6	2	–	1.2	2.6	2
	C117	தமிழரும் ததழில் நுட்ப மும் / Tamils and Technology	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	C118	Engineering Practices Laboratory	2.2	2	2	2	1.8	1.8	–	–	1.8	2	–	–	–	–
	C119	Programming in C Laboratory	3	2.8	2.25	2	–	–	–	–	1.6	2	–	1.2	2.6	2
	C120	Communication Laboratory / Foreign Language	–	–	–	–	–	–	–	2	2.5	2.6	–	1.8	–	–
III	C201	Discrete Mathematics	2.8	2.4	2.4	2	–	–	–	–	2	–	–	–	2.4	2.5
	C202	Digital Principles and Computer Organization	2.6	2	2	2	2	–	–	–	–	–	–	–	2	–
	C203	Foundations of Data Science	2.8	2.4	2.4	2	–	–	–	–	2	–	–	–	2.4	2.5
	C204	Data Structures	2.8	2.4	2.4	2	–	–	–	–	2	–	–	–	2.4	2.5
	C205	Object Oriented Programming	2.8	2.4	2	2	–	–	–	–	–	–	–	–	2.4	2
	C206	Data Structures Laboratory	3	2.2	2	2	2	–	–	2	2	2	–	2	2.6	2
	C207	Object Oriented Programming Laboratory	2.6	2.2	2.2	2.33	1.67	2	–	2	1.67	1.67	–	2	2.6	2
	C208	Data Science Laboratory	3	2.2	2	2	2	–	–	2	2	2	–	2	2.6	2
	C209	Professional Development	–	–	–	–	–	–	–	2	2.5	2.6	–	1.8	–	–
IV	C211	Theory of Computation	3	2.2	2	2	2	–	–	–	2	1.5	–	–	2.6	2

	C212	Artificial Intelligence and Machine Learning	2.8	2.6	2.75	2	2	2	2	–	2	2	–	–	2.8	2
	C213	Database Management Systems	2.6	2.4	2	2	2	–	–	–	2	2	–	–	2.6	2
	C214	Algorithms	2.8	2.4	2	2	2	–	–	–	2	1.75	–	–	2.4	2
	C215	Introduction to Operating Systems	3	2.4	2.4	2	2	–	–	–	2	2	–	–	2.83	2.33
	C216	Environmental Sciences and Sustainability	2	2	2.25	–	–	2	2.6	2	2	–	–	2	2	–
	C217	Operating Systems Laboratory	3	2.2	2	2	2	–	–	–	2.4	2	–	2	3	2
	C218	Database Management Systems Laboratory	3	2.4	2	2	–	–	–	2	2	2	–	1.67	2.6	2
V	C301	Computer Networks	2	2	2	2	2	–	–	–	2	2	–	–	2.4	2
	C302	Compiler Design	2.5	2.2	2.2	2	2	–	–	–	1.67	2	–	2	2.5	2
	C303	Cryptography and Cyber Security	2	2	2	2	–	2	2	2	2.6	2.4	–	2	2	–
	C304	Distributed Computing	1.8	2.4	1.8	2.4	2	–	–	–	2.6	2.2	2.2	1.6	2	1.8
	C305	Big Data Analytics	2.5	2.4	2	2	2	–	–	–	2.2	1.8	2.4	2	2	2.1
	C306	Web Technologies	1.8	2	2.8	1.8	2.4	–	–	–	1.8	1.8	2	1.6	1.8	1.8
	C307	Disaster Risk Reduction and Management	2	2	2	2.2	–	–	2.8	2.5	–	–	2	–	1.8	–
VI	C311	Object Oriented Software Engineering	2.6	2.75	2.75	2	2	–	–	–	1.67	2	–	–	2.6	2

	C312	Embedded Systems and IoT	2.4	2	2.4	2.1	1.5	–	–	–	1	2.2	2.2	2.4	1.4	1.6
	C313	Graph Theory	2.2	2.1	2.2	2	1.4	–	–	–	–	2.1	–	–	–	–
	C314	Cloud Computing	2.6	2.4	2.25	2	0	0	0	2	2	2	0	0	2.6	2.33
	C315	Soft Computing	1.8	2.2	2	2.4	2	–	–	–	2	2	2.2	1.8	1.8	1.6
	C316	Cyber security	2	2	2	2	0	2	2	2	2.6	2.4	0	2	2	–
	C317	Game Theory	2	2	2.1	2	2	–	–	–	–	–	–	–	1	1
	C318	Industrial Safety	2	2	2	2	2.1	2.8	2	2.4	2.6	1	1	2.2	1	1
VII	C401	Human Values and Ethics	–	–	–	–	–	1.8	2.2	3	2	2.2	–	1.8	2	–
	C402	Principles of Management	2.6	2.4	2.2	2	2	2	2	2	1.8	2	2	1.5	2.4	2
	C403	Resource Management Technique	2.4	2.4	1.8	2.1	2.1	2	1.8	1.8	2	1	1.4	1	1	1.4
	C404	Operations Research	2.2	2.2	1	0.8	–	–	–	–	2	–	–	2	–	–
	C405	Geographical Information System	2.4	2.25	2	–	–	–	–	–	2	2	–	–	2.4	2.33
	C406	Summer internship	2.4	3	3	3	3	2.73	1.33	1.67	3	3	3	3	1.67	2
VIII	C411	Project Work / Internship	2.4	3	3	3	3	2.73	1.33	1.67	3	3	3	3	1.67	2
Average CO - PO - PSO Mapping			2.11	1.95	1.80	1.48	1.02	0.44	0.41	0.67	1.66	1.48	0.43	1.01	1.71	1.20

The analysis of the curriculum map shows that the level of achievement of the PO's 1, 2, 3, 4, 11 and 12 is greater than the mean value of 1.24. Hence the achievement of the above stated PO's is possible with the current curriculum to some extent. The percentage of achievement of the PO's – 5, 6,7,8,9 and 10 are less than the mean value of 1.24. This implies that in order to achieve the above PO's the content to be imparted beyond the syllabus should be identified. Based on the above mappings, Department Advisory Committee (DAC) identifies the course gaps to propose an appropriate action to bridge the same.

B. List the curricular gaps for the attainment of defined POs and PSOs.

Table 2.1.1.9 List the curricular gaps for Regulation 2017

Semester	Course Code	Subject name	Curricular Gap	Relevance To POs and PSOs
III	C204	Object Oriented Programming	Advanced Java	PO1,PO2,PO3,PO4,PO8,PSO1
IV	C212	Database Management Systems	The application of several data models	PO1,PO2,PO3,PO4,PSO1
IV	C213	Design and Analysis of Algorithms	The Complexity of most recent algorithms	PO1, PO2, PO3, PO4,PO9,PO12
V	C305	Object Oriented analysis and design	Software testing	PO1,PO2,PO3,PO5,PO9,PO10,PSO2
VI	C310	Internet Programming	Java advanced techniques, Design, Client-servers architecture, PHP and Web servers	PO1, PO2, PO3,PO5,PO9, PO12,PSO1
VI	C311	Artificial Intelligence	AI advancement trends in recent years	PO1, PO2, PO3,PO4,PO12,PSO1,PSO2
VII	C406	Supply chain management	Awareness of media and digital marketing	PO2,PO3,PO4,PO6,PO7,PO8, PO11,PO12
VII	C403	Cloud Computing	An alternative to the on-site data center is cloud computing. Utilizing an on-site data center.	PO1, PO2, PO3, PO4, PO5

Table 2.1.1.10 List the curricular gaps for Regulation 2021

Semester	Subject Code	Course	Curricular Gap	Relevance To POs and PSOs
III	C204	Data Structures	Array of structure and pointer to structure	PO1, PO2, PO4, PSO1, PSO2
III	C207	Object Oriented Programming	Advanced Java	PO1,PO2,PO3,PO4,PO8,PSO1
IV	C211	Theory of Computation	Addressing complicated problems	PO1, PO2, PO3, PO4, PSO1, PSO2
IV	C212	Artificial Intelligence and Machine learning	AI advancement trends in recent years	PO1, PO2, PO3, PO4, PSO1, PSO2
IV	C213	Database Management Systems	The application of several data models	PO1, PO2, PO3, PO4, PSO2
IV	C214	Algorithms	The complexity of the most recent algorithms	PO1, PO2, PO3, PO4, PSO1, PSO2
V	C302	Compiler Design	Understanding of Automata	PO1, PO2, PO3, PO4, PSO2
VI	C314	Cloud Computing	An alternative to the on-site data center is cloud computing. Utilizing an on-site data center.	PO1, PO2, PO3, PO4, PSO1, PSO2
VII	C402	Principles of Management	Recent trends in implementation of OGSA	PO1, PO2, PO6, PO8, PO9, PO12

2.1.2 State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10)

(Provide details of the additional course/learning material/content/laboratory experiments/projects etc., arising from the gaps identified in 2.1.1 in a tabular form in the format given below)

A. Steps taken to get identified gaps included in the curriculum

In accordance with the Program Outcomes (POs) outlined by the NBA, the Department has established its own POs and PSOs for its UG program. University-designed course outcomes are mapped with their respective PSOs and POs. Gaps are filled during regular classes or by conducting seminars, workshops, and other training activities. The department conducts regular tests as per the University requirements to assess each PO, PSO, and CO's academic progress. The outcomes of the curriculum are continuously reviewed through systematic documentation.

B. Delivery details of content beyond syllabus and Mapping of content beyond syllabus with the POs and PSOs

The content beyond syllabus is needed to bridge the gap between industrial requirement and curriculum.

Table 2.1.2.1 Delivery details of content beyond syllabus and the attainment of POs and PSOs for academic year 2022-23

S.No	Semester	Relevant Subject	Gap	Action taken	Date-Month-Year	Resource person with designation	% of Students (year wise)	Relevance to POs and PSOs	
								PO	PSO
GUEST LECTURE									
1.	VI	Cloud computing	The students learnt about SMAC as technology, development of SMAC in gadgets and e-business with Cloud computing and advantages	Social mobile analytics and cloud (Guest Lecture)	25-08-2022	Mr. Rajasekaran , CEO, Bizplus Services, Chennai	95	PO1, PO2, PO3, PO5, PO10	PSO2
2.	IV	Artificial intelligence and Machine learning	The students learnt the advanced concepts and updates of Machine Learning and Implementation of Advanced Algorithms in Machine Learning, and it's need and importance.	Machine Learning and Artificial Intelligence (Guest Lecture)	08-08-2022	Mr. Socrates Krishnamurthy, Data scientist in USA	95	PO1, PO2, PO3, PO5, PO6, PO7, PO8, PO9	PSO1
WORKSHOP									
3.	VI	Software testing	Importance and trending concepts of Software Testing	Software Testing (Workshop)	20-03-2023	Mr. Raja (Manager, Cap Gemini, Chennai)	95	PO1, PO2, PO3, PO5	PSO1
4.	I	Problem solving and python programming	The students learnt the Advanced concepts and updates of IOT and python	Industry Application on IOT using Python (Workshop)	26-09-2022	Mr. Muhammed Ilyas, C.E.O IT Experts Training	96	PO1, PO2, PO3, PO5, PO6, PO8, PO9	PSO1, PSO2
SEMINAR									
5.	VIII	Awareness program on	Students were explained about	Information Session on	06-03-2023		97.8	PO6, PO11,	

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		higher education	the various courses they can pursue for master	“Higher Education		Alumni		PO12	
6.	VIII	Awareness program on abroad studies	Provide valuable insights and information to the students about studying abroad and its benefits for their academic and professional growth	A seminar on study abroad opportunities	23-02-2023	Department of Training and Placement & Higher Education Cell	98	PO1, PO2, PO3, PO4, PO11, PO12	PSO1
7.	VII	Cloud Computing	Cloud Computing provides an alternative to the on-premises data center. With an on-premises data Centre.	Seminar on Introduction to cloud computing	05-12-2022	Mr. Krishna Kumar CEO, Skill up by Simplilearn	96	PO1, PO3, PO5	PSO1, PSO2
8.	VII	Importance of industry	The Students learnt the importance of Industry 4.0	Expert Talk on Industry 4.0	11-11-2022	Dr. Swarna Ravindra babu Founder of COOVUM Smart System & Services Pvt. Ltd	94	PO1, PO2, PO3, PO4, PO9	PSO1
9.	V	Web technologies	Angular JS	Web Development (Seminar)	28-09-2022	Mr. Siva Kumar, CEO, Astonish InfoTech, Trichy	95	PO1, PO2, PO5	PSO1
10.	VII		Trend in recent techniques to promote the commodities in the digital and social media	Digital and Social Media Marketing (Seminar)	22-08-2022	Mr. R.Sathish Assistant Professor.	93	PO1, PO2, PO3, PO5, PO6, PO7, PO8, PO9	PSO1
11.	VI	Graph theory	Basics of Graph Theory and its applications	Graph theory and application (Seminar)	23-8-2022	Dr..M.P.Jeyaraman Professor, Department	96	PO3, PO5, PO6, PO10	PSO1, PSO2

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						of Mathematic s, L.N Govt College, Ponneri			
HACKATHON									
12.	II / IV / VI / VIII		A unique national level Hackathon to identify innovative concepts and technology solutions for addressing the security challenges of the 21 st century faced by our intelligence agencies	Internal Hackathon for KAVACH- 2023	28-04- 2023	Er R. Vinoth Kumar Team lead- Data Engineer & Head of Practice- Python CWC Technologie s Pvt. Ltd	94	PO1, PO2, PO3, PO4, PO5, PO6, PO12	PSO1
ADD-ON									
13.	II		An Introduction to IOT	ADD-ON	21-03- 2023 to 29-03- 2023	Ms. V. Valarmathi Visiting Professor (IT Experts systems)	94	PO1, PO2, PO3, PO5, PO12	PSO1, PSO2
14.	IV	Artificial Intelligence and Machine Learning	Machine Learning Using Python	ADD-ON	23-01- 2023 to 31-01- 2023	Mr. Muhhamed Iliyas Visiting Professor (IT Experts systems)	88	PO1, PO2, PO3, PO4, PO5, PO6	PSO2
15.	I		Python Programming	ADD ON	08-12- 2022 to 16-12- 2022	Dr. Swarna Ravindraba bu Founder of COOVUM Smart System & Services	97.89	PO1, PO2, PO3, PO4, PO5, PO6	PSO1, PO2

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						Pvt. Ltd			
16.	V	Web technologies	Web Designing using HTML and CSS	ADD-ON	14-09-2022 to 22-09-2022	Mr. Krishna Kumar CEO, Skillup by Simplilearn	93	PO1, PO2, PO3, PO5, PO6, PO8, PO9	PSO1, PSO2
17.	III	Object oriented programming	Advanced Java	ADD-ON	12-09-2022 to 20-09-2022	Ms. V. Valarmathi Visiting Professor (IT Experts systems)	90	PO1, PO2, PO3, PO5, PO6, PO8, PO9	PSO1
18.	VII		PHP & MySQL	ADD-ON	12-09-2022 to 20-09-2022	Mr. Muhamed Iliyas Visiting Professor (IT Experts systems)	86	PO3, PO5, PO6, PO10	PSO1, PSO2
TRAINING AND PLACEMENT									
19.	VI		Training and Placement	JISIC Code Camp	01-03-2023	Amazon Web Service Training	96	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO10, PO12	PSO1
20.	VI		Computer adaptive test which measures job applicants on critical areas like communication skills, logical reasoning, Quantitative	AMCAT Assessment	20-02-2023	AMCAT Team	93.97	PO1, PO2, PO10	PSO1, PSO2

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		skill						
21.	VIII	Pre placement talk and campus hiring drive was conducted for final year	NIIT Pre Placement	20.02.2023	Representatives of NIIT	97	PO1, PO3, PO6, PO8, PO9	-
EXTRA-CURRICULAR ACTIVITY								
22.	VIII	Annual day Celebration	YUKTHI 2023	21-04-2023	Mr. Tharun Dance Mater (Chief Guest)	96.21	PO8, PO9	
23.	II/IV/VI/VIII	Annual Sports Day	TRUUMPH	24-02-2023	Dr Suresh Babu Chairman of WAKOINDIA	97.15	PO8, PO9	
24.	I / III / V /VII	To incorporate holistic health in the student's lives	Yoga & Meditation	18-11-2022	Ms. Subha Physical Director	---	----	---
WEBINAR								
25.	VIII	Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.	Webinar on intellectual property rights under the Nipam mission	09-1-2023	Mr. Shailendra Singh Examiner of Patents & Design (Nipam Officer) Ministry of Commerce and Industry DPIIT	96.13	PO1, PO3	PSO1, PSO2
ENTREPRENEURSHIP DEVELOPMENT CELL								
26.	VII	The roll of Entrepreneurship development	Entrepreneurship Development	02-12-2022	Dr, T. Srihari Professor		PO1, PO3, PO6,	PSO1

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		and be a part of the solution, not a part of the pollution	cell		Coordinator ED Cell	97.56	PO8, PO9	
27.	VI	Event Encouraged Students to share their startup ideas and consider a career as an entrepreneur	Startup Tamil	16-02-2023	Dr Sharmila Nagarajan Founder and Chairman of the ICCDF	97.13	PO1, PO3, PO6, PO8, PO9	-
SYMPOSIUM								
28.	I /III /V/ VII	The events conducted in the Friday were code debugging, Projects Mania, Paper Presentation, Technical Memes, Passing the pass, Dump Charade	National level Symposium	04-11-2022	Mr. Vignesh Chandasekaran, Founder & CEO Vault Infos	98	PO1, PO2, PO3, PO5, PO6, PO8, PO9	PSO1, PSO2
INDUSTRIAL VISIT								
29.	VI	Industrial Visit	Regional Meteorological Centre (RMC), Nungambakkam, Chennai	17.04.2023	-----	93	PO8	
30.	VI	Industrial Visit	Infercon Automation Pvt. Ltd, Chennai	25.05.2022	-----	93	PO8	

2.2.1 Describe Processes followed to improve quality of Teaching & Learning (25)

Academic calendar, pedagogical initiatives, Weak and Bright students, Classroom instruction, Experiment, Continuous Assessment in Lab, T-L student feedback, and action done are all included in the process description.

A. ADHERENCE TO ACADEMIC CALENDAR (3)

Academic calendar:

- Every academic year, the college publishes a calendar and distributes it to students, which contains all of the information a student needs to complete his or her studies at the institution, including the designation of all faculty members.
- The academic calendar lists the start and finish dates of each semester, as well as the numerous programmes to be held, the internal exam schedule, and the preliminary university exam schedule.
- The academic calendar also lists all planned co-curricular and extracurricular events.

ACADEMIC CALENDAR- ODD SEMESTER- 2022 -2023 - HIGHER SEMESTER

J.N.N INSTITUTE OF ENGINEERING											
ACADEMIC CALENDAR- ODD SEMESTER- 2022 -2023 - HIGHER SEMESTER											
DATE	DAY	DATE	DAY	DATE	DAY	DATE	DAY	DATE	DAY	DATE	DAY
Aug 22		Aug 22		Aug 22		Aug 22		Aug 22		Aug 22	
MON	1	TUE	2	WED	3	THU	4	FRI	5	SAT	6
SUN	7	MON	8	TUE	9	WED	10	THU	11	FRI	12
SAT	13	SUN	14	MON	15	TUE	16	WED	17	THU	18
FRI	19	SAT	20	SUN	21	MON	22	TUE	23	WED	24
THU	25	FRI	26	SAT	27	SUN	28	MON	29	TUE	30
WED	31	THU	1	FRI	2	SAT	3	SUN	4	MON	5
TUE	6	WED	7	THU	8	FRI	9	SAT	10	SUN	11
MON	12	TUE	13	WED	14	THU	15	FRI	16	SAT	17
SUN	18	MON	19	TUE	20	WED	21	THU	22	FRI	23
SAT	24	SUN	25	MON	26	TUE	27	WED	28	THU	29
FRI	30	SAT	31	SUN	1	MON	2	TUE	3	WED	4
THU	5	FRI	6	SAT	7	SUN	8	MON	9	TUE	10
WED	11	THU	12	FRI	13	SAT	14	SUN	15	MON	16
TUE	17	WED	18	THU	19	FRI	20	SAT	21	SUN	22
MON	23	TUE	24	WED	25	THU	26	FRI	27	SAT	28
SUN	29	MON	30	TUE	31	WED	1	THU	2	FRI	3
SAT	4	SUN	5	MON	6	TUE	7	WED	8	THU	9
FRI	10	SAT	11	SUN	12	MON	13	TUE	14	WED	15
THU	16	FRI	17	SAT	18	SUN	19	MON	20	TUE	21
WED	22	THU	23	FRI	24	SAT	25	SUN	26	MON	27
TUE	28	WED	29	THU	30	FRI	31	SAT	1	SUN	2
MON	3	TUE	4	WED	5	THU	6	FRI	7	SAT	8
SUN	9	MON	10	TUE	11	WED	12	THU	13	FRI	14
SAT	15	SUN	16	MON	17	TUE	18	WED	19	THU	20
FRI	21	SAT	22	SUN	23	MON	24	TUE	25	WED	26
THU	27	FRI	28	SAT	29	SUN	30	MON	31	TUE	1
WED	2	THU	3	FRI	4	SAT	5	SUN	6	MON	7
TUE	8	WED	9	THU	10	FRI	11	SAT	12	SUN	13
MON	14	TUE	15	WED	16	THU	17	FRI	18	SAT	19
SUN	20	MON	21	TUE	22	WED	23	THU	24	FRI	25
SAT	26	SUN	27	MON	28	TUE	29	WED	30	THU	31
FRI	1	SAT	2	SUN	3	MON	4	TUE	5	WED	6
THU	7	FRI	8	SAT	9	SUN	10	MON	11	TUE	12
WED	13	THU	14	FRI	15	SAT	16	SUN	17	MON	18
TUE	19	WED	20	THU	21	FRI	22	SAT	23	SUN	24
MON	25	TUE	26	WED	27	THU	28	FRI	29	SAT	30
SUN	31	MON	1	TUE	2	WED	3	THU	4	FRI	5
SAT	6	SUN	7	MON	8	TUE	9	WED	10	THU	11
FRI	12	SAT	13	SUN	14	MON	15	TUE	16	WED	17
THU	18	FRI	19	SAT	20	SUN	21	MON	22	TUE	23
WED	24	THU	25	FRI	26	SAT	27	SUN	28	MON	29
TUE	30	WED	31	THU	1	FRI	2	SAT	3	SUN	4
MON	5	TUE	6	WED	7	THU	8	FRI	9	SAT	10
SUN	11	MON	12	TUE	13	WED	14	THU	15	FRI	16
SAT	17	SUN	18	MON	19	TUE	20	WED	21	THU	22
FRI	23	SAT	24	SUN	25	MON	26	TUE	27	WED	28
THU	29	FRI	30	SAT	31	SUN	1	MON	2	TUE	3
WED	4	THU	5	FRI	6	SAT	7	SUN	8	MON	9
TUE	10	WED	11	THU	12	FRI	13	SAT	14	SUN	15
MON	16	TUE	17	WED	18	THU	19	FRI	20	SAT	21
SUN	22	MON	23	TUE	24	WED	25	THU	26	FRI	27
SAT	28	SUN	29	MON	30	TUE	31	WED	1	THU	2
FRI	3	SAT	4	SUN	5	MON	6	TUE	7	WED	8
THU	9	FRI	10	SAT	11	SUN	12	MON	13	TUE	14
WED	15	THU	16	FRI	17	SAT	18	SUN	19	MON	20
TUE	21	WED	22	THU	23	FRI	24	SAT	25	SUN	26
MON	27	TUE	28	WED	29	THU	30	FRI	31	SAT	1
SUN	2	MON	3	TUE	4	WED	5	THU	6	FRI	7
SAT	8	SUN	9	MON	10	TUE	11	WED	12	THU	13
FRI	14	SAT	15	SUN	16	MON	17	TUE	18	WED	19
THU	20	FRI	21	SAT	22	SUN	23	MON	24	TUE	25
WED	26	THU	27	FRI	28	SAT	29	SUN	30	MON	31

ACADEMIC CALENDAR- EVEN SEMESTER- 2022 -2023 - HIGHER SEMESTER

J.N.N INSTITUTE OF ENGINEERING

AUTONOMOUS

NBAAC 'A' Grade | Approved by AICTE | Affiliated to Anna University

ACADEMIC CALENDAR- EVEN SEMESTER (II,III & IV Year) 2022-2023

AY	CWO	DATE	Jan-22	CWO	DATE	Feb/22	CWO	DATE	Mar/22	CWO	DATE	Apr/22	CWO	DATE	May/22
ON	2												67	1	
UE	3												68	2	
ED	4		5	3		27	1						69	3	
HU	5		6	2		28	2						70	4	
RI	6		7	3		29	3						71	5	
AT	7	HOLIDAY	8	4	Zeroth Proj/W Year	4		HOLIDAY		1		HOLIDAY	6		HOLIDAY
UN	8	HOLIDAY	5		HOLIDAY	5		HOLIDAY		2		HOLIDAY	7		HOLIDAY
SON	9		9	6		16	6			49	3	1 st Project /W Year	72	8	
TUE	10		10	7		17	7			50	4		73	9	
WED	11		11	8		18	8			51	5		74	10	Model Exam/2&3 rd Years
THU	12		12	9	Int Asst-4 / Final year	19	9			52	6		75	11	Model Exam/2&3 rd Years
FRI	13	Pongal Holidays	13	10	Int Asst-4 / Final year	20	10			53	7	Good Friday	76	12	Model Exam/2&3 rd Years
SAT	14	Pongal Holidays	14	11		21	11		HOLIDAY	54	8	HOLIDAY	77	13	HOLIDAY
SUN	15	Pongal Holidays	15	12	HOLIDAY	22	12		HOLIDAY	55	9	HOLIDAY	78	14	HOLIDAY
MON	16	Pongal Holidays	16	13		23	13	Mod Exam-4yr/Int-1-2&3 rd yrs	56	10		79	15	Model Exam/2&3 rd Years	
TUE	17	Pongal Holidays	17	14		24	14	Mod Exam-4yr/Int-1-2&3 rd yrs	57	11		80	16	Model Exam/2&3 rd Years	
WED	18	Pongal Holidays	18	15		25	15	2 nd Proj day/Int Asst-1-2&3 rd yrs	58	12		81	17	Model Exam/2&3 rd Years	
THU	19		19	16		26	16	Int Asst-1 / 2&3 rd Years	59	13		82	18	Last Working Day	
FRI	20		20	17		27	17	Int Asst-1 / 2&3 rd Years	60	14	Tamil New Year	83	19	Practicals	
SAT	21	HOLIDAY	21	18	HOLIDAY	28	18	HOLIDAY	61	15	HOLIDAY	84	20	HOLIDAY	
SUN	22	HOLIDAY	22	19	HOLIDAY	29	19	HOLIDAY	62	16	HOLIDAY	85	21	HOLIDAY	
MON	23		23	20		30	20	Int Asst-1 / 2&3 rd Years	63	17	Int Asst-1 / 2&3 rd Years	86	22	Practicals	
TUE	24		24	21		31	21		64	18	Int Asst-1 / 2&3 rd Years	87	23	Practicals	
WED	25		25	22	Int Asst-1 / Final year	1	22	Telugu New Year	65	19	Int Asst-1 / 2&3 rd Years	88	24	Practicals	
THU	26	Republic Day	26	23	Int Asst-1 / Final year	2	23		66	20	Int Asst-1 / 2&3 rd Years	89	25	Practicals	
FRI	27	1 st W/W Year Recruits	27	24	Annual Sports Day	3	24		67	21	Int Asst-1 / 2&3 rd Years	90	26	Theory Starts	
SAT	28		28	25	HOLIDAY	4	25	HOLIDAY	68	22	Int Asst-1 / 2&3 rd Years	91	27	HOLIDAY	
SUN	29	HOLIDAY	29	26	HOLIDAY	5	26	HOLIDAY	69	23	HOLIDAY	92	28	HOLIDAY	
MON	30		30	27		6	27		70	24	Int Asst-1 / 2&3 rd Years	93	29		
TUE	31		31	28	1 st Project/W Year	7	28		71	25		94	30		
WED						8	29		72	26		95	31		
THU						9	30		73	27		96			
FRI						10	31		74	28		97			
SAT									75	29	HOLIDAY	98			
SUN									76	30	HOLIDAY	99			

Dr. K. GANESAN, M.E., Ph.D.
PRINCIPAL
J.N.N. INSTITUTE OF ENGINEERING

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PRINCIPAL
J.N.N INSTITUTE OF ENGINEERING
(Autonomous)

The institution adheres with the academic calendar.

B. Use of Various Instructional Methods and Pedagogical Initiatives (3)**Table 2.2.1.1 Teaching Learning Process includes the following practices.**

S. No	Parameter	Frequency	Description	Relevance with PO's and PSO's
1	Teaching plan	Once in a semester	Detailed teaching plan and lecture schedule of the complete syllabus is provided to the student.	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
2	E-Learning portal	CAMU Login	Students have an access to the complete learning material for all the subjects at their convenience	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
3	Lecture notes (course files)	Once in a Semester for each subject	Contains the material delivered by the faculty as per the syllabus and also contents beyond the syllabus.	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
4	Computer Computer-assisted instruction (PPTs, animations, videos)	Depending upon topics to be delivered	Student can visualize the key concepts much effectively through usage of ICT technology.	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
5	Assignments	Three times in a semester/subject	To encourage self-study	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
6	Remedial Classes	Once in a week after internal assessment	Students whose performance is weak are supported with extra lectures and guidance	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
7	Real World Examples	Depending upon topics to be delivered	Previous or recent happenings relevant to topics taken by the faculty	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
8	Workshops	One per semester	Student will be benefited with latest trends and technologies	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
9	Seminars	Twice in a week	Student can overcome the stage inferiority and improve communication skills	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2

S. No	Parameter	Frequency	Description	Relevance with PO's and PSO's
10	Guest lectures	One per semester	Students get exposed to additional contents and advanced technologies	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
11	Soft skills II Year (3 rd Sem) & III Year(6 th Sem)	Three days in a week (Communication classes)	Student can improve communication Skills	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
12	Campus Recruitment Training (CRT) III Year (5 th & 6 th Sem) & IV Year (7 th & 8 th Sem)	Once in the program	Students can improve their soft skills, aptitude, verbal & nonverbal reasoning skills.	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
13	Project – IV Year (7 th & 8 th Sem)	Once in the program	Inculcate team working, innovation & designing skills	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
14	Mini Project - III Year (5 th & 6 th Sem)	Once in the program	Inculcate team working, innovation & designing skills	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
15	Industrial Tours & visits	Twice in the program as required during the academic year (visits)	Student get exposed to the practical working environment	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
16	Additional Lab experiments	Depending on the concerned practical course	Student is enabled to learn contents beyond the laboratory syllabus	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
17	Digital Library& Internet	Weekly once	Students and faculty are provided with access for reputed e-journals from IEEE and Springer databases.	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2
18	Counselling	Weekly Twice	Students are motivated by counsellors towards academic, curricular and extracurricular activities.	PO1, PO2, PO3, PO4, PO6, PO8, PO9, PO11& PO12, PSO1, PSO2

The department's teaching and learning procedures include a variety of instructional approaches and pedagogical initiatives, which are detailed below.

Teaching Process

Despite the fact that the bulk of the student body comes from a rural background, the teaching approach is designed to ensure that the student achieves the highest level of technical achievement possible.

The many pedagogical and instructional techniques for an effective teaching process are listed below.

Class room teaching:

- ✓ A well-structured lesson plan is produced by the involved faculty and vetted by the HOD before being used in the classroom. All faculty members are required to attend extensive introductory seminars that include a thorough discussion of course outcomes.
- ✓ NPTEL online certification courses are also being taken by faculty members in order to improve their classroom teaching skills.

Continuous assessment in laboratory:

- ✓ All practical courses, i.e., all laboratories, use a continuous assessment technique that includes daily experimental observations, daily performance, and record submission.
- ✓ Before the experimentation, the students are given a viva voce and the design of the experiment is displayed to ensure that they comprehend the theoretical and practical ideas.

Student Counselling:

Counselling is provided in light of the student's career goals, as well as his or her educational and extracurricular activities. Faculty members serve as career counsellors, guiding and motivating students toward their goals.

Contents beyond the curriculum:

To enhance the course outcomes, additional experimentations have been incorporated in the laboratory courses and appropriate concepts in the theory classes have been also covered using several teaching learning methods.

a. Lecture Notes:

A detailed learning notes for each unit is prepared by respective course faculty according to the prescribed syllabus before the commencement of the individual semester class work.

b. Question Bank:

Question banks are prepared for each unit in the course based on the course objectives and considering the nature of the university question papers. The previous question papers of University are also maintained in the course files. Question banks are made available in the e-Learning portal and course files.

c. PPTs:

Power Point Presentations are prepared by the respective course faculty for typical topics for better and easy understanding of the student.

d. Assignments:

Assignment questions are framed based on the attainment of the Course Outcomes and Program Outcomes such that it reflects the Bloom's Taxonomy.

e. Remedial Classes:

After Internal Assessment evaluation, weaker students are identified and remedial classes are conducted to improve their performance.

f. Online Student Feedback:

Online student feedback is taken after three weeks from the commencement of class works to further improve teaching learning environment within the class room.

Learning Process

To ensure effective teaching learning environment, the following are the initiatives by the department.

1. Meditation is frequently practiced for 5 minutes inside the classroom.
2. Singing of National anthem is also practiced in all the Department and College Events.

Following are the various practices/modes that are facilitated for enhancing the learning process among the students.

a. Interactive Learning

- ✓ Besides traditional classrooms with a blackboard, few of the classrooms in the department are equipped with an LCD projector and internet connectivity.
- ✓ Faculty regularly uses presentations and videos as teaching tools and encourages interactive learning among the students.
- ✓ Department also organizes guest lectures for the students as a part of interactive learning.

b. Collaborative Learning

- ✓ Faculty facilitate discussions on important concepts within the classroom to encourage combined learning.
- ✓ Faculty regularly organize seminars, group discussions and competitions to encourage collaborative learning among the students.

- ✓ Daily one student discusses a topic of his interest for about 10 min (9:00 to 9.10). This is an initiative taken by Electronics and Communication Engineering department to encourage public speaking among students.

c. Independent Learning

E-Learning:

The central library has a vast collection of books, journals, magazines, ebooks, etc. Additionally, an e-learning activity so called “*e-portal*” has been introduced for all the theoretical and practical courses for accelerating learning process. The e-portal is made available for the students in the department website such that students can access it at their convenience. Individual subjects in the e-portal consist of unit wise learning material and question bank. A list of objective questions covering the entire university syllabus is also made available for preparation of online internal examinations.

NPTEL based learning:

NPTEL based online courses are attended by the faculty for enhancing their teaching skills and smooth conduct of the teaching process in the regular class room teaching. Some of the interested faculty are supported to register for the NPTEL program/subject online certification course of their own areas of teaching and research interests. Similarly, students are supported with NPTEL video lectures in the central digital library and a data bank of the CD's of all the NPTEL courses are made available in the department library. Additionally, interested students are also encouraged to register for NPTEL certification courses for enhancing the potential concepts much effectively.

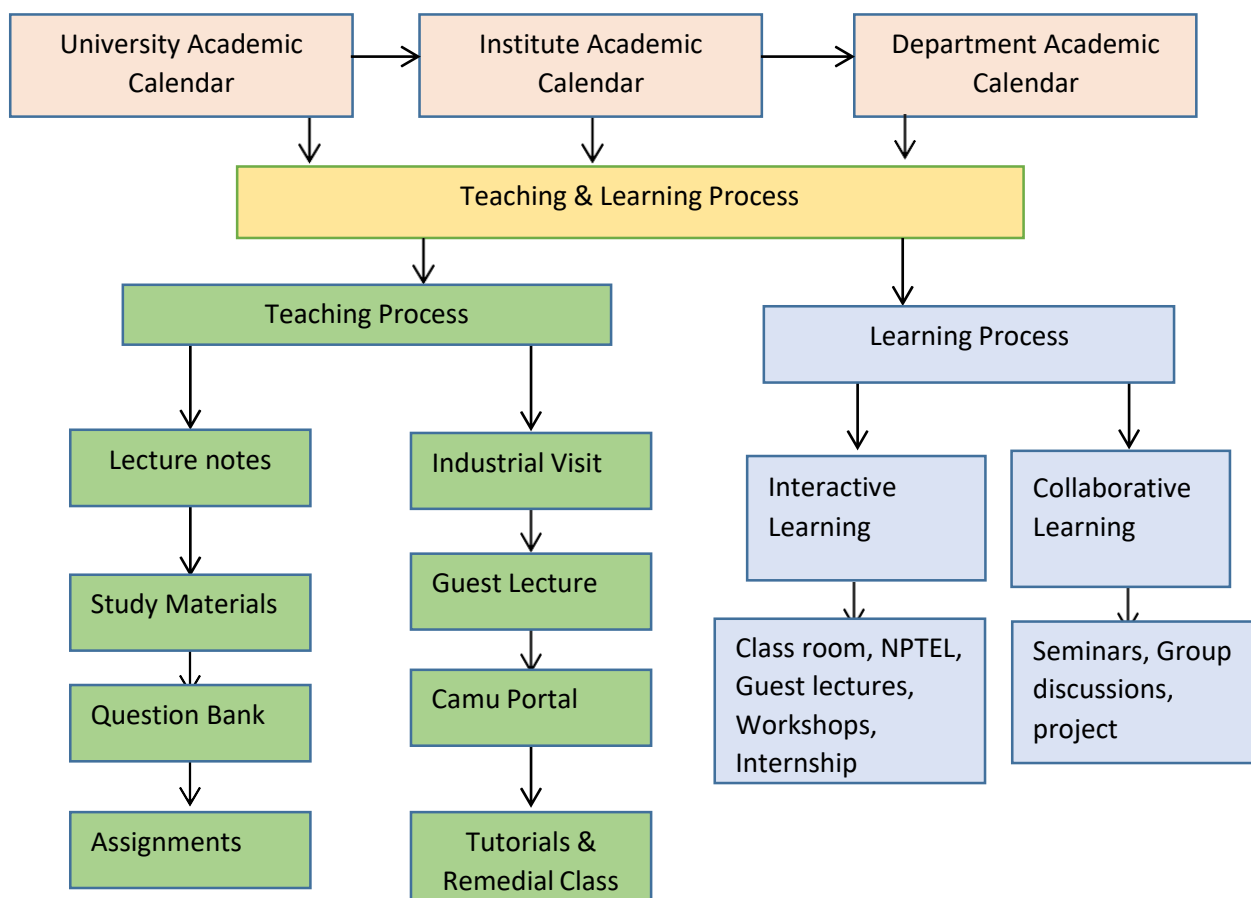


Fig 2.2.1.1 Teaching Learning Process

C. Methodologies to Support Weak Students and Encourage Bright Students (4)

SLOW LEARNERS

All the faculty members are asked to submit the list of weak students those who are failed (below 50) in an Internal Assessment Test to the Class advisor for the special coaching classes that are planned to conduct in the week days. Class advisors are requested to submit the consolidated the weak students list based on the Internal Assessment Test and Semester Exam Failures. Faculty mentors continuously take care and monitor the performance of slow learners and do periodic interaction with parents about the performance of slow learners.

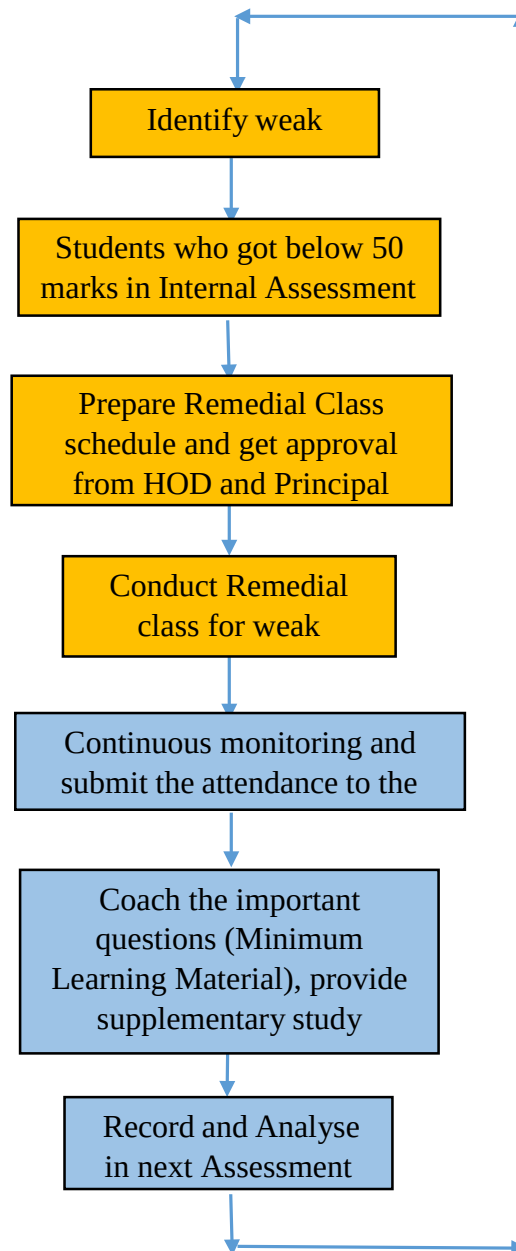
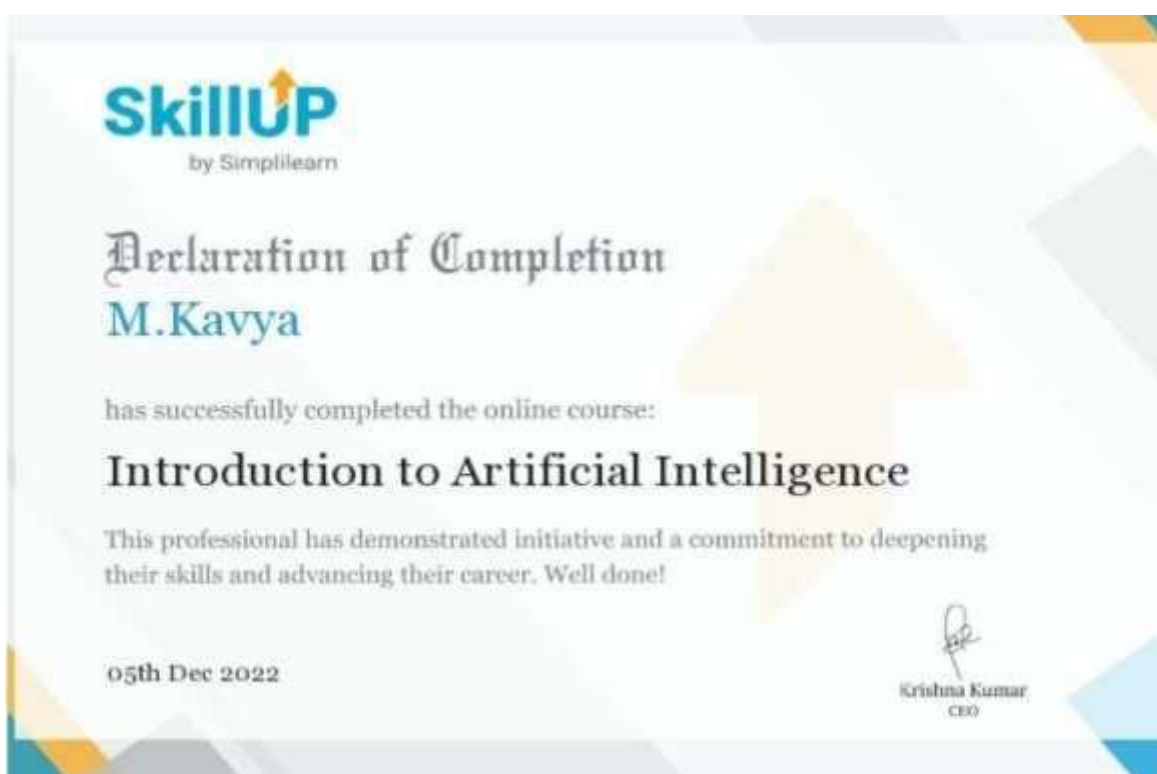


Fig 2.1.1.2 Process Chart to improve performance of slow learners

ADVANCED LEARNERS

If the performance score of the student in Internal Assessment is above 75%, then the student is considered as advanced learners. Such students are encouraged to participate in advanced learning related activities as shown in figure 2.4. For encouraging and motivating advanced learners some of the special activities, not restricted to, listed herewith are as follows:

- ✓ Encouragement to complete NPTEL/SWAYAM/COURSERA courses
- ✓ Encouragement to Participate in Seminars/Conferences/Technical Events/ Live Projects / Domain specific Entrepreneurial Skills / Start Up etc.
- ✓ Providing platform to become the part of Industry sponsored Internship/Research Work.
- ✓ Advanced learners are selected to be the committee coordinators of different technical/professional departmental and university level committees.
- ✓ Encourage to participate in National level contests and events.



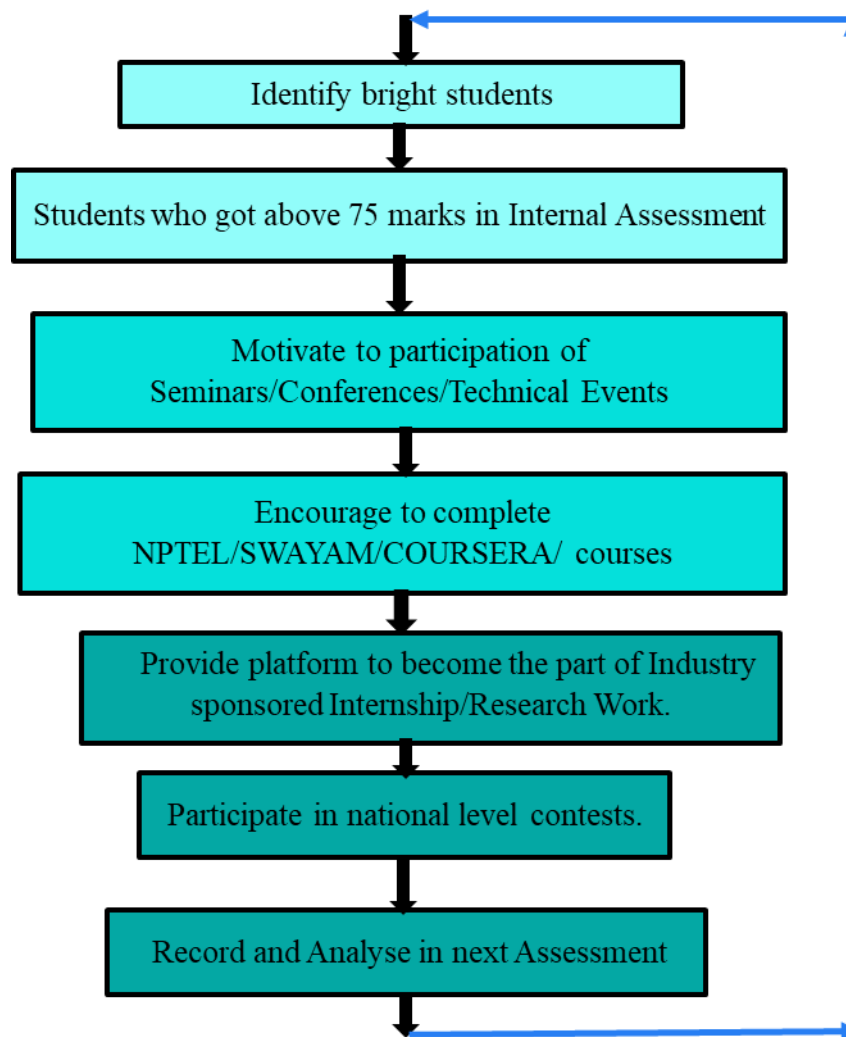


Fig 2.2.1.3 Process Chart to improve performance of Advanced learners

D. Quality of classroom teaching (Observation in a class) (3)

The following aspects are considered to ensure quality of classroom teaching

- ✓ During the lecture, faculty members take efforts to keep students engaged by reviewing and asking questions on previous lecture and interactively deliver the lecture planned for the day.
- ✓ Smart class room and LCD projectors facilities are utilized by the faculty members to bring lessons to life with rich, powerful activities that grab students' attention and real world experience into the learning process.

- ✓ Real world components, charts and models are taken to the class room to demonstrate the concepts in a clear way to the students.
- ✓ Real time examples are presented in the form of videos Tutorial problems are solved in the class rooms by the faculty and students together.
- ✓ Principal, Academic Coordinator and Heads of Departments regularly visit classes to observe the teaching process.
- ✓ At the end of the lecture, students are encouraged to summarize, ask doubts from the content taught.

E. Conducting experiments (Observation in lab) (3)

- ✓ Laboratory manuals and plans are prepared by the faculty members for each laboratory course at the commencement of each semester.
- ✓ Students are instructed to complete the records within a week from the date of completion of experiment and marks are awarded based on the results of the experiments conducted. This process is monitored strictly by the laboratory course-in-charges.
- ✓ Before doing the experiments, students are instructed about the procedure of the experiments and how to handle the laboratory equipment.
- ✓ As per the curriculum, there are two or three laboratory courses in each semester. For each laboratory, 3 hours per week are allotted in the timetable.
- ✓ Viva-voce is conducted to assess the students' technical knowledge.

F. Continuous assessments in the laboratory (3)

Continuous Assessment for the laboratory emphasizes the developmental or progressive aspect of learning since it is ongoing and the records reveals progress through records of student's performance. It makes use of authentic assessment procedures which contribute to the development of the learners. It enhances fairness in assessment by providing for a wide range of assessment possibilities over a period of time. There are many ways by which an instructor can assess student performance in a laboratory. The Lab performance assessment is done using the following rubric.

- ✓ Performance: Execution of a program, proper tool usage and its output
- ✓ Viva-voce
- ✓ Formal lab report, timely submission of observation and record note books

G. Students' feedback on teaching-learning process and actions taken (6)

Online Students' feedback is collected to assess the effectiveness in teaching-learning process. The feedback is collected during the middle of every semester.

- ✓ How is the faculty's approach towards teaching?
- ✓ How has the faculty prepared for the classes?
- ✓ Does the faculty inform you about your expected competencies, course outcomes?
- ✓ How often does the faculty illustrate the concepts through examples and Practical applications?
- ✓ Whether Faculty covers syllabus in time?
- ✓ Do you agree that the faculty teaches content beyond syllabus?
- ✓ How does the faculty communicate?
- ✓ Whether Faculty returns answer script in time and produce helpful comments?

- ✓ How does the faculty identify your strengths and encourage you with high level of challenges?
- ✓ How does the faculty counsel & encourage the students?
- ✓ The feedback collected from students is analysed by the HoD. All the parameters in the feedback form are communicated to the respective course instructors along with their feedback levels to know their strengths and weaknesses and to enhance their teaching skills.
- ✓ A score more than 85 is considered for appreciation and faculty members are asked to proceed with their good works. A score less than 85 is considered for the review of Head of the department and the Principal.
- ✓ Faculty members are asked to submit an explanation for the low feedback marks from students. A suitable counselling is given to improve his/her teaching processes.
- ✓ The faculty lacking in specific area are addressed and directed to attend faculty development programs in order to improve their skill sets in teaching.
- ✓ Another students' feedback is collected at the end of the semester to ensure the attainment of required score by the faculty.

2.2.2 Quality of internal semester Question papers, Assignments and Evaluation.

A. Process of Internal Semester Question Paper setting and evaluation and effective process of implementation

As per the regulations of Anna University, two internal assessment examinations and one model examination are conducted. The outcomes are measured based on the following assessment pattern.

The question papers are framed by the faculty member through the cognitive process (Bloom Taxonomy) with the courses to induce the knowledge of the students, which will boost up the analytical and critical thinking. In general, the first two units of the syllabus are covered in internal assessment examination I, second two units are covered in internal assessment examination II and all the five units are covered in model examination. The effective process of setting question papers and the evaluation process are shown in the below figure.

Process of internal assessment examination question paper setting:

Previous university questions are considered while setting the question paper.

- Two sets of question papers are compiled by the faculty member in such a way that they satisfy the course outcome as per Anna University.
- Question paper is set for 50 marks for internal assessment examination then converted to 100 marks and the duration of examination is 1.30 Hours. The marks are divided as follows.

Part A ($5 \times 2 = 10$)

Part B ($2 \times 16 = 32$)

Part C ($1 \times 8 = 8$)

- Question paper is set for 100 marks for model examination and the duration of examination is 3 Hours. The marks are divided as follows.

Part A ($10 \times 2 = 20$)

Part B ($5 \times 13 = 65$)

Part C (1×15=15)

- The question papers are submitted to the HoD and Principal for verification and approval.
- HoD selects one question paper and forwards it to the department examination cell coordinator to maintain confidentiality.
- The internal examinations schedule, invigilation duty schedule and the hall plan for the students are framed by the exam cell coordinator and approved by HoD and Principal.

Process of internal assessment examination question paper setting

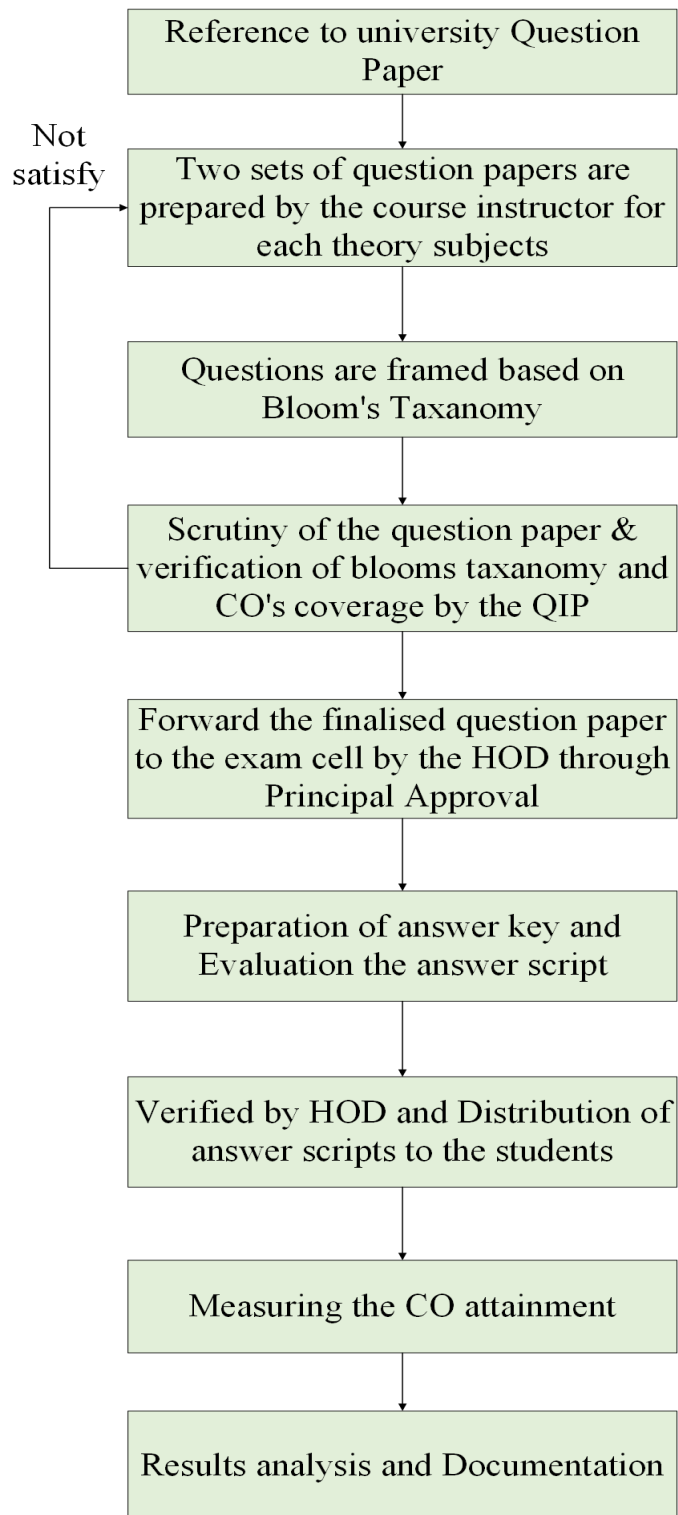
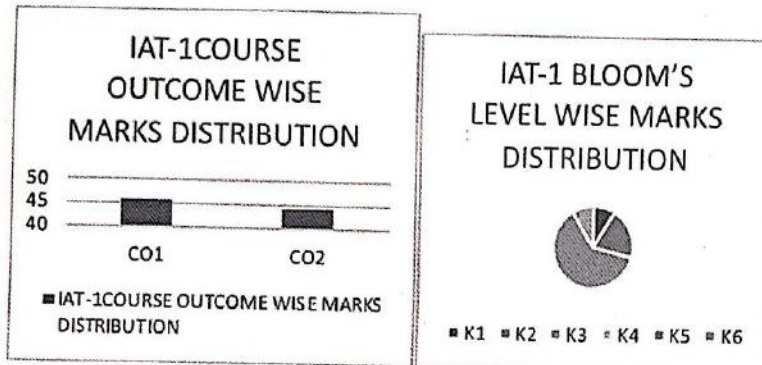


Fig 2.2.2.1 Process flowchart of internal assessment examination question paper setting

PART C (8x1= 8 Marks)

Q.NO	Questions	Marks	CO	Bloom's Level
8.(a)	Explain the way in which data can be presented in a tabular form using HTML.	8	CO1	K4
OR				
8. (b)	Demonstrate a JavaScript program to find the prime number between 1 and 100.	8	CO2	K3



BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating) CO – Course Outcomes

CO – Course Outcomes

PO – Program Outcomes; PI Code – Performance Indicator Code

Course Code -Course Title: CS8651- INTERNET PROGRAMMING

Course Outcomes (CO):

1. Construct a basic website using HTML and Cascading Style Sheets.
2. Build dynamic web pages with validation using JavaScript objects and by applying different event handling mechanisms.
3. Develop a server side program using Servlets and JSP.
4. Construct a simple web page in PHP and represent data in XML format.
5. Use AJAX and web services to develop interactive web applications.

[Signature]
Course Faculty

[Signature]
HOD

[Signature]
PRINCIPAL

Register No:

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MODEL EXAMINATION, APRIL / MAY 2023

Fourth Semester

B.E. Computer Science and Engineering

CS3491- ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

(Regulation 2021)

Course Outcome: On completion of the course, the student is expected to CO1: Use appropriate search algorithms for problem solving CO2: Apply reasoning under uncertainty CO3: Build supervised learning models CO4: Build ensemble and unsupervised models CO5: Build deep learning neural network models			
Bloom's Level: 1 - Remembering, 2 - Understanding, 3 - Applying, 4 - Analyzing, 5 - Evaluating 6 - Creating.			
Answer All the Questions			
PART A (10 x2 =20 marks)		Bloom's Level	Course Outcome
1.	What are the different types of agents?	[1]	[CO1]
2.	Show the application of BFS.	[1]	[CO1]
3.	Mention the needs of probabilistic reasoning in AI	[1]	[CO2]
4.	State Bay's Theorem in Artificial Intelligence.	[1]	[CO2]
5.	Mention the five popular algorithms of Machine Learning?	[1]	[CO3]
6.	What is the main key difference between supervised and unsupervised machine learning?	[1]	[CO3]
7.	How the bagging and boosting in ensemble learning?	[1]	[CO4]
8.	Compare between K means and Gaussian mixture	[1]	[CO4]
9.	What are the types of activation functions?	[1]	[CO5]
10.	List the various types of Perceptron.	[1]	[CO5]
PART B (5 x13 =65 marks)			
11.a	Discuss uninformed search methods with examples.	[2]	[CO1]
OR			
11.b	Explain the nature of heuristics with example. What is the effect of heuristics accuracy?	[2]	[CO1]
12.a	Define uncertain knowledge, prior probability and conditional probability. State the Bayes' theorem. How it is useful for decision making under uncertainty? Explain belief networks briefly?	[2]	[CO2]

OR				
12.b	Discuss about Bayesian Theory and Bayesian network.	[2]	[CO2]	[13]
13.a	Explain SVM Algorithm in Detail.	[2]	[CO3]	[13]
OR				
13.b	Discuss Naïve Bayes Classifier with an Example.	[2]	[CO3]	[13]
14.a	Explain various learning techniques involved in unsupervised learning?	[2]	[CO4]	[13]
OR				
14.b	Illustrate the concepts of clustering approaches. How it differs from classification?	[2]	[CO4]	[13]
15.a	Describe back propagation and features of back propagation.	[2]	[CO5]	[13]
OR				
15.b	Draw the architecture of a Multilayer perceptron (MLP) and explain its operation. Mention its advantages and disadvantage.	[2]	[CO5]	[13]
PART C (1 x15 =15 marks)				
16.a	Explain the following a) Linear regression b) Logistic Regression	[2]	[CO3]	[15]
OR				
16.b	Explain the stochastic optimization methods for weight determination	[2]	[CO5]	[15]

Evaluation and effective process implementation:

- The answer scripts are handed over to the subject in charge by the department exam cell coordinator.
- After evaluating the answer scripts, the answer scripts are distributed to the students.
- Marks are recorded for obtaining the COs attainment and verified by HoD.
- Improvement examination are conducted for the students who scored below 50 marks.

COURSE OUTCOMES ASSESSMENT SHEET (COAS)**MODEL EXAMINATION**

DATE OF EXAM : 25/4/23

MAX MARKS : 100

QUESTION NO COURSE OUTCOMES	PART - A										PART - B					PART - C					TOTAL			TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	A	B	C	
CO1	2	2									12										4	12		16
CO2			2	2								12				5					4	12	5	21
CO3					2	2							12								4	12		16
CO4							2	2						12							4	12		16
CO5									2	2											4			4
TOTAL MARKS OUT OF 100																								73

COURSE OUTCOMES	QUESTIONS ATTENDED	MAXIMUM MARKS	ACTUAL MARKS SCORED	PERCENTAGE OF MARKS SCORED	ATTAINMENT LEVEL
CO1	3	20	16	80%	3
CO2	4	28	21	75%	3
CO3	3	20	16	80%	3
CO4	3	20	16	80%	3
CO5	2	12	4	33%	1
TOTAL	15	100	73	OVERALL ATTAINMENT OBTAINED	13

ATTAINMENT AND TARGET LEVEL FOR THE COURSE

PERCENTAGE OF MARKS SCORED IN EACH CO	ATTAINMENT LEVEL
Less than 60%	1
From 60% - 69%	2
From 70% above	3

SIGNATURE OF THE FACULTY

HOD

C. Evidence of COs coverage in class test / mid-term test.

COs	Subject Code - Subject Name		
	Internal Assessment Test I	Internal Assessment Test II	Model Examination
CO1	✓		✓
CO2	✓		✓
CO3		✓	✓
CO4		✓	✓
CO5			✓

D. Quality of Assignment and its relevance to COs.

- ❖ The course instructor given the assignment topic, submission date to the students.
- ❖ Assignments are designed in such a way to promote self-learning and address the real-world problems from various sources along with the mapping of the course outcomes.
- ❖ Assignments are evaluated and feedback is given to the students.

CO'S	CS8691-ARTIFICIAL INTELLIGENCE
	Assignment-cum-Seminar
CO1	✓
CO2	✓
CO3	✓
CO4	✓
CO5	✓

Assessment Tools for Assignments

Rubric Components	Low	Medium	Good	Very Good	Excellent
Content	The content is generic or partly relevant	The content is not accurate but complete	The content is accurate but incomplete	The content is Accurate and partially complete	The content is accurate and complete
Presentation	Presentation is not up to the mark	Presentation is average	Presentation needs to improve	Presentation is neat but not in order	Presentation is neat and orderly
Student's Score	6	7	8	9	10

2.2.3 Quality of Student Projects (25)

A. Identification of Projects and allocation methodology to Faculty (3)

- ✓ Project based learning is perceived to be a student centric approach to learning. Students engaged in project-based learning activities "work in groups to solve challenging problems that are realistic and curriculum-based and often inter - disciplinary". Therefore, projects are designed to allow students with a variety of different learning methods to demonstrate their knowledge and skill. Professors urge students to publish their project results in reputable publications and conferences.

Project Identification and Allotment

- ✓ According to the university semester schedule, the project will be completed in 8 weeks.
- ✓ The department head appoints a project coordinator who is in charge of planning, arranging, and executing all activities relating to student project work.
- ✓ A project team comprising a maximum of 4 students is formed to design and develop solutions for complex engineering problems in the area of interest.
- ✓ The members of faculty who act as a supervisor have to monitor the project work.
- ✓ Necessary facilities required will be arranged by the department for the successful completion of the project.
- ✓ The students' projects are also based on the POs and the PSOs of the department of Computer Science and Engineering.
- ✓ The students are expected to follow research methodology including design of experiments, analysis and interpretation of data to arrive at valid conclusions.

B. Types and relevance of the projects and their contribution towards attainment of Pos and PSOs (5)

Table 2.2.3.1. Project type and relevance to POs and PSO

S.NO	TYPE OF PROJECT	RELEVANCE TO PO's	RELEVANCE TO PSO's
1.	Application	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
2.	Research	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
3.	Product	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
4.	Core	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
5.	Interdisciplinary	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

Justification:

All the project areas are mapped with PO 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, PSO1 and 2, because projects need mathematical modelling, basic engineering knowledge, problem analysis, designing and developing ideas, conducting investigation in complex problems, contribution to engineering society and need of modern software's for simulation purposes. This also supports outcomes like individual and team work, communication, project management and lifelong learning. Additionally, PO7 helps to demonstrate the knowledge of their project and PO8 also helps to improve the ethics.

Flowchart for Project Work

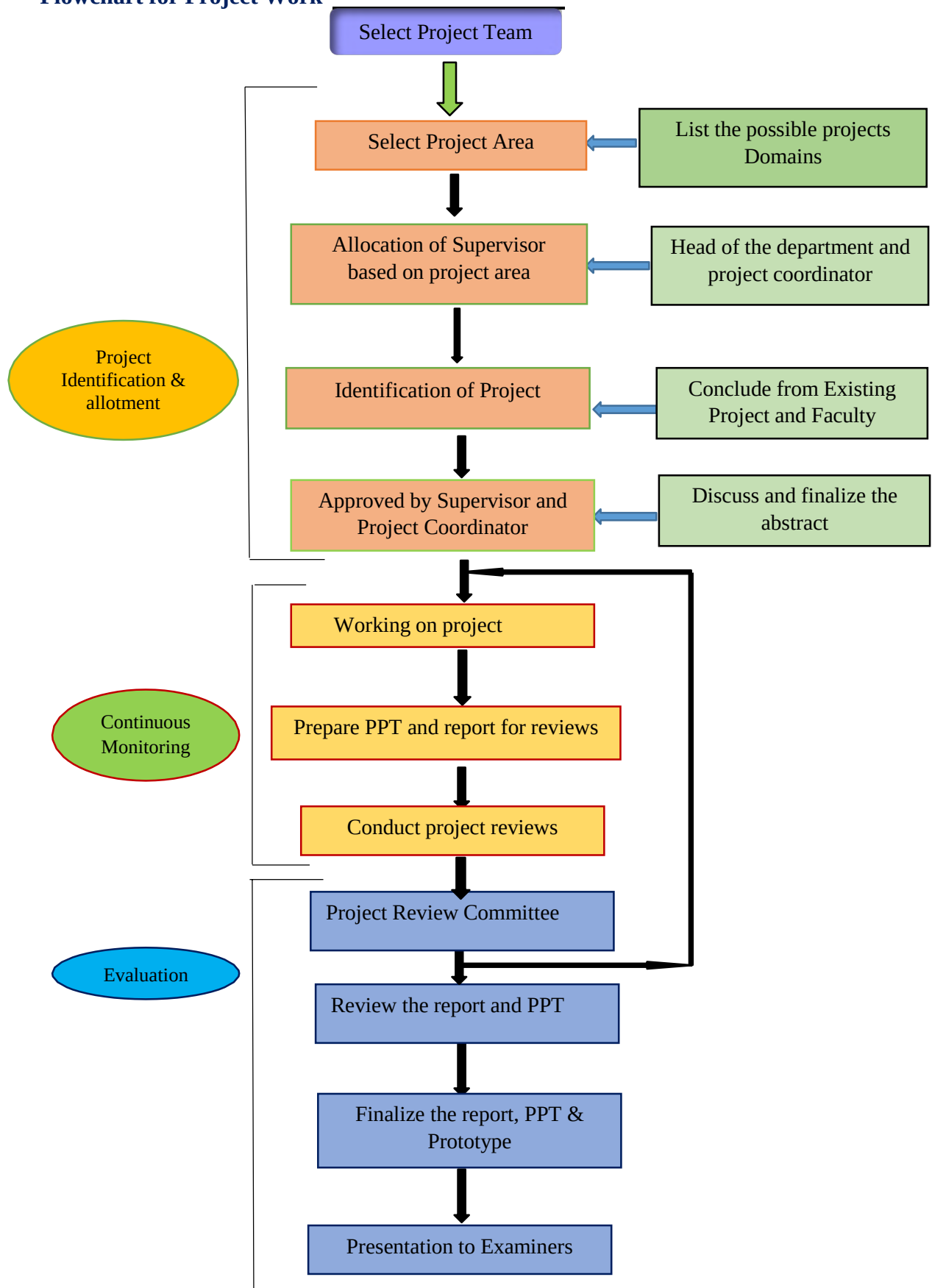


Table 2.2.3.2 List of Projects and faculty Members who have been assigned for students in the year 2022-23

2022-2023							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
1	B.V.M. Ragava Reddy K.Vivek Narayan Reddy K. Midhun Surya Kalyan N.Sumanth	Driver Drowsiness and Yawn Detection System using Deep Learning	Mr.Iyyanarappan.A	Application	Deep Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
2	M.Manu Vardhan N.Bhargav N.Bala Chaithanya K.Chenchu Kishore	Leaf Disease Identification using Deep Learning	Mrs. R.Glory Sangeetha	Research	Deep Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
3	N.Bala Thirupura Sundari Indhumathi.S Dharani.V J.Bharath	Chronic Kidney Disease Prediction using SML (Supervised Machine Learning) Technique	Dr. Jebaraj Ratnakumar.A	Research	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

2022-2023							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
4	Durga Devi.J Priyadharshini.G Sandhya.K Srilekha.S	Smart Voting System using Face Recognition	Mrs. Sangavi. M	Application	Artificial Intelligence	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
5	Gowtham Reddy.A Vishnu Vardhan.D Y.Karthick N.V.S.Abhishek	Credit Card Fraud Detection using State-of-the-art Machine Learning	Mr. Dilavar Basha. K	Research	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
6.	Kathi Chandu Ravuru Charitha Cherukuru Naveena G.P.Chandrika	Detecting URL Phishing using Natural Language Processing and Machine Learning	Mr. Dilavar Basha.K	Research	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

2022-2023							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
7.	M.Abhilash N.Yamini Priya G.Phaneendra M.Poojitha	Prediction of Intrusion Detection using Deep Learning Technique	Dr. Jebaraj Ratnakumar.A	Research	Deep Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
8.	Kumari Sravan G.Sai Akhilesh Shaik Althaf G.Dhanush Naidu	Bit Coin Price Prediction using Machine Learning	Mr.Karthikeyan.K	Research	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
9.	K.Hyndavi K.Sairam P.Supraja G.Sucharitha	Soil Analysis and Crop Recommendation using Machine Learning	Mr. Karthikeyan.K	Application	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

2022-2023							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
10.	Pelliti Yogith Reddy Kavathi Sumanth Talamanchi Shrijith K.Hithesh	Accurate Breast Cancer Detection using ANN and GMM Segmentation	Mr. Iyyanarappan.A	Application	Artificial Intelligence	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
11.	Pakanati Hemashika Shaik Yasmine Kalthireddy Lalasa Pacha Sowmya	Crime Analysis and Prediction using Machine Learning	Mr. S.M.Mustafa Nawaz	Application	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
12.	K.Gnapthika J.Sushma Sri R.Nagamani T.Yamuna	SMS Spam Detection using Machine Learning Framework	Mr. S. Senthilnathan	Research	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

2022-2023															
S.No	Project Title	PO												PSO	
		1	2	3	4	5	6	7	8	9	10	11	12	1	2
1.	Driver Drowsiness and Yawn Detection System using Deep Learning	3	2	3	2	3	3	1	2	3	3	3	2	1	2
2.	Leaf Disease Identification using Deep Learning	3	3	2	2	3	2	2	2	3	3	3	2	1	2
3.	Chronic Kidney Disease Prediction using SML(Supervised Machine Learning) Technique	3	2	3	2	3	3	1	2	3	1	3	2	1	2
4.	Smart Voting System using Face Recognition	3	2	3	1	3	2	2	1	3	2	3	2	1	2
5.	Credit Card Fraud Detection using State-of-the-art Machine Learning	3	2	3	2	3	1	2	2	3	1	3	2	1	2
6.	Detecting URL Phishing using Natural Language Processing and Machine Learning	3	2	1	3	2	3	2	2	3	1	3	2	1	2
7.	Prediction of Intrusion Detection using Deep Learning Technique	3	2	3	1	3	2	2	1	3	2	3	2	1	2
8.	Bit Coin Price Prediction using Machine Learning	3	1	2	3	2	3	2	2	3	1	3	2	1	2
9.	Soil Analysis and Crop Recommendation using Machine Learning	3	2	3	1	3	2	2	2	3	1	3	2	1	2
10.	Accurate Breast Cancer Detection using ANN and GMM Segmentation	3	2	3	2	3	2	2	2	3	2	3	2	1	2
11.	Crime Analysis and Prediction using Machine Learning	3	1	2	3	1	2	2	2	3	2	3	2	1	2
12.	SMS Spam Detection using Machine Learning Framework	3	1	2	3	1	3	2	2	3	2	3	2	1	2

Table 2.2.3.4 List of Projects and faculty Members who have been assigned for students in the year 2021-22

2021-2022							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
1	A.Madhu Revanth Reddy B.Sivateja B.Amil Kumar D.Kiran Kumar	Logistics Information Blockchain Data Query Algorithm Based on Searchable Encryption	Mr. N.Venkatesan	Research	Block Chain	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
2	Chirumavilla Saidinesh Karna Dinesh Kumar Lakshmipuram Manish Naravula Sai Ravi Chandra	Flood Prediction with Machine Learning	Dr. K. Somasundaram	Application	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
3	B. Prudvi Raj CH.Navyanth G.Charan K.Charith	Employee Skill Tracking System	Mr. Akhil Nair. R	Application	Cloud Computing	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11 PO12	PSO1, PSO2

2021-2022							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
4	Dwaram Tharun Kumar Reddy Epuru Surya Teja Muppala Chandu Ashok Padarth Kasthur Reddy	Analysis for Disease Gene Association using Machine Learning a Project Report	Mr. N. Muthuvariran Pillai	Research	Artificial Intelligence	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
5	Ajay A Puneeth B Balaji Ch Tharun Cherukuru	Code Vectorizer Based Machine Learning Models for Software Defect Prediction	Mr. N. Venkatesan	Research	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

Table 2.2.3.5 List of Projects and mapping in the year 2021-22

2021-2022															
S.No	Project Title	PO												PSO	
		1	2	3	4	5	6	7	8	9	10	11	12	1	2
1.	Logistics Information Block Chain Data Query Algorithm Based on Searchable Encryption	3	3	2	3	2	2	1	2	3	2	1	3	2	3
2.	Flood Prediction with Machine Learning	3	2	3	1	3	2	1	2	3	2	1	3	2	3
3	Employee Skill Tracking System	3	2	3	2	3	2	1	2	3	1	3	2	2	3
4.	Analysis for Disease Gene Association using Machine Learning a Project Report	3	2	3	2	3	2	1	2	3	1	3	2	2	3
5.	Code Vectorizer Based Machine Learning Models for Software Defect Prediction	3	2	3	1	3	2	1	2	3	2	3	1	2	3

Table 2.2.3.6 List of Projects and faculty Members who have been assigned for students' in the year 2020-21

2020-2021							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
1	S.Vikneshwar D.Vivek S.Sarath Pudi Dhaneshwar	Secure Computational Resource Sharing System Using NLP	Dr. Subhashini.P	Research	Machine Learning	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
2	M.Neelima R.Madhupriya C.Surekha P.Tejaswini	Characterization of Plant Disease Prediction using Convolutional Neural Network.	Dr. G. Gunasekaran	Application	Artificial Intelligence	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
3	Sandhiya Ashwini Suganya Lavanya	Smart Walking Sticks for Visually Impaired People using Ultrasonic Sensors and Arduino	Mr. Sathish. R	Application	Sensors Network	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

2020-2021							
Batch	Name	Project Title	Guide Name	Type of Project	Project Domain	PO's	PSO's
4	G.Neelima kumara Y.Dharani R.Charishma	Collective Trade Type Revolution using Quintuple Ecology.	Mrs. T.Sangeetha	Application	Cloud Computing	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2
5	K.Penchalasai Reddy Anil kumar Reddy P.Venkata Manoj Kumar Y.Nitheesh Kumar	Security Enhancement through Block Chain in Banking System	Mrs. J.Melta	Research	Block Chain	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PSO1, PSO2

Table 2.2.3.7 List of Projects and mapping in the year 2020-21

2020-21															
S.No	Project title	PO												PSO	
		1	2	3	4	5	6	7	8	9	10	11	12	1	2
1	Secure Computational Resource Sharing System Using NLP	3	2	3	2	3	1	2	2	3	1	3	2	1	2
2	Characterization of Plant Disease Prediction using Convolutional Neural Network.	3	1	3	2	3	2	1	2	3	1	3	2	2	2
3	Smart Walking Sticks for Visually Impaired People using Ultrasonic Sensors and Arduino	3	3	3	3	3	2	1	2	3	3	3	3	2	1
4	Collective Trade Type Revolution using Quintuple Ecology.	3	2	3	1	3	2	2	3	2	3	1	3	2	1
5	Security Enhancement through Block Chain in Banking System	3	2	3	2	3	2	1	2	3	1	2	3	2	2

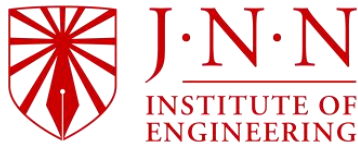
C. Process for Monitoring and Evaluation (5)

- ✓ The project review committee consists of senior faculty members and supervisor concerned.
- ✓ The committee monitors the progress of projects from the beginning to submission.
- ✓ It thoroughly scrutinizes the performance and the involvement of each student and helps the student to execute the project in the proper direction by conducting internal reviews.
- ✓ There shall be three reviews (each 100 Marks) during the project period. The students shall make a presentation on the progress made by them before the committee during every review.
- ✓ The total marks obtained in the three reviews shall be reduced for 20 marks and rounded to the nearest integer.
- ✓ The project report shall carry a maximum of 30 marks. The project report shall be submitted as per the approved guidelines given by Director, Academic Courses, and Anna University. The same marks shall be awarded to every student within the project group for the project report.
- ✓ The viva-voce examination shall carry 50 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

D. Process to Assess Individual and Team Performance (5)

As mentioned earlier, reviews are conducted to assess the performance of the individual and the team. Interaction and updating the progress of the project to the guide can also be taken into account while assessing the individual student performance in presentation.

Project Evaluation Template for all the 4 reviews including Zeroth review



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CS8811 - PROJECT WORK
PROJECT EVALUATION SHEET

Batch No:

Types of Project: In-House/Industry

S. No	Reg. No.	Name of Student
1.		
2.		
3.		
4.		

Tentative Title of the project or broad area of project:

Name of the Guide:	Internal	External(If Applicable)

REVIEW-0: Title Confirmation

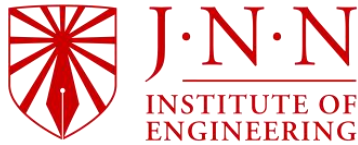
Date:

Title of the Project:

Project Guide

Project Coordinator

HOD



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CS8811 - PROJECT WORK

PROJECT EVALUATION SHEET

Batch No:

Types of Project: In-House/Industry

Title of the Project:

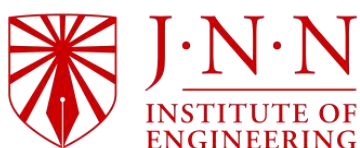
Name of the organization/Industry where project is carried out:

PROJECT EVALUATION					
LITERATURE & STUDY REVIEW-1				Date:	
Reg. No.	Abstract (20)	Literature Review (20)	Problem Identification (10)	Presentation (50)	Total (100)

Project Guide

Project Coordinator

HOD



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CS8811 - PROJECT WORK

PROJECT EVALUATION SHEET

Batch No:

1

Types of Project: In-House/Industry

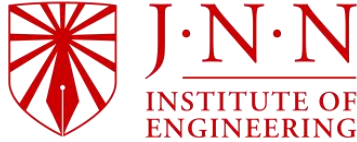
Title of the Project:

WORK PROGRESS REVIEW-2			Date:	
Reg. No.	Abstract (20)	50 % of work progress (30)	Presentation (50)	Total Marks (100)

Project Guide

Project Coordinator

HOD



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CS8811 - PROJECT WORK

PROJECT EVALUATION SHEET

Batch No: 1

Types of Project: In-House/Industry

Title of the Project:

FINAL REVIEW-3				Date:
Reg. No.	Design & Testing /Working (40 M)	Result Analysis (40 M)	Documentation & Viva voce (20 M)	Total Marks (100M)

TOTAL INTERNAL MARKS							
S.No.	Reg. No.	Name of the Student	MARKS				
			R1 (100)	R2 (100)	R3 (100)	Average (100)	Internal (20)

Project mapping/relevance with POs:

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12

Project Guide

Project Coordinator

HOD

E. Quality of Completed Projects/ Working Prototype (5)

Project committee members ensure the quality of the projects at various stages through the internal review. If any deviation from the quality in the progress of the project is identified, the committee panel will help them to attain the expected quality.

2.2.4 Initiatives related to Industry interaction: (15)

The department has joined hands with the various industries in their core engineering field with an objective to strengthen interaction with industries, to keep our students updated with the latest trends, to enhance the knowledge and inculcate the practical exposure. The industry personnel involve in the design of value added courses as an additional input to the students about the current practices.

A. Industry supported laboratories (5)**Table 2.2.4.1 List of Industry supported Laboratories**

S.NO	LAB BASED ON CSE	INDUSTRY CONNECTED	SUBJECTS RELATED TO LAB
1.	NETWORK LAB	Cisco Networking Academy	NETWORKS LAB
2.	CLOUD COMPUTING LAB	AWS Academy	CPLAB 2
3.	SOFTWARE-AS-A-SERVICE (SAAS) LAB	TRAILHEAD & CELONIS	CPLAB 1
4.	ROBOTICS PROCESS AUTOMATION LAB	Ui Path Academic Alliance	CPLAB 1

B. Industry involved in the program design and partial delivery of any regular courses for students (5)

The institution has signed MoUs with leading industries. These industries are involved in designing programs and providing training to the faculty members and students of our institution. During the department advisory committee meeting, curriculum gaps are identified & discussed with industrial experts. To bridge the gap, programs are designed and training is given to the students. The Institute has a separate Training and Placement cell to develop the students with good communication, technical, aptitude and soft skills towards placement. Industrial experts are invited to deliver guest lectures and to conduct value added courses. So that students are able to know the industrial expectations, recent trends and developments. The details are given in below table 2.2.4.2.

Table 2.2.4.2 List of Memorandum of Understanding (MoU) between JNNIE and Industries

S.No	Date of MOU signed	Name of the Industry	Domain Area	Duration	List the Actual Activities Under Each MOU and Web -Links Year-Wise	Contributed
1	12-08-2023	VyVoxel Private Ltd, Chennai	Computer Science Engineering	5 Years	Industrial visits, Research & Development, Guest Lectures and FDP	Student Placements
2	12-04-2023	IBM India Pvt. Ltd, Bangalore	Computer Science Engineering	5 Years	Career Guidance, value added program	Industry Oriented Training
3	19-04-2022	IT Expert Training, Chennai	Computer Science Engineering	5 Years	Industrial visits, Research & Development, Guest Lectures and FDP	Student Placements

Table 2.2.4.3 List of Guest Lecture from Industrial Experts

Date	Activity	Resource Person with Designation	Domain Area of Curriculum Covered	Student out Come	Beneficiary	PO's
12-11-2022	Expert Talk on Industry 4.0	Dr. Swarna Ravindrababu, Founder of COOVUM Smart System & Services Pvt. Ltd	Industry 4.0	The Students learnt the importance of Industry 4.0	II, III & IV	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10
25-08-2022	Social mobile analytics and cloud	Mr. Rajasekaran, CEO, Bizplus Services, Chennai	SMAC technology	The students learnt about SMAC as technology, development of SMAC in gadgets and e-business with Cloud computing and advantages	II, III & IV	PO1, PO2, PO3, PO4, PO5, PO8, PO10
08-08-2022	Machine Learning and Artificial Intelligence	Mr. Socrates Krishnamurthy, data scientist in united states of america	Computer science and engineering	The Students learnt the Advanced concepts and updates of Machine Learning and Implementation of Advanced Algorithms in Machine Learning, and it's need and importance.	IV and III year	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO11

Table 2.2.4.4 List of Seminars and Workshop from Industrial and Subject Experts

Date	Activity	Resource Person with Designation	Domain Area of Curriculum Covered	Program	Student Out Come	Beneficiary	PO's
20-03-2023	Software Testing	Mr.Raja (Manager, Capgemini, Chennai)	Importance and trending concepts of Software Testing.	Workshop	The Students learnt the importance and trending concepts of Software Testing, Testing Automation Tools and Software Engineering which is useful for their curriculum and career	II and III Year	PO1, PO2, PO3, PO4, PO5, PO9, PO10
05-10-2022	Web Development	Mr.Sivakumar, CEO, Astonish Infotech, Trichy	Angular JS	Seminar	The Students learnt the importance and trending concepts of Web design and development	II, III & IV	PO1, PO2, PO3, PO4, PO9
26-09-2022	Industry Application on IOT using Python	Mr. Muhammed Ilyas, C.E.O IT Experts Training	Industry Application on IOT using Python	Workshop	The Students learnt the Advanced concepts and updates of IOT and python	III and IV Year	PO1, PO2, PO3, PO4, PO5, PO7, PO10
19-08-2022	Digital and Social Media Marketing	Mr.R.Sathish Assistant Professor.	Trend in recent techniques to promote the commodities in the digital and social media	Seminar	The Students learnt the importance and trending concepts of Software digital concept.	II and III Year	PO1, PO2, PO 3, PO4, PO5, PO6, PO9, PO10, PO11
19-8-2022	Graph theory and application	Dr.M.P.Jeyaraman Professor, Department of Mathematics, L.N Government College, Ponneri	Basics of Graph Theory and its applications	Seminar	The Students were enthralled by his teaching. He taught the most significant topics in a very elucidative way.	IV	PO1, PO2, PO3, PO4, PO8, PO12

Table 2.2.4.5 List of Add-on courses from Industrial and Subject Experts

Date	Domain Area of curriculum covered	Resource person with designation	Program	Beneficiary	Po's	Pso's
13-03-2023 to 29-03-2023	An Introduction to IoT	Ms. V. Valarmathi Visiting Professor (IT Experts systems)	Add-on	94	PO1,PO2,PO3, PO5,PO12	PSO1, PO2
23-01-2023 to 31-01-2023	Machine Learning Using Python	Mr. Muhhamed Iliyas Visiting Professor (IT Experts systems)	Add-on	88	PO1,PO2,PO3, PO4,PO5,PO6	PSO2
05-12-2022 to 16-12-2022	Python Programming	Dr. Swarna Ravindrababu Founder of COOVUM Smart System & Services Pvt. Ltd	Add-on	97.89	PO1,PO2,PO3, PO4,PO5,PO6	PSO1, PO2
12-09-2022 to 27-09-2022	Web Designing using HTML and CSS	Mr.Krishna kumar CEO ,Skillup by Simplilearn	Add-on	93	PO1,PO2,PO3, PO5,PO6, PO8,PO9	PSO1, PSO2
12-09-2022 to 27-09-2022	Advanced Java	Ms. V.Valarmathi Visiting Professor (IT Experts systems)	Add-on	90	PO1,PO2,PO3, PO5,PO6, PO8,PO9	PSO1
12-09-2022 to 27-09-2022	PHP & MySQL	Mr.Muhhamed Iliyas Visiting Professor (IT Experts systems)	Add-on	86	PO3, PO5, PO6, PO10	PSO1, PSO2

Initiatives Related to Industrial Visit**Table 2.2.4.6 List of Industrial visit during the academic year 2022-2023**

S.NO	INDUSTRIAL VISIT	DATE OF VISIT	YEAR
1.	Regional Meteorological Centre (RMC), Nungambakkam, Chennai	17.04.2023	III & IV Year
2.	Infercon Automation Pvt. Ltd, Chennai	25.05.2022.	II & III Year

Table 2.2.4.7 List of Industrial visit during the academic year 2021-2022

S.NO	INDUSTRIAL VISIT	DATE OF VISIT	YEAR
1.	IT Expert Training	10-03-2022	III & IV Year
2.	Blue Web Animation Studio	18-04-2022	II & III Year

2.2.5 Initiatives related to industry internship/summer training (15)**A. Industrial training/tours for student (3)**

Industrial visit has its own importance in the career development of engineering students. With an aim to go beyond the syllabus, industrial visit provides students a practical perspective on the real-world industrial environment. It provides an opportunity to plan and participate with active learning experience both inside and outside the class room.

Table 2.2.5.1 List of Industrial visit during the academic year 2022-2023

S. No	Year	Industry Name	Number of Students	Date
1	III & IV	Regional Meteorological Centre (RMC), Nungambakkam, Chennai	134	17.04.2023
2	II & III	Infercon Automation Pvt. Ltd, Chennai	165	25.05.2022

B. Industrial/Internship/Summer training of more than two weeks and post training assessment Internship (4)

Table 2.2.5.2 List of Internship undergone during the academic year 2022-2023

S.No	Period	Objective of the training	Name of the Student	Number of beneficiaries	Name of the industry	Area of training	Relevance	
							PO	PSO
1	26-06-23 to 02-07-23	To enhancing technical skills such as coding, debugging, and working with various web development tools and frameworks.	MAHALAKSHMI.C	11	Code bind Technologies	Web Development	PO1, PO2, PO3, PO4, PO9	PSO1
	01-07-23 to 05-07-23		LAKSHMI.R					
	01-07-23 to 05-07-23		HARINI.P					
	01-07-23 to 08-07-23		JEEVANANTHAM.V					
	21-06-23 to 25-06-23		TAMILARASI.R.S					
	21-06-23 to 25-06-23		VASAVI.A					
	21-06-23 to 25-06-23		SUBASHREE.S					
	21-06-23 to 25-06-23		REKHA.S					
	21-06-23 to 25-06-23		NANDHINI.P					
	03-07-23 to 23-07-23		SHRUTHI.R					
	03-07-23 to 07-07-23		RAMYA.S.R					
2	20-07-23 to 30-07-23	Full-stack development is to provide comprehensive exposure to both front-end and back-end technologies, allowing students to gain a holistic understanding of the entire web development process. The internship aims to develop well-rounded professionals who can contribute to various aspects of a project, from user interfaces to server-side logic.	SIDDHAVATAM ENKATESH	1	Bootcamp	Full Stock Development	PO1, PO2, PO3, PO4, PO9	PSO1
3	06-06-23 to 04-07-23	To provide students with practical experience in utilizing Python programming language for various applications. The internship aims to enhance their coding skills, problem-	GURIJALA PREMCHAND	1	CAT	Python	PO1, PO2, PO3, PO4, PO9	PSO1

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		solving abilities, and familiarity with Python's versatile applications in different domains.						
4	04-07-23 to 09-07-23	Data visualization is to provide hands-on experience in translating raw data into meaningful visual representations. This includes understanding data sources, selecting appropriate visualization tools, and mastering techniques to convey information effectively.	DILLIRAJ.M	11	Forage	Data Visualisation	PO1, PO2, PO3, PO4, PO9	PSO1
	01-08-23 to 09-08-23		KATAKAM SAI TEJA					
	08-08-23 to 08-09-23		JAGABATHINA RAKESH					
	08-08-23 to 08-09-23		BINABOINAVENKA TESH					
	29-06-23 to 29-06-23		GORLA MANOJKUMAR					
	25-06-23 to 25-06-23		MALLU VASU					
	28-06-23 to 28-06-23		CHALLAVINEEL KRISHNA					
	01-07-23 to 09-07-23		ATHIKAYALAPRAN AYKUMAR YADAV					
	28-07-23 to 28-07-23		GANIMINENI MUNEEESH					
	04-07-23 to 14-07-23		VADLA HARISH					
	15-07-23 to 21-07-23		SOBANBABU.V					
	19-06-23 to 23-06-23	Account data analysis is to provide a practical understanding of financial data, focusing on accounts, transactions, and financial statements. The internship aims to equip students with the skills required to analyze and interpret financial data for decision-making purposes.	PERAM SASIKUMAR REDDY	1		Account Data Analysis	PO1, PO2, PO3, PO4, PO9	PSO1
	19-06-23 to 23-06-23	Software architecture is to provide a practical and immersive experience in designing, implementing, and managing software systems. This includes understanding architectural patterns, scalability, security, and the overall structuring of software applications.	RAJA YASHWANTH SAI	1		Software Architecture	PO1, PO2, PO3, PO4, PO9	PSO1
		To provide practical experience in	YANAMALA ABHILASH					

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	31-7-23 to 23-8-23	translating complex data and analytical findings into clear, understandable messages for diverse stakeholders. This includes honing skills in data storytelling, visualization, and effective communication strategies.		1		Communicating insight and analysis	PO1, PO2, PO3, PO4, PO9	PSO1
	19-7-23 to 25-7-23	Framing business scenarios is to provide practical experience in understanding, analyzing, and presenting business situations. This involves developing skills in problem framing, strategic thinking, and effectively communicating business scenarios to stakeholders.	THOTA MANIKANTASRINU	1		Framing business Scenario	PO1, PO2, PO3, PO4, PO9	PSO1
	29-7-23 to 3-8-23	Data analytics is to provide practical, hands-on experience in collecting, processing, analyzing, and interpreting data to derive actionable insights. This involves honing skills in statistical analysis, data visualization, and utilizing analytics tools.	PAVULURU SAIDILEEPKUMAR	2		Data Analytics	PO1, PO2, PO3, PO4, PO9	PSO1
	22-7-23 to 3-8-23		UPPUTURU RAHUL					
	11-7-23 to 11-8-23	To provide a hands-on learning experience in utilizing advanced techniques to extract insights from data. This involves mastering skills in data preprocessing, machine learning, and applying statistical methods to solve complex problems.	SANTHOSH.S	1		Data Science	PO1, PO2, PO3, PO4, PO9	PSO1
		To provide practical experience in	SYEDHASEEB					

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	12-6-23 to 24-7-23	creating websites that adapt seamlessly to various devices and screen sizes. This involves mastering techniques such as flexible grids, media queries, and optimizing user experience across different platforms.		1		Responsive Web design	PO1, PO2, PO3, PO4, PO9	PSO1
	6/24/2023	Full-stack development is to provide comprehensive exposure to both front-end and back-end technologies, allowing students to gain a holistic understanding of the entire web development process. The internship aims to develop well-rounded professionals who can contribute to various aspects of a project, from user interfaces to server-side logic.	SHAIK ADIL BASHA	1		Full Stack Development	PO1, PO2, PO3, PO4, PO9	PSO1
6.	June - July 2023	To provide students with practical experience in utilizing Python programming language for various applications. The internship aims to enhance their coding skills, problem-solving abilities, and familiarity with Python's versatile applications in different domains.	GOPINATH.V	1	Great Learning	Python	PO1, PO2, PO3, PO4, PO9	PSO1
7.	15-7-23 to 18-8-23	To enhancing technical skills such as coding, debugging, and working with various web development tools and frameworks.	KONDURU CHANDRA	2	Grow with Code	Web Development	PO1, PO2, PO3, PO4, PO9	PSO1
	26-7-23 to 14-7-23		THATIBOINA ANUSHA.K					
	June - July 2023	To experience and practical knowledge in using JavaScript for web development. This includes			GUVI	Java Script	PO1, PO2, PO3, PO4,	PSO1

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8.		mastering the language's features, understanding its role in creating dynamic and interactive web pages, and learning to work with frameworks and libraries.	MANIKANDAN.M	1			PO9	
9.	20-6-23 to 22-6-23	To provide practical experience in leveraging digital channels for advertising, brand promotion, and customer engagement. This involves mastering various aspects of digital marketing, including social media, content creation, SEO, email marketing, and data analytics.	SANJALA.A	1	IOX Ripple	Digital Marketing	PO1, PO2, PO3, PO4, PO9	PSO1
10.	11-7-23 to 27-7-23	To provide practical experience in cybersecurity, focusing on identifying and addressing vulnerabilities within computer systems, networks, and applications. This involves learning ethical hacking techniques to strengthen the security posture of organizations.	BAINABOINA NANDHINI	3	Kashiv Infotech	Ethical Hacking	PO1, PO2, PO3, PO4, PO9	PSO1
	7-7-23 to 11-7-23		DUVVURU.MOHITH REDDY					
	7-7-23 to 11-7-23		PALLALA MADHAVI					
11.	8-7-23 to 12-7-23	To provide students with practical experience in utilizing Python programming language for various applications. The internship aims to enhance their coding skills, problem-solving abilities, and familiarity with Python's versatile applications in different domains	BODIPATI DURGA MALLESWARI	2		Python	PO1, PO2, PO3, PO4, PO9	PSO1
	30-6-23 to 2-8-23		PADRATHI SUREKHA					
12.	24-7-23 to 31-7-23	To provide students with practical experience in utilizing Python programming	KOMMANABOINA GOVARDHAN		Maxcello Tech	Python	PO1, PO2, PO3, PO4,	PSO1

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		language for various applications. The internship aims to enhance their coding skills, problem-solving abilities, and familiarity with Python's versatile applications in different domains.		1			PO9	
13.	26-6-23 to 1-7-23	To provide practical, hands-on experience in designing, building, and deploying Android applications. This involves mastering programming languages like Java or Kotlin, understanding the Android development ecosystem, and gaining proficiency in relevant tools and frameworks.	KAVIYA G	6	NSIC	Android App Development	PO1, PO2, PO3, PO4, PO9	PSO1
	3-7-23 to 7-7-25		KEERTHANA.P					
	3-7-23 to 7-7-26		JANANI.V					
	3-7-23 to 8-7-23		KAVIYARASI.C.Y					
	3-7-23 to 7-7-23		HARINI.P					
	26-6-23 to 1-7-23		MOHANAPRIYA.N					
	21-6-23 to 28-6-23	To provide practical experience in integrating Python programming with Artificial Intelligence (AI) and Machine Learning (ML) techniques for applications in the Internet of Things (IoT). This includes learning to develop intelligent systems, analyze IoT data, and implement machine learning algorithms using Python.	KARPAGARAJ.K	4		Python with AI & ML using IOT	PO1, PO2, PO3, PO4, PO9	PSO1
	21-6-23 to 28-6-23		JANANI.M					
	21-6-23 to 28-6-23		YUVASRI.S					
	21-6-23 to 28-6-23		SUGANYA.E					
14.	11-7-23 to 11-8-23	To provide a hands-on learning experience in utilizing advanced techniques to extract insights from data. This involves mastering skills in data preprocessing, machine learning, and applying statistical methods to solve complex problems.	SANTHOSH.S	1	Forage	Data Science	PO1, PO2, PO3, PO4, PO9	PSO1
	12-6-23 to 24-7-23	To provide practical experience in creating websites that	SYEDHASEEB	1		Responsive Web design	PO1, PO2, PO3,	PSO1

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		adapt seamlessly to various devices and screen sizes. This involves mastering techniques such as flexible grids, media queries, and optimizing user experience across different platforms.					PO4, PO9	
	24-06-2023	Full-stack development is to provide comprehensive exposure to both front-end and back-end technologies, allowing students to gain a holistic understanding of the entire web development process. The internship aims to develop well-rounded professionals who can contribute to various aspects of a project, from user interfaces to server-side logic.	SHAIK ADIL BASHA	1		Full Stock Development	PO1, PO2, PO3, PO4, PO9	PSO1
15.	23-6-23 to 23-7-23	To provide practical experience in developing and integrating embedded systems with Internet of Things (IoT) applications. This includes learning to design efficient, real-time embedded systems that can communicate and interact with other devices in the IoT	AGALYA.B	1	Pantech Solution	Embedded System Design & IOT	PO1, PO2, PO3, PO4, PO9	PSO1
16.	19-6-23 to 17-7-23	To enhancing technical skills such as coding, debugging, and working with various web development tools and frameworks.	SANJAI.A	1	REPU NEXT	Web development	PO1, PO2, PO3, PO4, PO9	PSO1
17.	10-7-23 to 24-7-23	Full-stack development is to provide comprehensive exposure to both front-end and back-end technologies, allowing students to gain a holistic	BARATH.K	2	RETECH	Full Stock Development	PO1, PO2, PO3, PO4, PO9	PSO1
	10-7-23 to 24-7-23		NAVEENKUMAR.S. B					

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		understanding of the entire web development process. The internship aims to develop well-rounded professionals who can contribute to various aspects of a project, from user interfaces to server-side logic.						
18.	5-7-23 to 11-7-23	Data visualization is to provide hands-on experience in translating raw data into meaningful visual representations. This includes understanding data sources, selecting appropriate visualization tools, and mastering techniques to convey information effectively.	MOPURU DEEPIKA	3	TATA	Data Visualisation	PO1, PO2, PO3, PO4, PO9	PSO1
	1-7-23 to 5-7-23		PRAVINA.K					
	21-7-23 to 23-7-23		SURENDAR.M					
19.	26-6-23 to 3-7-23	To provide practical, hands-on experience in designing, building, and deploying Android applications. This involves mastering programming languages like Java or Kotlin, understanding the Android development ecosystem, and gaining proficiency in relevant tools and frameworks.	PREMAVATHI S	29	NSIC	ANDROID APP DEVELOPMENT	PO1, PO2, PO3, PO4, PO9	PSO1
	10-6-23 to 23-6-23		RAVILLA HARATHI					
	26-6-23 to 3-7-23		ROHITH D					
	26-6-23 to 3-7-23		SANJAY S					
	26-6-23 to 3-7-23		SARALA M					
	26-6-23 to 3-7-23		SARANYA J					
	26-6-23 to 3-7-23		SWETHA D					
	26-6-23 to 3-7-23		THEENATHAYANITHI D					
	26-6-23 to 3-7-23		THULASI B					
	18-6-23 to 22-6-23		YOKESHWARI S					
	26-6-23 to 3-7-23		YUNESHWARAN G					
	26-6-23 to 3-7-23		YUVASRI S					
	26-6-23 to 3-7-23		MONISHA J					
	26-06-23 to 3-7-23		ANBARASU J					
	26-06-23 to 3-7-23		ANITHA S					
	10-06-23 to 23-06-23		ANNEM NAGARAJU JAHNAVI					
	26-06-23 to 3-07-23		BASITH K					

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	18-06-23 to 22-06-23		GAYATHRI V					
	26-06-23 to 03-07-23		HERFIN HARRISTRA R					
	18-06-23 to 22-06-23		INDHIRA M					
	26-06-23 to 03-07-23		G.KAVIYARASI					
	26-06-23 to 03-07-23		B.KEERTHANA					
	18-06-23 to 22-06-23		LAVANYA B					
	26-06-23 to 03-07-23		MD SYADUDDIN					
	26-06-23 to 03-07-23		MONISH KUMAR V					
	26-06-23 to 23-03-23		NANDINI S					
	26-06-23 to 03-07-23		NIMITHA J					
	26-06-23 to 03-07-23		NOSHINILAKSHMI G					
	26-06-23 to 03-07-23		PAVITHRA EASWARI M					
	3-7-23 to 10-7-23	To enhancing technical skills such as coding, debugging, and working with various web development tools and frameworks.	RESHMA R	1		WEB DEVELOPMENT	PO1, PO2, PO3, PO4, PO9	PSO1
19.	15-07-23 to 15-08-23	To provide a hands-on learning experience in utilizing advanced techniques to extract insights from data. This involves mastering skills in data preprocessing, machine learning, and applying statistical methods to solve complex problems.	MAVILLA DHANUSH	2		DATA SCIENCE	PO1, PO2, PO3, PO4, PO9	PSO1
			MOHAMMED ADIL SYED					
	12-6-23 to 25-6-23	Software Engineering Virtual Program is to provide a remote and immersive learning experience in software engineering practices, methodologies, and tools. This includes hands-on exposure to virtual collaboration, software development lifecycle, and the application of	PRADEESH A	10	FORAGE	SOFTWARE ENGINEERING VIRTUAL PROGRAM	PO1, PO2, PO3, PO4, PO9	PSO1
	18-6-23 to 25-6-23		ZUNAITH SHARIFF K S					
	18-6-23 to 26-6-23		MONISH S					
	18-6-23 to 22-6-23		RUBAN E					
	12-06-23 to 25-06-23		DHANUSH E					
	12-6-23 to 25-6-23		PRADEESH A					
	18-6-23 to 25-6-23		ZUNAITH SHARIFF K S					
	18-6-23 to		MONISH S					

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	26-6-23	engineering principles in a virtual environment.						
	18-6-23 to 22-6-23		RUBAN E					
	12-06-23 to 25-06-23		DHANUSH E					
	Jul-23	Software Engineering Lite is to provide a streamlined and practical learning experience focused on fundamental aspects of software engineering. This includes exposure to key concepts, development methodologies, and hands-on application of essential engineering principles in a simplified setting.	KUDITHIPUDI YASASWINI	1		SOFTWARE ENGINEERING LITE	PO1, PO2, PO3, PO4, PO9	PSO1
20.	5-06-23 to 5-07-23	To enhancing technical skills such as coding, debugging, and working with various web development tools and frameworks.	BOMMU UMA MAHESWARI	3	iLIFE TECHNOLOGIES	WEB DESIGNING AND DEVELOPMENT	PO1, PO2, PO3, PO4, PO9	PSO1
	5-06-23 to 5-07-23		DONGALA MAHESH					
	12-06-23 to 26-06-23		DUPPALA KALYANI					
	5-06-23 to 5-07-23		EATHAMUKKALA SRAVANI	6				
	05-06-23 to 05-07-23		PAKANATI SUDEEPTHIKA					
	12-07-23 to 28-07-23		PALEMKOTA BHARATH					
21	27-6-23 to 3-7-23	To provide students with practical experience in utilizing Python programming language for various applications. The internship aims to enhance their coding skills, problem-solving abilities, and familiarity with Python's versatile applications in different domains.	THALLURU SIVARANJANI	1	KAASHIV INFOTECH	PYTHON PROGRAMMING	PO1, PO2, PO3, PO4, PO9	PSO1
	09-06-23 to 13-06-23	To enhancing technical skills such as coding, debugging, and working with various web development tools and frameworks.	VAKATI LASYA	3		WEB DESIGNING	PO1, PO2, PO3, PO4, PO9	PSO1
	09-06-23 to 13-06-23		KONIDALA SUJITHA					
	09-06-23 to 13-06-23		NEELAKANTAM SRI VYSHNAVI					
	20-05-23 to 20-06-23	To provide students with practical experience in	VALLURU BALAJI					
	20-05-23 to		K.HARSHAVARDHA					

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22.	20-06-23	utilizing Python programming language for various applications. The internship aims to enhance their coding skills, problem-solving abilities, and familiarity with Python's versatile applications in different domains.	N	3	SKILL VERTEX	PYTHON PROGRAMMING	PO1, PO2, PO3, PO4, PO9	PSO1
	20-05-23 to 20-06-23		MADHALA ASHOK					
	05-03-23 to 05-04-23	To enhancing technical skills such as coding, debugging, and working with various web development tools and frameworks.	GENJI NAGARATHNAMMA	1		WEB DEVELOPMENT	PO1, PO2, PO3, PO4, PO9	PSO1
23	20-5-22 to 20-6-22	To provide participants with hands-on experience and practical exposure to various aspects of web development. The internship aims to enhance their skills, deepen their understanding of web technologies, and prepare them for a successful career in the field.	AARIMANDA GOWTHAM REDDY	5	Kaashiv Infotech	Web Technology	PO1, PO2, PO3, PO4, PO9	PSO1
			DHARANI V					
			CHERUKURU NAVEENA					
			CHANDRODHAYAN V N					
			INDHUMATHI S					
24	12-06-22 to 30-06-22	To equip practical skills and knowledge, contribute to strengthening the overall cybersecurity landscape by implementing effective security measures and best practices	DURGA DEVI J	6	Innovate Engineering Solution	Network security	PO1, PO2, PO3, PO4, PO9	PSO1
			GUDUGUNTALA SUCHARITHA					
			KONDAMAREDDY VIVEK NARAYANA REDDY					
			SHAIK ALTHAF					
			YELURU KARTHIK					
			GANDAMANENI PHANEENDRA					
25	11-7-22 to 11-8-22	To provide a hands-on learning experience in utilizing advanced techniques to extract insights from data. This involves mastering skills in data preprocessing, machine learning, and applying statistical methods to solve complex problems.	JAMA BHARATH	7	Techso Technologies	Data Science	PO1, PO2, PO3, PO4, PO9	PSO1
			KOLA SAIRAM					
			KAVATI SUMANTH					
			GOGINENI DHANUSH NAIDU					
			PACHA SOWMYA					
			JUVVALADINNE SUSHMA SRI					
			MOCHERLA ABHILASH					
		To provide practical, hands-on experience	KIRUTHEESWARAN K					

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26	10-7-22 to 29-7-22	in designing, building, and deploying Android applications. This involves mastering programming languages like Java or Kotlin, understanding the Android development ecosystem, and gaining proficiency in relevant tools and frameworks.	RAYAPANENI NAGAMANI MAINAMPATI POOJITHA KALTHIREDDY LALASA NAGINENI BHARGAV KATHI CHANDU PELLETI YOGITHREDDY MADALA MANUVARDHAN	8	Pantech Solutions	Android App Development	PO1, PO2, PO3, PO4, PO9	PSO1
27	10-7-22 to 29-7-22	Data visualization is to provide hands-on experience in translating raw data into meaningful visual representations. This includes understanding data sources, selecting appropriate visualization tools, and mastering techniques to convey information effectively.	HITESH K NELAKONDA VENKATA SAI ABHISHEK NELLORE SUMANTH KUMARI SRAVAN PERAM SUPRAJA NASINA BALACHAITHANYA SHAIK YASMINE	7	Chennai Technologies	Data Visualisation	PO1, PO2, PO3, PO4, PO9	PSO1
28	12-07-22 to 28-07-22	To provide a hands-on learning experience in utilizing advanced techniques to extract insights from data. This involves mastering skills in data preprocessing, machine learning, and applying statistical methods to solve complex problems.	RAVURU CHARITHA PRIYADHARSHINI G PAKANATI HEMASHIKA GATTAMANENI SAI AKILESH NALLAPANENI BALACHIRUPURA SUNDARI KOLA HYNDAVI	6	Pantech Solutions	Data Analytics	PO1, PO2, PO3, PO4, PO9	PSO1

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S.NO	DURATION	STUDENT NAME	INDUSTRY NAME	DOMAIN	BENEFICIARY
6	21-6-23 to 25-6-23	Vasavi.A			
7	21-6-23 to 25-6-23	Subashree.S			
8	21-6-23 to 25-6-23	Rekha.S			
9	21-6-23 to 25-6-23	Nandhini.P			
10	3-7-23 to 23-7-23	Shruthi.R			
11	3-7-23 to 7-7-23	Ramya.S.R			
12	6-6-23 to 4-7-23	Gurijala Premchand	Cat	Python	1
13	4-7-23 to 9-7-23	Dilliraj.M	Forage	Data Visualisation	11
14	1-8-23 to 9-8-23	Katakam Sai Teja			
15	1-8-23 to 9-8-23	Jagabathina Rakesh			
16	1-8-23 to 9-8-23	Binaboinavenkatesh			
17	29-6-23 to 29-6-23	Gorla Manojkumar			
18	25-6-23 to 25-6-23	Mallu Vasu			
19	28-6-23 to 28-6-23	Challavineel Krishna			
20	1-7-23 to 9-7-23	Athikayala Pranay Kumar Yadav			
21	28-7-23 to 28-7-23	Ganimineni Muneesh			
22	4-7-23 to 14-7-23	Vadla Harish			
23	15-7-23 to 21-7-23	Sobanbabu.V			
24	19-6-23 to 23-6-23	Peram Sasikumar Reddy		Account Data Analysis	1
25	19-6-23 to 23-6-23	Raja Yashwanth Sai		Software Architecture	1

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S.NO	DURATION	STUDENT NAME	INDUSTRY NAME	DOMAIN	BENEFICIARY
26	31-7-23 to 23-8-23	Yanamala Abhilash		Communicating Insight And Analysis	1
27	19-7-23 to 25-7-23	Thota Manikantasrinu		Framing Business Scenario	1
28	29-7-23 to 3-8-23	Pavuluru Sai Dileep Kumar		Data Analytics	2
29	22-7-23 to 3-8-23	Upputuru Rahul			
30	11-7-23 to 11-8-23	Santhosh.S		Data Science	1
31	12-6-23 to 24-7-23	Syedhaseeb		Responsive Web Design	1
32	24-06-2023	Shaik Adil Basha		Full Stock Development	2
33	20-7-23 to 30-7-23	Siddhavatam Venkatesh			
34	June - July 2023	Gopinath.V	Great Learning	Python	1
35	15-7-23 to 18-8-23	Konduru Chandra	Grow with Code	Web Development	2
36	26-7-23 to 14-7-23	Thatiboina Anusha.K			
37	June - July 2023	Manikandan.M	Guvi	Java Script	1
38	20-6-23 to 22-6-23	Sanjai.A	Iox Ripple	Digital Marketing	1
39	27-7-23 to 11-7-23	Bainaboina Nandhini	Kashiv Infotech	Ethical Hacking	3
40	7-7-23 to 11-7-23	Duvvuru Mohith Reddy			
41	7-7-23 to 11-7-23	Pallala Madhavi			
42	8-7-23 to 12-7-23	Bodipati Durga Malleswari		PYTHON	2
43	30-6-23 to 2-8-23	Padrathi Surekha			
44	24-7-23 to 31-7-23	Kommanaboina Govardhan	Maxcello Tech	Python	1

NBA-SAR, Tier II Institution, CAY 2022-23

S.NO	DURATION	STUDENT NAME	INDUSTRY NAME	DOMAIN	BENEFICIARY
45	26-6-23 to 1-7-23	Kaviya G	NSIC	Android App Development	6
46	3-7-23 to 7-7-25	Keerthana.P			
47	3-7-23 to 7-7-26	Janani.V			
48	3-7-23 to 8-7-23	Kaviyarasi.C.Y			
49	3-7-23 to 7-7-23	Harini.P			
50	26-6-23 to 1-7-23	Mohanapriya.N			
51	21-6-23 to 28-6-23	Karpagaraj.K		Python With AI & ML Using Iot	4
52	21-6-23 to 28-6-23	Janani.M			
53	21-6-23 to 28-6-23	Yuvasri.S			
54	21-6-23 to 28-6-23	Suganya.E			
55	23-6-23 to 23-7-23	Agalya.B	Pantech Solution	Embedded System Design & Iot	1
56	19-6-23 to 17-7-23	Sanjai.A	Repu Next	Web Development	1
57	10-7-23 to 24-7-23	Barath.K	Retch	Full Stack Development	2
58	10-7-23 to 24-7-23	Naveenkumar.S.B			
59	5-7-23 to 11-7-23	Mopuru Deepika	Tata	Data Visualisation	3
60	1-7-23 to 5-7-23	Pravina.K			
61	21-7-23 to 23-7-23	Surendar.M			
62	26-6-23 to 3-7-23	Premavathi S	NSIC	Android App Development	29
63	10-6-23 to 23-6-23	Ravilla Harathi			
64	26-6-23 to 3-7-23	Rohith D			

NBA-SAR, Tier II Institution, CAY 2022-23

S.NO	DURATION	STUDENT NAME	INDUSTRY NAME	DOMAIN	BENEFICIARY
65	26-6-23 to 3-7-23	Sanjay S			
66	26-6-23 to 3-7-23	Sarala M			
67	26-6-23 to 3-7-23	Saranya J			
68	26-6-23 to 3-7-23	Swetha D			
69	26-6-23 to 3-7-23	Theenathayanithi D			
70	26-6-23 to 3-7-23	Thulasi B			
71	18-6-23 to 22-6-23	Yokeshwari S			
72	26-6-23 to 3-7-23	Yuneshwaran G			
73	26-6-23 to 3-7-23	Yuvasri S			
74	26-6-23 to 3-7-23	Monisha J			
75	26-06-23 to 3-7-23	Anbarasu J			
76	26-06-23 to 3-7-23	Anitha S			
77	10-06-23 to 23-06-23	Annem Nagaraju Jahnnavi			
78	26-06-23 to 3-07-23	Basith K			
79	18-06-23 to 22-06-23	Gayathri V			
80	26-06-23 to 03-07-23	Herfin Harristra R			
81	18-06-23 to 22-06-23	Indhira M			
82	26-06-23 to 03-07-23	Kaviyarasi G			
83	26-06-23 to 03-07-23	Keerthana B			
84	18-06-23 to 22-06-23	Lavanya B			
85	26-06-23 to 03-07-23	Md Syadduddin			

NBA-SAR, Tier II Institution, CAY 2022-23

S.NO	DURATION	STUDENT NAME	INDUSTRY NAME	DOMAIN	BENEFICIARY
86	26-06-23 to 03-07-23	Monish Kumar V			
87	26-06-23 to 23-03-23	Nandini S			
88	26-06-23 to 03-07-23	Nimitha J			
89	26-06-23 to 03-07-23	Noshinilakshmi G			
90	26-06-23 to 03-07-23	Pavithra Easwari M			
91	3-7-23 to 10-7-23	Reshma R		Web Development	1
92	15-07-23 to 15-08-23	Mavilla Dhanush	Forge	Data Science	2
93	15-07-23 to 15-08-23	Mohammed Adil Syed		Software Engineering Virtual Program	10
94	12-6-23 to 25-6-23	Pradeesh A			
95	18-6-23 to 25-6-23	Zunaith Shariff K S			
96	18-6-23 to 26-6-23	Monish S			
97	18-6-23 to 22-6-23	Ruban E			
98	12-06-23 to 25-06-23	Dhanush E			
99	12-6-23 to 25-6-23	Pradeesh A			
100	18-6-23 to 25-6-23	Zunaith Shariff K S			
101	18-6-23 to 26-6-23	Monish S			
102	18-6-23 to 22-6-23	Ruban E			
103	12-06-23 to 25-06-23	Dhanush E			
104	Jul-23	Kudithipudi Yaraswini		Software Engineering Lite	1
105	5-06-23 to 5-07-23	Bommu Uma Maheswari	ilife Technologies	Web Designing and Development	6
106	5-06-23 to 5-07-23	Dongala Mahesh			

S.NO	DURATION	STUDENT NAME	INDUSTRY NAME	DOMAIN	BENEFICIARY
107	12-06-23 to 26-06-23	Duppala Kalyani			
108	5-06-23 to 5-07-23	Eathamukkala Sravani			
109	05-06-23 to 05-07-23	Pakanati Sudeepthika			
110	12-07-23 to 28-07-23	Palemkota Bharath			
111	27-6-23 to 3-7-23	Thalluru Sivaranjani	Kaashiv Infotech	Python Programming	1
112	09-06-23 to 13-06-23	Vakati Lasya		Wed Designing	3
113	09-06-23 to 13-06-23	Konidala Sujitha			
114	09-06-23 to 13-06-23	Neelakantam Sri Vyshnavi			
115	20-5-23 to 20-6-23	Valluru Balaji	Skill Vertex	Python Programming	3
116	20-05-23 to 20-06-23	K.Harshavardhan			
117	20-05-23 to 20-06-23	Madhala Ashok			
118	05-03-23 to 05-04-23	Genji Nagarathnamma		Web Development	1

C. Impact analysis of industrial training (4)

- Students observe the actual implementation of theory in the field and understand the skill sets required in the industry.
- Students understand how to work as a team.
- Students understand the importance of time & punctuality.
- Students who perform well may get placement offers.

D. Student feedback on initiative (4)

After completing industrial training and visiting an industrial site, students are asked for their feedback. They are instructed to provide written feedback detailing what they learned during training or the industrial visit, what they experienced and what they learned as a result of the training or industrial visit. Their input is examined and on the basis of this, it is intended to send additional branches of trainees to the same company for industrial training. In addition to that students are also instructed to give a presentation about their industrial training. We have invited industry professionals to conduct industry oriented programming and guest lectures. For ongoing semester, we are receiving student's feedback regarding guest lecture, value added courses and industry oriented programs.

 **J·N·N | INSTITUTE OF ENGINEERING**

SUMMER INTERNSHIP / INPLANT TRAINING PROGRAM

STUDENT FEEDBACK FORM

Name: R. Reshma Reg. no. 110720104059

Department: Computer Science Engineering

Name of the internship/Inplant training: Web Development

Name of the organization: Nsic, Guindy

S.No	Parameter	Excellent	Good	Satisfactory
1	Support Received from company on internship identification	✓		
2	Opportunity to learn from the internship work in the company	✓		
3	Learning benefits from the internship work		✓	
4	Placement Opportunities		✓	
5	Support received from department to do internship on regular basis	✓		
6	Recommendation to do internship in the core company		✓	
7	Overall Experience		✓	

Date: 28-07-2023

R. Reshma
Signature of the student

Criterion 3	Course Outcomes and Program Outcomes	120
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3.1. Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs)

(Program Outcomes as mentioned in Annexure I and Program Specific Outcomes as defined by the Program)

PROGRAM OUTCOMES (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 independent and life-long learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

Graduates of Bachelor of Computer Science and Engineering will have the ability and capability to

- ✓ **PSO1:** To apply software engineering principles and practices for developing quality software for scientific and business applications.
- ✓ **PSO2:** To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions to existing/novel problems.

3.1.1 Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked)

Process of framing Course outcomes:

- ✓ Course Outcomes are framed by the Course in-charge and the Program Coordinator
- ✓ This is followed by submitting the same for approval of Head of the Department.
- ✓ Five Course Outcomes have been formulated for every course of the program.
- ✓ The need for formulating Course Outcomes for each course of a program is to assess whether the objective of the course has been fulfilled and thereby meet the respective program outcomes.

Table 3.1.1 Course Outcomes (COs)

SEMESTER III	
Regulation / Course Code / Name: 2021/ CS3301/ Data Structures	
Course Name/Year of Study : C204/ 2022-2023	
CO	Course Outcome Statement
C204.1	Define linear and non-linear data structures.
C204.2	Implement linear and non-linear data structure operations.
C204.3	Use appropriate linear/non-linear data structure operations for solving a given problem.
C204.4	Apply appropriate graph algorithms for graph applications.
C204.5	Analyze the various searching and sorting algorithms
SEMESTER IV	
Regulation / Course Code / Name: 2021/ CS3451 / Introduction to Operating Systems	
Course Name/Year of Study : C214/ 2022 - 2023	
C214.1	Analyze various scheduling algorithms and process synchronization.
C214.2	Explain deadlock prevention and avoidance algorithms.
C214.3	Compare and contrast various memory management schemes.
C214.4	Explain the functionality of file systems, I/O systems, and Virtualization
C214.5	Compare iOS and Android Operating Systems.
SEMESTER V	
Regulation / Course Code / Name : 2017/ CS8591/ Computer Networks	
Course Name/Year of Study : C302/ 2022-2023	
C302.1	Understand the basic layers and its functions in computer networks
C302.2	Evaluate the performance of a network.
C302.3	Understand the basics of how data flows from one node to another.
C302.4	Analyze and design routing algorithms
C302.5	Design protocols for various functions in the network.
C302.6	Understand the working of various application layer protocols.
SEMESTER VI	
Regulation / Course Code / Name: 2017/ CS8602/ Compiler Design	

Course Name/Year of Study : C313/ 2022 - 2023	
C313.1	Compare the different phases of compiler. Construct different finite automata.
C313.2	Examine the functionalities of different parsers.
C313.3	Inspect syntax directed definition and syntax trees.

C313.4	Design code generator and understand run-time environment.
C313.5	Experiment with code optimization techniques.
C313.6	Design and implement a scanner and a parser using LEX and YACC tools.

SEMESTER VII

Regulation / Course Code / Name: 2017/ CS8792/ Cryptography and Network Security

Course Name/Year of Study : C402/ 2022 - 2023

C402.1	Understand the fundamentals of networks security, security architecture, threats and vulnerabilities
C402.2	Apply the different cryptographic operations of symmetric cryptographic algorithms
C402.3	Apply the different cryptographic operations of public key cryptography
C402.4	Apply the various Authentication schemes to simulate different applications.
C402.5	Understand various Security practices and System security standards

SEMESTER VIII

Regulation / Course Code / Name: 2017/ CS8078/ Green Computing

Course Name/Year of Study : C410/ 2022 - 2023

C410.1	Acquire knowledge to adopt green computing practices to minimize negative impacts on the environment
C410.2	Enhance the skill in energy saving practices in their use of hardware.
C410.3	Evaluate technology tools that can reduce paper waste and carbon footprint by the stakeholders
C410.4	Understand the ways to minimize equipment disposal requirements

3.1.2 CO-PO matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from 3rd to 8th semester)

The contribution of each course towards various POs and PSOs are decided according to the course outcomes framed for a particular course. First, the relevance of CO towards various POs and PSOs is verified. If the particular CO is having relevance, then by using the k-levels of CO and PO, contribution is prepared. For high contribution the weightage is '3', for medium contribution the weightage is '2' and for low contribution the weightage is '1'. If the CO is not having relevance with the POs, it is marked as '-'.
1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High) 4: No correlation “-”

Table 3.1.2 CO-PO matrices of courses

SEMESTER III														
Regulation / Course Code / Name: 2021/ CS3301/ Data Structures														
Course Name/Year of Study : C204/ 2022-2023														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C204.1	3	2	1	-	-	-	-	2	-	2	-	-	-	-
C204.2	2	1	1	-	-	-	-	2	-	-	-	-	-	-
C204.3	2	1	1	-	1	-	-	-	-	-	-	-	-	-
C204.4	3	2	1	-	-	-	-	1	-	-	-	-	-	-
C204.5	2	2	2	-	-	-	-	1	-	-	-	-	-	-
C204	2.40	1.60	1.20	-	1.00	-	-	1.50	-	2.00	-	-	-	-
SEMESTER IV														
Regulation / Course Code / Name: 2021/ CS3451 / Introduction to Operating Systems														
Course Name/Year of Study : C214/ 2022 - 2023														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C214.1	3	1	1	-	-	-	-	-	2	1	-	-	-	-
C214.2	2	2	3	-	-	-	-	-	-	1	-	2	-	-
C214.3	1	1	-	-	-	-	-	-	-	2	-	1	-	-
C214.4	1	1	1	-	-	-	-	-	-	2	-	1	-	-
C214.5	2	1	-	-	-	-	-	-	-	1	-	1	-	-
C214	1.80	1.20	1.67	-	-	-	-	-	2.00	1.40	-	1.25	-	-
SEMESTER V														
Regulation / Course Code / Name: 2017/ CS8591/ Computer Networks														

Course Name/Year of Study : C302/ 2022-2023														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C302.1	3	2	2	-	-	-	-	-	-	-	-	-	-	-
C302.2	3	2	2	-	1	-	-	-	-	-	-	-	-	-
C302.3	-	2	1	-	-	-	-	1	-	-	-	-	-	-
C302.4	-	2	2	-	-	-	-	1	-	-	-	-	-	-
C302.5	2	1	1	-	-	-	-	-	-	-	-	-	1	-
C302.6	-	2	-	-	-	-	-	1	-	-	-	-	-	-
C302	2.67	1.83	1.60	-	1.00	-	-	1.00	-	-	-	-	1.00	-

SEMESTER VI

Regulation / Course Code / Name: 2017/ CS8602/ Compiler Design

Course Name/Year of Study : C313/ 2022 – 2023

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C313.1	3	3	2	2	2	-	-	-	2	-	-	2	-	-
C313.2	3	3	2	2	2	-	-	-	-	-	-	2	-	-
C313.3	3	3	2	2		-	-	-	-	-	-	-	-	-
C313.4	3	2	2	-	-	-	-	-	-	-	-	-	-	-
C313.5	3	2	2	-	-	-	-	-	-	-	-	-	-	-
C313.6	3	2	2	-	2	-	-	-	2	2	-	2	-	-
C313	3.00	2.50	2.00	2.00	2.00	-	-	-	2.00	2.00	-	2.00	-	-

SEMESTER VII

Regulation / Course Code / Name: 2017/ CS8792/ Cryptography and Network Security

Course Name/Year of Study : C402/ 2022 - 2023

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C402.1	3	2	2	-	-	-	-	2	-	-	-	-	-	-
C402.2	3	1	1	-	-	-	-	-	-	-	-	-	-	-
C402.3	3	1	1	-	-	-	-	-	-	-	-	-	-	-
C402.4	3	1	1	-	-	-	-	-	-	-	-	-	-	-
C402.5	3	1	1	-	-	-	-	2	-	-	-	-	-	-

C402	3.00	1.20	1.20	-	-	-	-	2.00	-	-	-	-	-	-
SEMESTER VIII														
Regulation / Course Code / Name: 2017/ CS8078- Green Computing														
Course Name/Year of Study : C410/ 2022 - 2023														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C410.1	3	2	2	-	-	-	3	-	-	-	-	-	-	-
C410.2	2	1	1	-	2	-	-	-	-	-	-	-	-	-
C410.3	2	2	2	-	2	-	3	-	-	-	-	-	-	-
C410.4	1	1	1	-	-	-	2	-	-	-	-	-	-	-
C410	2.00	1.50	1.50	-	2.00	-	2.67	-	-	-	-	-	-	-

3.1.3 Program level course – PO matrix of all courses including first year

Table 3.1.3 Courses – PO – PSO Mapping: Academic Year 2021 – 2022

Sl. No.	Course Code	Subject Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1	C101	Communicative English	1.00	1.00	1.00	1.00	1.00	1.00	-	-	2.00	-	-	-	-	-
2	C102	Engineering Mathematics - I	2.83	2.67	2.67	1.00	1.00	1.00	1.00	1.00	2.67	-	-	-	-	-
3	C103	Engineering Physics	3.00	3.00	3.00	1.00	1.00	1.00	-	1.00	-	-	-	-	-	-
4	C104	Engineering Chemistry	1.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	-	-	-	-	-
5	C105	Problem Solving and Python Programming	2.00	1.25	1.50	-	3.00	-	1.00	2.00	1.60	-	-	-	-	-
6	C106	Engineering Graphics	1.00	3.00	3.00	1.00	1.00	-	3.00	1.00	-	-	-	-	-	-
7	C107	Problem Solving and Python Programming Laboratory	1.00	1.33	2.60	-	3.00	-	1.00	1.00	1.00	-	-	-	2.00	-
8	C108	Physics and Chemistry Laboratory	1.00	1.33	3.00	-	1.25	1.00	-	1.00	1.00	-	-	-	-	-
9	C109	Technical English	-	1.67	2.00	1.25	1.50	1.50	3.00	1.00	-	2.00	-	-	-	-
10	C110	Engineering Mathematics - II	3.00	3.00	3.00	-	1.80	-	-	-	-	-	-	-	-	-
11	C111	Physics for Information Science	2.20	1.50	1.00	-	1.00	-	-	2.60	-	-	-	-	-	-
12	C112	Basic Electrical, Electronics and Measurement Engineering	2.25	1.00	1.00	-	-	-	2.00	1.50	-	1.00	-	-	-	-
13	C113	Environmental Science and Engineering	2.40	2.00	1.50	-	-	-	2.00	1.00	-	2.00	-	1.20	-	-
14	C114	Programming in C	3.00	2.20	2.00	2.00	1.20	-	-	-	-	-	-	1.80	1.00	-
15	C115	Engineering Practices Laboratory	1.67	1.50	2.83	-	1.50	-	1.00	1.50	1.50	-	-	-	-	-
16	C116	C Programming Laboratory	2.00	1.33	1.67	-	1.33	-	-	-	-	-	-	-	-	-
17	C201	Discrete Mathematics	2.80	1.80	1.20	1.00	-	-	-	-	-	-	-	1.00	-	-

Sl. No.	Course Code	Subject Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
18	C202	Digital Principles and System design	2.00	1.75	1.75	1.00	1.00	-	-	-	-	-	-	-	-	-
19	C203	Data Structures	3.00	2.00	2.00	1.00	1.00	-	-	-	-	-	-	-	-	-
20	C204	Object Oriented Programming	3.00	2.00	2.00	1.00	-	-	-	1.00	-	-	-	-	1.00	-
21	C205	Communication Engineering	2.50	2.00	1.00	1.00	-	-	-	-	-	-	-	1.00	-	-
22	C206	Data Structures Laboratory	3.00	2.00	2.00	-	2.00	-	-	-	2.00	-	-	1.25	-	-
23	C207	Object Oriented Programming Laboratory	3.00	2.00	2.00	-	2.00	-	-	2.00	2.00	2.00	-	1.83	1.00	0.67
24	C208	Digital Systems Laboratory	3.00	2.00	2.00	2.00	-	-	-	-	2.00	2.00	-	-	1.00	-
25	C209	Interpersonal Skills/ Listening and Speaking	-	-	-	-	-	-	-	2.00	2.00	3.00	-	2.00	-	-
26	C210	Probability and Queueing Theory	3.00	2.00	1.00	-	-	-	-	-	-	-	-	1.00	-	-
27	C211	Computer Architecture	3.00	2.00	1.67	-	-	-	-	-	2.00	-	-	2.00	-	-
28	C212	Database Management Systems	2.75	1.75	1.60	1.00	-	-	-	-	-	-	-	-	1.00	-
29	C213	Design and Analysis of Algorithms	3.00	2.80	2.00	1.80	-	-	-	-	2.00	-	-	2.00	-	-
30	C214	Operating Systems	2.67	2.00	2.00	1.50	-	-	-	-	-	-	-	-	-	-
31	C215	Software Engineering	2.33	2.00	2.00	-	2.00	-	-	-	1.83	1.83	3.00	2.00	-	-
32	C216	Database Management Systems Laboratory	3.00	2.00	2.00	-	2.00	-	-	-	2.00	-	-	2.00	1.00	-
33	C217	Operating Systems Laboratory	3.00	2.00	2.00	-	-	-	-	-	2.00	-	-	-	-	-
34	C218	Advanced Reading and Writing	-	-	-	-	-	-	-	2.00	2.00	3.00	-	2.00	-	-
35	C301	Algebra and Number Theory	3.00	2.00	2.00	1.00	-	-	-	-	2.00	-	-	1.00	-	-
36	C302	Computer Networks	2.67	1.83	1.60	-	1.00	-	-	1.00	-	-	-	1.00	1.00	-

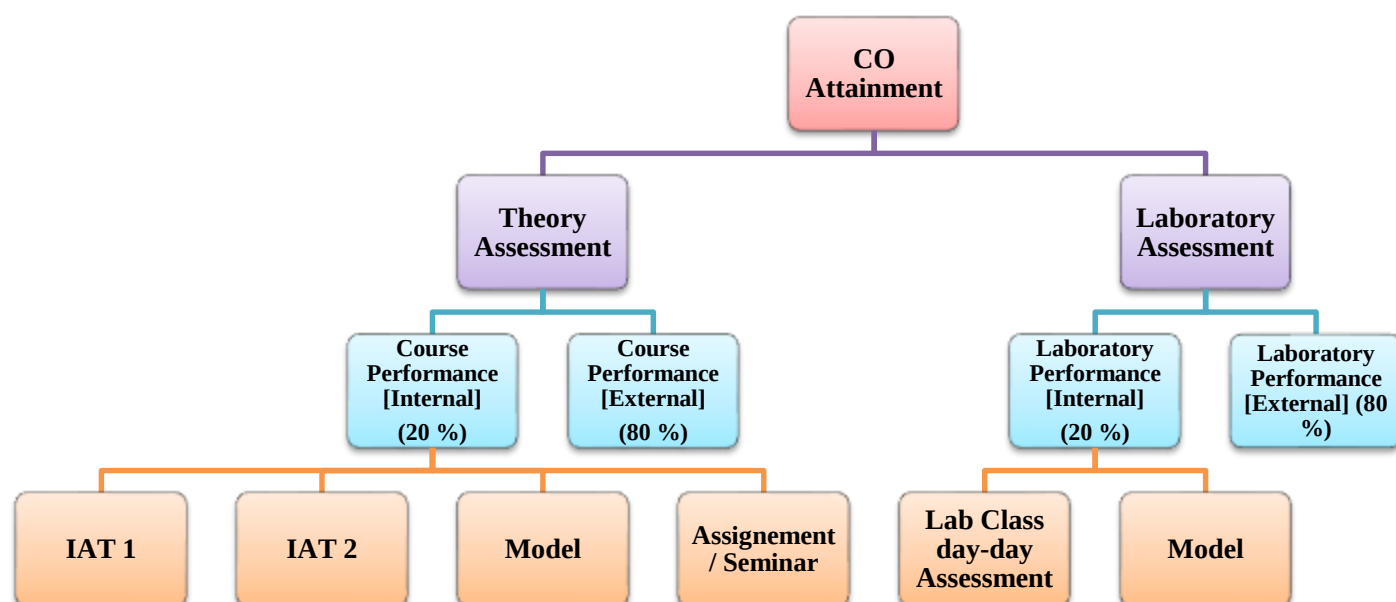
Sl. No.	Course Code	Subject Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
37	C303	Microprocessors and Microcontrollers	3.00	2.20	1.75	1.25	1.00	1.00	-	1.00	-	-	-	1.00	1.00	-
38	C304	Theory of Computation	3.00	3.00	2.00	2.00	-	-	-	-	2.00	-	-	1.00	-	-
39	C305	Object Oriented Analysis and Design	2.00	1.60	1.60	1.00	1.00	-	-	-	2.00	2.00	-	1.00	-	1.00
40	C306	Geographical Information System - Open Elective I	2.80	2.60	-	-	2.00	-	-	-	2.00	2.00	-	-	-	-
41	C307	Microprocessors and Microcontrollers Laboratory	3.00	2.00	2.00	2.00	2.00	-	-	-	2.00	2.00	-	2.00	-	-
42	C308	Object Oriented Analysis and Design Laboratory	3.00	2.00	1.60	-	1.60	-	-	-	2.00	-	-	2.00	-	-
43	C309	Networks Laboratory	3.00	2.80	2.60	-	2.00	-	-	-	2.00	2.00	-	2.00	1.00	-
44	C310	Internet Programming	3.00	2.60	2.00	-	2.00	-	-	-	2.00	-	-	1.75	1.50	-
45	C311	Artificial Intelligence	3.00	3.00	2.00	2.00	-	-	-	-	-	-	-	2.00	1.00	1.00
46	C312	Mobile Computing	3.00	2.00	2.00	-	2.00	-	-	-	2.00	2.00	-	2.00	2.00	1.00
47	C313	Compiler Design	3.00	2.50	2.00	2.00	2.00	-	-	-	2.00	2.00	-	2.00	-	-
48	C314	Distributed Systems	2.40	2.00	2.00	-	-	-	-	-	2.00	-	-	-	-	-
49	C315	Software Testing- Professional Elective I	3.00	3.00	2.17	2.00	2.00	-	-	-	2.00	2.00	2.20	2.00	-	-
50	C316	Internet Programming Laboratory	3.00	2.00	2.00	-	1.67	-	-	2.00	2.00	-	-	2.00	-	-
51	C317	Mobile Application Development Laboratory	3.00	3.00	2.00	2.60	1.00	-	-	-	-	-	-	2.00	-	-
52	C318	Mini Project	-	-	-	-	-	-	-	1.00	2.00	3.00	-	1.00	-	-
53	C319	Professional Communication	-	3.00	-	-	2.00	-	-	-	-	-	-	-	3.00	3.00
54	C401	Principles of Management	3.00	2.00	1.00	-	-	1.00	-	1.83	2.83	2.00	1.00	1.00	-	-
55	C402	Cryptography and Network Security	3.00	1.20	1.20	-	-	-	-	2.00	-	-	-	-	-	-

Sl. No.	Course Code	Subject Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
56	C403	Cloud Computing	2.20	1.00	1.60	1.75	2.00	-	-	-	-	-	-	-	-	-
57	C404	Human Computer Interaction – Professional Elective II	-	2.00	1.00	1.00	-	2.00	2.83	2.00	-	-	3.00	2.00	-	-
58	C405	Machine Learning Techniques – Professional Elective III	2.50	1.75	-	-	1.50	1.50	-	2.20	2.00	1.50	3.00	1.67	1.50	-
59	C406	Supply Chain Management – Open Elective II	3.00	2.00	1.00	-	-	-	-	-	2.00	2.00	-	2.00	-	-
60	C407	Cloud Computing Laboratory	3.00	2.00	2.00	-	2.00	-	-	-	2.00	-	-	2.00	-	-
61	C408	Security Laboratory	2.83	2.00	2.00	-	2.00	-	-	2.00	-	-	-	2.00	-	-
62	C409	Professional Ethics in Engineering - Professional Elective IV	2.67	1.75	2.00	2.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00	1.00	-	-
63	C410	Green Computing - Professional Elective V	2.00	1.50	1.50	-	2.00	-	2.67	-	-	-	-	-	-	-
64	C411	Project Work	2.36	3.00	3.00	3.00	3.00	2.27	1.18	2.00	3.00	3.00	3.00	2.91	1.55	2.09
Average Courses CO – PO – PSO Mapping			2.34	1.94	1.70	0.71	1.08	0.27	0.39	0.67	1.13	0.69	0.27	0.96	0.34	0.14

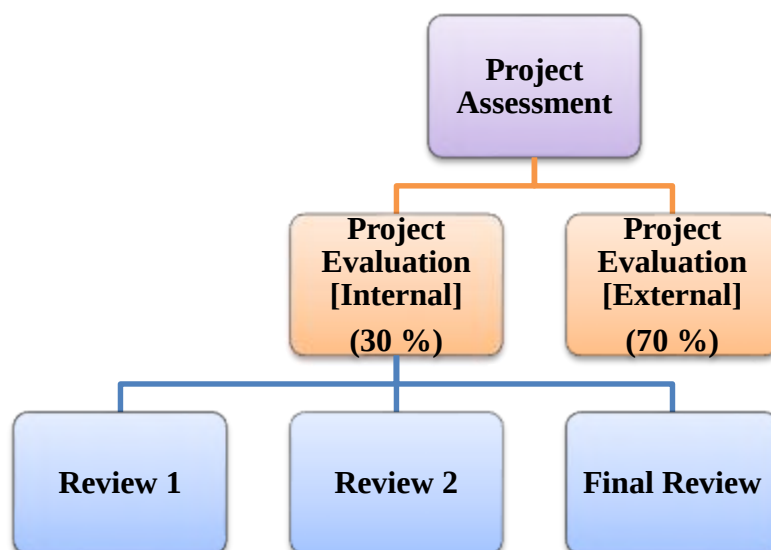
3.2. Attainment of Course Outcomes

3.2.1. Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based.

To evaluate the Course Outcomes, the data are gathered using the following process.



(a) Course Attainment



(b) Project Attainment

Fig. 3.2.1 Flowchart for attainment of Course Outcomes

Assessment tools to assess the course outcomes:**Direct Attainment:**

Direct methods display the students' knowledge and skills from their performance in the Internal Assessment-I, Internal Assessment-II, Model Examination & University Examination along with assignments.

Table 3.2.1.1 Direct Assessment Methods

Assessment Tools	CO Assessment Methods	Description
Theory Course Assessment	Course Performance -IA	It is a metric to assess the attainment of COs continuously and students' learning domains, thus improving the teaching-learning process. The Internal Assessment (IA) marks in a theory paper shall be based on IAT-1, IAT-2, and Model Assessments generally conducted each semester. The retests will be conducted for the failed students and absentees after each assessment to allow them to improve their understanding of the subject with the permission of HEI.
	Course Performance – Assignment/ Seminar	The assignment marks in a theory paper shall be based on assignments from 3 units and assignment cum seminar from 2 units of 10 marks each to assess the learning outcomes of the course every semester.
	Course Performance – EA	The ESE are the metric to assess whether all the course outcomes are attained.
Laboratory Assessment	Lab. class day-day Assessment and Model Exam -IA	Lab assessment mainly assesses students' practical knowledge with their designing capabilities. The IA marks achieved for practical shall be based on the weightage of each experiment in the record and observation notebooks on day-by-day practical sessions and the results of the model examination, which is held at the end of the semester.
	Laboratory Performance ESE -IA	Practical ESE is focused on the performance of experiments and viva-voce.
Theory Cum Lab. Course Assessment	Course cum lab. Performance – IA	The IA marks in a theory cum lab. course shall be based on IAT-1, IAT-2, and Model Assessments generally conducted end of each semester, like theory course. The IA marks achieved for practical shall be based on the weightage of each experiment in the record and

		observation notebooks on day-day practical sessions. The ESE are the metric to assess whether all the course outcomes are attained.
Project Assessment	Project Work -IA	The marks in case of project work in the final year shall be based on the evaluation in 8th semester by PRC consisting of HoD and project coordinator, along with the project guide. They award internal marks for the project work. The project coordinator monitors the students project's progress in three reviews at various stages of the project implementation. Individual and team performance is evaluated in each of the reviews.
	Project Work ESE-EA	The University conducts a viva-voce examination for the students, and their projects are evaluated by the External Examiners based on the presentation, contents of the report and the demonstration.

Course Outcome Assessment methodology, tools and frequency of use for direct method described in the following table 3.2.1.2.

Table 3.2.1.2 Course Outcome Assessment methodology, tools and frequency of use for direct method

Assessment Tools	Assessment Method	Assessment frequency	Assessment Tool	In charge	Reviewer
Theory Course Assessment	Course Performance – IA	Thrice in a semester.	Students’ performance in internal assessment.	Course in charge and Course Coordinator	HoD
	Course Performance – Assignment - IA	At least one Assignment from each unit.	Students’ performance in submitting the assignment/seminar		
	Course Performance, ESE-EA	At the end of the semester	Students’ performance in ESE	External Examiners	
	Lab. Class Assessment-IA	Lab Classes	Students’ performance in doing experiments	Course Coordinator	HoD

Lab. Assessment	Lab. Model-IA	At the end of the semester	Students' performance in Model Exam	Course Coordinator	HoD
	Lab. ESE-EA	At the end of the semester	Students' performance in ESE	External Examiners	
Theory Cum Lab. Course Assessment	Course Performance – IA	Thrice in a semester.	Students' performance in internal assessment.	Course in charge and Course Coordinator	HoD
	Course Performance – Assignment -IA	At least one Assignment from each unit.	Students' performance in submitting the assignment/seminar		
	Course Performance, ESE-EA	At the end of the semester	Students' performance in ESE	External Examiners	
	Lab Class Assessment - IA	Lab Classes	Students' performance in doing experiments	Course Coordinator	
	Lab. Performance, ESE-EA	At the end of the semester	Students' performance in ESE	External Examiners	
Project Assessment	Project Work - IA	During 8 th semester, (zeroth, 1st, 2nd, and final review)	Reviews, demonstration, viva-voce, conference presentation, and journal publication	Project Guide/Project Coordinator	
	Project Evaluation ESE-EA	End of 8th semester	Students' performance in ESE	Internal and External Examiners	

3.2.2. Record the attainment of Course Outcomes of all courses with respect to set attainment levels

Rubrics for internal and external assessment

The attainment of Course Outcome is evaluated under two categories – University Examination and Internal Assessment.

University Examination:

For University Examination the target is fixed based on the following criteria.

- ✓ Attainment Level 1: 60% students scoring more than 50% University percentage marks in the final examination.
- ✓ Attainment Level 2: 70% students scoring more than 50% University percentage marks in the final examination.
- ✓ Attainment Level 3: 80% students scoring more than 50% University percentage marks in the final examination.

Internal Assessment:

For Internal Assessment the target is fixed based on the following criteria.

- ✓ Attainment Level 1: 60% students scoring more than 60% percentage marks in the Internal Assessment.
- ✓ Attainment Level 2: 70% students scoring more than 60% percentage marks in the Internal Assessment.
- ✓ Attainment Level 3: 80% students scoring more than 60% percentage marks in the Internal Assessment.

Table.3.2.2.2 Attainment of Course Outcome for the Academic Year 2021 – 2022
[Batch 2018 – 2022]

S NO	Course Code	Course Name	INTERNAL ATTAINMENT		EXTERNAL ATTAINMENT LEVEL		CO ATTN	% OF ATTN
			LEVEL	20%	LEVEL	80%		
1	C101	Communicative English	1.50	0.30	3.00	2.40	2.70	90%
2	C102	Engineering Mathematics - I	1.35	0.27	1.00	0.80	1.07	36%
3	C103	Engineering Physics	1.50	0.30	1.00	0.80	1.10	37%
4	C104	Engineering Chemistry	1.55	0.31	3.00	2.40	2.71	90%
5	C105	Problem Solving and Python Programming	1.45	0.29	1.00	0.80	1.09	36%
6	C106	Engineering Graphics	1.80	0.36	3.00	2.40	2.76	92%
7	C107	Problem Solving and Python Programming Laboratory	3.00	0.60	3.00	2.40	3.00	100%
8	C108	Physics and Chemistry Laboratory	3.00	0.60	3.00	2.40	3.00	100%
9	C109	Technical English	1.40	0.28	3.00	2.40	2.68	89%
10	C110	Engineering Mathematics - II	1.40	0.28	3.00	2.40	2.68	89%
11	C111	Physics for Information Science	1.35	0.27	1.00	0.80	1.07	36%
12	C112	Basic Electrical, Electronics and Measurement Engineering	1.45	0.29	1.00	0.80	1.09	36%
13	C113	Environmental Science and Engineering	1.45	0.29	2.00	1.60	1.89	63%
14	C114	Programming in C	1.45	0.29	2.00	1.60	1.89	63%
15	C115	Engineering Practices Laboratory	3.00	0.60	3.00	2.40	3.00	100%
16	C116	C Programming Laboratory	3.00	0.60	3.00	2.40	3.00	100%
17	C201	Discrete Mathematics	1.35	0.27	2.00	1.60	1.87	62%
18	C202	Digital Principles and System design	1.40	0.28	1.00	0.80	1.08	36%
19	C203	Data Structures	1.30	0.26	1.00	0.80	1.06	35%
20	C204	Object Oriented Programming	1.45	0.29	1.00	0.80	1.09	36%
21	C205	Communication Engineering	1.40	0.28	2.00	1.60	1.88	63%
22	C206	Data Structures Laboratory	3.00	0.60	3.00	2.40	3.00	100%
23	C207	Object Oriented Programming Laboratory	3.00	0.60	3.00	2.40	3.00	100%
24	C208	Digital Systems Laboratory	3.00	0.60	3.00	2.40	3.00	100%
25	C209	Interpersonal Skills/ Listening and Speaking	3.00	0.60	3.00	2.40	3.00	100%

26	C210	Probability and Queueing Theory	1.35	0.27	3.00	2.40	2.67	89%
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27	C211	Computer Architecture	1.35	0.27	3.00	2.40	2.67	89%
28	C212	Database Management Systems	1.45	0.29	3.00	2.40	2.69	90%
29	C213	Design and Analysis of Algorithms	1.40	0.28	3.00	2.40	2.68	89%
30	C214	Operating Systems	1.35	0.27	3.00	2.40	2.67	89%
31	C215	Software Engineering	1.45	0.29	3.00	2.40	2.69	90%
32	C216	Database Management Systems Laboratory	3.00	0.60	3.00	2.40	3.00	100%
33	C217	Operating Systems Laboratory	3.00	0.60	3.00	2.40	3.00	100%
34	C218	Advanced Reading and Writing	3.00	0.60	3.00	2.40	3.00	100%
35	C301	Algebra and Number Theory	0.87	0.17	3.00	2.40	2.57	86%
36	C302	Computer Networks	1.40	0.28	3.00	2.40	2.68	89%
37	C303	Microprocessors and Microcontrollers	1.60	0.32	3.00	2.40	2.72	91%
38	C304	Theory of Computation	1.25	0.25	3.00	2.40	2.65	88%
39	C305	Object Oriented Analysis and Design	1.50	0.30	3.00	2.40	2.70	90%
40	C306	Geographical Information System - Open Elective I	1.45	0.29	3.00	2.40	2.69	90%
41	C307	Microprocessors and Microcontrollers Laboratory	3.00	0.60	3.00	2.40	3.00	100%
42	C308	Object Oriented Analysis and Design Laboratory	3.00	0.60	3.00	2.40	3.00	100%
43	C309	Networks Laboratory	3.00	0.60	3.00	2.40	3.00	100%
44	C310	Internet Programming	1.45	0.29	3.00	2.40	2.69	90%
45	C311	Artificial Intelligence	1.45	0.29	3.00	2.40	2.69	90%
46	C312	Mobile Computing	1.35	0.27	3.00	2.40	2.67	89%
47	C313	Compiler Design	1.40	0.28	3.00	2.40	2.68	89%
48	C314	Distributed Systems	1.45	0.29	3.00	2.40	2.69	90%
49	C315	Software Testing - Professional Elective I	1.30	0.26	3.00	2.40	2.66	89%
50	C316	Internet Programming Laboratory	3.00	0.60	3.00	2.40	3.00	100%
51	C317	Mobile Application Development Laboratory	3.00	0.60	3.00	2.40	3.00	100%
52	C318	Mini Project	3.00	0.60	3.00	2.40	3.00	100%
53	C319	Professional Communication	2.90	0.58	3.00	2.40	2.98	99%
54	C401	Principles of Management	1.35	0.27	3.00	2.40	2.67	89%
55	C402	Cryptography and Network Security	1.40	0.28	3.00	2.40	2.68	89%
56	C403	Cloud Computing	1.40	0.28	3.00	2.40	2.68	89%

57	C404	Human Computer	1.35	0.27	3.00	2.40	2.67	89%
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		Interaction - Professional Elective II						
58	C405	Machine Learning Techniques - Professional Elective III	1.50	0.30	3.00	2.40	2.70	90%
59	C406	Supply Chain Management - Open Elective II	3.00	0.60	3.00	2.40	3.00	100%
60	C407	Cloud Computing Laboratory	3.00	0.60	3.00	2.40	3.00	100%
61	C408	Security Laboratory	1.35	0.27	3.00	2.40	2.67	89%
62	C409	Professional Ethics in Engineering - Professional Elective IV	1.40	0.28	3.00	2.40	2.68	89%
63	C410	Green Computing - Professional Elective V	2.93	0.59	3.00	2.40	2.99	100%
64	C411	Project Work	1.50	0.30	3.00	2.40	2.70	90%

3.3 Attainment of Program Outcomes and Program Specific Outcomes

3.3.1. Describe assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes

i) PO and PSO Assessment Instructions:

Direct assessment and Indirect assessment are the two tools that are being used for assessing the attainment of POs and PSOs.

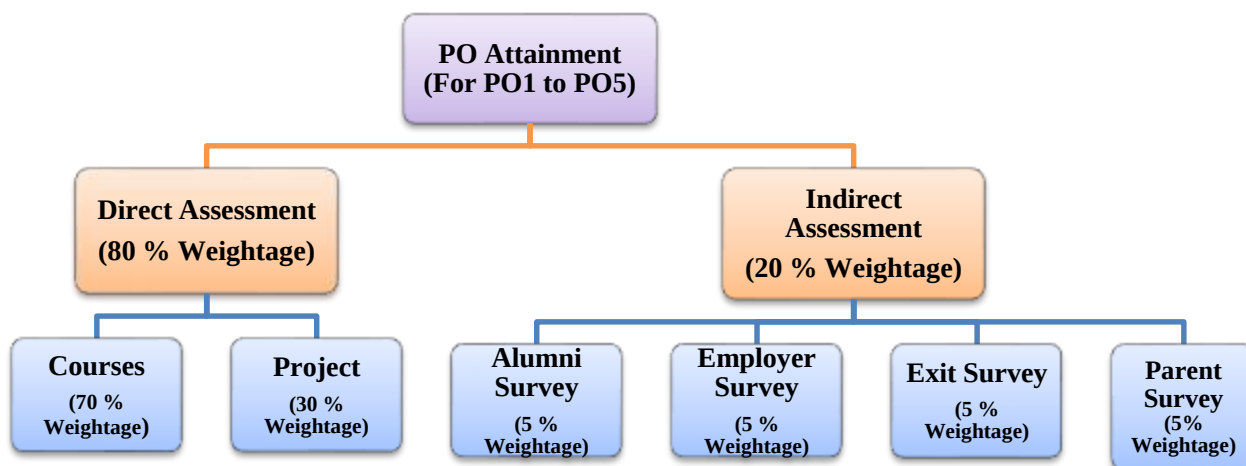


Figure 3.3.1 Assessment tools and processes for PO1 to PO5

PO assessment for PO1 to PO5 is done by giving 80% Weightage to direct assessment and 20% Weightage to indirect assessment. Direct assessment is based on COURSES and PROJECT attainment where 70% Weightage is given to attainment through Courses and 30%

Weightage is given to attainment through Projects. Indirect assessment is done through Alumni survey, Exit survey, Employer survey and Parent survey are given equal Weightage.

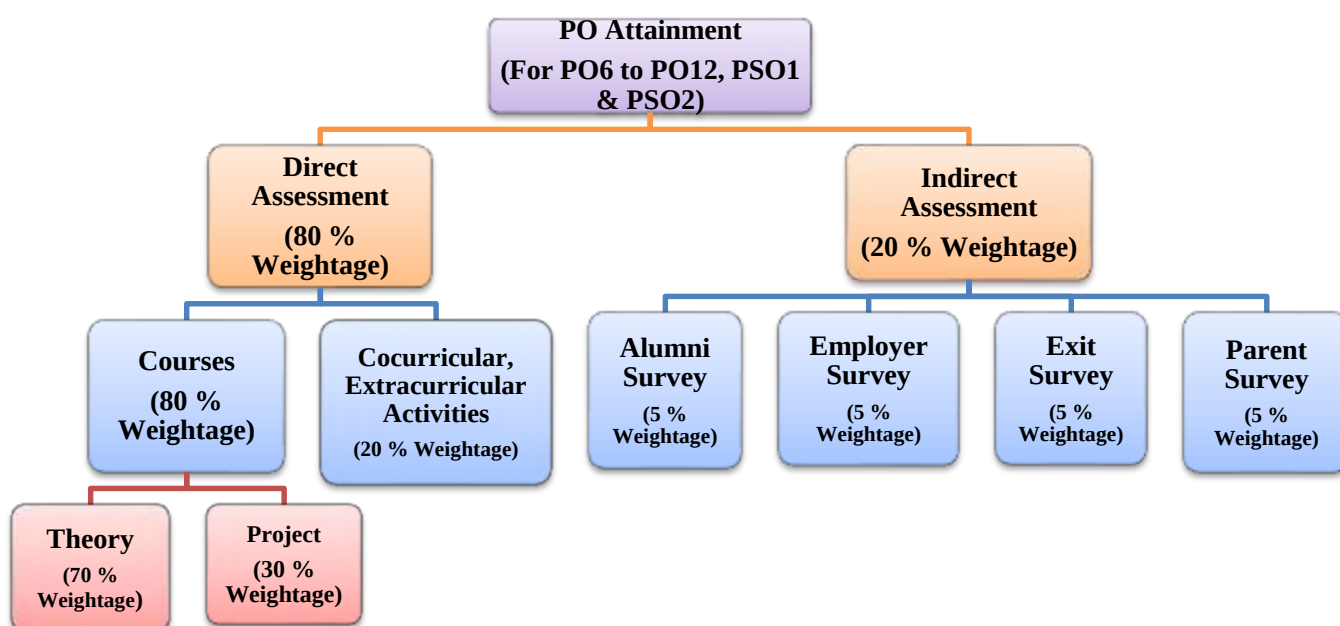


Figure 3.3.2 Assessment tools and processes for PO6 to PO12 & PSO1 to PSO2

PO/PSO assessment for PO6 to PO12, PSO1 and PSO2 is done by giving 80% Weightage to direct assessment and 20% Weightage to indirect assessment. Direct assessment is based on Courses and Co-Curricular & Extra Co-Curricular attainment where 80% Weightage is given to attainment through Courses (70% Weightage is given to attainment through Courses and 30 % Weightage is given to attainment through Projects) and 20% Weightage is given to attainment through co-curricular & extra co- curricular activities. Indirect assessment is done through Alumni survey, Exit survey, Employer survey and Parent survey are given equal weightage.

ii) PO and PSO Assessment Tools:

The various direct and indirect assessment tools used to evaluate POs & PSOs and the frequency with which the assessment processes are carried out are listed in Table 3.3.1.1

Table 3.3.1.1 Assessment tools and processes used for evaluation of PO and PSO

Attainment

Direct Assessment	Courses	Course Type	Assessment tools	Frequency
Direct Assessment	Courses	Theory	Internal Assessment	Three per course
			Assignment/seminar	Five per course
			ESE	One per course
		Practical	Day by day performance	Every lab session
			Internal Lab. Exam.	One per course
			ESE	One per course
	Project	Project Review	Zeroth Review	One per course
			First Review	One per course
			Second Review	One per course
			Final Review	One per course
			ESE	One per program
	Co-Curricular and Extra Curricular Activities			
Indirect Assessment	Surveys	Program Exit Survey		Once in a year
		Employer Survey		Once in a year
		Alumni Survey		Once in a year
		Parent Survey		Once in a year

iii) Direct Assessment Tools

The direct assessments are done to determine the extent to which the POs and PSOs are achieved by the students. The assessment method used is as given below:

- Courses: It involves theory and practical for direct assessment of POs and PSOs which are described in section 3.2.1.
- Project: The assessment process for project is described in section 3.2.1.

- c. Extra / Co-Curricular Activities: The various Co / Extracurricular activities considered for assessment is described in table 3.3.1.2

Table 3.3.1.2. Assessment tools of Co-curricular, Extra Curricular and Students Participation

CO	Organized/ Attended	Rubrics		
		Level 3	Level 2	Level 1
Guest lecture	Organized	More than 6	More than 3	Less than 3
EDC Activity	Organized	More than 5	More than 2	Less than 2
NSS Activity	Attended	More than 80 % students' participation	More than 50% students' participation	Less than 50% students' participation
Soft skills Training	Attended	100 % students' participation	More than 80% students participation	Less than 80% students participation
Competitive Exams/Career Guidance	Attended	More than 75 % students Participation	More than 50% students Participation	Less than 50% students' participation
Club Activity / Student Chapter	Organized	100 % students' participation	More than 80% students' participation	Less than 50% students' participation
Inplant Training/ Internships	Attended	100 % students Participation	More than 80% students participation	Less than 50% students participation
Industrial Visit	Organized	More than 6	More than 4	Less than 4
Yoga/ Meditation	Attended	More than 75 % students participation	More than 50% students participation	Less than 50% students participation

Hackathon	Attended	More than 50% students participation	More than 20% students participation	Less than 20% students participation
Sports Activities	Attended	More than 50% students' participation	More than 20% students' participation	Less than 20% students' participation
Cultural Activities	Attended	More than 50% students Participation	More than 20% students Participation	Less than 20% students Participation
Value Added Course	Organized	More than 60% Students Participation	More than 30% Students Participation	Less than 30% Students Participation

Activity Chart: The organizing and participation details of students in activities like paper presentation, project contests, seminars etc. are grouped. An activity chart is framed relating to these activities which contributes to each POs and PSOs. The activity chart mapping is given in Table 3.3.1.2:

Table 3.3.1.2 Activity Chart Mapping for Academic Batch 2018 – 2022

CO	Batch 2018- 2022	PO							PSOs	
		6	7	8	9	10	11	12	1	2
Guest lecture	4			2		2		2	2	2
EDC Cell Activity	3	2	2	2	2	2	2			
NSS Activity	52%	2	2	2	2	2	2			
Soft skills Training	85%	2		2	2	2				
Competitive Exams/Career Guidance	62%	2		2	2	2	2	2	2	2
Club Activity / Student Chapter	85%	2	2	2	2	2	2	2	2	2
Inplant Training/ Internships	85%	2	2	2	2	2	2	2	2	2
Industrial Visit	3	1	1	1	1	1	1	1	1	1
Yoga/ Meditation	85%			3	3	3		3	3	3
Hackathon	20%	2	2	2	2	2	2	2	2	2
Sports Activities	20%	2	2	2	2	2	2	2	2	2

Cultural Activities	20%	2	2	2	2	2	2	2	2	2
Value Added Course	40%	2	2	2	2	2	2	2	2	2
Curriculum Gap Filling Activities		1.62	1.31	2.00	1.85	2.00	1.46	1.54	1.54	1.54

iv) Indirect Assessment:

This method of assessment includes the data interpretation of results obtained from the following:

- Programme Exit Survey.
- Alumni Survey
- Employer Survey
- Parent Survey

Programme Exit, Alumni, Employer Survey and Parent Survey:

Program exit survey is collected at final semester of a batch. Alumni Survey, Employer Survey and Parent Survey are collected once in a year. This assessment is done for all students in order to estimate the degree to which the student has achieved the expected outcome of the Programme. Also the overall average outcome of the batch is found using this assessment.

Table 3.3.1.3 Frequency of Assessment components

S. No	Component	Frequency
1.	Program Exit Survey	Final semester of a batch
2	Alumni Survey	Once in a year
3.	Employer Survey	Once in a year
4.	Parent Survey	Once in a year

Process for PO attainment

The process for PO attainment is shown in Figure 3.3.1. Direct assessment and Indirect assessment tools are used for the PO attainment process. In direct assessment, CO-PO mapping for all the courses are framed and CO attainments are calculated using the process described in section 3.2.1. The PO attainment has been computed using CO-PO mapping. Further, PO attainment through Alumni, Employer, Parent and Exit survey has been computed in the indirect assessment. The overall CO-PO attainment has been calculated by considering 80% of PO attainment obtained in direct assessment and 20% of PO attainment obtained in indirect assessment.

3.3.2. Provide results of evaluation of each PO & PSO

Program shall set Program Outcome attainment levels for all POs & PSOs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course-PO & PSO matrix as indicated).

Table 3.3.2.1 Attainment of POs and PSOs for the 2018 – 2022 Batch

Sl. No.	Course Code	Course Name	PROGRAM OUTCOME												Program Specific Outcome	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
1	C101	Communicative English	0.90	0.90	0.90	0.90	0.90	0.90	-	-	1.80	1.80	-	-	-	-
2	C102	Engineering Mathematics - I	1.01	0.95	0.95	0.36	0.36	0.36	0.36	0.36	0.95	-	-	-	-	-
3	C103	Engineering Physics	1.10	1.10	1.10	0.37	0.37	0.37	-	0.37	-	-	-	-	-	-
4	C104	Engineering Chemistry	0.90	0.90	0.90	2.53	0.90	0.90	0.90	0.90	0.90	-	-	-	-	-
5	C105	Problem Solving and Python Programming	0.73	0.45	0.55	-	1.09	-	0.36	0.73	0.73	-	-	-	-	-
6	C106	Engineering Graphics	0.92	2.76	2.76	-	0.92	-	2.76	0.92	-	-	-	-	-	-
7	C107	Problem Solving and Python Programming Laboratory	1.00	1.33	2.60	-	3.00	-	1.00	1.00	1.00	-	2.00	-	2.00	-
8	C108	Physics and Chemistry Laboratory	1.00	1.50	3.00	-	1.25	1.00	-	1.00	1.00	-	-	-	-	-
9	C109	Technical English	-	-	-	-	-	-	-	1.61	2.32	2.14	-	1.97	-	-
10	C110	Engineering Mathematics - II	2.68	2.68	2.68	-	1.61	-	-	-	-	-	-	-	-	-

Sl. No.	Course Code	Course Name	PROGRAM OUTCOME												Program Specific Outcome	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
11	C111	Physics for Information Science	0.78	0.54	0.36	-	0.36	-	-	0.93	-	-	-	-	-	-
12	C112	Basic Electrical, Electronics and Measurement Engineering	0.82	0.36	0.36	-	-	-	0.73	0.55	-	0.36	-	-	-	-
13	C113	Environmental Science and Engineering	1.51	1.26	0.95	-	-	-	1.26	0.63	-	1.26	-	0.76	-	-
14	C114	Programming in C	1.89	1.39	1.26	1.26	0.76	-	-	-	-	-	-	1.13	0.63	-
15	C115	Engineering Practices Laboratory	1.67	1.50	2.83	-	1.50	-	1.00	1.50	1.50	-	-	-	-	-
16	C116	C Programming Laboratory	2.00	1.33	1.67	-	1.33	-	-	-	-	-	1.00	-	-	-
17	C201	Discrete Mathematics	1.75	1.12	0.75	0.62	-	-	-	-	-	-	-	0.62	-	-
18	C202	Digital Principles and System design	0.72	0.63	0.63	0.36	0.36	-	-	-	-	-	-	-	-	-
19	C203	Data Structures	1.06	0.71	0.71	0.35	0.35	-	-	-	-	-	-	-	-	-
20	C204	Object Oriented Programming	1.09	0.73	0.73	0.36	-	-	-	0.36	-	-	-	-	0.36	-
21	C205	Communication Engineering	1.57	1.25	0.63	0.63	-	-	-	-	-	-	-	0.63	-	-
22	C206	Data Structures Laboratory	3.00	2.00	2.00	-	2.00	-	-	-	2.00	-	-	1.25	-	-
23	C207	Object Oriented Programming Laboratory	3.00	2.00	2.00	-	2.00	-	-	2.00	2.00	2.00	-	1.83	1.00	1.00
24	C208	Digital Systems Laboratory	3.00	2.00	2.00	2.00	-	-	-	-	2.00	2.00	-	-	1.00	-
25	C209	Interpersonal Skills/ Listening	-	-	-	-	-	-	-	2.00	2.00	3.00	-	2.00	-	-

Sl. No.	Course Code	Course Name	PROGRAM OUTCOME												Program Specific Outcome	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
		and Speaking														
26	C210	Probability and Queueing Theory	2.67	1.78	0.89	-	-	-	-	-	-	-	-	0.89	-	-
27	C211	Computer Architecture	2.67	1.78	1.48	-	-	-	-	-	1.78	-	-	1.78	-	-
28	C212	Database Management Systems	2.47	1.57	1.43	0.90	-	-	-	-	-	-	-	-	0.90	-
29	C213	Design and Analysis of Algorithms	2.68	2.50	1.79	1.61	-	-	-	-	1.79	-	-	1.79	-	-
30	C214	Operating Systems	2.37	1.78	1.78	1.34	-	-	-	-	-	-	-	-	-	-
31	C215	Software Engineering	2.09	1.79	1.79	-	1.79	-	-	-	1.64	1.64	2.69	1.79	-	-
32	C216	Database Management Systems Laboratory	2.75	1.75	1.60	1.00	-	-	-	-	-	-	-	-	1.00	-
33	C217	Operating Systems Laboratory	3.00	2.00	2.00	-	-	-	-	-	2.00	-	-	-	-	-
34	C218	Advanced Reading and Writing	-	-	-	-	-	-	-	2.00	2.00	3.00	-	2.00	-	-
35	C301	Algebra and Number Theory	2.57	1.72	1.72	0.86	-	-	-	-	1.72	-	-	-	-	-
36	C302	Computer Networks	2.38	1.64	1.43	-	0.89	-	-	0.89	-	-	-	-	0.89	-
37	C303	Microprocessors and Microcontrollers	2.72	1.99	1.59	1.13	0.91	0.91	-	0.91	-	-	-	-	0.91	-
38	C304	Theory of Computation	2.65	2.65	1.77	1.77	-	-	-	-	1.77	-	-	-	-	-
39	C305	Object Oriented Analysis and	1.80	1.44	1.44	0.90	0.90	-	-	-	1.80	1.80	-	-	-	0.90

CRITERION # 3

Department of CSE, J.N.N Institute of Engineering

Sl. No.	Course Code	Course Name	PROGRAM OUTCOME												Program Specific Outcome	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
		Design														
40	C306	Geographical Information System - Open Elective I	2.51	2.33	-	-	1.79	-	-	-	1.79	1.79	-	-	-	-
41	C307	Microprocessors and Microcontrollers Laboratory	3.00	2.00	2.00	2.00	2.00	-	-	-	2.00	2.00	-	2.00	-	-
42	C308	Object Oriented Analysis and Design Laboratory	3.00	2.00	1.60	-	1.60	-	-	-	2.00	-	-	2.00	-	-
43	C309	Networks Laboratory	3.00	2.80	2.60	-	2.00	-	-	-	2.00	2.00	-	2.00	1.00	-
44	C310	Internet Programming	2.69	2.33	1.79	-	1.79	-	-	-	1.79	-	-	1.57	1.35	-
45	C311	Artificial Intelligence	2.69	2.69	1.79	1.79	-	-	-	-	-	-	-	1.79	0.90	0.90
46	C312	Mobile Computing	2.67	1.78	1.78	-	1.78	-	-	-	1.78	1.78	-	1.78	1.78	0.89
47	C313	Compiler Design	2.68	2.23	1.79	1.79	1.79	-	-	-	1.79	1.79	-	1.79	-	-
48	C314	Distributed Systems	2.15	1.79	1.79	-	-	-	-	-	1.79	-	-	-	-	-
49	C315	Agile Methodologies - Professional Elective I	2.66	2.66	1.92	1.77	1.77	-	-	-	1.77	1.77	1.95	1.77	-	-
50	C316	Internet Programming Laboratory	3.00	2.00	2.00	-	1.67	-	-	2.00	2.00	-	-	2.00	-	-
51	C317	Mobile Application Development Laboratory	3.00	3.00	2.00	2.60	1.00	-	-	-	-	-	-	2.00	-	-
52	C318	Mini Project	1.60	1.80	1.80	1.40	1.40	1.20	1.20	0.80	2.60	3.00	1.40	1.20	1.80	1.20
53	C319	Professional Communication	-	-	-	-	-	-	-	0.99	1.99	2.98	-	0.99	-	-

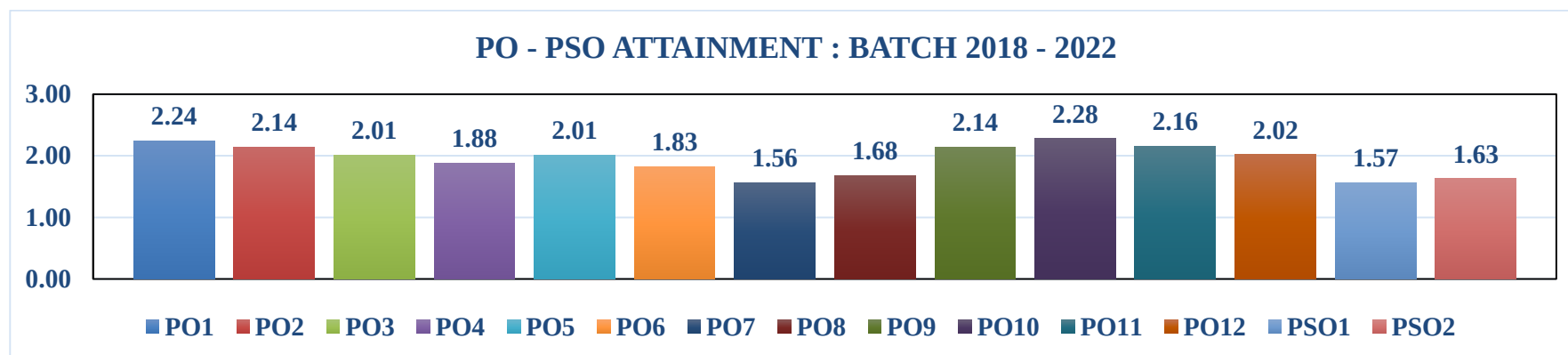
CRITERION # 3

Department of CSE, J.N.N Institute of Engineering

Sl. No.	Course Code	Course Name	PROGRAM OUTCOME												Program Specific Outcome	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
54	C401	Principles of Management	2.67	1.78	0.89	-	-	0.89	-	1.63	2.52	1.78	0.89	0.89	-	-
55	C402	Cryptography and Network Security	2.68	1.07	1.07	-	-	-	-	1.79	-	-	-	-	-	-
56	C403	Cloud Computing	2.46	2.23	1.43	1.56	1.79	-	-	-	-	-	-	-	-	-
57	C404	Human Computer Interaction - Professional Elective II	2.67	1.78	0.89	-	-	-	-	-	1.78	1.78	-	1.78	-	-
58	C405	Machine Learning Techniques - Professional Elective III	2.15	1.26	1.43	0.90	1.79	-	-	1.79	-	-	-	-	-	-
59	C406	Supply Chain Management - Open Elective II	-	1.80	0.90	0.90	-	1.80	2.55	1.80	-	-	2.70	1.80	-	-
60	C407	Cloud Computing Laboratory	3.00	2.00	2.00	-	2.00	-	-	-	2.00	-	-	2.00	-	-
61	C408	Security Laboratory	2.83	2.00	2.00	-	2.00	-	-	2.00	-	-	-	2.00	-	-
62	C409	Professional Ethics in Engineering - Professional Elective IV	2.37	1.56	1.78	1.78	2.67	2.67	2.67	2.67	1.78	1.78	1.78	0.89	-	-
63	C410	Green Computing - Professional Elective V	1.79	1.34	1.34	-	1.79	-	2.38	-	-	-	-	-	-	-
64	C411	Project Work	2.40	3.00	3.00	3.00	3.00	2.73	1.33	1.67	3.00	3.00	3.00	3.00	1.67	2.00

Sl. No.	Course Code	Course Name	PROGRAM OUTCOME												Program Specific Outcome	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
		Direct Attainment from Courses	2.14	1.72	1.57	1.29	1.47	1.25	1.42	1.28	1.81	2.02	1.93	1.62	1.15	1.15
		Direct Attainment from Courses (70%)	1.50	1.20	1.10	0.90	1.03	0.87	1.00	0.89	1.27	1.41	1.35	1.13	0.80	0.80
		Project Work (30%)	0.72	0.90	0.90	0.90	0.90	0.82	0.40	0.50	0.90	0.90	0.90	0.90	0.50	0.60
		Curriculum Gap Filling Activities						1.62	1.31	2.00	1.85	2.00	1.46	1.54	1.54	1.54
		Direct Attainment from Courses	2.22	2.10	2.00	1.80	1.93	1.69	1.40	1.39	2.17	2.31	2.25	2.03	1.30	1.40
		Direct Attainment from Courses including curriculum Gap Filling Activities	2.22	2.10	2.00	1.80	1.93	1.68	1.38	1.52	2.10	2.25	2.10	1.93	1.35	1.43
		Indirect Attainment	2.34	2.29	2.05	2.20	2.36	2.43	2.30	2.35	2.28	2.38	2.41	2.37	2.45	2.41
		Direct Attainment 80%	1.78	1.68	1.60	1.44	1.54	1.34	1.10	1.21	1.68	1.80	1.68	1.55	1.08	1.14
		Indirect Attainment 20%	0.47	0.46	0.41	0.44	0.47	0.49	0.46	0.47	0.46	0.48	0.48	0.47	0.49	0.48
		PO ATTAINMENT	2.24	2.14	2.01	1.88	2.01	1.83	1.56	1.68	2.14	2.28	2.16	2.02	1.57	1.63

Figure 3.3.2.1: Attainment of POs and PSOs for 2018 – 2022 Batch



POs and PSOs attainment for the batch 2018 – 2022 of students are shown in the table 3.3.2.1. In the DAC meeting held in the department, 1.8 target value of the attainment level was fixed as mentioned in the figure 3.3.2.1. POs and PSOs with the attainment level less than 1.8 are discussed in the Criteria 7.

CRITERION 4	STUDENTS PERFORMANCE	60
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Table 4.1 ENROLLMENT RATIO

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2022-23 (CAY)	2021-22 (CAY m1)	2020-21 (CAY m2)	2019-20 (CAY m3)	2018-19 (CAY m4)	2017-18 (CAY m5)	2016-17 (CAY m6)
Sanctioned intake of the program(N)	90	90	90	120	90	120	120
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)	73	84	78	50	73	50	35
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	-	1	4	0	0	0	1
Separate division students, If applicable (N3)	0	0	0	0	0	0	0
Total number of students admitted in the programme (N1 + N2 + N3)	73	84	78	50	73	50	35

4.1 ENROLLMENT RATIO

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2022-23 (CAY)	90	73	81.11
2021-22 (CAYm1)	90	84	93.33
2020-21 (CAYm2)	90	78	86.66

Average [(ER1 + ER2 + ER3) / 3]: 87.03

Assessment: 18

Table 4.2 SUCCESS RATE WITHOUT BACKLOGS**4.2 SUCCESS RATE in the Stipulated Period of the Program****CRITERION #4****Department of CSE, J.N.N Institute of Engineering**

4.2.1 Success Rate Without Backlogs in any semester / year of study

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)	73	49	NA	NA	NA
2021-22 (CAYm1)	85	7	7	NA	NA
2020-21 (CAYm2)	82	68	12	9	NA
2019-20 (CAYm3)	50	7	7	4	4
2018-19 (LYG)	73	21	17	17	17
2017-18 (LYG m1)	50	18	11	11	11
2016-17 (LYGm2)	36	14	11	10	5
Item			Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation (m-1), LYGm1 (2017-18)	Latest Year of Graduation (m-2) LYGm2 (2016-17)
(X) Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and separated division, if applicable			73	50	36
(Y) Number of students who have graduated without backlogs in the stipulated period			17	11	5
Success Index [SI = Y / X]			0.23	0.22	0.13
Assessment [25 * Average SI]: 4.83					

4.2.2 Success Rate in Stipulated Period

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation (m-1), LYGm1 (2017-18)	Latest Year of Graduation (m-2) LYGm2 (2016-17)
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(X) Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and separated division, if applicable	73	50	36
(Y) Number of students who have graduated in the stipulated period	61	39	32
Success Index [$SI = Y / X$]	0.84	0.78	0.89
Assessment [25 * Average SI]: 15*0.84= 12.6			

4.3 Academic Performance in Third Year

Academic Performance	CAYm1 (2021-2022)	CAYm2 (2020-2021)	CAYm3 (2019-2020)
Mean of CGPA or mean percentage of all successful students (X)	7.04	8.56	6.75
Total number of successful students (Y)	50	67	42
Total number of students appeared in the examination (Z)	50	67	42
API [$X*Y/Z$]	7.04	8.56	6.75

Average API [(API+AP2+AP3)/3]: 7.45

Assessment [1.5*Average API]: 11.17

4.4 Academic Performance in Second Year

Academic Performance	CAYm1 (2021-2022)	CAYm2 (2020-2021)	CAYm3 (2019-2020)
Mean of CGPA or mean percentage of all successful students (X)	6.61	5.59	6.80
Total number of successful students (Y)	82	44	68
Total number of students appeared in the examination (Z)	82	44	68
API $[X \times Y / Z]$	6.61	5.59	6.80

Average API $[(API+AP2+AP3)/3]$: 6.33

Assessment $[1.5 \times \text{Average API}]$: 9.5

4.5 Placement / Higher Studies and Entrepreneurship

Item	LYG 2018-22	LYG m1 2017-21	LYG m2 2016-20
Total No of Final Students (N)	73	50	36
No of Students placed in the companies or government sector (X)	36	34	30
No of Students admitted to higher studies with valid qualifying scores (GATE or equivalent state or national level test, GRE, GMAT, etc) (Y)	15	5	4
No of Students turned entrepreneur in engineering / technology (Z)	0	0	0
$X+Y+Z =$	51	39	34
Placement Index $[(X+Y+Z)/N]$	0.70	0.78	0.94

Average Placement $[(P1+P2+P3)/3] = 0.81$

Assessment $[40 \times \text{Average placement}] = 32.4$

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Higher Studies (3)

Batch 2016-2020 (4)		
S.NO	REGISTER NUMBER	STUDENT NAME
1	110716104030	UMAMAHESH VELIVELI
2	110716104007	GAYATHRI J
3	110716104018	PREMKUMAR B
4	110716104035	YAMINI PRIYA V
Batch 2017-2021 (5)		
1	110717104012	HEMANTH V
2	110717104016	KAMESH J
3	110717104020	LOSHINI S
4	110717104040	SINDHUJA G
5	110717104044	VIKNESHWAR S
Batch 2018-2022 (15)		
1	110718104023	DHIVYA K
2	110718104033	GUNALAN S
3	110718104034	HARINATH S
4	110718104039	KOKILA S
5	110718104044	LALITHA V
6	110718104063	SWETHA S
8	110718104045	LITHEESH M R
9	110718104007	BATHALA MAHESH
10	110718104016	CHEKURU NIKITHA

11	110718104029	GADUPUDI CHARAN
12	110718104042	KURAKULA SRINADH
13	110718104052	NAGELLA MAHITHA
14	110718104022	CHOKKABOINA NIKHILA
15	110718104056	NETHI BHANU MALLICK

Placement

Assessment Year: LYG (2018-2022)

S.No.	STUDENTS NAME	REGISTER NUMBER	DISCIPLINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE(LPA)
1	ASA AJAY	110718104002	CSE	2022	OFF	MPHASIS, QUALITEST	3.25 4
2	AUDIPUDI MADHU REVANTH REDDY	110718104003	CSE	2022	OFF	TCS	3.36
3	BADABHAGNI SIVATEJA	110718104004	CSE	2022	OFF	HEXAWARE	4
4	BOLIGARLA KEERTHI	110718104010	CSE	2022	OFF	MPHASIS	3.26
5	BUDAVARAPU PRUDVI	110718104012	CSE	2022	OFF	PRELUDESYS	4
6	CHILAKURU THARUN	110718104017	CSE	2022	OFF	MPHASIS, INFOSYS, QUALITEST	3.25 3.6 4
7	CHIRAMANA BHAVITHA	110718104019	CSE	2022	OFF	MPHASIS, QUALITEST	3.25 4
8	CHIRUMAVILLA SAI DINESH	110718104020	CSE	2022	OFF	FLOWSERVE	5.6
9	CHITTETI NAVYANTH	110718104021	CSE	2022	OFF	PRELUDESYS	4
10	DUVVURU SRESHTA	110718104026	CSE	2022	OFF	FLOWSERVE, INFOSYS	5.6 3.6
11	EPURU SURYATEJA	110718104028	CSE	2022	OFF	PRELUDESYS, WIPRO	4 3.5
12	GAYATHIRI P	110718104031	CSE	2022	OFF	CAPGEMINI	4
13	KARNA DINESH KUMAR	110718104036	CSE	2022	OFF	MPHASIS	3.35
14	KARTHIGA M	110718104037	CSE	2022	OFF	AVASOFT	4
15	KUNDAM CHARITH	110718104041	CSE	2022	ON	MPHASIS, FLOWSERVE, TEKION, MINDTREE	3.25 5.6 5 4
16	LAKSHMIPURAM MANISH	110718104043	CSE	2022	OFF	MPHASIS	3.25
S.No.	STUDENTS NAME	UNIVERSITY SERIAL NUMBER	DISCIPLINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE(LPA)
17	MOGALRAJ DEDEEPIYA	110718104049	CSE	2022	ON	FLOWSERVE	5.6

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18	MUPPALA CHANDU ASHOK	110718104051	CSE	2022	ON	FLOWSERVE	5.6
19	NAVEEN KUMAR S	110718104055	CSE	2022	ON	FLOWSERVE, WIPRO	5.6 3.5
20	PULI BHARATH	110718104059	CSE	2022	OFF	MPHASIS, QUALITEST	3.25 4
21	RAKESH SINGH M	110718104060	CSE	2022	OFF	TCS, FLOWSERVE	3.36 5.6
22	SWETHA S	110718104063	CSE	2022	OFF	CSS CORP	2.25
23	UNKAR MONIKA	110718104065	CSE	2022	OFF	MPHASIS, TEKION	3.25 5
24	VAKICHERLA CHINMAYA SAICHARAN GUPTHA	110718104066	CSE	2022	OFF	PRELUDESYS, MIND TREE	4 4
25	KONJETI HARIKA VENKATA SAILAKSHMI	110718104040	CSE	2022	OFF	INFOSYS, QUALITEST	3.6 4
26	CHEEKAVOLU BALAJI	110718104015	CSE	2022	OFF	INFOSYS, CAPGEMINI, QUALITEST	3.6 4 4
27	CHINNAKONDU VENKATA PAVAN KUMAR REDDY	110718104018	CSE	2022	OFF	INFOSYS	3.6
28	BALLAPURAM PUNEETH	110718104006	CSE	2022	OFF	INFOSYS	3.6
29	KOKILA S	110718104039	CSE	2022	OFF	CAPGEMINI	4
30	MARRI VENKATESWAR REDDY	110718104046	CSE	2022	OFF	QUALITEST	4
31	BOYAPATI ANILKUMAR	110718104011	CSE	2022	OFF	QUALITEST	4
32	NARRAVULA SAI RAVI CHANDRA	110718104054	CSE	2022	OFF	WIPRO	3.5
33	RAYAPANENI RESHMASREE	110718104061	CSE	2022	OFF	WIPRO	3.5
34	VENUMBAKA JAHNAVI	110718104069	CSE	2022	OFF	WIPRO	3.5
35	VENNAPUSA RANJITH REDDY	110718104068	CSE	2022	OFF	WIPRO	3.5
36	YENISETTY VENKATA PRIYATHAM	110718104073	CSE	2022	OFF	WIPRO	3.5

Assessment Year: LYG m1 (2017-2021)

S.No	STUDENTS NAME	REGISTER NUMBER	DISCIPLINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE(LPA)
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CRITERION #4

Department of CSE, J.N.N Institute of Engineering

NBA-SAR, Tier II Institution, CAY 2022-23

1	AAMINA	110717104001	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
2	ASWINI.B	110717104004	CSE	2021	OFF	EC SOFT SOLUTION	3
3	BALAJI.K.A	110717104005	CSE	2021	OFF	EC SOFT SOLUTION	3
4	BHARATH KUMAR.G	110717104006	CSE	2021	OFF	TCS	3.36
5	CHANGERI SUREKHA	110717104007	CSE	2021	OFF	EC SOFT SOLUTION, MIND READERS SOFTWARE	3 3.2
6	DEEPASRI.S	110717104009	CSE	2021	OFF	MIND READERS SOFTWARE, BOSON LABS	3.2 3.2
7	GALI NEELIMA KUMARI	110717104010	CSE	2021	OFF	EC SOFT SOLUTION	3
8	HEMANTH.V	110717104012	CSE	2021	OFF	MSC TECHNOLOGY , AMBATTUR (JOB)	3.2
9	KAMBAM SINDHU	110717104015	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
10	KANDALA KAVYA	110717104017	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
11	LEKHA.B	110717104019	CSE	2021	OFF	EC SOFT SOLUTION	3
12	MADUMITHA.V	110717104021	CSE	2021	OFF	MIND READERS SOFTWARE, ACCENTURE TECHNOLOGY	3.2
13	MAKINENI GOWRI SHANKAR	110717104023	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
14	METTA NEELIMA	110717104024	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
15	PANDILLAPALLI VENKATA MANOJ KUMAR	110717104027	CSE	2021	OFF	MIND TREE	3.2
16	POONDLA TEJASWINI	110717104030	CSE	2021	OFF	TCS	3.36
17	PRAVEEN.R	110717104031	CSE	2021	OFF	EC SOFT SOLUTION	3
18	PUDI DHANESHWAR	110717104032	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
19	RAYAPANENI CHARISHMA	110717104033	CSE	2021	OFF	MOURI TECH	1.5
20	RAYAPENI MADHUPRIYA	110717104034	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
21	RESHMA H	110717104035	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
22	SARATH S	110717104038	CSE	2021	OFF	TECH DIGITAL	2.28
23	SAVITHA.V	110717104039	CSE	2021	OFF	SITEL INDIA PRIVATE LIMITED, MIND READERS SOFTWARE	3.4 3.2
24	SNEHA N	110717104041	CSE	2021	OFF	SITEL INDIA PRIVATE LIMITED	3.4
25	SUGANYA.M	110717104042	CSE	2021	OFF	SITEL INDIA PRIVATE LIMITED	3.4
26	TAMIZHAJANI.S	110717104043	CSE	2021	OFF	EC SOFT SOLUTION	3
27	VIVEK.D	110717104045	CSE	2021	OFF	WIPRO TECHNOLOGIES	1.8
28	YALLA DHARANI	110717104046	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
29	YARAMAKKA NITHEESH KUMAR	110717104047	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
30	YUVARAJ	110717104048	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
31	KURAGULA ANIL KUMAR REDDY	110717104049	CSE	2021	OFF	ERNEST & YOUNG , JAIPUR	8
32	RAVURU SAI YESHWANTH	110717104050	CSE	2021	OFF	MIND READERS SOFTWARE, PRIMERA MEDICAL TECHNOLOGY	3.2 2.8
33	VIDHYA V	110717104701	CSE	2021	OFF	SJV MARINE , ACCOUNTANT	1.5

NBA-SAR, Tier II Institution, CAY 2022-23

34	GOMATHI S	110717104702	CSE	2021	OFF	SJV MARINE , ADMIN	1.5
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Assessment Year: LYG m2 (2016-2020)

S.No	STUDENTS NAME	REGISTER NUMBER	DISCIPLINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE(LPA)
1	ALEKHYA VADDINENI	110716104001	CSE	2020	ON	MITSUBA SICAL. Q-SPIDER, SUTHERLAND, VCARE	2.4, 2.6, 2.6, 1.8
2	ARUNA	110716104002	CSE	2020	ON	Q-SPIDER, SUTHERLAND	2.6, 2.6
3	ASWINI GURRAMPATI	110716104003	CSE	2020	ON	SUTHERLAND	2.6
4	DESHIKA K V	110716104004	CSE	2020	ON	VCARE	1.8
5	DHANUSHA B	110716104005	CSE	2020	ON	MITSUBA SICAL	2.6
6	DHIVYA PRIYA	110716104006	CSE	2020	ON	CSS CORP	2.3
7	DIVYA PRIYA	110716104006	CSE	2020	ON	Q-SPIDER	2.6
8	GREESHMITHA YADLAPALLI	110716104008	CSE	2020	ON	MITSUBA SICAL., WIPRO	2.6, 3.5
9	GUNDALA KEERTHI	110716104009	CSE	2020	ON	AMAZON PAY, Q-SPIDER, SUTHERLAND	2.6, 2.6, 2.6
10	HEMANTH V	110716104010	CSE	2020	ON	CONGRUENT, SUTHERLAND	2.2, 1.8
11	JAYASHREE SNGK	110716104011	CSE	2020	ON	MITSUBA SICAL, VCARE	1.8, 1.8
12	JAYASHREE SNGK	110716104011	CSE	2020	ON	MITSUBA SICAL, VCARE	1.8, 1.8
13	KATA SOWMYA	110716104013	CSE	2020	ON	CSS CORP	2.3
14	KAVYA K M	110716104014	CSE	2020	ON	VEE TECH	2.04
15	LAVANYA SIVADA	110716104015	CSE	2020	ON	MITSUBA SICAL, Q SPIDER	1.8, 2.6
16	NIVETHA DHARANI R	110716104017	CSE	2020	ON	VCARE	1.8
17	RAJ ASHOK R	110716104019	CSE	2020	OFF	MIND TREE	2.8
18	RAMYA M	110716104020	CSE	2020	OFF	HINDUJA GLOBAL SERVICES	2.4
19	RANJITH KUMAR YELUVOLU	110716104021	CSE	2020	OFF	SITEL, CHENNAI	3.4
20	SHAREN D	110716104023	CSE	2020	OFF	INFOSYS, ALPHIND SOFTWARE SOLUTIONS	1.8, 3.5
21	SHARMILA A	110716104024	CSE	2020	ON	SUTHERLAND	1.68
22	SHIVASUNDAR C R A	110716104025	CSE	2020	ON	SUTHERLAND	1.68
23	SRILEKHA G T	110716104026	CSE	2020	OFF	HCL TECHNOLOGIES	4
24	SUNEEL BACHU	110716104027	CSE	2020	OFF	APTEAM	2.9
25	SURYA V	110716104028	CSE	2020	ON	SUTHERLAND	1.68
26	SWETHAA M	110716104029	CSE	2020	ON	CSS CORP, SEQUENT ASIA IT P.LTD	2.3, 1.8
27	UMAMAHESH VELIVELLI	110716104030	CSE	2020	OFF	TECH DIGITAL	3
28	VEDANAPARTHY PALLAVI	110716104031	CSE	2020	ON	Q-SPIDER, SEQUENT ASIA IT P.LTD, BASON LABS	2.6, 1.8, 3.2

29	VENKATA TEJESWINI MULLAMURI	110716104032	CSE	2020	ON	Q-SPIDER, SUTHERLAND	2.6. 2.6
30	VISHAL VARDHAN VUPPALAPAT	110716104033	CSE	2020	ON	CSS CORP	2.3

4.6 PROFESSIONAL ACTIVITIES

4.6.1 Professional Societies / chapters and organising engineering events

Details of the Students Chapter Activities (2020-2021)

S. No	Name of the Chapter	Year of Inauguration	Category	No. of Active Members
1	Institute of Engineers (IE)	2020	Student	41
2	ICT Academy	2020	Student	148
3	Computer Society of India	2020	Institution	50

Details of the Students Chapter Activities (2020-2021)

S.No	Topic	Resource Person	Date	Chapter	PO/PSO
1	IoT and AI for Healthcare and Manufacturing	Dr. T. Srihari, Professor, KSR Institute for engineering and Technology, Thiruchengode	03-Jul-20	CSI	ONLINE
2	Social Media Governance in a Connected world	Dr. N. Balamurugan, Associate Professor, Pondicherry University	11-Jul-20	CSI	ONLINE
3	Oracle Academy Virtual Girls in ICT Day2021	Dr. C. Senthilkumar, Associate Professor Thiagarajar College of Engineering	12-Apr-21	ICT Academy	Virtual Conference
4	VMware Tanzu Build-A-Thon	VMware Academy	10-Apr-21	ICT Academy	Virtual Conference
5	Modern App Development	Various Professors from Different Colleges	11-Apr to 18-Apr-21	ICT Academy	Virtual Conference
6	ICT ACT- Free Online Course during lockdown on vSphere, NSX, vSAN	Dr. W. Deva Priya, Professor, KSR Institute for Engineering and Technology, Tiruchengode	01-Apr-21	ICT Academy	Virtual Conference

Details of the Students Chapter Activities (2021-2022)

S.NO	TOPIC	RESOURCE PERSON	DATE	CHAPTER	MODE
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1	Why It's Important To Learn Programming	Mr. Raghul.T, Associate R&D Engineer In Lmes	14.06.2021	CSI	ONLINE
2	Technological Augmentation	Mr. Sathish Kumar.R IT Professional	05.06.2021	CSI	ONLINE
3	Internet Of Things Using Python	Mohammed Iliyas IT Professional	28.12.21 to 30.12.21	CSI	ONLINE
4	Asic Design	Dr Karthick Sekhar AP/ECE, SRMIST	08.07.2021	CSI	ONLINE
5	Opportunities For Engineers In The Field Of Plant Design Construction & Operation	Mr M Kannan Plant Design And Construction Founder Coimbatore	07.06.2021	CSI	ONLINE
6	Diy Robotics	Mr Praveen Pandian Founder And Lead Engineer Evolve Lab	23.06.2021	CSI	ONLINE
7	Student To Professional Transformation(S2p)	Mr Vijay Anandh Assurance Manager Mcdermott	18.06.2021	CSI	ONLINE
8	Design Thinking Life Cantered Design	Dr.S Gupta AP Biomedical Engineering NIT Rajpur	16.06.2021	CSI	ONLINE
9	Migration of Database Azure	Mr. Sathish Cloud Databse Migration Architech	15.06.2021	CSI	ONLINE

Details of the Students Chapter Activities (2022-2023)

S.No	Topic	Resource Person	Date	Chapter	Mode
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1	Project Competition	Mr. J. Madhavan Knowledge Exchange Dr. Ayesha Begum Saveetha School of Engineering	23.09.2022	CSI	OFFLINE
2	Recent Trends in IoT	Prof. B.Raja Kumar Senior Assistant Professor, Saveetha School of Engineering.	11.08.2022	CSI	OFFLINE
3	Block Chain Technology	Mr. B. Raja Kumar Assistant Professor-CSE, Mohammed Sathak AJ College of Engineering.	10.06.2022	CSI	OFFLINE
4	Embedded IoT using Python	Mr. M. Karthikeyan Assistant Professor-CSE, Velammal Institute of Technology	18.11.2022	CSI	OFFLINE
5	Advancement of Artificial Intelligence in Cyber Security	Mr. M. Karthikeyan Assistant Professor-CSE, Velammal Institute of Technology.	21.09.2022	CSI	OFFLINE
6	Security Issues in Internet of Things	Mr. S. Senthilnathan Assistant Professor-CSE, Kings College of Engineering.	13.10.2022	CSI	OFFLINE
7	Ethical Hacking and Cyber Security	Mr. S. Senthilnathan Assistant Professor-CSE, Kings College of Engineering	15.12.2022	CSI	OFFLINE

4.6.2 Publication of Technical Magazines, Newsletters, etc.

S.No	Academic Year	Name of the Magazine	Student Convenor	Faculty Coordinator	Cover Design
1	June 2019- May 2020	JNNIEANS'19	Ms. Shalini S	Ms.Sherlin suresh	
		Techworld'19 June19 – Aug19	Anbarasu J Dhanush E Chandrodhayan V N Gattamaneni Sai Akilesh Epuru Suryateja Gayathiri P	Ms.Sherlin suresh	
		Techworld'19 Sep19-Nov19	Anbarasu J Dhanush E Chandrodhayan V N Gattamaneni Sai Akilesh Epuru Suryateja Gayathiri P	Ms.Sherlin suresh	
		Techworld'19 Dec19 – Feb 20	Anbarasu J Dhanush E Chandrodhayan V N Gattamaneni Sai Akilesh Epuru Suryateja Gayathiri P	Ms.Sherlin suresh	
		Techworld'19 Mar20- May20	Anbarasu J Dhanush E Chandrodhayan V N Gattamaneni Sai Akilesh Epuru Suryateja Gayathiri P	Ms.Sherlin suresh	
2	June 2020- May 2021	JNNIEANS'20	Ms. Chirumavilaa Mr. Saidinesh	Ms. Yeshwani M	
		Techworld'20 June 20 – Aug20	Agalya B Syed Haseeb Anbarasu J Iswarya J Chandrodhayan V N Gattamaneni Sai Akilesh	Ms. Yeshwani M	

		Techworld'20 Sep20-Nov20	Agalya B Syed Haseeb Anbarasu J Iswarya J Chandrodhayan V N Gattamaneni Sai Akilesh	Ms. Yeshwani M	
		Techworld'20 Dec20 – Feb 21	Agalya B Syed Haseeb Anbarasu J Iswarya J Chandrodhayan V N Gattamaneni Sai Akilesh	Ms. Yeshwani M	
		Techworld'20 Mar21- May21	Agalya B Syed Haseeb Anbarasu J Iswarya J Chandrodhayan V N Gattamaneni Sai Akilesh	Ms. Yeshwani M	
3	June 2021- May 2022	JNNIEANS'21	Ms.Saraswathy M	Ms. Sangeetha Tulip	
		Techworld'21 June 21 – Aug21	Annadurai V Gajalakshmi S Agalya B Syed Haseeb Anbarasu J Iswarya J	Ms. Sangeetha Tulip	
		Techworld'21 Sep21-Nov21	Annadurai V Gajalakshmi S Agalya B Syed Haseeb Anbarasu J Iswarya J	Ms. Sangeetha Tulip	
		Techworld'21 Dec21 – Feb 22	Annadurai V Gajalakshmi S Agalya B Syed Haseeb Anbarasu J Iswarya J	Ms. Sangeetha Tulip	
		Techworld'21 Mar22- May22	Annadurai V Gajalakshmi S Agalya B Syed Haseeb Anbarasu J Iswarya J	Ms. Sangeetha Tulip	

4	June 2022- May 2023	JNNIEANS'22	Mr. Surya teja	Mrs. M. Sangavi	
		Techworld'22 June 22 – Aug22	S.K.Mohita A.Keshika D.Daphe Ch.Tesaswini S.K.Monish M.Arunkumar	Mrs. M. Sangavi	
		Techworld'22 Sep22-Nov22	S.K.Mohita A.Keshika D.Daphe Ch.Tesaswini S.K.Monish M.Arunkumar	Mrs. M. Sangavi	
		Techworld'22 Dec22 – Feb 23	S.K.Mohita A.Keshika D.Daphe Ch.Tesaswini S.K.Monish M.Arunkumar	Mrs. M. Sangavi	
		Techworld'22 Mar23- May23	S.K.Mohita A.Keshika D.Daphe Ch.Tesaswini S.K.Monish M.Arunkumar	Mrs. M. Sangavi	

4.6.3 Participation in inter-institute events by students of the program of study (Sample Documents)

2022-2023

S.No	Name(s) of the Student(s)	Name of the event in which he/she participated	Name of the Organizing Institute	Date of event	Position/ Prize, if any received
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NBA-SAR, Tier II Institution, CAY 2022-23

1	Saranya J Sarupuru Revanth Swetha D Sanjay R Sarala M	National Level Technical Symposium NECTS2K23	Narayana Engineering College	22-Jul-2023	Participated
2	Palemkota Bharath Gundu Prem Kalyan Gayathri V Pavithra Easwari M Poli Siva Shankar	A National Level Student Technical Symposium VISVOTSAV-2K23	PDR Visvodaya Institute of Technology and Science	15-Apr-2023	Participated
3	Ravula Archana Rohith D Sanjay R Sarala M Saranya J Sarupuru Revanth Swetha D Thenmalar K Thulasi B Vakati Lasya	Technical Symposium CYNAPSE 2K2	RMK Engineering college	14-Nov-2022	Participated
4	Koduru Harsha Vardhan Reddy Konidala Sujitha Palemkota Bharath Pavithra Easwari M Poli Siva Shankar Gundu Prem Kalyan Herfin Harristra R Gadupudi Alekya Gayathri V	Technical Symposium XEMPLAR 2K22	Velammal Institute of Technology	17-Oct-2022	Second Place
5	Reeta D	insta Minds	insta Minds	14.Oct.22	Participated
6	Acchi Masthan Anbarasu J Dhanush E Dongala Mahesh Herfin Harristra R Kamalnath K Kaviyarasi G	Big Data Analytics	Agni College of Engineering	11-Aug-2022	Participated

	Keerthana B Kudithipudi Ysaswini Lavanya B				
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2021-2022

S.No	Name(s) of the Student(s)	Name of the event in which he/she participated	Name of the Organizing Institute	Date of event	Position/ Prize, if any received
1	Keerthana B Kudithipudi Ysaswini Dhanush E Dongala Mahesh Herfin Harristra R Lavanya B	A National Level Student Technical Symposium TECH HERTZ-2K22	PDR VISVODAY A INSTITUTE OF TECHNOLOGY AND SCIENCE	22-Mar-2022	Participated
2	Ravula Archana Rohith D Sarupuru Revanth Swetha D Reeta D	National Level Technical Symposium AROHAN2K22	NARAYAN A ENGINEERING COLLEGE	28-May-2022	Participated
3	Konidala Sujitha Palemkota Bharath Pavithra Easwari M Poli Siva Shankar Dongala Mahesh	3 rd National Level Technical Symposium VISHWAYOJAN A FIESTA 2K22	SANSKRITI SCHOOL OF ENGINEERING	30-Apr-2022	Participated
4	Asa Ajay Audipudi Madhu Revanth Reddy Baddevolu Rupa Sri Ballapuram Puneeth Challagiri Venkatesh Dhivya K Epuru Suryateja Gayathiri P Kokila S Litheesh M R Mavillapalli Ramu Naveen Kumar S	Internet of Things Conference	Velammal Institute of Technology	18-Oct-2021	Second Place

5	Bathala Yaswanth Bhavani S Chiramana Bhavitha Chirumavilla Sai Dinesh Duvvuru Sreshta Dwaram Tharun Kumar Reddy Lalitha V Padarthi Kasthur Reddy Palooru Sai Madhav Unkar Monika Vakicherla Chinmaya Saicharan Guptha	Tech Events	GRT Engineering College	16-Jun-2021	Participated
6	Basith K Chatla Siva Kumar Dhanush E Dongala Mahesh Gadupudi Alekya Gayathri V Kaviyarasi G Keerthana B Koduru Harsha Vardhan Reddy Konidala Sujitha Reshma R Pradeesh A	Code-A-Thon	Agni College of Engineering	11-Mar- 2021	Third Place

2020-2021

S.No	Name(s) of the Student(s)	Name of the event in which he/she participated	Name of the Organizing Institute	Date of event	Position/ Prize, if any received
1	Bhavani S Challa Akhila Madhumitha B Savitha.V Indhumathi S Kathi Chandu	Digital Marketing Workshop	S.A Engineering College	16-Nov-20 – 18.Nov.20	Completed

2	Aswini B Bharath Kumar G Chinthaginjala Vijitha Kambam Sindhu Sandhiya B Thamizhajani S Vikneshwar S Yalla Dharani Yuvaraj P Gomathi S Vidhya V Unkar Monika Vennapusa Ranjith Reddy	Symposium – Tech Events	Pondicherry Engineering College	09-Sep-2020	Participated
3	Aamina Balaji K P Changeri Surekha Dheepasri S Hemanth V Kakumuri Penchallasai Lavanya S Madhumitha B Pavithra.N Poondla Tejaswini Pudi Dhaneshwar Reshma H Harinath S Karna Dinesh Kumar	Online Symposium - Tech Events	Rajalakshmi Engineering College	12-Aug-2020	Participated
4	Harinath S Karna Dinesh Kumar Karthiga M Lakshmipuram Manish Marri Venkateswar Reddy Mogalraj Dedeepya Nagella Mahitha Nethi Bhanu Mallick Palooru Sai Madhav Rayapaneni Reshmasree Shrija V	Industry 4.0- IT Expert Training	RMK Engineering College	03-Mar-2020	Participated
5	Chokkaboina Nikhila Dwaram Tharun Kumar Reddy Gayathiri P Padarthi Kasthur Reddy Rakesh Singh M Shrija V Thatiparthi Sathyasekhar Reddy Unkar Monika Vennapusa Ranjith Reddy	Techno -logical Augmentation - Conference	Velammal Institute of Technology	05-Feb-2020	Third Place

	Yenisetty Venkata Priyatham				
6	Mogalraj Dedeepya Nagella Mahitha Changeri Surekha Dheepasri S Thamizhajani S Vikneshwar S	A One Day National Level Student Technical Symposium EITRONS-2K20	Narayana engineering college	04-Apr-2020	Participated

2019-2020

S.No	Name(s) of the Student(s)	Name of the event in which he/she participated	Name of the Organizing Institute	Date of event	Position/ Prize, if any received
1	Ramya M Sharen D Umamahesh Velivelli Vedanaparthi Pallavi Vishal Vardhan Vuppapalat Yamini Priya V Kakumuri Penchalasai Lavanya S Mogalraj Dedeepya Nagella Mahitha	Unix Workshop	RMK Engineering College	03-Sep-2019	Participated
2	Alekhyia Vaddineni Deshika K V Gayathri J Hemanth V Jayashree Sngk Kamakolanu Vinay Kumar Lavanya Sivada Nitish V Premkumar B Raj Ashok R Chinthaginjala Vijitha	Technical Symposium CYNAPSE2K19	RMK Engineering College	06-Mar-2019	Participated

Details of Publications

S.No	Name of the Author	Title of Paper	Detail of Publication				Whether
							National
			Name of the Journal	ISSN No.	Page No.	Year	International

1	Vikneshwar selvam, VIvek Devendiran	Secure Computational Resource Sharing System Using Natural Language Processing	IRJMETS	2582-5208	2843-1848	2021	International
2	P.Tejaswini, M.Neelima, C.Surekha	Characterization of Plant Disease Using Prediction Using CNN	IJSREM	2582-3930	1 to 6	2021	International
3	Aamina, Sindhuja, Sneha, Thamizhanjani	Smart Trail Room	IJADST	2582-1059	1 to 6	2021	International
4	Bharath Kumar G, Hemnath V, Balaji	Growth Identification of Tomato Plants Using Tensor Flow	IJEAST	2455-2143	259-264	2021	International
5	Dheepasri, Lekha, Pavithra, Madhumitha	Silence Speaker	IJADST	2582-1059	1 TO 12	2021	International
6	Vijitha, Kambhamsindhu, Kandalakavya	Annoyed Turnout Ability Transmittal Using Heap Structure	IJAEM	2395-5252	1137-1143	2021	International

CRITERION 5	Faculty Information and Contributions													200
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S. No	Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications (Number for all faculty)	Ph.D Guidance (Number)	Ph.D. granted during the Assessment Year (Yes if received in the academic year/No)	Current Designation	Date (Designated as Prof/ Assoc. Prof.).	Initial Date of Joining	Association Type	At present working with the Institution (Yes/No)	In case of NO, Date of Leaving	IS HOD?
1	Dr. P SUBHASHINI	BGIPS0044M	ME, PhD	16-10-2017	INFORMATION TECHNOLOGY	14	No	2017	Professor	02-05-2019	02-05-2019	Regular	No	06-06-2022	No
2	Dr. GUNASEKARAN G	AKCPG2129A	ME, PhD	01-12-2009	DATA MINING	18	No	2010	Professor	14-02-2018	14-02-2018	Regular	No	31-05-2021	No
3	Mr. SATHISH R	CTCPS4654M	M.Tech	31-05-2012	COMPUTER SCIENCE AND ENGINEERING	1	No	No	Assistant Professor	-	21-07-2017	Regular	Yes	-	No
4	Mr. MAHESHBABU	BADPM8652G	M.Tech	11-10-2012	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	11-10-2012	Regular	Yes	-	No
5	Mrs. MELTA J	DVHPM7155R	M.E	31-05-2014	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	01-04-2019	Regular	No	31-06-2022	No
6	Mr. ARULMOZHI KS	AOSPA6317A	M.E	30-06-2011	NETWORK ENGINEERING	-	No	No	Assistant Professor	-	07-07-2011	Regular	Yes	-	No
7	Mrs. PRIYA M	BCIPP8867P	M.E	29-06-2013	COMPUTER SCIENCE AND ENGINEERING	11	No	No	Assistant Professor	-	01-08-2013	Regular	No	30-06-2022	No
8	Mrs. SANGEETHA TUPILI	CCQPS7398K	M.E	30-07-2011	COMPUTER SCIENCE AND ENGINEERING	9	No	Pursuing	Assistant Professor	-	01-07-2011	Regular	No	30-06-2022	No
9	Mr. PHILIP VINOD K	ARLPP3143K	M.Tech	31-05-2011	INFORMATION TECHNOLOGY	7	No	No	Assistant Professor	-	01-06-2011	Regular	Yes	-	No
10	Mr. SREEKANTH G	BGYPS8016B	M.E	31-05-2005	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Associate Professor	01-06-2018	25-05-2009	Regular	No	31-05-2021	No

NBA-SAR, Tier II Institution, CAY 2022-23

S. No	Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications (Number for all faculty)	Ph.D Guidance (Number)	Ph.D. granted during the Assessment Year (Yes if received in the academic year/No)	Current Designation	Date (Designated as Prof/ Assoc. Prof.).	Initial Date of Joining	Association Type	At present working with the Institution (Yes/No)	In case of NO, Date of Leaving	IS HOD?
11	Dr. JAYANTHI S	AKPPJ5234K	ME/M. Tech and PhD	14-12-2020	COMPUTER SCIENCE AND ENGINEERING	12	No	2020	Professor	15-12-2020	01-07-2020	Regular	Yes	-	No
12	Mr. UPENDRA BABU K	ABDPU4550B	M.Tech	30-06-2011	COMPUTER SCIENCE AND ENGINEERING	3	No	No	Associate Professor	02-07-2014	02-07-2014	Regular	No	30-09-2021	No
13	Mrs. YASASWINI MANDIGA	CMWPM2798H	M.Tech	30-06-2015	COMPUTER SCIENCE AND ENGINEERING	2	No	No	Assistant Professor	-	29-06-2019	Regular	No	07-07-2022	No
14	Mrs. GLORY SANGEETHA R	BSHPG6145A	M.Tech	30-06-2017	MULTIMEDIA TECHNOLOGY	1	No	No	Assistant Professor	-	01-06-2021	Regular	Yes	-	No
15	Ms. VIGNESHWARI K	BMJPV1750N	M.Tech	30-06-2020	INFORMATION SECURITY	-	No	No	Assistant Professor	-	01-06-2021	Regular	No	27-05-2022	No
16	Ms. YASHIKA P	BIVPY2382K	M.Tech	31-08-2020	INFORMATION SECURITY	-	No	No	Assistant Professor	-	07-06-2021	Regular	No	31-05-2022	No
17	Mr. AKHIL NAIR R	BFOPA6638C	M.E	30-06-2017	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	09-06-2021	Regular	No	22-07-2022	No
18	Mrs. GEETHANJALI A	DROPG8636N	M.E	29-06-2019	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	01-07-2019	Regular	Yes	-	No
19	Mr. SARVESAN B	DXJPS7048F	M.E/M.Tech	30-06-2009	INFORMATION TECHNOLOGY	-	No	No	Associate Professor	01-08-2019	01-08-2019	Regular	No	30-09-2021	No
20	Mr. DHANASEKARAN R	BRKPD3313D	M.E/M.Tech	29-06-2013	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	01-07-2016	Regular	No	31-08-2021	No
21	Dr. SOMASUNDARAM K	BTKPS4219P	ME/M. Tech and PhD	10-03-2021	SOFTWARE QUALITY IN COMPUTER SCIENCE AND ENGINEERING	3	No	2020	Professor	26-07-2021	26-07-2021	Regular	No	12-07-2022	Yes

NBA-SAR, Tier II Institution, CAY 2022-23

S. No	Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications (Number for all faculty)	Ph.D Guidance (Number)	Ph.D. granted during the Assessment Year (Yes if received in the academic year/No)	Current Designation	Date (Designated as Prof/ Assoc. Prof.).	Initial Date of Joining	Association Type	At present working with the Institution (Yes/No)	In case of NO, Date of Leaving	IS HOD?
22	Dr. JEBARAJ RATNAKUMAR	AJCPR8938F	Ph.D	2010	COMPUTER SCIENCE AND ENGINEERING	27	No	2010	Professor	-	18.7.2022	Regular	Yes	-	Yes
23	Mr. SENTHIL KUMAR V	ASXPK2636F	M.E	2016	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	01.07.2019	Regular	Yes	-	No
24	Mr. MATHAN KUMAR A	FCIPM9840M	M.E	2018	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	16.07.2022	Regular	Yes	-	No
25	Mr. MUSTAFA NAWAZ SM	AUOPM8524H	M.Tech	2007	DIGITAL COMMUNICATION AND NETWORKING	5	No	Pursuing	Assistant Professor	-	08.07.2022	Regular	No	31-06-2023	No
26	Mrs. VANISHREE K	AJFPV9621C	M.Tech	2009	INFORMATION TECHNOLOGY	-	No	No	Assistant Professor	-	01.02.2022	Regular	Yes	-	No
27	Mr. IYYANARAPPAN A	AFKPI6061E	M.E	2014	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	19.07.2022	Regular	Yes	-	No
28	Mrs. SANGAVI M	QRDPS1320D	M.E	2019	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	18.8.2022	Regular	Yes	-	No
29	Mr..PRIYA.P	CIGPP8120G	M.E	2019	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor	-	01.07.2019	Regular	Yes	-	No
30	Ms. POORNIMA A.	BINPA4216Q	M.E	2017	COMPUTER SCIENCE AND ENGINEERING	-	No	No	Assistant Professor		01.07.2022	Regular	Yes	-	No

5.1. Student-Faculty Ratio (SFR) (20)

S:F ratio = N/F ; N = No. of students = $3 \times X$ where X is (approved intake + 20% lateral entry intake + separate division, if any) F = No. of faculty = $(a+b-c)$ for every assessment year

a: Total number of full-time regular Faculty serving fully to 2nd, 3rd and 4th year of this program

b: Total number of full-time equivalent regular Faculty (considering fractional load) serving this program from other Program(s)

c: Total number of fulltime equivalent regular Faculty (considering fractional load) of this program serving other program(s)

Regular Faculty means:

- Fulltime on roll with prescribed pay scale. An employee on contract for a period of more than two years AND drawing consolidated salary more than applicable gross salary shall only be counted as a regular employee.
- Prescribed pay scale means pay scales notified by the AICTE/ Central Government and implementation as prescribed by the State Government. In case State Government prescribes lesser consolidated salary for a particular cadre then same will be considered as reference while counting faculty as a regular faculty.

Marks to be given proportionally from a maximum of 20, and zero for average SFR higher than 20:1.

B.E COMPUTER SCIENCE AND ENGINEERING						
YEAR OF STUDY	CAY (2022-23)		CAYm1 (2021-22)		CAYm2 (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	90	1	90	4	120	0
3rd Year	90	4	120	0	90	0
4th Year	120	0	90	0	120	1
Sub-Total	300	5	300	4	330	1
Total	305		304		331	

Year	CAY (2022-23)	CAYm1 (2021-22)	CAYm2 (2020-21)
Total No. of Students in the Department(s)	305	304	331
No. of Faculty in the Department (F)	16	18	18
Student Faculty Ratio (SFR)	19.06	16.89	18.39
Average SFR	18.11		

5.2. Faculty Cadre Proportion (25)

The reference Faculty cadre proportion is 1(F1):2(F2):6(F3)

F1: Number of Professors required = $\frac{1}{9} \times$ Number of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (N) as per 5.1

F2: Number of Associate Professors required = $\frac{2}{9} \times$ Number of Faculty required to comply with 20:1 Student- Faculty ratio based on no. of students (N) as per 5.1

F3: Number of Assistant Professors required = $\frac{6}{9} \times$ Number of Faculty required to comply with 20:1 Student- Faculty ratio based on no. of students (N) as per 5.1

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY 2022-23	2	2	3	0	10	14
CAY M1 2021-22	2	3	3	0	10	15
CAY M2 2020-21	2	3	4	0	11	15
Average Numbers	2	2.66	3.33	0	10.33	14.66

Average Assessment = 23.72

5.3 Faculty Qualification (25)

$FQ = 2.5 \times [(10X + 6Y)/F]$ where x is no. of regular faculty with Ph.D., Y is no. of regular faculty with M.Tech., F is no. of regular faculty required to comply 1:20 Faculty Student ratio (no. of faculty and no. of students required are to be calculated as per 5.1)

Year	X	Y	F	$FQ = 2.5 \times [(10X + 4Y)/F]$
CAY 2022-23	2	14	16	11.88
CAY M1 2021-22	3	15	18	12.5
CAY M2 2020-21	3	15	18	12.5
Average Assessment				12.29

5.4 Faculty Retention (25)

Description	2022-23	2021-22
No of Faculty Retained	8	12
Total No of Faculty	16	18
% of Faculty Retained	50	66.67

Average Faculty Retention: 58.82

5.5 Innovations by the Faculty in Teaching and Learning (20)

The faculty members were engaged in multiple innovative teaching and learning practices to improve the course outcome and program outcome and also for the student welfare.

The following methods are used to the teaching and learning.

Teaching Methods:

The teacher-centered approach vs. the student-centered approach. High-tech vs. low-tech approaches to learning. Flipped classrooms, differentiated instruction, inquiry-based learning, personalized learning and more.

Teacher-Centered Approach to Learning

Faculty serve as instructor/authority figures who deliver knowledge to their students through lectures and direct instruction, and aim to measure the results through testing and assessment. This method is sometimes referred to as “sage on the stage.”

1. Direct Instruction:

Under the direct instruction model sometimes described as the “traditional” approach to teaching. Faculty convey knowledge to their students primarily through lectures and scripted lesson plans, without factoring in student preferences or opportunities for hands-on or other types of learning. This method is also customarily low-tech since it relies on texts and workbooks rather than computers or mobile devices.

2. Flipped Classrooms:

If students did the “classroom” portion of their learning at home and their “homework” in the classroom. That’s an oversimplified description of the flipped classroom approach, in which students watch or read their lessons on computers at home and then complete assignments and do problem-solving exercises in class.

High-Tech Approach to Learning

From devices like laptops and tablets to using the internet to connect students with information and people from around the world, technology plays an ever-greater role in many of today's classrooms. In the high-tech approach to learning, Faculty utilize many different types of technology to aid students in their classroom learning.

Low-Tech Approach to Learning

Technology obviously comes with pros and cons, and faculties believe that a low-tech approach better enables them to tailor the educational experience to different types of learners. Additionally, while computer skills are undeniably necessary today, this must be balanced against potential downsides; for example, some would argue that over-reliance on spell check and autocorrect features can inhibit rather than strengthen student spelling and writing skills.

5.6. Faculty as participants in Faculty development/training activities/STTPs (15)

- A Faculty scores maximum five points for participation
- Participation in 2 to 5 days Faculty development program: 3 Points
- Participation >5 days Faculty development program: 5 points

S. No	Name of the faculty	Max. 5 per faculty		
		CAYm1	CAYm2	CAYm3
		2021-22	2020-21	2019-20
1	Dr. P SUBHASHINI	5	5	-
2	Dr. GUNASEKARAN G	5	5	5
3	Mr. SATHISH R	5	5	5
4	Mrs. MELTA J	5	5	5
5	Mr. ARULMOZHI KS	5	5	5
6	Mrs. PRIYA M	-	5	5
7	Mrs. SANGEETHA TUPILI	5	5	5
8	Mr. PHILIP VINOD K	5	5	5
9	Mr. SREEKANTH G	-	5	5

10	Dr. JAYANTHI S	-	5	-
11	Mr. UPENDRA BABU K	-	5	5
12	Mrs. YASASWINI MANDIGA	5	5	5
13	Mrs. GLORY SANGEETHA R	5	-	-
14	Ms. VIGNESHWARI K	5	-	-
15	Ms. YASHIKA P	-	-	-
16	Mr. AKHIL NAIR R	-	-	-
17	Mrs. GEETHANJALI A	-	5	-
18	Dr. MOHAMMED THAHA M	-	-	-
19	Mr. SARVESAN B	-	-	5
20	Mr. DHANASEKARAN R	5	5	5
21	Dr. SOMASUNDARAM K	5	5	-
22	Mr. MAHESHBABU	5	5	5
23	Ms. PRIYA P.	-	5	5
24	Mr. SENTHIL KUMAR.V	5	5	-
Sum		70	90	70
RF=Number of faculty required to comply with 20:1 student-Faculty ratio as per 5.1		16	17	17
Assessment = $3X(\text{sum}/0.5\text{RF})$ (Marks limited to 15)		26.25	31.76	24.71
Average assessment over last three years (Marks limited to 15) =		27.57		

5.7 Research and Development (30)

5.7.1 Academic Research (10)

Academic research includes research paper publications, Ph.D. guidance, and faculty receiving Ph.D. during the assessment period.

- Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (6)
- Ph.D. guided /Ph.D. awarded during the assessment period while working in the institute (4)

All relevant details shall be mentioned.

List of Faculty Pursing Ph.D.

S. No	Faculty Name	Research Area
1	Mrs. SANGEETHA TUPILI	Machine Learning using Tensor Flow
2	Mr. PHILIP VINOD K	P-P Network
5	Mr. MUSTAFA NAWAS S.M	Cancer detection using medical image processing

RESEARCH PAPER PUBLICATIONS**CAY 2020-21**

S.NO	NAME OF THE FACULTY	TITLE OF THE PAPER	DETAILS OF PUBLICATION			
			NAME OF JOURNAL	VOL.& ISSUE	YEAR	ISSN NO & IMPACT FACTORY
1	Mrs. SANGEETHA TUPILI	Whatsapp auto responder using natural language processing and artificial intelligence	International E-conference on innovation engineering technology and management		2021	
		Deep pockets barter margin	International E-conference on innovation engineering technology and management			
2	Mrs. PRIYA M	Brain tumor growth prediction and segmentation in longitudinal brain	International E-conference on innovation engineering technology and management		2021	
		Silence Speaker	International journal advanced development and science technology			2582-1059 3.563

S.NO	NAME OF THE FACULTY	TITLE OF THE PAPER	DETAILS OF PUBLICATION			
			NAME OF JOURNAL	VOL.& ISSUE	YEAR	ISSN NO & IMPACT FACTORY
3	Mr. SATHISH R	Intermodal sentiment analysis for image with text captions using VAGGNET technique	ACM translation low resource language information process		2021	
4	Mrs. SANGEETHA TUPILI	Growth identification of tomato plants using sensor follow	International journal of advances engineering applied science and technology	-	2021	2455-2143
5	Mr. UPENDRA BABU K	Annoyed turnout ability transmittal using heap structure	Internal journal of advances in engineering and management	-	2021	2395-5252
6	Dr. P SUBHASHINI	Smart trial room	International journal advanced development and science technology			2582-1059
		Secure computational resource sharing system using natural language balancing	International research journal of modernization in engineering technology and science		2021	2582-5208

CAY 2019-20

S.NO	NAME OF THE FACULTY	TITLE OF THE PAPER	DETAILS OF PUBLICATION			
			NAME OF JOURNAL	VOL.& ISSUE	YEAR	ISSN NO & IMPACT FACTORY
1	Dr. P SUBHASHINI	Develops Automation and Agile Methodology	Journal Of Information and Computational Science		2020	1548-7741
2	Dr. GUNASEKARAN G	Quantum Cryptography & Key Distribution (Qkd) – Secured Technology	Journal Of Information and Computational Science		2020	1548-7741
3	Mr. SATHISH R	Optimization of stir casting parameters for corrosion rate analysis of AA 7068- Boron Carbide Composites	Materials Today: Proceedings		2020	2214-7853
4	MRS. PRIYA M	Security Automation in Information Technology	Journal Of Information and Computational Science		2020	1548-7741
5	MRS. SANGEETHA TUPILI	Enhanced and cost-effective techniques used for plant growth in vertical agriculture	Materials Today: Proceedings		2020	2214-7853
6	MR. PHILIP VINOD K	Devops Automation and Agile Methodology	Journal Of Information and Computational Science		2020	1548-7741
7	MR. UPENDRA BABU K	Public-Key Searchable Encryption Scheme with Charm Prototyping	Journal Of Information and Computational Science		2020	1548-7741
8	MRS. YASAWINI MANDIGA	Quantum Cryptography & Key Distribution (Qkd) – Secured Technology	Journal Of Information and Computational Science		2020	1548-7741

5.7.3 Development activities (10)

Provide details:

- **Product Development**
- **Research laboratories (IoT labs are available)**
- **Instructional materials**
- **Working models/charts/monograms etc.**
- There are specific Labs for CSE R&D activities which includes several systems with software's installed.
- The student projects are executed in the R&D Lab

Product Development

S. No	Name of the Product/ Working Model
1	Campus Gardening Digitalization
2	Real Time COVID Cases Notification App
3	Power Saving Automatic Light Control
4	Face Mask Detection Using Machine Learning
5	Growth Identification of Tomato Plants Using Tensor Flow
6	Bringing Health and Data Together for Connected Health Care

Growth Identification of Tomato Plants Using Tensor Flow

INTRODUCTION:

Vertical farming is the modern practice of producing food that comes in different shapes and sizes either horizontally as shelving units or vertically as staircases. This soilless farming developing plants in controlled indoor atmosphere, with artificial lightening that provides adequate room temperature for photosynthesis process, water flow with nutrients mix (NPK ratios), and CO₂ etc. Vertical farming uses 70–95 less water compared to traditional way of farming. And crops in this farming are free from unfavorable weather conditions and assures more crop productions which is pesticide free and pure organic. Till

now, many believe that vertical farming can be the answer that can fulfil these food demands to certain extent.



Bringing Health and Data Together for Connected Health Care

INTRODUCTION:

The device is designed to be lightweight, comfortable, and easy to use with a simple interface that allows users to view their progress and set goals for themselves. The Fit band connects to a smartphone app, where users can access more detailed information about their health and fitness, as well as track their progress over time.

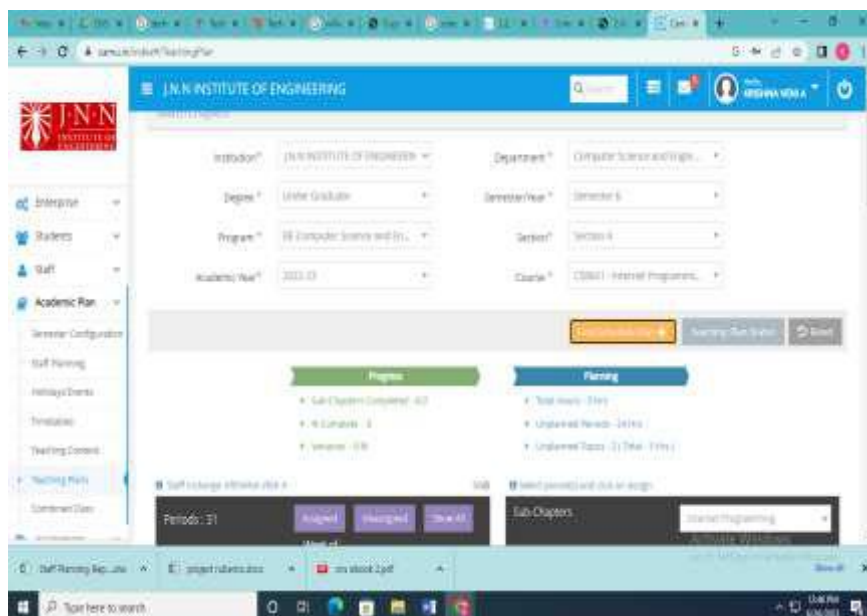


Research laboratories

LAB NAME	Name of the Software / Equipment
R & D LAB	Systems: 20 NOs C Java, Digital Trainer kit, IC's required numbers, Simulink Software, Oracle 11i Shell Programming, ArgoUML Java Traffic light controller, Alarm controller, 8251 serial communication interface, parallel communication interface 8255, Key board controller 8279 interface, 8253 Timer interface, stepper motor interface, DMA, DCI Interface HTML, XML, Java frames, APPLET, PHP, AJAX

Instructional materials

Learning Management System (LMS)	Description
CAMU	All instructional materials, videos, Lectures, Presentations are stored in CAMU and students are provided login to learn. All instructional materials are updated and uploaded by faculty to encourage students in self-learning and ICT based learning. In COVID times this would be very useful for students to download materials & study



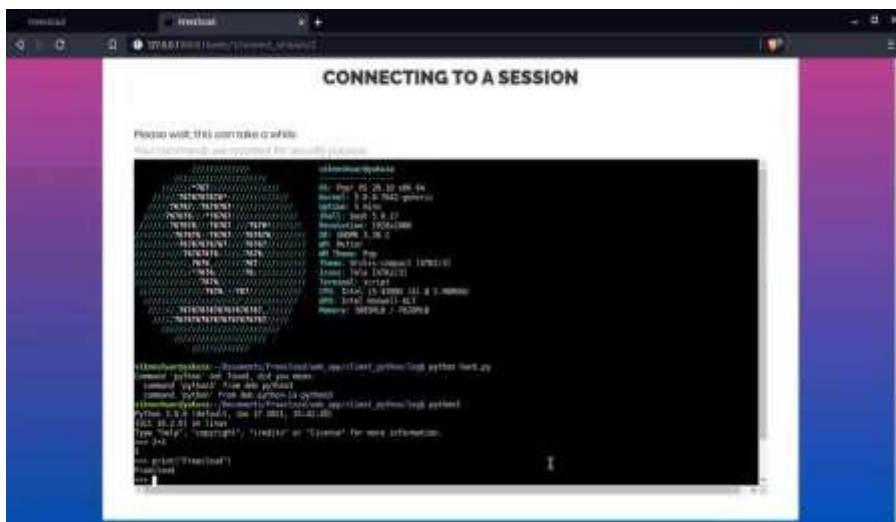
Working models (Applications / Software)

S. No	Name of the Product/ Working Model
1	Register Login website with MySQL Database
2	Typewriting Desktop Software with time
3	Virtual Assistant
4	Offline text to speech in JavaScript
5	Secure Computational Resource sharing system using NLP

Secure Computational Resource sharing system using NLP

INTRODUCTION:

Cloud computing and cloud services have improved a lot over the years and it is used in various sectors and it plays an important role in our day-to-day life. But, using cloud services comes with a cost and it is not widely available to every developer and there is no entirely free alternative to cloud services, our project tries to create a free cloud experience. Almost every one of us relies on the cloud one way or another, either it is storage or mail services or video streaming and video conferencing platforms. It helps the user to access IT services without spending too much money on hardware and because of its on-demand nature, users can use cloud services only when they require and pay only for what they have used. We are trying to make cloud services accessible to everyone and create a tension-free cloud experience without worrying about usage charges. We have implemented a software where the users can share their terminal with others and other user can utilize that terminal right from their browser. The commands entered by the will be analyzed by a NLP model to check whether the user have entered any malicious command in it.



5.8 Faculty Performance Appraisal and Development System (FPADS) (30)

Faculty members of Higher Educational Institutions today have to perform a variety of tasks pertaining to diverse roles. In addition to instruction, faculty members need to innovate and conduct research for their self-renewal, keep abreast with changes in technology, and develop expertise for effective implementation of curricula. They are also expected to provide services to the industry and community for understanding and contributing to the solution of real-life problems in industry. Another role relates to the shouldering of administrative responsibilities and co-operation with other Faculty, Heads-of-Departments and the Head of Institution. An effective performance appraisal system for faculty is vital for optimizing the contribution of individual Faculty to institutional performance.

The assessment is based on:

A well-defined system for faculty appraisal for all the assessment years (10)

Its implementation and effectiveness (20)

Policy on Performance Appraisal System for Teaching and Non-teaching staff

A well-defined system for faculty appraisal for all the assessment years (10)

Background

The policy document is designed by HODs of all departments in consultation with Principal and Management. It is discussed with teaching and non-teaching staff in

department meetings. The inputs and suggestions are taken into account for designing policy. The policy document is approved in the meeting of HODs, Principal and Management on 01-03-2019. This appraisal system will be effective from the academic year 2019-20

Performance appraisal policy is the way to ensure the performance-oriented work environment in the organization, it helps employees to achieve the set objects and act as a reward for their contribution in the progress of the organization. J.N.N Institute of Engineering continuously makes efforts to improve the academic training and research environment in its constituent colleges.

This is achieved not only by improving the infrastructure facilities but also by using effective teaching and learning methodologies. To assess the success of the inputs given by the institution, it is important to understand, whether the user of such facilities is indeed satisfied and getting the expected outcomes from the initiatives made.

The institution has Self-Appraisal Mechanism for Teaching Staff:

In this direction, the institution has structured an objective assessment mechanism with scope for improvement.

The Three tier assessment involves:

- Self-appraisal by the faculty & Result Percentage - 40 Mark
- Contribution to Research & Development, Publication in National & International Conference, Journal Publication, Project, Consultancy, Self-development, Team work - 25 Mark

The above assessment mechanism has resulted in the teaching staff understanding and getting acquainted about the following:

Scope for improvement in teaching resources and methodologies

The research outcomes and relevance of the work being done with the current developments in the respective fields.

J.N.N Institute of Engineering
Performance Evaluation for Teaching Staff for Academic Year 2019-20

Name of the Dept: _____ Name of Staff: _____ Design & Qualification: _____ Normalized Experience: _____

Parameters	Description of parameters and Targets	Total Marks (100)	ODD Semester			Even Semester pass % in theory						Marks			Remarks		
			Subject : 1		Subject : 2	Subject : 3		Subject : 1		Subject : 2		Subject : 3		Self		HOD	Principal
			%	Marks (R.M)	%	Marks (R.M)	%	Marks (R.M)	%	Marks (R.M)	%	Marks (R.M)	%				
(1) Academics (50)	Cycle Test - I Pass Percentage	20															
	Cycle Test - II Pass Percentage																
	Cycle Test - III Pass Percentage																
	Model Exam - Pass Percentage																
	University Exam Pass Percentage / Current Year (odd Semester) & Previous year (Even Semester)	20															
	Regularity (95% and above)	5															
	Delivery of subject (to be assessed by H.O.D with proof)	5															
(2) Continuous Learning (25)	A) Two publications/year in journals with impact factor 0.3 and above (Or) B) One FDP per year (not less than one week) (Or) C) Min. Two R&D students' project awards.	10															
(3) Extension Activities (25)	(A) Academic Awards / Prizes / Honors received	10															
	(B) Participation in Affiliated University Activities	5															
	(C) Membership of professional bodies / organizations (with positions held, if any)	5															
	(D) Would you like to mention anything else significant / noteworthy about yourself	5															
Total Marks																	
PRINCIPAL APPRAISAL:																	

Eligibility for promotion This format is to be read with FACULTY UPGRADATION POLICY –GUIDELINES and HR POLICY FOR PROMOTION.

Eligibility for retention: (Minimum 90% of the total marks specified for each level:

AP-II = 45 out of 50 marks (Academics); From AP-II to AP-I = 54 out of 60 marks (Academics 50 + Cont. Learning 10); From AP-I to AP-I = 76.5 out of 85 marks (Academics 50 + Cont. Learning 10+ funded projects 25); From AP = I to Associate-81 out of 90 (Academics 50 + Cont. Learning 10+ Extension Activities 25+ consultancy 5) From Associate to Professor = 90 out of 100 marks (Academics 50 + Cont. Learning 10+ Extension Activities 25+ consultancy 5+ IPR 10).

SIG.OF STAFF

HOD

PRINCIPAL

Distribution of Marks:

Percentage	Reward Marks		Faculty Regularity	
	Cycle test/ Model Exam	University Exam	Percentage	Marks
89.5% to 94.4%	3	10	Above 95	1
			Above 96	2
			Above 97	3
94.5% to 100%	5	20	Above 98	4
			Above 99	5

Calculation of marks:

Cycle Tests / Model Exam: Sum of marks in all cells
 $\frac{\text{Sum of marks}}{16} \times 4$

University Exams: Average of all marks

Supporting Parameters (to be evaluated by H.O.D and Principal in case of more than one faculty for one position):

Parameters	Marks
Course File	1
Lab manual	1
Innovative assignment	1
Class room handling	1
Feedback from students	1
HOD's Confidential report	1
Counseling / Mentoring	1
Placement initiatives	1
College level co ordination	1
Image Building (outside participation / community reach)	1
Total	10

J.N.N Institute of Engineering
 Performance Evaluation for Teaching Staff for Academic Year 2021-22

Name of the Dept: CSE Name of Staff: R. GURU SHANKAR Designation & Qualification: Asst. Prof. & M.Tech Normalized Experience: _____

Parameters	Description of parameters and Targets	Total Marks (100)	Odd Semester			Even Semester			Marks			Remarks						
			Subject 1	Subject 2	Subject 3	Subject 1	Subject 2	Subject 3	Self	HOD	Principal							
			Score (0-100)	Score (0-100)	Score (0-100)	Score (0-100)	Score (0-100)	Score (0-100)										
(A) Academic (60)	Cycle Test - I (100 Marks)	20	95	95	95	95	95	95	15	15	15	Good						
	Cycle Test - II (100 Marks)	20	95	95	95	95	95	95										
	Cycle Test - III (100 Marks)	20	95	95	95	95	95	95										
	Model Exam - I (100 Marks)	20	95	95	95	95	95	95										
	University Exam (100 Marks) - Current Year (50 Marks) & Previous Year (50 Marks)	20	95	95	95	95	95	95	15	15	15							
(B) Extra-curricular (40)	Regularity (100%) and Absence	5							5	5	5	Good						
	Delivery of subject (to be assessed by H.O.D with peers)	5							5	5	5							
	(i) Two publications/year in journals with impact factor > 1 and others (10)	10	0			5			10	10	10							
	(ii) Two IPR per year (not less than one mark) (10)	10	0			5			10	10	10							
	(iii) Two IPR per year (not less than one mark) (10)	10	0			5			10	10	10							
(C) Professional (10)	(i) Participation in Affiliated University Activities	5	5			5			5	5	5	Good						
	(ii) Membership of professional bodies / organizations (with position held, if any)	5	5			5			5	5	5							
	(iii) Would you like to mention anything else significant/ noteworthy about yourself?	5	5			5			5	5	5							
			5			5			5	5	5							
			5			5			5	5	5							
Total Marks									80	80	80							
PRINCIPAL APPRAISAL: Academic performance is good. Try to do more research papers. Hardly work to receive the awards. Be a member in professional organizations.																		

Eligibility for promotion: This form is to be read with FACULTY UPGRADATION POLICY - GUIDELINES and HR POLICY FOR PROMOTION.

Eligibility for retention: (Minimum 90% of the total marks specified for each level)

AP-III - 45 out of 100 marks (Academic); From AP-III to AP-II - 54 out of 100 marks (Academic) 50 + Cont. Learning 10; From AP-III to AP-I - 70.5 out of 100 marks (Academic) 50 + Cont. Learning 10; Hardly project 10; From AP - I to Associate-III out of 90 (Academic) 50 + Cont. Learning 10; Extra-curricular 25+consultancy 5; From Associate to Professor - 90 out of 100 marks (Academic) 80 + Cont. Learning 10; Extra-curricular 25+consultancy 5+ IPR 10).

Signature of HOD: _____ Signature of Principal: _____

Policy for Appraisal of Teaching Faculty (The Faculty appraisal is to be carried out on three parameters)

S. No	Parameter	Weightage
1	ACADEMICS	
	Internal Exam Results	20
	University Exam	20
	Regularity and Delivery of Subjects	10
2	CONTINUOUS LEARNING	
	Two Publications per year in a journal with Impact factor 0.3 and above	10
	One FDP per year	10
	Minimum two R&D students' Project award	5
3	EXTENSION ACTIVITIES	
	Academic Awards/Prizes/Honors	10
	Participation in Affiliated University Activities	5
	Membership in Professional bodies	5
	Significant role	5
Overall points secured		100

The self-assessment mechanism does not have any negative impact on the staff as he is provided with the opportunity to comment on the evaluation outcomes and give opportunity for improvement. The institution rewards and recognizes teachers commending them for their teaching approaches and research initiatives, which helps them to work with renewed zeal.

The Institution has Self-Appraisal Mechanism for Non-Teaching Staff.

The works of the Nonteaching staff are assessed periodically through a structured mechanism:

- Work efficiency and commitment.
- Initiative towards learning newer trends in their respective areas.
- Leadership and team work.
- Discipline and regularity

Policy for Appraisal of Non-Teaching Faculty:

The faculty appraisal is to be carried out on Five parameters

S. No	Parameter
1	Training Support
2	Skills Development
3	Active Participation in the team work
4	Involvement
5	Housekeeping and adapting Safety Practices

Its implementation and effectiveness (20)

The feedback had helped take the following decisions.

- Conduct of language and soft skill programme for non-teaching and administrative staff.
- Leadership training programme for senior faculty to identify the succession lines.
- Deputation of staff to various orientation programs relating government policies and rules concerning HR management and Education.

Conclusion of appraisal

Student's feedback, appraisal by HOD and Principal will be taken into consideration for final conclusion as per following table

S. No	Appraisal Score	Observations, Conclusion	Remedial Action
1	85 & above	Excellent	However, staff will be encouraged to sustain the performance with Increment/Incentive/Awards.
2	60 - 84	Good	Staff will be encouraged for further improvement if required. Staff will be encouraged to attend more FDP, Conference, and Publication.
3	<60	Fair	Need improvement in weaker areas. Motivation and Support will be given for improvement like FDP, Conference, and Publication.

5.9 Visiting/Adjunct/Emeritus Faculty etc. (10)

Adjunct faculty also includes Industry experts. Provide details of participation and contributions in teaching and learning and /or research by visiting/adjunct/Emeritus faculty etc. for all the assessment years:

- Provision of inviting/having visiting/adjunct/emergitus faculty (1)
- Minimum 50 hours per year interaction with adjunct faculty from industry/retired professors etc.

(Minimum 50 hours' interaction in a year will result in 3 marks for that year; 3 marks $\times$ 3 years = 9 marks)

YEAR 2022-23							
S. No	Name	Qualification	Designation	Company Name	Experience	Subject Name	No. of Hours
1	Ms. V. Valarmathy	M.E	Visiting Professor	IT Experts System	20 Yrs.	Mobile Computing	30
2	Mr. Muhhamed Iliyas	B.E	Visiting Professor	IT Expert Training	12	Data Science	20
YEAR 2021-22							
S. No	Name	Qualification	Designation	Company Name	Experience	Subject Name	No. of Hours
1	Ms. V. Valarmathy	M.E	Visiting Professor	IT Experts System	20 Yrs.	Cryptography and Network Security	20
2	Dr. Kogila Vani Gopalan	Ph.D	Visiting Professor	Flowserve	15	Microprocessor and Microcontroller	20
3	Mr. Muhhamed Iliyas	B.E	Visiting Professor	IT Expert Training	12	Artificial Intelligence	20
YEAR 2020-21							
S. No	Name	Qualification	Designation	Company Name	Experience	Subject Name	No. of Hours
	Mr. Muhhamed		Visiting	IT Expert			30

NBA-SAR, Tier II Institution, CAY 2022-23

1	Iliyas	B.E	Professor	Training	13	Cloud Computing	
2	Mr. Devarajan	B.E	Visiting Professor	Blue Waves	14	Image Processing	30

CRITERION 6	Facilities and Technical Support	80
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6. Facilities and Technical Support

6.1 Adequate and well equipped laboratories and technical manpower (30)

Table 6.1 Adequate and well equipped laboratories and technical manpower

S. No	Name of the laboratory	No. of students per setup (batch)	Name of the Software/ Equipment	Weekly utilization status (all the courses for which lab is utilized)	Technical man power		
					Name of the technical staff	Designation	Qualification
1	CP LAB 1	50	Windows 10 and UBUNTU Linux Operating System Lenovo Desktop LED 19" wide Display, Intel Core i5 8GB RAM 2.00 GHZ Processor Intel Chipset Motherboard, 250 GB Hard disk, HP Keyboard and Dell Mouse	ODD SEM: Object Oriented Analysis and Design Laboratory 12 hrs. Cloud Computing Laboratory 9 hrs. Security Laboratory 8 hrs. Total: 29 hrs.	Mr. R.Raja Ashok	Technical Assistant	B.E.

				EVEN SEM: Operating Systems Laboratory 9 hrs. Database Management Systems Laboratory 12 hrs. Total: 21 hrs.			
2	CP LAB 2	50	Windows 10 Intel Motherboard with Processor 3.2GHZ Dual Core Zebronic Cabinet SMPS, Keyboard, Mouse, 250GB Hard disk, 4GB RAM DDR3, Monitor	ODD SEM: Data Structures Laboratory 12 hrs. Object Oriented Programming Laboratory 10 hrs. Networks Laboratory 8hrs. Total: 30 hrs	Mr. R.Karhikeyan	System Administrator	Diploma in Computer Hardware and Networking

				EVEN SEM: Mobile Application Development Laboratory- 12hrs. Internet Programming Laboratory 8hrs. Total: 12 hrs.			
3	CP LAB 3	50	Windows 10 Acer Desktop, Intel Pentium Dual Core 2.40 GHZ Processor Intel Chipset Motherboard, 2GB DDR2 RAM, 250 GB Hard disk, ATX Cabinet, Wide Screen, TFT Monitor, Keyboard, Optical Mouse. I3 Processor 3 rd Generation 3.2GHZ , 8GB RAM, DDR3 , 250GB Hard Disk, LG Monitor 18.6", Keyboard and Mouse	ODD SEM: Problem Solving and Python Programming Laboratory 18 hrs. Total: 18 hrs. EVEN SEM: C Programming Laboratory 12 hrs. Total: 12 hrs.	Mr.Suresh	Technical Assistant	MCA

4	CP LAB 4	160	Lenovo Desktop LED 19" wide Display, Intel Core i5 8GB RAM 2.00 GHZ Processor Intel Chipset Motherboard, 240 GB Hard disk, Keyboard and Mouse	ODD SEM: Problem Solving and Python Programming Laboratory 18 hrs. Total: 18 hrs. EVEN SEM: C Programming Laboratory 12 hrs. Total: 12 hrs.	Mr. R.Raja Ashok	Technical Assistant	B.E.
	R & D Lab		Lenovo Desktop LED 19" wide Display, Intel Core i5 8GB RAM 2.00 GHZ Processor Intel Chipset Motherboard, 240 GB Hard disk, Keyboard and Mouse	15hrs/week	Mr.D.Ashok Kumar	Technical Assistant	B.E

5		40	Microsoft Office 2016, Java JDK1.8, MySQL Oracle 11G Client, Code Blocks, XML Copy Editor, Argo UML, Python, Apache Tomcat, My Eclipse, Net beans IDE, Selenium, Hadoop, PIG, HIVE, PERL, RUBY, PHP-XAMPP, Android Studio, Anaconda, Cisco Packet Tracer, IoT Software, NS-2/NS-3 (Network SimulatorTool), Virtual box, HDL, Shell Programming, Traffic light controller, Alarm controller, 8251 Serial Communication interface, Parallel communication interface 8255, 8279 Keyboard controller interface, 8253 Timer interface, stepper motor interface, DMA, DCI Interface				
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6.2 Additional facilities created for improving the quality of learning experience in laboratories (25)

Table 6.2 Additional facilities created for improving the quality of learning experience in laboratories

S. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to enhanced learning	Relevance to POs/PSOs
1	Hadoop Tool Apache spark	Beyond the curriculum Students are learning Big Data Analytics	Students are ability to design the process and analyze large datasets across clusters of computers	Within and beyond the college hours	Big Data Analytics	PO1, PO2, PO3, PO4, PO5, PO9.
2	Unity Engine (C#)	Beyond the curriculum students are learning Game APP & VFX Development	To learn Game development in Virtual Reality & Augmented Reality	Within and beyond the college hours	.Net Framework	PO1, PO2, PO3, PO4, PO7.
3	Unreal Engine	Students are learning to create High Level short films and animation movie with the help of Unreal Engine.	With this tool, Students have the ability to build a simulation, edit videos or sound, and render animations	Within and beyond the college hours	Audio Implementation and Gameplay Mechanics	PO1, PO2, PO3, PO4, PO5, PO7, PO9.
4	Android Studio	Beyond the curriculum students are learning to create application for android operating operating System	Android Studio provides extensive testing tools and frameworks. It supports C++, NDK and build-in supports for Google Cloud Platform. It makes it easy to integrate Google Cloud Messaging and App Engine. We can create android application using java	Within and beyond the college hours	User Interface (UI) Design Layouts and Views	PO1, PO2, PO3, PO4, PO6, PO7, PO9.
5	Blender	Beyond the curriculum Students are learning to create 3D Model Designing and Animation using Blender	To develop a complete project using only one program, whether it's animation or modeling and rendering. It is one of the fastest developing 3D toolkits currently available and also one of the fastest growing online communities in the technology space	Within and beyond the college hours	3D Modelling, Animation and Game development	PO1, PO2, PO3, PO4, PO5, PO7, PO10, PO11.

S. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to enhanced learning	Relevance to POs/PSOs
6	Figma	Beyond the curriculum Students are learning to create High Level UI an UX Designing skills through Figma	With this tool allows UX/UI designers, developers, and any other collaborators to view, modify, create, and copy elements, properties, and code from Figma designs seamlessly	Within and beyond the college hours	UI/UX Design, Web and Mobile application	PO1, PO2, PO3, PO4, PO6, PO9, PO10.
7	Maya	Beyond the curriculum Students are learning to create 3D Model Designing and Animation using Maya	Maya is a popular 3D computer graphics program used by both professionals and hobbyists alike. It is capable of animation, modeling, sculpting, simulation, and rendering realistic objects and characters, interactive scenes, and exciting effects	Within and beyond the college hours	Animation, Film, Gaming and Visual Effects	PO1, PO2, PO3, PO7, PO8, PO9, PO11.
8	Flutter	Beyond the curriculum students are learning to create Application for cross-platform	The students are ability to create stunning cross-platform like web applications that have a native look and feel on both Android and iOS devices, reduced development time and costs, and increased flexibility	Within and beyond the college hours	App Development and Building projects	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO9, PO11.
9	Mininet	Beyond the curriculum students are learning Testing and Network Configuration	To creating virtual networks on a single machine, useful for testing and experimenting with network configurations	Within and beyond the college hours	Network virtualization and Software-Defined Networking (SDN)	PO1, PO2, PO3, PO4, PO6, PO7, PO9, PO10.
10	HTML5 Builder	Beyond the curriculum students to building a web and mobile apps using HTML, CSS, JavaScript, and PHP	To develop cross-platform Apps with flexible Cloud services and Create location-based browser and mobile applications using geolocation components in HTML5 Builder	Within and beyond the college hours	Web design and Mobile applications	PO1, PO2, PO3, PO4, PO6, PO10, PO11.

S. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to enhanced learning	Relevance to POs/PSOs
11	Fiddler	Beyond the curriculum students are learning web debugging proxy tool	To inspect and manipulate HTTP traffic between your computer and the internet	Within and beyond the college hours	Web debugging proxy and Mobile Device Testing	PO1, PO2, PO3, PO4, PO6, PO10, PO11
12	Github	Beyond the curriculum students to building a Software	GitHub allows students to review code, manage projects, and build software	Within and beyond the college hours	Software Development Projects	PO1, PO2, PO3, PO4, PO6, PO9, PO10, PO11.
13	Training and Placement classes	Training on reasoning, group discussion, and technical skill by experts	Job oriented training and to improve logical reasoning and technical skills	Throughout the semester	Employability and entrepreneurship	PO1, PO2, PO3, PO4, PO8, PO12
14	Incubation Centre (Inst.Level)	Workspace to develop interdisciplinary projects	To encourage the students towards innovative learning	Within and beyond the college hours	Provides a platform for students to implement their ideas/innovation	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10.
15	Python Programming	Beyond the curriculum students are learning python programming	For entry level engineers to maximize their foundation in basics of Python	4Hrs	Basic Python modules	PO1, PO2, PO3, PO4, PO10, PO11.
16	Internet of Things Lab	Computer System	Project development using Arduino Uno and Raspberry Pi	Training & certification on Arduino Uno and Raspberry Pi	Problem solving using Arduino Uno and Raspberry Pi	PO1, PO2, PO3, PO4, PO5, PO6, PO10.
17	E-learning	Access to digital library (e-books), NPTEL Videos, Swayam	To enhance Teaching and Learning	By Students, faculties	All engineering subject domains	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO12

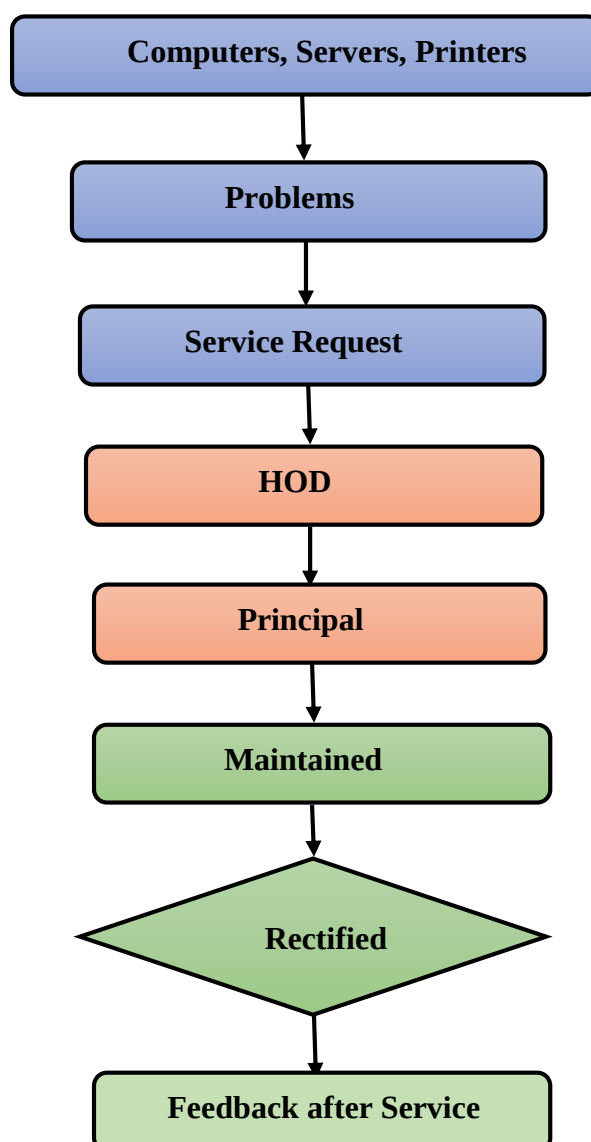
6.3 Laboratories: Maintenance and Overall Ambience

A faculty in charge and a technical assistant looks after the maintenance of each laboratory. They put together propose the budget for the required consumables, new equipment, repairs & maintenance and back up if required. The technical assistant maintains the log book for equipment of the laboratory.

They prepare the preventive maintenance schedules under the guidance of faculty in- charge and carry out regular maintenance as per the schedules.

Technical assistants are in-charge of each computer laboratory are responsible for maintenance of systems and Software.

Each laboratory maintains a stock register with details of the equipment. The maintenance is carried out on both preventive and breakdown bases. Laboratories run on a UPS, which is maintained through annual maintenance.



Overall Maintenance and Service Flowchart

Maintenance of laboratory equipment

Preventive maintenance is taken care as follows:

- Some tasks are done on day-to-day basis, some on weekly basis; some on monthly basis and rest are taken care in the beginning of semester.
- Basic and minor maintenance is done by the lab technicians.
- Breakdown maintenance is done on the basis of requirement. The requirement which cannot be fulfilled by the staff is done by outsourcing.
- Regular maintenance is done by the lab technicians.
- System administrator looks after the networking, Wi-Fi connectivity.
- System administrator looks after the computer systems hardware/software maintenance.

To establish minimum safety work practices for laboratory equipment, the department follows the following procedure.

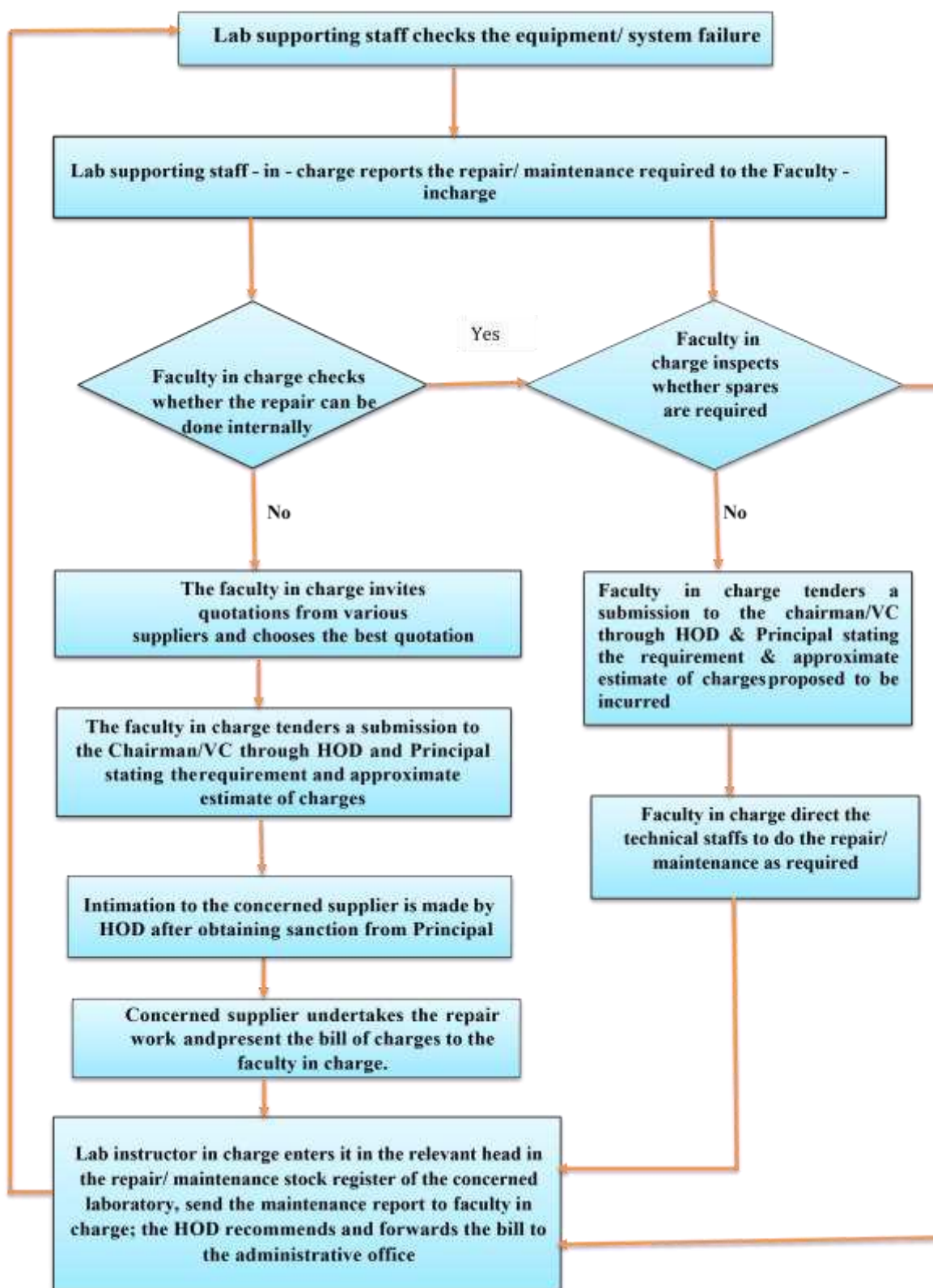
1. Do's and Don'ts are orally taught in each laboratory by the concerned faculty in-charge.
2. Well trained technical staff maintain the laboratory equipment regularly before the start of every semester.
3. UPS is provided for uninterrupted power supply at each lab.
4. Internet facility is available through 100Mbps.
5. Lab Manuals are available in the respective labs.
6. All repairs are carried out by our hardware engineers.

7. Periodic updation / installation of software and hardware is carried out as per the requirement.
8. Backup and temporary files removal is carried out at the beginning of every semester.
9. Lab Time tables, List of Experiments, list of additional experiments, do's and don'ts and configuration of equipment used in the labs are displayed in the respective labs.
10. A minimum of 2 faculty members are allotted in each lab to assist the students and to clarify their doubts.
11. Cleanliness is maintained in each lab.
12. Separate Stock Registers for each lab are maintained.
13. Obsolete items are removed and replaced with the new ones.

Overall Ambience

- Laboratory area is spacious and furnished with ergonomically designed furniture.
- All laboratories are equipped with air-conditioning facility.
- All laboratories have sufficient natural light and good ventilation.
- Labs are also equipped with notice boards, white boards and projector
- Dusting and cleaning is done on regular basis.
- The department laboratories have computers with latest configuration that caters for all the UG lab courses as per the curriculum requirement and also beyond the curriculum as well.

- A Lab with adequate number of computers (50 PCs) is available for students and is provided with good internet connectivity and licensed software such as Android Studio, Blue Mix etc. to meet program specific objectives and program objectives.
- Laboratory manuals are prepared and are available in soft and hard copy.
- All laboratories are well furnished to conduct experiments individually at a time.
- All the labs are equipped with good and well trained technical support staff available during working hours and beyond office hours as per the need of students.
- Labs are equipped with high end configuration servers and client computers are connected through LAN to the servers.
- Students who wish to carry projects on Cloud and Big Data and Network related projects can utilize R&D Lab.
- A Separate lab, namely R & D Lab, can be utilized by the students who wish to do general projects.
- Students must wear ID card before entering the lab and prohibited mobile phones.



AMBIENCE LABORATORIES:

CP LAB 1



CP LAB 2



CP LAB 3



6.4 Project Laboratories (5)

- A dedicated laboratory is available exclusively for the project work to be carried out by the students. This laboratory is equipped with 60 computer systems with a dedicated Lab Technician. The students who are interested to do projects in campus utilize the laboratory. High-speed internet facility is available in the laboratory. The computer systems support with advanced software and are used for the implementation of student projects.
- The Department is well equipped with state-of-the art project laboratory and infrastructural facilities in all the thrust areas. Student gets wide exposure and practical hands on training on latest technologies to do their projects smoothly.
- The primary purpose of the Project Laboratory in our Computer Science and Engineering Department is to provide the software and other system resources needed by students to complete, their main project and mini project work smoothly.
- Most of the students utilise this project laboratory to work on learning projects for enhancing their skills. This Project Laboratory is utilized by final year students and research faculty.
- The project laboratories are opened to the students from 9:00 AM to 7:00 PM along with concerned faculty member and lab technician.
- Licensed and Open-source software are installed in high-end desktop systems for smooth working/ completion of project tasks.
- Internet facility is provided for gathering the literature and any required open-source software exclusively for project.
- Apart from project lab, all the labs in the department are also used for doing projects.

The project laboratory is allotted to final year students as follows:

Odd Semester:

CS8611: Mini Project (R17 Regulation)

Even Semester:

CS8811: Project Work (R17 Regulation)

To meet the current demands of the industries, the department has established the project laboratory with the following high-configured desktop systems. It facilitates for doing of big data related projects, network and security and IoT and cloud services-related projects.

Details of computer system are available below:

Table 6.3: Project laboratory

S. No	Laboratory	Name of equipment's	Utilization	Relevance to POs and PSOs
1	Project Lab	Hardware: Lenova Desktop LED 19" wide Display, Intel Core i7 16GB RAM 2.00 GHZ Processor Intel Chipset Motherboard, 240 GB Hard disk, Keyboard and Mouse Basic and advanced IoT setup: Sensors Micro Controllers Raspberry Pi Arduino	UG/PG students and Faculty members utilize for their minor projects, major projects. Even Semester: 36 Hrs Project Work (Phase -I) & Project Work (Phase -II) Odd Semester: 36 Hrs Mini Project	PO6, PO7, PO9, PO11 & PO12

Table 6.4 List of Software available in Project Laboratory

Laboratory	Number of Students	Major Facilities / Equipment's / Software
Project Laboratory	60	1. Code::Blocks 2. Python 3. PHP - XAMPP 4. Argo UML 5. Java Development Kit 6. Microsoft Visual Studio Code 7. My Eclipse 8. Cisco Packet Tracer 9. Apache Tomcat Server 10. My SQL Server 11. MATLAB 12. Microsoft Campus Connect Server Software 13. NS-2/NS-3 (Network Simulator Tool) 14. Android Software 15. Anaconda 16. IoT Software 17. MongoDB 18. NodeXL 19. Power BI 20. AWS Cloud9 & Azure

Project lab utilization

Using the facilities available in the project laboratory as mentioned in Table 6.5, the students undertake various projects on different technologies and platforms based on their area of interest. Some of the specialized areas in which the students perform the projects are given below.

- | | |
|---|--|
| ☐ Artificial Intelligence. | ☐ Image Processing. |
| ☐ Cloud Computing. | ☐ Mobile Computing. |
| ☐ Computation & Data Security. | ☐ Neural Networks. |
| ☐ Big Data Analytics. | ☐ Software Engineering. |
| ☐ Database Security. | ☐ Web Mining. |
| ☐ Distributed Networking. | ☐ Grid Computing. |

6.5 Safety measures in laboratories (10)

S.No	Laboratory Name	Safety Measures
1	Computer Programming Lab – 1	1. Safety instructions are placed in Lab notice board. 2. The fire extinguishers are installed in labs area and staff is trained to use them in case of an emergency.
2	Computer Programming Lab - 2	3. The Technician checks all the systems and electrical fitting on weekly basis. 4. In case of some electrical issue MCBs are fitted in all power lines. Separate earthing for each lab has been provided.
3	Computer Programming Lab – 3	5. The power supplied through online UPS with safety measures. Separate earthing also has been provided for online UPS.
4	Computer Programming Lab – 4	6. First aid kit is available 7. Information and network security is provided through firewalls to handle misuse of Wi-Fi in the campus.
5	R & D Lab	8. Mikro Tik router and firewall are available to safeguard the network from cyber or phishing attacks. 9. Well trained technical supporting staff.
6	Project Lab	10. Periodical Backup of Lab Programs/Projects and servicing of the lab equipment. 11. Prohibited the use of cell phones in the Lab. 12. To avoid crashing of operating systems and software's due to power fluctuations UPS is provided in each lab. 13. Earthing is provided for each lab. 14. Water house reels are provided in the corridor in case of some major fire situations

CRITERION 7	CONTINUOUS IMPROVEMENT	50
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7.1. Actions taken based on the results of evaluation of each of the POs & PSOs (20)

POs & PSOs Attainment Levels and Actions for improvement – 2021-2022

POs	Target Level	Attainment Level	Observations
PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.			
PO1	1.8	2.24	TARGET LEVEL ATTAINED Observations: 1. The target level was attained by the students in most of the subjects.
Proposed actions for continuous quality enhancement: 1. Conducting workshops using industry experts to enhance their practical knowledge.			
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.			
PO2	1.8	2.14	TARGET LEVEL ATTAINED Observations: 1. Target level was attained due to contribution of seminars, lab courses and projects.
Proposed actions for continuous quality enhancement: 1. Conducting seminars and workshops for students to enhance their core engineering knowledge and expose them about the ongoing researches in their domain.			

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.			
PO3	1.8	2.01	TARGET LEVEL ATTAINED Observations: 1. Target level was attained by the students in many subjects 2. Exposure to the design concepts, Add-on courses, NSS activities and environmental activities.
Proposed actions for continuous quality enhancement: 1. Conducting Yoga, Psychological and ethical value added seminars and workshops to increase behavioural knowledge in students.			
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.			
PO4	1.8	1.88	TARGET LEVEL ATTAINED Observations: 1. Target level attained due to research publications, projects, research workshops and seminars.
Proposed actions for continuous quality enhancement: 1. Writing case studies, articles and journals to improve research document writing.			
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.			
PO5	1.8	2.01	TARGET LEVEL ATTAINED Observations:

			1. Target level was attained through projects, workshops and seminars.
Proposed actions for continuous quality enhancement: 1. Encourage students to participate in technical events.			
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.			
PO6	1.8	1.83	TARGET LEVEL ATTAINED Observations: 1. Target level attained due to research publications, projects, research workshop and seminar.
Proposed actions for continuous quality enhancement: 1. Guest lecture 2. Seminar			
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.			
PO7	1.8	1.56	TARGET LEVEL MODERATELY DEVIATED Observations: 1. Attainment level is moderately deviated. To improve the level, following actions are made.
Proposed actions for continuous quality enhancement: 1. Guest lecture 2. Seminar			
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	1.8	1.68	TARGET LEVEL MODERATELY DEVIATED Observations: 1. Attainment level is moderately deviated. To improve the level,

			following actions are made.
Proposed actions for continuous quality enhancement: 1. Guest lecture 2. Seminar.			
PO9: Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.			
PO9	1.8	2.14	TARGET LEVEL ATTAINED Observations: 1. Target level was attained due to NSS Activities and society activities.
Proposed actions for continuous quality enhancement: 1. Enablement of Teamwork is injected into students through various NSS Activities like Blood Donation Camps. Conduct team based social service activities.			
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.			
PO10	1.8	2.28	TARGET LEVEL ATTAINED Observations: 1. Target level was attained due to the participation of students in seminars, workshops and technical training activities.
Proposed actions for continuous quality enhancement: 1. Technical Seminars on latest topics are to be improved, so that student can enhance his communication skills as well as technical skills.			
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.			
PO11	1.8	2.16	TARGET LEVEL ATTAINED Observations: 1. Target level was attained due to

			curriculum course and projects.
Proposed actions for continuous quality enhancement: 1. Project hours are included in the curriculum for project work and additional hours are planned to improve the quality of project.			
PO12: Lifelong 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.			
PO12	1.8	2.02	TARGET LEVEL ATTAINED Observations: 1. Target level was attained due to career guidance, expert lectures, motivational seminars and activities under NSS and Innovation and Incubation Centre (IIC).
Proposed actions for continuous quality enhancement: 1. Seminar			

Actions taken based on the results of evaluation of each of the PSOs

PSO1: To apply software engineering principles and practices for developing quality software for scientific and business applications.			
PSO1	1.8	1.57	TARGET LEVEL MODERATELY DEVIATED Observations: 1. Attainment level was moderately deviated. To improve the level, following actions are made.
Proposed actions for continuous quality enhancement: 1. Guest lecture 2. Seminar			
PSO2: To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions for existing or novel problems.			
PSO2	1.8	1.63	TARGET LEVEL MODERATELY DEVIATED Observations:

			1. Attainment level was moderately deviated. To improve the level, following actions are made.
Proposed actions for continuous quality enhancement: 1. Guest lecture 2. Seminar 3. Workshop			

7.2 Academic Audit and actions taken thereof during the period of Assessment (10)

Our Institution is an ISO 9001:2015 certified. By adopting proper guidelines, the process of ISO Internal and External Academic Audit intends to observe and enhance the standards of technical education.

IQAC-Academic Audit:

IQAC focuses on the academic performance of the students, teaching-learning process and monitors continuous improvement through an academic audit. The academic audit team comprising of senior faculty from all the departments focuses on the following objectives

- To review the implementation process.
- To ensure the quality of teaching and administration.
- To identify strengths and areas of improvement of the faculty member, department and institution.

The members visit the departments, offices and cells to monitor both the performance and the maintenance of proper records. The committee insists on systematic documentation and recording of all events in academic and extra-curricular activities. The purpose of the academic audit is to observe the effectiveness of the educational processes at the department level, ensure and encourage the quality in teaching, research and extension activities.

IQAC facilitates the auditing format which includes all the activities pertaining to academics and the target planned during the beginning of the semester. Once the IQAC audit team completes the audit, the report is discussed with respective HoD to provide suitable recommendations for the improvement.

Assessment Criteria:

The auditors will focus the following details during the audit:

i) Monitoring of syllabus coverage:

All the faculty members should strictly adhere to the lesson plan regarding the coverage of syllabus. If any deviations found, faculty members will take the additional classes to compensate the deviations. The audit members will verify this coverage of syllabus in comparison with the lesson plan.

ii) Conduction of Value Added Courses

Value added courses will be conducted for the curriculum gap identified in the regulations. Feedback will be taken from the students to appraise the course. Auditors will verify the feedbacks and provide the suitable suggestions if required.

iii) Attendance Maintenance:

The students' attendance will be maintained everyday by the department and the same will be updated in the university website for the students for the awareness of their presence to the class. Audit members will verify the maintenance of attendance by the department and add some suitable suggestions if required.

iv) Lecture Notes & Log Book Maintenance:

Lecture notes will be maintained by the faculty members. Log books are updated by the faculty members every day. The audit members will verify this lecture notes and log book maintenance and they will provide suitable advice to the faculty members.

v) Preparation of Internal Assessment Test Question paper, Answer Key and Question Bank:

Step 1: The Course Instructors prepare the Internal Assessment Test question paper along with the answer key by considering the following factors:

- Blooms Taxonomy
- Previous year University questions
- Course coverage as per the assessment plan

Step 2: The Head of the Department validates the question paper set and also recommend for the modification if required.

Step 3: The Course instructors evaluate the answer sheets based on the answer key prepared by them and the evaluation is verified by the Head of the Department randomly.

Step 4: After evaluation, audit members will verify the quality of question paper, answer keys and question banks prepared by the faculty members.

vi) Student Centric Activities:

Co-curricular activities such as industrial visits, symposium, guest lectures, short term courses and value added courses will be organized every year.

The audit members will verify the feedbacks obtained from the industrial visit and value added courses. The student projects evaluation procedure will be verified by the audit members. Suggestions will be provided by the audit members.

vii) Mentoring System:

Institution uses mentoring system for the academic performance improvement of the department. In mentoring systems, each faculty advisor is put in charge of some students to monitor, guide and advise them to ensure their overall comprehensive growth in academic achievements. Counseling is given for each student to get rid of their problems to improve their studies. The audit members will verify the counseling methodology followed by the faculty members and add some suitable suggestions if required.

viii) Remedial Coaching:

Subject handled by the faculty members will identify the slow learners based on the results obtained in the previous semester and the internal marks. Slow learners will be given separate coaching after the class hours. The audit members will verify the schedule for the coaching classes and they interact with the faculty members for the effectiveness of the coaching class and provide suitable advice.

ix) Students' Progress Report:

Faculty members will be generating the consolidated mark list of internal assessment test for all the students and the individual students marks will be sent to the parents. The audit members will verify the consolidated mark list and ensure the faculty members regarding the information sent to the parents.

x) Class Committee Meeting and Follow Up Action:

Four class committee meetings per semester are conducted by the committee coordinator along with the faculty members handling the subjects and student representative. The quality in the teaching methodology is improved based on the feedbacks given by the students having one to one interaction with the respective faculty members. The audit members will verify the report containing the minutes

of Class Committee meeting.

xi) Budget and Utilization:

The budget for the academic activities and utilization chart will be maintained in the department. The audit members will verify the utilization of budgets for every semester.

xii) Conduct of the Internal Assessment Test:

Three internal assessment tests will be conducted for every semester. Test will be conducted as per the schedule planned by the department. Faculty members will correct the answer sheets within three days after the completion of respective subject and the marks will be handed over to the department.

xiii) Maintenance of Mark List:

The department will maintain the marks obtained by the students and analysis will be made for the marks obtained. The audit members will be verifying the marks and analysis made for the test marks.

xiv) Result Analysis of University Examinations:

Result analysis for the University results will be prepared by the department. The audit members will verify the analysis and they provide the suitable suggestions to improve the University result.

xv) Library, Laboratories and Internet Facilities:

The audit members will verify the utilization register of the library and the books being maintained in the library. The audit members will verify the lab utilization and internet facilities available in the department

Action Plan:

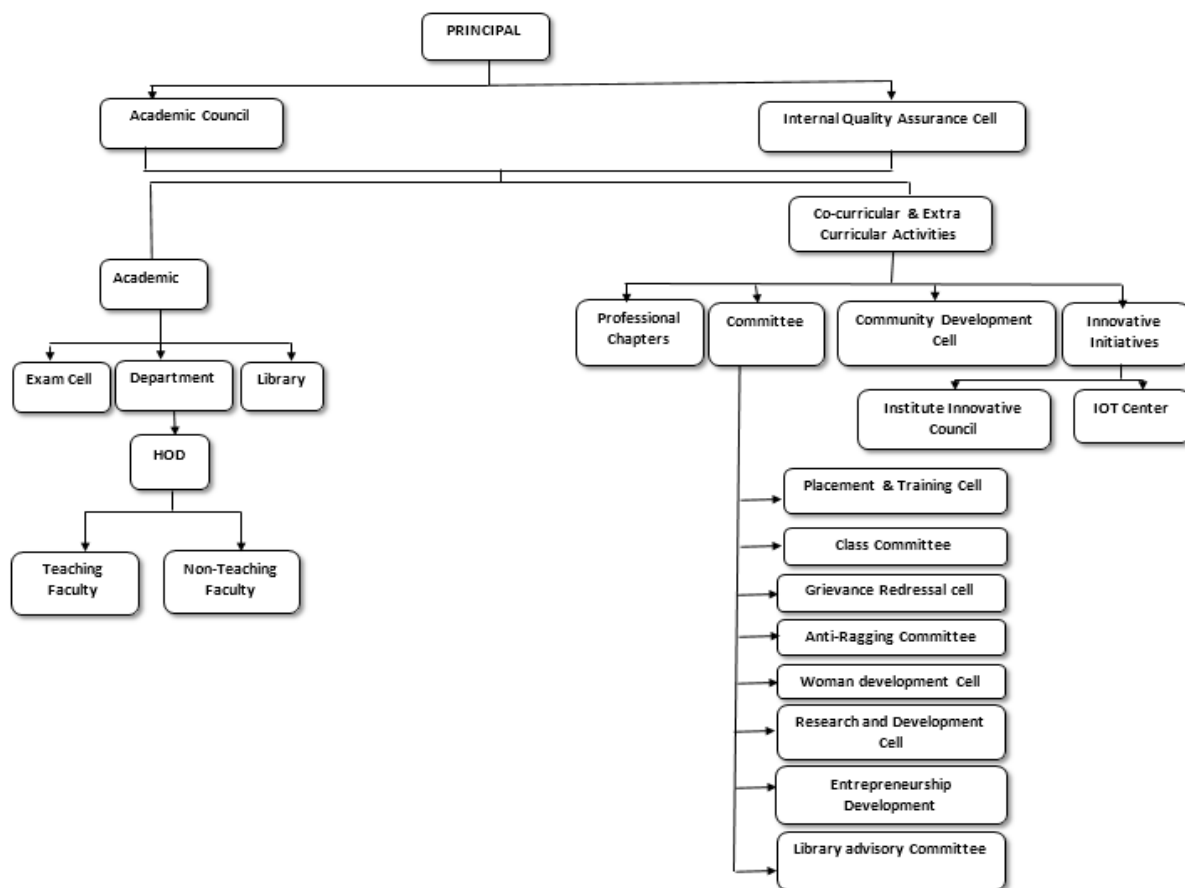
Observations and Non-conformities report are given for the deviations which also contain suitable suggestions given by the audit members.

Implementation & Effectiveness:

The suggestions given by the audit members are accepted and implemented in the department to make the academic process effectively.

Academic Audit is conducted by the Internal Quality Audit Cell.

INTERNAL QUALITY AUDIT CELL (IQAC) [ACADEMIC COUNCIL]



7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

Our college has an excellent record of placement. The following are the placement details of the department

Quality Placement:

Item	CAY (2021-2022)	CAYm1 (2020-2021)	CAYm2 (2019-2020)
No. of. Students Placed	36	34	30
No. of. Graduated	61	39	31

Table. 7.3.1 Number of Students Placed

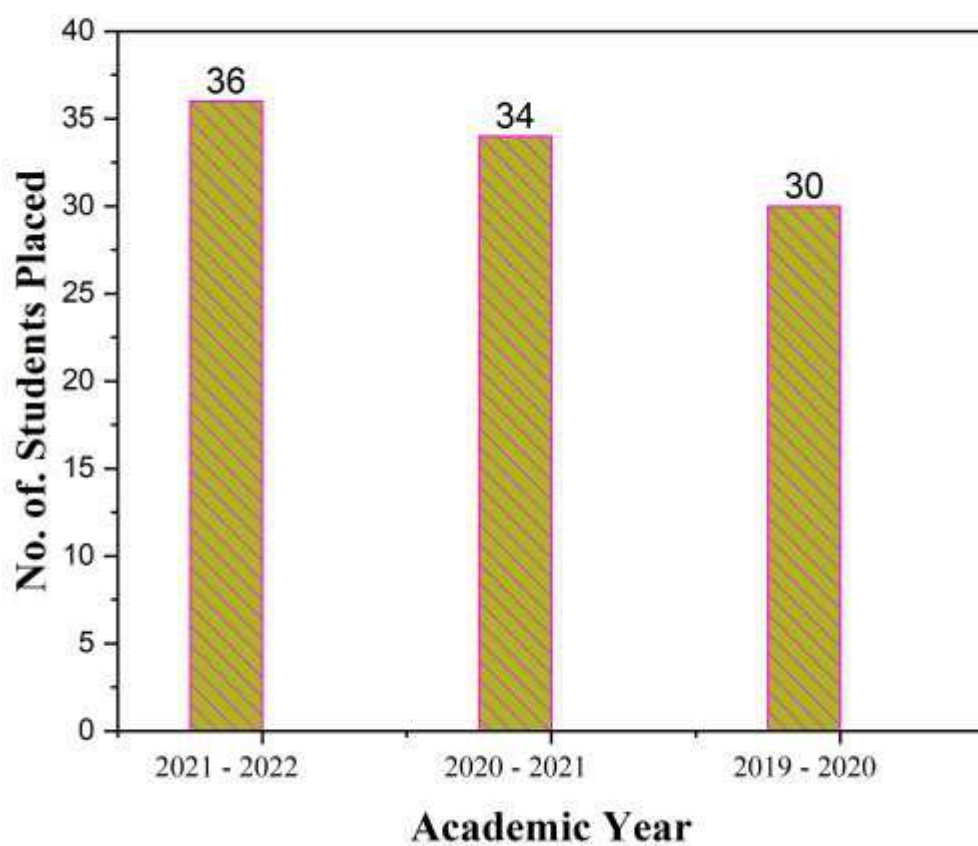


Fig. 7.3.1 Number of Students Placed

PLACEMENTS 2022-23

STUDENTS NAME	REGISTER NUMBER	DISCIP LINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE (LPA)
DHARANI V	110719104005	CSE	2023	ON	FOCUS EDUMATICS	5.6
GATTAMANENI SAI AKILESH	110719104009	CSE	2023	ON	QSPIDERS, FOCUS EDUMATICS	3, 3
GUDUGUNTLA SUCHARITHA	110719104012	CSE	2023	ON	FOCUS EDUMATICS	3
INDHUMATHI S	110719104016	CSE	2023	ON	FOCUS EDUMATICS	3
JAMA BHARATH	110719104017	CSE	2023	ON	QSPIDERS	3
KALTHIREDDY LALASA	110719104019	CSE	2023	OFF	PALLE TECHNOLOGIES	3
KATHI CHANDU	110719104020	CSE	2023	OFF	TCS	3.36
KOLA HYNDAVI	110719104022	CSE	2023	ON	FOCUS EDUMATICS	3
KOLA SAIRAM	110719104023	CSE	2023	ON	QSPIDERS, FOCUS EDUMATICS	3,3
KUMARI SRAVAN	110719104027	CSE	2023	ON	QSPIDERS, FOCUS EDUMATICS	3,3
NALLAPANENI BALA THIRUPURA SUNDARI	110719104033	CSE	2023	ON	QSPIDERS, FOCUS EDUMATICS	3,3
NASINA BALA CHAITHANYA	110719104034	CSE	2023	ON	FOCUS EDUMATICS	3
NELAKONDA VENKATA SAI ABHISHEK	110719104035	CSE	2023	ON	FOCUS EDUMATICS	3
PACHA SOWMYA	110719104037	CSE	2023	ON	QSPIDERS	3
PAKANATI HEMASHIKA	110719104038	CSE	2023	ON	PALLE TECHNOLOGIES, QSPIDER, FOCUS EDUMATICS	3, 3,3
PELETTI YOGITHREDDY	110719104039	CSE	2023	ON	TCS, SUTHERLAND, FOCUS EDUMATICS	3.36, 1.68, 3
SHAIK ALTHAF	110719104044	CSE	2023	ON	FOCUS EDUMATICS	3
YELURU KARTHIK	110719104050	CSE	2023	ON	FOCUS EDUMATICS	3

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PERAM SUPRAJA	110719104040	CSE	2023	ON	QSPIDERS	3
AARIMANDA GOWTHAM REDDY	110719104001	CSE	2023	OFF	CSS CORP	2.5
GOVINDHA PANDU RANGA CHANDRIKA	110719104011	CSE	2023	OFF	CSS CORP	2.5
HITESH K	110719104015	CSE	2023	OFF	CSS CORP	2.5
KAVATI SUMANTH	110719104021	CSE	2023	OFF	ECSOFT	3
GOGINENI DHANUSH NAIDU	110719104010	CSE	2023	OFF	CSS CORP	2.5
KONDAMAREDDY VIVEK NARAYANA REDDY	110719104025	CSE	2023	OFF	CSS CORP	2.5
MAINAMPATI POOJITHA	110719104030	CSE	2023	ON	ECSOFT	3
MOCHERLA ABHILASH	110719104031	CSE	2023	ON	SUTHERLAN D	1.68
NAGINENI BHARGAV	110719104032	CSE	2023	ON	SUTHERLAN D	1.68
SRILEKHA S	110719104046	CSE	2023	ON	ECSOFT	3
THUPAKULA YAMUNA	110719104048	CSE	2023	ON	SUTHERLAN D	1.68
YAMINI PRIYA N	110719104049	CSE	2023	ON	SUTHERLAN D	1.68

PLACEMENTS 2021-22

STUDENTS NAME	REGISTER NUMBER	DISCIP LINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE (LPA)
ASA AJAY	110718104002	CSE	2022	OFF	MPHASIS, QUALITEST	3.25, 4
AUDIPUDI MADHU REVANTH REDDY	110718104003	CSE	2022	OFF	TCS	3.36
BADABHAGNI SIVATEJA	110718104004	CSE	2022	OFF	HEXAWARE	4
BOLIGARLA KEERTHI	110718104010	CSE	2022	OFF	MPHASIS	3.26
BUDAVARAPU PRUDVI	110718104012	CSE	2022	OFF	PRELUDESYS	4
CHILAKURU THARUN	110718104017	CSE	2022	OFF	MPHASIS, INFOSYS, QUALITEST	3.25, 3.6, 4
CHIRAMANA BHAVITHA	110718104019	CSE	2022	OFF	MPHASIS, QUALITEST	3.25, 4
CHIRUMAVILLA SAI DINESH	110718104020	CSE	2022	OFF	FLOWSERVE	5.6
CHITTETI NAVYANTH	110718104021	CSE	2022	OFF	PRELUDESYS	4
DUVVURU SRESHTA	110718104026	CSE	2022	OFF	FLOWSERVE, INFOSYS	5.6, 3.6

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EPURU SURYATEJA	110718104028	CSE	2022	OFF	PRELUDESYS, WIPRO	4, 3.5
GAYATHIRI P	110718104031	CSE	2022	OFF	CAPGEMINI	4
KARNA DINESH KUMAR	110718104036	CSE	2022	OFF	MPHASIS	3.35
KARTHIGA M	110718104037	CSE	2022	OFF	AVASOFT	4
KUNDAM CHARITH	110718104041	CSE	2022	ON	MPHASIS, FLOW SERVE, TEKION, MINDTREE	3.25, 5.6, 5, 4
LAKSHMIPURAM MANISH	110718104043	CSE	2022	OFF	MPHASIS	3.25
MOGALRAJ DEDEEPPYA	110718104049	CSE	2022	ON	FLOWSERVE	5.6
MUPPALA CHANDU ASHOK	110718104051	CSE	2022	ON	FLOWSERVE	5.6
NAVEEN KUMAR S	110718104055	CSE	2022	ON	FLOWSERVE, WIPRO	5.6, 3.5
PULI BHARATH	110718104059	CSE	2022	OFF	MPHASIS, QUAL ITEST	3.25, 4
RAKESH SINGH M	110718104060	CSE	2022	OFF	TCS, FLOWSERV E	3.36, 5.6
SWETHA S	110718104063	CSE	2022	OFF	CSS CORP	2.25
UNKAR MONIKA	110718104065	CSE	2022	OFF	MPHASIS, TEKIO N	3.25, 5
VAKICHERLA CHINMAYA SAICHARAN GUPTHA	110718104066	CSE	2022	OFF	PRELUDESYS, M IND TREE	4, 4
KONJETI HARIKA VENKATA SAILAKSHMI	110718104040	CSE	2022	OFF	INFOSYS, QUALI TEST	3.6, 4
CHEEKAVOLU BALAJI	110718104015	CSE	2022	OFF	INFOSYS, CAPG EMINI, QUALITE ST	3.6, 4, 4
CHINNAKONDU VENKATA PAVAN KUMAR REDDY	110718104018	CSE	2022	OFF	INFOSYS	3.6
BALLAPURAM PUNEETH	110718104006	CSE	2022	OFF	INFOSYS	3.6
KOKILA S	110718104039	CSE	2022	OFF	CAPGEMINI	4
MARRI VENKATESWAR REDDY	110718104046	CSE	2022	OFF	QUALITEST	4
BOYAPATI ANILKUMAR	110718104011	CSE	2022	OFF	QUALITEST	4
NARRAVULA SAI RAVI CHANDRA	110718104054	CSE	2022	OFF	WIPRO	3.5
RAYAPANENI RESHMASREE	110718104061	CSE	2022	OFF	WIPRO	3.5
VENUMBAKA JAHNAVI	110718104069	CSE	2022	OFF	WIPRO	3.5
VENNAPUSA RANJITH REDDY	110718104068	CSE	2022	OFF	WIPRO	3.5

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YENISETTY VENKATA PRIYATHAM	110718104073	CSE	2022	OFF	WIPRO	3.5
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PLACEMENTS 2020-21

STUDENTS NAME	REGISTER NUMBER	DISCIP LINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE (LPA)
AAMINA	110717104001	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
ASWINI.B	110717104004	CSE	2021	OFF	EC SOFT SOLUTION	3
BALAJI.K.A	110717104005	CSE	2021	OFF	EC SOFT SOLUTION	3
BHARATH KUMAR.G	110717104006	CSE	2021	OFF	TCS	3.36
CHANGERI SUREKHA	110717104007	CSE	2021	OFF	EC SOFT SOLUTION, MIND READERS SOFTWARE	3,3.2
DEEPASRI.S	110717104009	CSE	2021	OFF	MIND READERS SOFTWARE, BOSON LABS	3.2,3.2
GALI NEELIMA KUMARI	110717104010	CSE	2021	OFF	EC SOFT SOLUTION	3
HEMANTH.V	110717104012	CSE	2021	OFF	MSC TECHNOLOG Y, AMBATTUR (JOB)	3.2
KAMBAM SINDHU	110717104015	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
KANDALA KAVYA	110717104017	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
LEKHA.B	110717104019	CSE	2021	OFF	EC SOFT SOLUTION	3
MADUMITHA.V	110717104021	CSE	2021	OFF	MIND READERS SOFTWARE, ACCENTURE TECHNOLOG Y	3.2
MAKINENI GOWRI SHANKAR	110717104023	CSE	2021	OFF	HCL TECHNOLOG IES	3.65

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METTA NEELIMA	110717104024	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
PANDILLAPALLI VENKATA MANOJ KUMAR	110717104027	CSE	2021	OFF	MIND TREE	3.2
POONDLA TEJASWINI	110717104030	CSE	2021	OFF	TCS	3.36
PRAVEEN.R	110717104031	CSE	2021	OFF	EC SOFT SOLUTION	3
PUDI DHANESHWAR	110717104032	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
RAYAPANENI CHARISHMA	110717104033	CSE	2021	OFF	MOURI TECH	1.5
RAYAPENI MADHUPRIYA	110717104034	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
RESHMA H	110717104035	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
SARATH S	110717104038	CSE	2021	OFF	TECH DIGITAL	2.28
SAVITHA.V	110717104039	CSE	2021	OFF	SITEL INDIA PRIVATE LIMITED, MIND READERS SOFTWARE	3.4,3.2
SNEHA N	110717104041	CSE	2021	OFF	SITEL INDIA PRIVATE LIMITED	3.4
SUGANYA.M	110717104042	CSE	2021	OFF	SITEL INDIA PRIVATE LIMITED	3.4
TAMIZHAJANI.S	110717104043	CSE	2021	OFF	EC SOFT SOLUTION	3
VIVEK.D	110717104045	CSE	2021	OFF	WIPRO TECHNOLOGIES	1.8
YALLA DHARANI	110717104046	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
YARAMAKKA NITHEESH KUMAR	110717104047	CSE	2021	OFF	MIND READERS SOFTWARE	3.2
YUVARAJ	110717104048	CSE	2021	OFF	HCL TECHNOLOGIES	3.65
KURAGULA ANIL KUMAR REDDY	110717104049	CSE	2021	OFF	ERNEST & YOUNG , JAIPUR	8
RAVURU SAI YESHWANTH	110717104050	CSE	2021	OFF	MIND READERS SOFTWARE,	3.2,2.8

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					PRIMERA MEDICAL TECHNOLOG Y	
VIDHYA V	110717104701	CSE	2021	OFF	SJV MARINE , ACCOUNTAN T	1.5
GOMATHI S	110717104702	CSE	2021	OFF	SJV MARINE , ADMIN	1.5

PLACEMENTS 2019-20

STUDENTS NAME	REGISTER NUMBER	DISCIP LINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPU S PLACE D	NAME OF THE EMPLOYER	PACKAGE (LPA)
LAVANYA	110715104019	CSE	2020	ON	CSS CORP	2.3
KOPPALA SUNEEL KUMAR	110716103007	CIVIL	2020	ON	GEO ADITYA	1.68
LOKESH BABU P	110716103009	CIVIL	2020	ON	GEO ADITYA	1.68
NEETHU K	110716103011	CIVIL	2020	ON	GEO ADITYA	1.68
NIVETHA S	110716103012	CIVIL	2020	ON	GEO ADITYA	1.68
VIJAYA KUMAR G	110716103020	CIVIL	2020	ON	GEO ADITYA	1.68
ALEKHYA VADDINENI	110716104001	CSE	2020	ON	MITSUBA SICAL.Q- SPIDER,SUTH ERLAND,VC ARE	2.4,2.6,2.6, 1.8
ARUNA	110716104002	CSE	2020	ON	Q- SPIDER,SUTH ERLAND	2.6,2.6
ASWINI GURRAMPATI	110716104003	CSE	2020	ON	SUTHERLAN D	2.6
DESHIKA K V	110716104004	CSE	2020	ON	VCARE	1.8
DHANUSHA B	110716104005	CSE	2020	ON	MITSUBA SICAL	2.6
DHIVYA PRIYA	110716104006	CSE	2020	ON	CSS CORP	2.3
DIVYA PRIYA	110716104006	CSE	2020	ON	Q-SPIDER	2.6
GREESHMITHA YADLAPALLI	110716104008	CSE	2020	ON	MITSUBA SICAL.,WIPR O	2.6,3.5
GUNDALA KEERTHI	110716104009	CSE	2020	ON	AMAZON PAY,Q- SPIDER,SUTH ERLAND	2.6,2.6,2.6
HEMANTH V	110716104010	CSE	2020	ON	CONGRUENT ,SUTHERLAN D	2.2,1.8

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HEMANTH V	110716104010	CSE	2020	ON	SUTHERLAND	1.8
JAYASHREE SNGK	110716104011	CSE	2020	ON	MITSUBA SICAL,VCAR E	1.8,1.8
KATA SOWMYA	110716104013	CSE	2020	ON	CSS CORP	2.3
KAVYA K M	110716104014	CSE	2020	ON	VEE TECH	2.04
LAVANYA SIVADA	110716104015	CSE	2020	ON	MITSUBA SICAL,Q SPIDER	1.8,2.6
NIVETHA DHARANI R	110716104017	CSE	2020	ON	VCARE	1.8
RAJ ASHOK R	110716104019	CSE	2020	OFF	MIND TREE	2.8
RAMYA M	110716104020	CSE	2020	OFF	HINDUJA GLOBAL SERVICES	2.4
RANJITH KUMAR YELUVOLU	110716104021	CSE	2020	OFF	SITEL, CHENNAI	3.4
SHAREN D	110716104023	CSE	2020	OFF	INFOSYS,ALP HIND SOFTWARE SOLUTIONS	1.8,3.5
SHARMILA A	110716104024	CSE	2020	ON	SUTHERLAND	1.68
SHIVASUNDAR C R A	110716104025	CSE	2020	ON	SUTHERLAND	1.68
SRILEKHA G T	110716104026	CSE	2020	OFF	HCL TECHNOLOG IES	4
SUNEEL BACHU	110716104027	CSE	2020	OFF	APTEAM	2.9
SURYA V	110716104028	CSE	2020	ON	SUTHERLAND	1.68
SWETHAA M	110716104029	CSE	2020	ON	CSS CORP,SEQUE NT ASIA IT P.LTD	2.3,1.8
UMAMAHESH VELIVELLI	110716104030	CSE	2020	OFF	TECH DIGITAL	3
VEDANAPARTHY PALLAVI	110716104031	CSE	2020	ON	Q- SPIDER,SEQU ENT ASIA IT P.LTD,BASO N LABS	2.6,1.8,3.2
VENKATA TEJESWINI MULLAMURI	110716104032	CSE	2020	ON	Q- SPIDER,SUTH ERLAND	2.6.2.6
VISHAL VARDHAN VUPPALAPAT	110716104033	CSE	2020	ON	CSS CORP	2.3

Higher studies:

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Academic Year	No of students opted higher studies	Successful in GATE,GRE, GMAT, CAT etc.
2021-2022	15	13 GRE
		2 TANCET
2020-2021	5	1 GRE
		2 TANCET
		2 SRM
2019-2020	4	2 TANCET
		2 MQ

Table. 7.3.2 Number of Students – Higher Studies

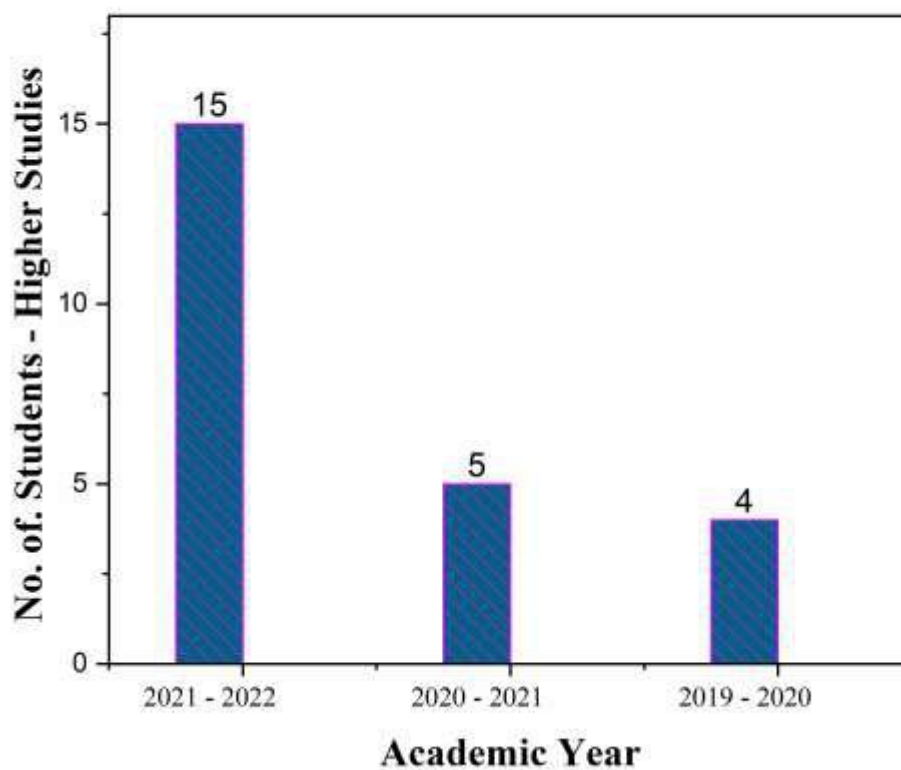


Fig. 7.3.2 Number of Students – Higher Studies

7.4. Improvement in the quality of students admitted to the program (10)

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Table 7.4

Item		2022-23	2021-22	2020-21	2019-20
National Level Entrance Examination (Name of the Entrance Examination)	No of Students Admitted	NA	NA	NA	NA
	Opening Score/Rank	NA	NA	NA	NA
	Closing Score/Rank	NA	NA	NA	NA
State/University/Level Entrance Examination/Others (Name of the Entrance Examination)	No of Students Admitted	73	84	76	50
	Opening Score/Rank	97%	99%	96%	95%
	Closing Score/Rank	45%	49%	42%	45%
Name of the Entrance Examination for Lateral Entry or lateral entry details	No of Students Admitted	2	1	4	NA
	Opening Score/Rank	90%	82%	76%	NA
	Closing Score/Rank	76%	82%	71%	NA
Average [CBSE/Any Other Board Result of admitted students (Physics, Chemistry & Maths)]		75	77	62	75

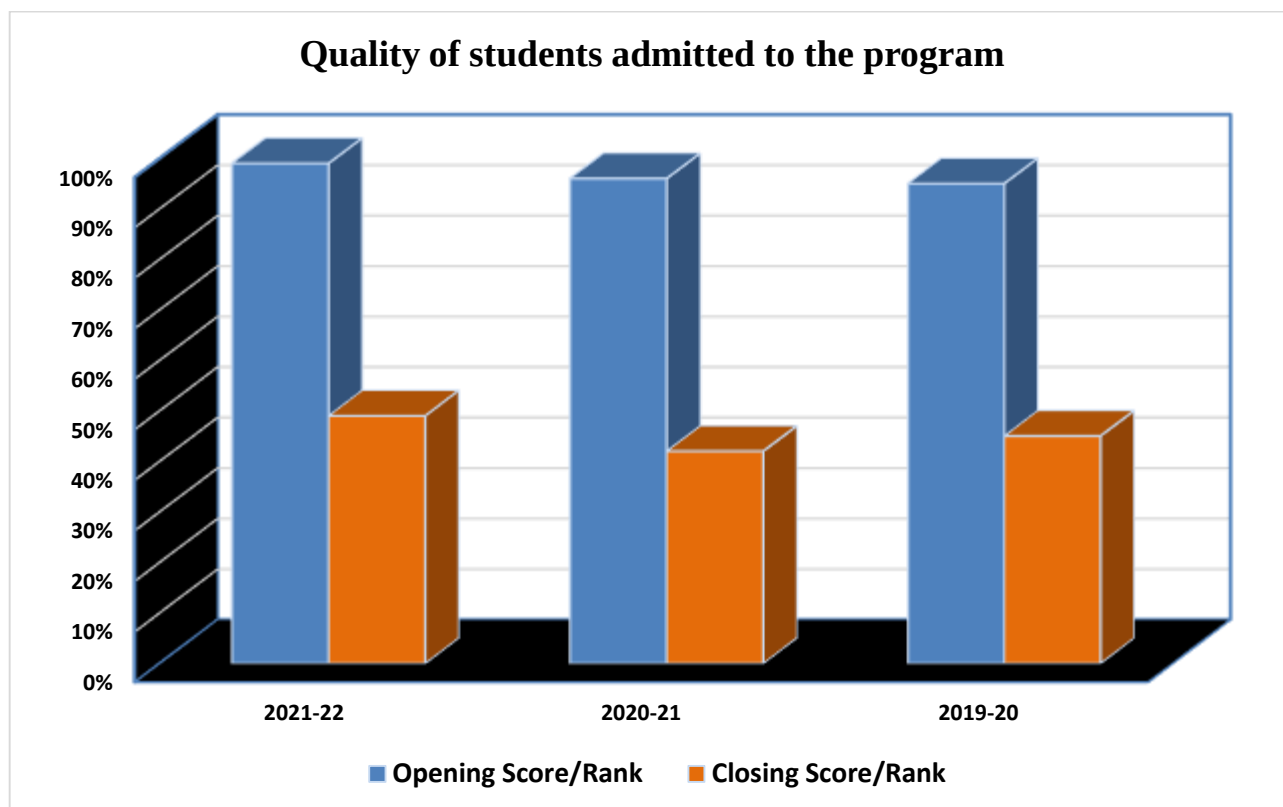


Fig. 7.4.1 Number of Students Opening and Closing Marks - Year wise

CRITERION 8	FIRST YEAR ACADEMICS	50
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8.1. First Year Student-Faculty Ratio (FYSFR) (5)

Assessment = $(5 \times 20) / \text{Average FYSFR}$

(Limited to Max. 5) Data for first year courses to calculate the FYSFR is shown below in

Table 8.1.1.

Table 8.1.1 First Year Student-Faculty Ratio

Year	Number of Students (Approved Intake Strength)	Number of Faculty Members (Considering Fractional Load)	FYSFR
2020-21	360	18	20
2021-22	360	19	18.95
2022-23	360	18	20
Average			19.65
Assessment= $(5 \times 20) / \text{Average FYSFR}$ (Limited to Max. 5) = 5.00			

8.2. Qualification of Faculty Teaching First Year Common Courses (5)

Assessment of qualification = $(5x + 3y) / RF$, 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.

Table 8.2.1 Qualification of Faculty Teaching First Year Common Courses

Year	X	Y	RF	Assessment of Faculty Qualification (5x + 3y)/RF
2020-21	3	10	18	2.50
2021-22	5	9	18	2.89
2022-23	4	7	18	2.28
Average Assessment = 2.56				

8.3. First Year Academic Performance (10)

Academic Performance = ((Mean of 1st Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks in First Year of all successful students/10))
 $\times$ (number of successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the second year.

Academic Performance	2021-22 (CAYm)	2020-21 (CAYm1)	2019-20 (CAYm2)
Mean of CGPA or mean percentage of all successful students(X)	7.83	8.46	8.09
Total Number of successful students(Y)	84	78	49
Total Number of students appeared in the examination(Z)	84	78	50
API = (X*(Y/Z))	7.83	8.46	7.93

Average API = (AP1+AP2+AP3)/3: **8.07**

8.4. Attainment of Course Outcomes of first year courses (10)

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)

(Examples of data collection processes may include, but are not limited to, specific exam questions, laboratory tests, internally developed assessment exams, oral exams assignments, presentations, tutorial sheets etc.)

To evaluate the Course Outcomes, the data are gathered using the following process.

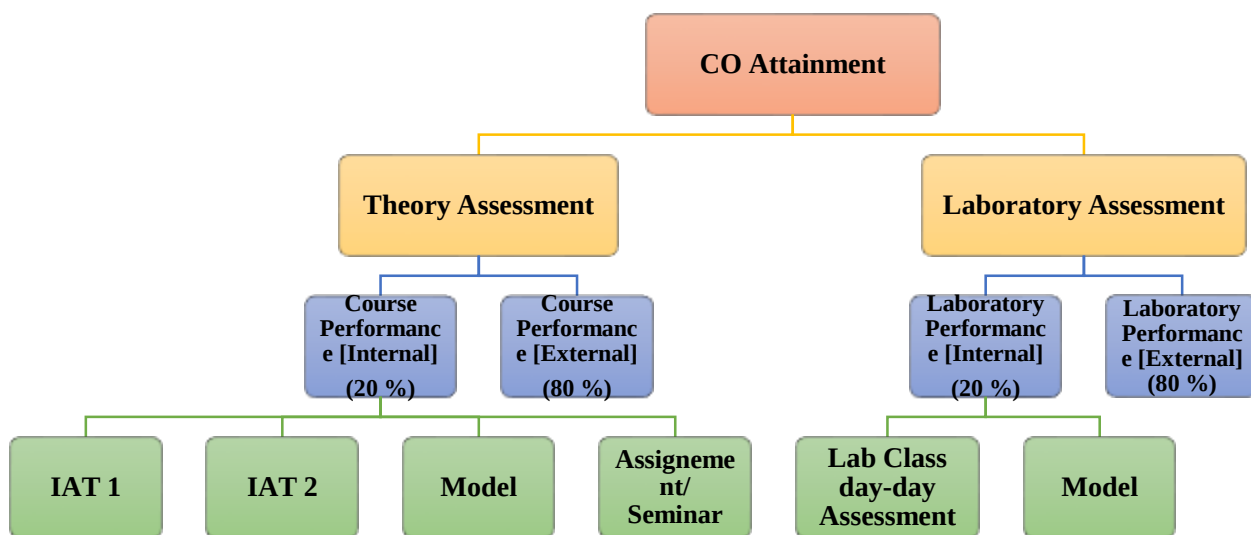


Fig. 8.4.1 Flowchart for attainment of Course Outcomes

Assessment tools to assess the course outcomes:**Direct Attainment:**

Direct methods display the students' knowledge and skills from their performance in the Internal Assessment Test-I, Internal Assessment Test-II, Model Examination & University Examination along with assignments. Indirect methods are obtained based on course end survey.

Table 8.4.1.1 Direct Assessment Methods

Assessment Tools	CO Assessment Methods	Description
Theory Course Assessment	Course Performance -IA	It is a metric to assess the attainment of COs continuously and students' learning domains, thus improving the teaching-learning process. The Internal Assessment (IA) marks in a theory paper shall be based on IAT-1, IAT-2, and Model Assessments generally conducted each semester. The retests will be conducted for the failed students and absentees after each assessment to allow them to improve their understanding of the subject with the permission of HEI.
	Course Performance – Assignment/ Seminar	The assignment marks in a theory paper shall be based on assignments from 3 units and assignment cum seminar from 2 units of 10 marks each to assess the learning outcomes of the course every semester.
	Course Performance – EA	The ESE are the metric to assess whether all the course outcomes are attained.
Laboratory Assessment	Lab. class day-day Assessment and Model Exam -IA	Lab assessment mainly assesses students' practical knowledge with their designing capabilities. The IA marks achieved for practical shall be based on the weightage of each experiment in the record and observation notebooks on day-by-day practical sessions and

		the results of the model examination, which is held at the end of the semester.
	Laboratory Performance ESE -IA	Practical ESE is focused on the performance of experiments and viva-voce.
Theory Cum Lab. Course Assessment	Course cum lab. Performance – IA	The IA marks in a theory cum lab. course shall be based on IAT-1, IAT-2, and Model Assessments generally conducted end of each semester, like theory course. The IA marks achieved for practical shall be based on the weightage of each experiment in the record and observation notebooks on day-day practical sessions. The ESE are the metric to assess whether all the course outcomes are attained.

Course Outcome Assessment methodology, tools and frequency of use for direct method described in the following table 8.4.1.2.

Table 8.4.1.2 Course Outcome Assessment methodology, tools and frequency of use for direct and indirect method

Assessment Tools	Assessment Method	Assessment frequency	Assessment Tool	In charge	Reviewer
Theory Course Assessment	Course Performance – IA	Thrice in a semester.	Students’ performance in internal assessment.	Course in charge and Course Coordinator	HoD
	Course Performance – Assignment - IA	At least one Assignment from each unit.	Students’ performance in submitting the assignment/seminar		
	Course Performance, ESE-EA	At the end of the semester	Students’ performance in ESE	External Examiners	

Lab. Assessment	Lab. Class Assessment-IA	Lab Classes	Students' performance in doing experiments	Course Coordinator	HoD
	Lab. Model-IA	At the end of the semester	Students' performance in Model Exam	Course Coordinator	HoD
	Lab. ESE-EA	At the end of the semester	Students' performance in ESE	External Examiners	
Theory Cum Lab. Course Assessment	Course Performance – IA	Thrice in a semester.	Students' performance in internal assessment.	Course in charge and Course Coordinator	HoD
	Course Performance – Assignment -IA	At least one Assignment from each unit.	Students' performance in submitting the assignment/seminar		
	Course Performance, ESE-EA	At the end of the semester	Students' performance in ESE	External Examiners	
	Lab Class Assessment - IA	Lab Classes	Students' performance in doing experiments	Course Coordinator	
	Lab. Performance, ESE-EA	At the end of the semester	Students' performance in ESE	External Examiners	

The attainment of Course Outcomes of all courses with respect to set attainment levels

The attainment of Course Outcomes is evaluated under two categories – University Examination and Internal Assessment.

University Examination:

For University Examination the target is fixed based on the following criteria.

- ✓ Attainment Level 1: 60% students scoring more than 50% University percentage marks in the final examination.
- ✓ Attainment Level 2: 70% students scoring more than 50% University percentage marks in the final examination.
- ✓ Attainment Level 3: 80% students scoring more than 50% University percentage marks in the final examination.

Internal Assessment:

For Internal Assessment the target is fixed based on the following criteria.

- ✓ Attainment Level 1: 60% students scoring more than 60% percentage marks in the Internal Assessment.
- ✓ Attainment Level 2: 70% students scoring more than 60% percentage marks in the Internal Assessment.
- ✓ Attainment Level 3: 80% students scoring more than 60% percentage marks in the Internal Assessment.

8.4.2. Record the attainment of Course Outcomes of all first year courses (5)

Program shall have set attainment levels for all first year courses.

(The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments with respect the COs of a subject plus the performance in the University examination)

Table 8.4.2.1 Attainment of Course Outcome for the Academic Year 2021 – 2022

COURSE CODE	COURSE NAME	INTERNAL ATTAINMENT		EXTERNAL ATTAINMENT LEVEL		CO ATTAINMENT	% OF ATTAINMENT
		LEVEL	20%	LEVEL	80%		
C101	PROFESSIONAL ENGLISH-I	1.10	0.22	3.00	2.40	2.62	87%
C102	MATRICES AND CALCULUS	0.85	0.17	2.00	1.60	1.77	59%
C103	ENGINEERING PHYSICS	0.95	0.19	1.00	0.80	0.99	33%
C104	ENGINEERING CHEMISTRY	0.90	0.18	2.00	1.60	1.78	59%
C105	PROBLEM SOLVING AND PYTHON PROGRAMMING	0.80	0.16	3.00	2.40	2.56	85%
C106	PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY	1.47	0.29	3.00	2.40	2.69	90%
C107	PHYSICS AND CHEMISTRY LABORATORY	2.40	0.48	3.00	2.40	2.88	96%
C108	PROFESSIONAL ENGLISH-II	1.00	0.20	3.00	2.40	2.60	87%
C109	STATISTICS AND NUMERICAL METHODS	0.95	0.19	1.00	0.80	0.99	33%
C110	PHYSICS FOR INFORMATION SCIENCE	1.05	0.21	1.00	0.80	1.01	34%
C111	BASIC ELECTRICAL , ELECTRONICS AND MEASUREMENT ENGINEERING	0.90	0.18	1.00	0.80	0.98	33%
C112	ENGINEERING GRAPHICS	0.95	0.19	3.00	2.40	2.59	86%

C113	PROGRAMMING IN C	0.80	0.16	1.00	0.80	0.96	32%
C114	ENGINEERING PRACTICES LABORATORY	2.30	0.46	3.00	2.40	2.86	95%
C115	C PROGRAMMING LABORATORY	2.30	0.46	3.00	2.40	2.86	95%

8.5. Attainment of Program Outcomes from first year courses (20)

8.5.1. Indicate results of evaluation of each relevant PO and/or PSO, if applicable (15)

The relevant program outcomes that are to be addressed at first year need to be identified by the institution. Program Outcome attainment levels shall be set for all relevant POs and/or PSOs through first year courses. (Describe the assessment processes that demonstrate the degree to which the Program Outcomes are attained through first year courses and document the attainment levels. Also include information on assessment processes used to gather the data upon which the evaluation of each Program Outcome is based indicating the frequency with which these processes are carried out)

CO – PO – PSO MAPPING

Table 8.5.1.1 Courses – PO – PSO Mapping: Academic Year 2021 - 2022

Sl. No.	Course Code	Subject Name	PO												PSO 1	PSO 2
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
1	C101	Professional English - I	2	1	1	-	-	-	-	1	-	-	-	-	-	-
2	C102	Matrices and Calculus	2	1	1	-	-	-	-	-	-	-	-	-	1	-
3	C103	Engineering Physics	2.2	1.4	1	1	1	-	1	1	-	1	-	1	-	-
4	C104	Engineering Chemistry	1	1	1	2.8	1	1	1	1	1	-	-	-	-	-
5	C105	Problem Solving and Python Programming	3	3	3	2	2	1	-	-	2	1	-	1	2	1
6	C106	Problem Solving and Python Programming Laboratory	1.6	1.8	1.8	2	1.5	1.6	-	-	1.7	-	-	-	1.8	1.75
7	C107	Physics and Chemistry Laboratory	3	2	1	-	-	-	-	-	2	-	-	-	-	-

Sl. No.	Course Code	Subject Name	PO												PSO 1	PS O2
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
8	C108	Professional English - II	2	2	-	2	2.8	2	2	-	2.6	3	2	2	-	-
9	C109	Statistics and Numerical Methods	3	2	2	2	-	2	-	-	-	-	-	-	-	-
10	C110	Physics for Information Science	2.4	1.2	1.25	-	-	-	-	1	-	1	-	1.5	-	-
11	C111	Basic Electrical and Electronics Engineering	3	2.6	2.5	-	-	2	-	-	-	-	-	2	-	-
12	C112	Engineering Graphics	3	1	2	-	2	-	-	-	-	3	-	2	-	-
13	C113	Programming in C	3	1.83	1.5	-	1	-	-	-	-	-	-	1.6	-	-
14	C114	Engineering Practices Laboratory	3	2	-	-	1	1	-	-	2	-	-	2	-	-
15	C115	Programming in C Laboratory	2.5	1.33	1.2	-	1.2	-	-	-	-	1	-	1.2	-	-

PO ATTAINMENT

Table 8.5.1.2 Attainment of POs and PSOs for the 2021 – 2022

Sl. No.	Course Code	Subject Name	PO												PSO 1	PS O2
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
1	C101	Professional English - I	1.75	0.87	0.87	-	-	-	-	0.87	-	-	-	-	-	-
2	C102	Matrices and Calculus	1.18	0.59	0.59	-	-	-	-	-	-	-	-	-	0.59	-
3	C103	Engineering Physics	0.73	0.46	0.33	0.33	0.33	-	0.33	0.33	-	0.33	-	0.33	-	-
4	C104	Engineering Chemistry	0.59	0.59	0.59	1.66	0.59	0.59	0.59	0.59	0.59	-	-	-	-	-
5	C105	Problem Solving and Python Programming	2.56	2.56	2.56	1.71	1.71	0.85	-	-	1.71	0.85	-	0.85	1.71	0.85
6	C106	Problem Solving and Python Programming Laboratory	1.44	1.62	1.62	1.80	1.35	1.44	-	-	1.53	-	-	-	1.62	1.57
7	C107	Physics and Chemistry Laboratory	2.88	1.92	0.96	-	-	-	-	-	1.92	-	-	-	-	-
8	C108	Professional English - II	1.73	1.73	-	1.73	2.43	1.73	1.73	-	2.25	2.60	1.73	1.73	-	-

Sl. No.	Course Code	Subject Name	PO												PSO 1	PSO 2
			1	2	3	4	5	6	7	8	9	10	11	12	1	2
9	C109	Statistics and Numerical Methods	0.99	0.66	0.66	0.66	-	0.66	-	-	-	-	-	-	-	-
10	C110	Physics for Information Science	0.81	0.40	0.42	-	-	-	-	0.34	-	0.34	-	0.51	-	-
11	C111	Basic Electrical and Electronics Engineering	0.98	0.85	0.82	-	-	0.65	-	-	-	-	-	0.65	-	-
12	C112	Engineering Graphics	2.59	0.86	1.73	-	1.73	-	-	-	-	2.59	-	1.73	-	-
13	C113	Programming in C	0.96	0.59	0.48	-	0.32	-	-	-	-	-	-	0.51	-	-
14	C114	Engineering Practices Laboratory	2.86	1.91	-	-	0.95	0.95	-	-	1.91	-	-	1.91	-	-
15	C115	Programming in C Laboratory	2.38	1.27	1.14	-	1.14	-	-	-	-	0.95	-	1.14	-	-
CO – PO – PSO Mapping Avg			1.63	1.13	0.98	1.31	1.17	0.98	0.89	0.53	1.65	1.28	1.73	1.04	1.30	1.21

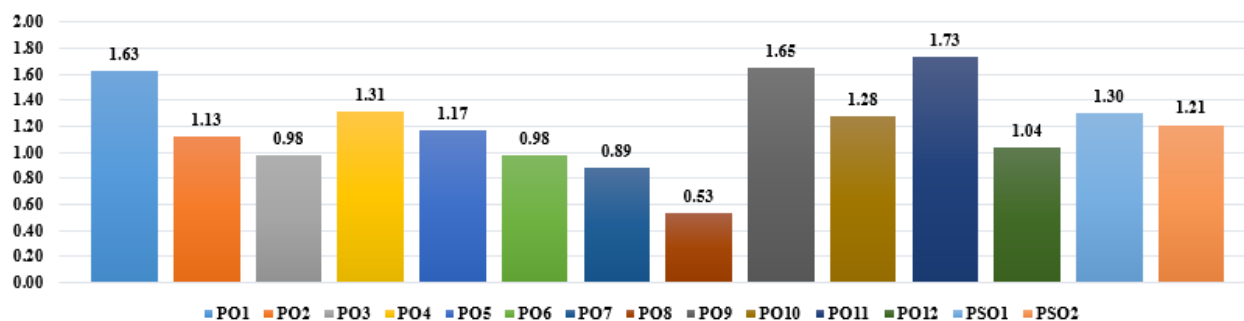


Figure 8.5.1 PO Attainment for First Year 2021 – 2022

8.5.2. Actions taken based on the results of evaluation of relevant POs (5)

(The attainment levels by direct (student performance) are to be presented through Program level Course-PO matrix as indicated)

Table 8.5.2.1 PO Attainment Levels and Actions for Academic Year 2021 – 2022

POs	Target Level	Attainment Level	Observations
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PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.			
PO1	1.25	1.63	TARGET LEVEL ATTAINED Observations: 1. The basic engineering knowledge attained by the students is adequate in most subjects 2. The basic knowledge in mathematics and engineering science that was learnt during intermediate courses combined with orientation programs and tutorial classes in college enabled students to perform well in both internal assessment tests and university examinations
Proposed actions for continuous quality enhancement: 1. Conducting workshops using industry experts to enhance their practical knowledge to improve effective study habits.			
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.			
PO2	1.25	1.13	TARGET LEVEL NOT ATTAINED Observations: 1. Target level is not attained by the students in all the subjects 2. Students acquired adequate problem solving and analytical skills in mathematics, science and engineering subjects through interactive learning in the tutorial classes which enabled them to perform well in both internal

			assessment tests and university examinations
Proposed actions for continuous quality enhancement: 1. Conducting seminars and workshops for students to build a confidence among the students to manage exam anxiety.			
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.			
PO3	1.25	0.98	TARGET LEVEL NOT ATTAINED Observations: 1. Target level is not attained by the students in many subjects 2. Exposure to the design concepts are limited at the first year level
Proposed actions for continuous quality enhancement: 1. Conducting group discussion for personal and academic success and set their goal themselves. 2. Conducting Yoga, Psychological and ethical value added seminars and workshops to increase behavioural knowledge in students.			
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.			
PO4	1.25	1.31	TARGET LEVEL ATTAINED Observations: 1. Research methods are not familiar with the students at the first year level. 2. Analysing of complex engineering problems has been found difficulty by the first year students.

Proposed actions for continuous quality enhancement: 1. Guided the students to use software for analysis, design of experiments. 2. Writing case studies, articles and journals to improve research document writing			
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.			
PO5	1.25	1.17	TARGET LEVEL NOT ATTAINED Observations: 1. Target level is not attained by the Students. 2. Usage of modern tools by the first year students are limited.
Proposed actions for continuous quality enhancement: 1. Encourage students to participate in technical events to get an exposure to modern tools.			
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.			
PO6	1.25	0.98	TARGET LEVEL NOT ATTAINED Observations: 1.NSS activities are conducted in and around college to identify the basic societal needs. 2.Awareness programs like Meditation, Yoga and Sports were conducted to bring health consciousness among students 3. Students were able to understand the role of engineers in the society through various lectures and activities
Proposed actions for continuous quality enhancement: 1. Conduct more social service activities as part of NSS program			

2. Conduct awareness programme on Food Waste Management, Safe Water Supply etc.,			
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.			
PO7	1.25	0.89	TARGET LEVEL NOT ATTAINED Observations: 1. Conducted awareness programs on Food Waste Management, Safe Drinking Water Supply etc. to give exposure to students on environment and sustainability 2. Conducted Swatch Bharat activities regarding pollution, cleanliness and waste management in nearby villages to give an exposure to students on sustainable development
Proposed actions for continuous quality enhancement: 1. Conduct more number of social service activities on environmental sustainability as part of NSS Program 2. Conduct awareness programme on Food Waste Management, Safe Water Supply etc.,			
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.			
PO8	1.25	0.53	TARGET LEVEL NOT ATTAINED Observations: 1. Organized personality development programs for the students to improve professional ethics and life skills 2. Conducted Seminars and awareness programs to initiate rational thinking among students and to insist on social harmony
Proposed actions for continuous quality enhancement:			

1. Awareness on professional ethics through video lectures.
2. Conducted induction programme on code of conduct.
3. Students are given Value Education classes.

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

PO9	1.25	1.65	TARGET LEVEL ATTAINED Observations: Target level is attained in most of the laboratory courses as the students performed the experiments in teams and also contributed through collaborative learning in tutorial hours.
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Proposed actions for continuous quality enhancement:

1. Conduct team based social service activities.
2. Team based problem solving in laboratory sessions.

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.

PO10	1.25	1.28	TARGET LEVEL ATTAINED Observations: 1. Target level is basically attained through English courses and LSRW skills training in language laboratories 2. Conducted group discussions and team management activities in communication labs for language training
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Proposed actions for continuous quality enhancement:

1. Conduct 'communication activity' in the class room, where the student communicates with their peer group on the engineering activities of respective streams.
2. Most interactive and activity based sessions in language lab.

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.			
PO11	1.25	1.73	TARGET LEVEL ATTAINED Observations: Students are not familiar with the finance and project management skills at the first year level as the Students have limited possibility to apply project management skills for developing their projects at the first year level
Proposed actions for continuous quality enhancement: 1. More interactive group discussions on financial budget allocation and management. 2. Create awareness on finance project management through video lectures.			
PO12: Lifelong 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.			
PO12	1.25	1.04	TARGET LEVEL NOT ATTAINED Observations: 1. Students have limited scope for lifelong learning at the first year level as the subjects are mostly fundamental subjects 2. Basic knowledge acquired by the first year students can be utilized in future for learning advanced technologies
Proposed actions for continuous quality enhancement: 1. Train students to make use of the current knowledge to meet with future needs 2. Support students to acquire knowledge through self-learning like NPTEL and similar courses			

PSO Attainment Levels and Actions for 2021-22

PSOs	Target Level	Attainment Level	Observations
PSO1: To apply software engineering principles and practices for developing quality software for scientific and business applications.			
PSO1	1.25	1.30	TARGET LEVEL ATTAINED Observations: 1.Target level is attained by the Students. 2.Usage of modern tools by the first year students are limited.
PSO2: To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions for existing or novel problems.			
PSO2	1.25	1.21	TARGET LEVEL NOT ATTAINED Observations: 1.Target level is not attained by the Students. 2.Students have lack of knowledge at the first year level to apply in their engineering course in the design and development.

CRITERION 9	Student Support Systems	50
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9. STUDENT SUPPORT SYSTEMS (50)

9.1. Mentoring system to help at individual levels (5)

Our Institution has an excellent mentoring system. Effective mentoring begins with the faculty. The institution helps to create an environment to establish a healthy relationship between faculty and students. Faculties from the Science and Humanities department mentor the first year engineering students and from second year, students are allotted to the mentors from their respective department. As a part of the mentoring process students are encouraged to discuss their ideas to go with new techniques and expand their skills.

Mentor- Mentee ratio: Around 15-20 students are tagged to each mentor.

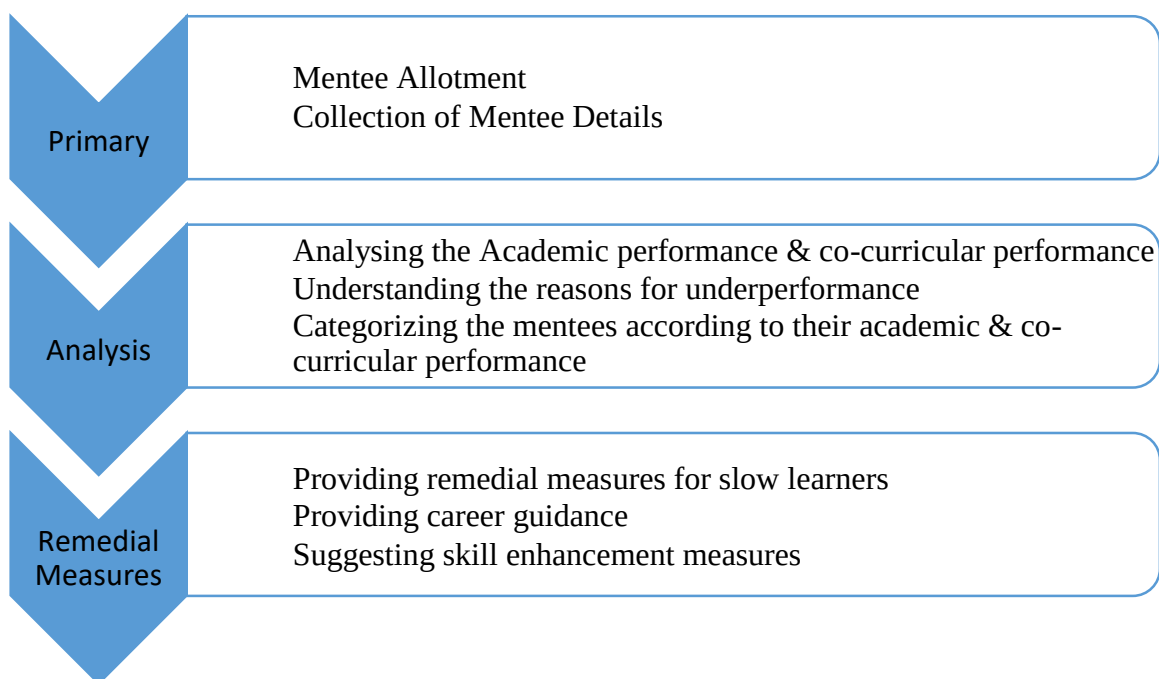
Frequency of meeting: Mentees meet their mentors weekly once. After every internal tests and model tests, mentees meet their mentors and discuss their performance.

Mentor- Mentee ratio

- Our institution maintains a standard mentor–mentee ratio during the following years as follows:

Year	Student Strength		Total number of Mentors	Mentor Mentee Ratio
	Boys	Girls		
2022-23	477	337	78	1:15
2021-22	437	331	81	1:15
2020-21	413	319	98	1:15
2019-20	477	318	113	1:15

Mentoring Systems:



9.1.1 The process for Identification of advanced learners and slow learners:

(i) Collection of the students' personal information:

- Once the student is admitted, his/her previous academic performance, family's socio economic background, strengths and weaknesses, goals etc., are collected through student counselling file and analysed throughout his/her program.

(ii) Analysis of the students' personal information:

- Based on the collected data through the college counselling process, the institute identifies the slow learners.
- A teacher of the same discipline adopts some students and acts as a mentor to monitor continuous progress of these students.
- Mentors will analyse the reason for being a slow learner and counsel them accordingly.
- If necessary, they are channelized to the Counselling club, where the psychologists professionally counsel them to come out of their problem.
- Internal motivation is carried out by the institution that helps students to overcome their difficulties.

- The Institution conducts remedial classes for slow learners.

9.1.2 Scope of Mentoring

9.1.2.1 Professional Guidance to mentees

- The institute trains the students based on the requirements of the industry, by imparting required skills which are essential for the dynamic employment market.
- Mentors motivate their mentees to present research papers in International / National conferences, seminars and symposiums conducted by various other colleges.
- The soft skills, technical skills of the mentees are continuously monitored by their mentors and steps are initiated to bridge the gap, if any.
- Mentors encourage their mentees to actively take part in the activities conducted by various cells such as Entrepreneurial development cell (EDC), Institutional innovation council (IIC) and incubation hubs set up by government and other bodies, and showcase their innovation and Entrepreneurial skills.
- Mentors guide the students for drafting business proposals, business plans and getting funded from start-up/ innovation councils for their business ideas.

9.1.2.2 Career guidance to mentees

- Mentors discuss the various higher educational opportunities in India and in abroad entrance exams for pursuing higher education.
- Emphasis is given on higher educational entrance examinations such as TANCET, GATE, CAT, MAT, XAT, GRE and other examinations conducted by institutions of national importance.
- Mentors also educate their mentees about the various competitive exams conducted by Public Service Commission (PSC) and other Public Sector Undertakings (PSU).

9.1.2.3 Overall Development of mentees

- The mentees are encouraged to participate in workshops, technical fests and present technical papers.
- Mentees are encouraged to take up certification courses like NPTEL, coursera and edX. The faculty helps the students to complete the certification course successfully.
- Mentees are also encouraged to take part in NSS, cultural activities and sports activities for the overall development.

Sample data of Student's personal information system.

Student's Personal Data:

Date of Birth: 02/08/2002 Age: 18

Sex: FEMALE State: AP

Nationality: INDIAN

Religion: HINDU Community: OC

Caste: BALISA NAIDU Mobile: 9000211429

Contact details: Landline _____ Email: _____

Sibling detail:

1. Name: P. SUDEEPTHIKA Age: 15 Sex: FEMALE

Education/Profession: INTERMEDIATE - II YEAR

2. Name: P. MONISH Age: 12 Sex: MALE

Education/Profession: Will grade.

?



Students Photo
(During Admission)



Father's Photo



Mother's Photo



Student's Photo
(While Leaving College)

J.N.N INSTITUTE OF ENGINEERING									
STUDENT'S MENTORING BOOKLET									
Name		PAKANATI HEMASHIMA			Register Number				
Batch		2019 - 2023		Branch : CSE		Sec:		Blood group 0-ve	
Parent's Name		FATHER : PAKANATI RAM PRASAD		Contact numbers		Landline: 9006311429			
		MOTHER: PAKANATI VASANTHI				Address for Communication:			
Educational level of parents		FATHER: Degree				5TH ST, RAJAGOPALAPURAM			
		MOTHER: 8th				NAIDUPETA, NELLORE			
Parent's occupation		FATHER: Finance				AP-524126			
		MOTHER: HOUSEWIFE							
Permanent address (Student's)		5TH STREET, RAJAGOPALAPURAM NAIDUPETA, NELLORE AP-524126		Present Address		1 st year 5TH ST, RAJAGOPALAPURAM NAIDUPETA, NELLORE, A.P.			
						2 nd year			
						3 rd year			
						4 th year			
Contact details of Local Guardian (address & number)				Name:		Contact numbers:			
10 th Mark & Board				12 th Mark & Board		Lateral entry		VEG/NON VEG?	
SEAP, 9.7				9.65 BOARD OF INTERMEDIATE EDUCATION		YES		NON-VEG	
Medium of Instruction				10 th Std		12 th Std		ENGLISH	
Details of 10 th Std., (School, subjects, marks etc)				School: NARAYANA					
Details of 12 th std., (School, Subjects, Marks etc)				Marks: 97					
				School: NARAYANA JUNIOR COLLEGE					
				Maths		Physics		Chem	
				93		95		92	
								Biol/CS	
								Cut off: 186.5	
Lateral Entry Students - give details of Diploma (Institution, Branch, Marks)								% of Marks:	
								Class:	
Mother Tongue				TELUGU		Other Languages known		ENGLISH	
Mode of Admission				COUNSELLING- MANAGEMENT ✓					
If you stay on your own outside the campus, give details about the place & your fellow mates									
Chronic Illness (if any)						Vision Problem?		—	
Social economic details:									
Father's Annual Income				80,000		Mother's Annual Income		—	
Other source of Income (if any)									
Do you under take part-time job? (If yes, give details)				—					
Do you get scholarship? (If yes, give details)				—					
Do you get any other financial assistance? (If yes give details)				—					

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Sample pages from Mentor Book for a particular Semester:

SEMESTER WISE MENTORING ACTIVITY	
Year: III	Semester: VI
Section:	
What is your field of Interest?	List:
What is your favourite Subject and reason?	
Who is your favourite Teacher and reason?	
What is your easiest Subject and reason?	
What is your hardest Subject and reason?	
Do you understand the subjects easily?	1.
If not describe your problems subject wise?	2.
	3.
	4.
	5.
	6.
Do you require any special class/ coaching?	
Do you require any special attention from the college? (both academic or otherwise)	
Do you have any distraction at home or outside? [in both academic/personal life]	
Understanding laboratory courses:	
a) Understanding theoretical concept before entering lab	
b) Keenness in completion of experiments	
c) Punctuality in submission of observation and record work	
What about your arrears?	Give history:
Are you not able to clear any subject after a number of attempts	
How often do you go the library?	
What are subject related books borrowed from our library?	
What are the other titles your have borrowed from our library?	
What are the books you have referred for the subjects in this semester?	
Do you visit other library?	
If yes, give details	
Do you read dailies? Give list	
How do you update yourself?	
What are the efforts to improve communication skills?	
Have you improved over a period of time?	

Overall remarks about the student by the mentor	
Disciplinary issues, if any	
Specific observation of the mentor about the student [please specify whether he/she require follow up mentoring by HOD/Principal/Management]	
Details of follow up mentoring by HOD/Principal/Management (if any)	

ANALYSIS SHEET (To be filled in by the mentor)			
Observations/Findings in the previous year/semester:			
STRENGTH: (Positive points in terms of attendance, discipline, academic and co/extra-curricular activities to be summarized)		WEAKNESS: (Negative points in terms of attendance, discipline, academic and co/extra-curricular activities to be summarized)	
Improvement(s) observed in the subsequent semester:			
Attendance	Discipline	Studies	Co/Extra-curricular activities

Signature(s) of

Mentor

Class Coordinator

HOD

PRINCIPAL

[illegible]

STUDENT'S RATING BY MENTOR							
Name of the mentor					Dept :		
S.No	Date of mentoring	Rating of student by Mentor [In a ten point scale; low-1, average-5, high-10]					
		As a person	Studies	Behaviour	Character and contact	Knowledge	Total
1							
2							
3							
4							
5							

Mentoring Chart (for faculty's use)

Points to be discussed	Student's input (Time spent in hours)	Suggestions given by mentor	Points to be discussed	Input from faculty handling subjects	Suggestions given
I. Time Management			III. Examinations		
A. One week			A. Monthly tests		
a) Academic			a) Attendance		
b) Professional - training & development			b) Seriousness		
c) Updating knowledge			c) Preparations		
d) Recreation			d) Material collection		
e) Personal attention			e) Record keeping		
B. In a day			B. University Exams	Input from students	
i) Reading for Subject			a) Previous year questions		
ii) Light reading			b) Question bank		
iii) Other preparations			c) Material collection - current semester notes for all sub.		
iv) Browsing			d) Group Study		
v) On social networks			e) Extra coaching		
vi) Physical/Sports			V. OTHER ACTIVITIES	Input from students	
II. Class routine	Input from faculty handling subjects		A. Mini Projects		
A. Classroom activity*	S1 S2 S3 S4 S5 S6		B. Presentations		
a) Attendance			Conference/ Seminar/ Workshop		
b) Attentiveness			C. Participations		
c) Taking notes			Cultural/Sports		
d) Interaction					
e) Task completion					
B. Laboratory	Input from faculty handling lab subjects		Training programme attended		
a) Performing experiments					
b) Observation					
c) Record completion			Any other interested activity		

Note: Very Good - 5, Good - 4, Above average - 3, Average - 2, Poor - 1.

9.2 FEEDBACK ANALYSIS AND REWARD/CORRECTIVE MEASURES TAKEN, IF ANY (10)

The feedback collection is a very important process for improvement of the Institution. The faculty feedback is collected from the students every semester for the entire course. This process contributes to evaluating faculty performance for reward/corrective measures. The types of feedback systems are followed, analysed and corrective actions taken in the institution.

Is Feedback collected for all courses : Yes

Is action planned based on feedback : Yes

Are corrective measures taken : Yes

(i) Types of feedbacks:

1. Online Feedback

The feedback mechanism is a well-organised system in the college. Once feedback is collected the summary is submitted to the head of department. He will analyse the feedback of each faculty and take necessary actions.

2. Oral Feedback

The principal conducts an interactive meeting with the section of students regarding the academic activities and collects the feedback from the students directly and suggestions are given to the HODs of concerned departments for necessary actions.

9.2.1 STUDENT FEEDBACK ON FACULTY CONSOLIDATED REPORTS:

SAMPLE FEEDBACK ANALYSIS - CSE (1st YEAR)

	Subject	Prof English I	Matrices & Calculus	Engg. Physics	Engg. Chemistry	PSP	Overall	Attainment Level
	Faculty	Mrs.Nancy	Ms.Jain	Dr.Latha	Dr.R.Ramya	Mrs.Mila		
S.No	Questions	Score						
1	Teacher comes to class on time	84.2	91.19	91.42	89.76	85.95	88.50	2.7
2	Teaching is well planned	79.76	79.28	75.95	75.23	73.33	76.71	2.3
3	Teacher makes the objective clear	75.71	76.90	74.52	74.04	75.71	75.38	2.3
4	Subject matter is organized in a logical sequence	75.47	78.80	78.09	91.66	79.52	80.71	2.4
5	Knowledge of the faculty in that particular subject	83.57	82.38	81.19	77.61	83.33	81.62	2.4
6	Faculty member completes the syllabus in time	90	90.33	88.09	85.95	85.23	87.92	2.6
7	Voice is clear and audible	74.76	80.95	81.19	76.42	80.47	78.76	2.4
8	Writing on the board is clear and visible.	75.23	76.19	77.85	75.23	75.95	76.09	2.3
9	Teacher provides examples of concepts/Principles; descriptions are clear and effective	76.19	75.71	80.23	68.57	77.85	75.71	2.3
10	Teacher's pace and level of instructions are suited to the attainment of the students	79.52	79.52	80.23	75.95	80	79.04	2.4
11	Teacher offers assistance on counselling to the needed students	78.57	77.38	79.28	77.38	73.80	77.28	2.3
12	Teacher ask questions to promote interaction and reflective thinking	79.04	80.71	78.80	76.19	80	78.95	2.4
13	Teacher ask questions to promote interaction and clarifies doubts	78.8	80.23	76.19	73.33	78.33	77.38	2.3

SAMPLE FEEDBACK ANALYSIS - CSE (2ND YEAR)

		Subashini	Shalini	Mariselvam	Subashini	Chandrasekha	Subashini	Yasaswini	Iswarya	Poonguzhali	
	Object Oriented Programming			Discrete Mathematics	Digital Principles and System C	Data Structure: Communication Engineering					
S.No	Question's	Score									
1	Teacher comes to Class on time	80.80%	75.83%	80.00%	80.80%	77.50%	80.80%	77.50%	75.83%	80.00%	2.42
2	Teaching is well planned	80.00%	79.17%	79.17%	80.00%	80.83%	80.00%	80.00%	80.83%	73.33%	2.4
3	Teacher makes objectives clear	78.40%	76.67%	75.00%	78.40%	78.33%	78.40%	75.00%	80.00%	76.67%	2.35
4	Subject matter organized in logical sequence	76.80%	79.17%	74.17%	76.80%	80.00%	76.80%	80.00%	78.33%	82.50%	2.3
5	Knowledge of faculty in that particular subjects	80.00%	80.83%	80.00%	80.00%	77.50%	80.00%	75.83%	75.00%	80.83%	2.4
6	Faculty member completes the syllabus in time?	81.60%	78.33%	80.00%	81.60%	76.67%	81.60%	73.33%	75.83%	76.67%	2.45
7	Voice is clear and audible?	75.20%	70.00%	69.17%	75.20%	69.17%	75.20%	72.50%	75.83%	71.67%	2.26
8	Lecture writing on the board is clear and visible?	79.20%	80.00%	78.33%	79.20%	81.67%	79.20%	75.00%	79.17%	75.00%	2.38
9	Teacher provides examples of concepts/principles, descriptions are clear and effective	72.00%	70.83%	75.00%	72.00%	69.17%	72.00%	74.17%	74.17%	75.83%	2.16
10	Teacher pace and level of instructions are suited to the attainment of students	75.20%	76.67%	75.00%	75.20%	71.67%	75.20%	75.00%	79.17%	76.67%	2.26
11	Teacher offer assistance on counselling to the needy students	80.00%	78.33%	80.00%	80.00%	78.33%	80.00%	79.17%	79.17%	76.67%	2.4
12	Teacher ask questions to promote interaction and reflective thinking	78.40%	76.67%	79.17%	78.40%	75.00%	78.40%	78.33%	77.50%	80.83%	2.35
13	Teacher asks the question to promote interactions and clarifies doubts?	76.00%	76.67%	78.33%	76.00%	77.50%	76.00%	78.33%	79.17%	78.33%	2.28

9.2.2 ALUMNI FEEDBACK - FEEDBACK ANALYSIS

Alumni feedback is collected online. This reflects the learning outcome and benefits attained upon OBE, including higher education, employment, and entrepreneurship.

9.2.3 PARENTS FEEDBACK - FEEDBACK ANALYSIS

Parents feedback not only helps parents contribute positively to their children's learning experience, but it also can be an indicator of institutions overall success. By sharing their opinions, parents provide useful insights that may otherwise go unnoticed.

9.2.4 EMPLOYER FEEDBACK - FEEDBACK ANALYSIS

The feedback collected from the employer of the alumni about the curriculum is given due weightage to review the implications of Outcome Based Education. Based on the constructive ideas collected, necessary measures are initiated for continuous improvement in OBE.

Student Feedback on Faculty

First Semester

S.No.	Name of the Faculty	Suggestions/ Issues	Action Plan	Corrective measures taken
1	Ms. Jain Caroline	Students find difficulty in understanding certain difficult problems in Maths	Two extra hours to be given to practice difficult sums	Additional 2 hours allotted on Saturdays to work out more problems.
2	Dr. R.Ramya	Classes are taken at a fast pace	The issue was addressed in the class committee meeting	HOD advised the faculty to slow down the pace of lecturing.
3	Mrs. Mila	Need more Lab hours to do additional experiments	Plan to include 2 hours additionally for Python lab	Additional 2 hours are allotted on Saturdays to do additional experiments.

Third Semester

S.No.	Name of the Faculty	Suggestions / Issues	Action Plan	Corrective measures taken
1	Ms. Sangeetha Tupili	Students find difficulty in understanding certain algorithms and problems.	Two extra hours to be given to practice simple programs that focuses on improving students basic Math and reasoning skills as they lack basic algorithm knowledge	Additional 2 hours are allotted on Saturdays to work out more problems to improve students basic Math and reasoning skills
2	Ms.A. Geethanjali	Students find difficulty in understanding certain programs and in sorting out errors	Two extra hours to be given to practice more programs that improves student's knowledge in programming	Additional 2 hours are allotted on Saturdays to work out more problems to improve student's knowledge in programming.

Sixth Semester

S.No.	Name of the Faculty	Suggestions / Issues	Action Plan	Corrective measures taken
1	Dr.S.Jayanthi	Students find difficulty in understanding Probability	Two extra hours to be given to practice more programs to enable students understand Probability	Additional 2 hours are allotted on Saturdays to work out more to enable students understand probability
2	Mr.Arulmozhi	Problematic paper, students find it difficult to understand	Two extra hours to be given to explain the concept in a slow pace and in a simpler way in order to make the students understand the concepts	Additional 2 hours are allotted on Saturdays to explain the concepts in a simpler way to enable students to understand the basic concepts.

9.3. FEEDBACK ON FACILITIES (5)

The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipment etc.. Following are the list of facilities available in the institution.

9.3.1 Classrooms / Smart Classrooms

There are well-furnished ICT enabled classrooms, smart classrooms with interactive panels and high-speed internet for the immersive learning experience of our department students.

9.3.2 Seminar Hall

One seminar hall with different seating capacities is available for overall institutional and departmental usage. Sophisticated PA systems and ICT equipment enable effective delivery of content. They are put to excellent use during National level Symposiums, Conferences, Pre-Placement orientation, Project reviews etc.

9.3.3 Laboratories

The Institute has adequate laboratories with hardware and software required for effective curriculum delivery as per the AICTE norms. Each laboratory has a stock register and maintenance register. The list of equipment and the list of experiments are displayed in all laboratories. All the laboratories have adequate lighting and ventilation to allow students to work comfortably. Fire safety equipment and first aid boxes are available at all laboratories. A project lab has been set up expressly for students to work on their mini and main projects. Each laboratory has a descriptive chart on display. Dimensional boards and name boards are available in all labs.

9.3.4 Computing Equipment, Internet & Wi-Fi

The Institute has 3 computer labs equipped with 300 systems of exemplary configuration (Intel i5) connected through LAN. All the computers have internet access via high-quality manageable switches. All the buildings (academic, laboratories, common areas, mess hall, hostels) are Wi-Fi enabled through Wi-Fi access points. The internet leased line is a broadband connection with a speed of 100 Mbps.

9.3.5 Central Library

The Central Library is spread across an area of 7000 sq. ft. Auto Lib Integrated Library Management System (ILMS) is used for managing library services. The library has many books, titles, journals, magazines and project reports.

9.3.6 Auditorium

The college boasts a spacious auditorium with a seating capacity of 800 people to conduct various curricular and co-curricular activities. Apart from the facilities mentioned above, the institution has Faculty and HOD cabins, Restrooms, Canteen, Dining halls, Guestrooms and Administrative offices. Separate hostels for boys and girls with facilities for indoor games are made available for the benefit of the students. All common areas are under CCTV surveillance. The available infrastructure is optimally utilized during and beyond college hours to conduct certificate courses, placement training and other co-curricular activities.

FACILITIES FEEDBACK - FEEDBACK ANALYSIS

S.No	Question's	Excellent	Very Good	Good	Fair	Poor	Total Weightage	Percentage	3-Scale Weightage
1	The condition of the sports facilities provided at our college	69	22	0	0	0	433	95.16%	2.85
2	The condition of the exterior and interior lighting facilities at our college	36	53	1	0	0	398	87.47%	2.62
3	The condition of the restrooms facilities available at our college	44	41	5	1	0	401	88.13%	2.64
4	The condition of the classrooms facilities provided at our college	45	41	3	0	2	420	87.91%	2.64
5	The availability of parking spaces facilities provided at our college	44	42	4	1	0	421	88.35%	2.65
6	The condition of Lab facilities provided at our college	36	52	3	0	0	397	87.25%	2.62
7	The condition of hostel facilities provided at our college	36	50	3	2	0	393	86.37%	2.59
8	The condition of Library facilities provided at our college	46	41	3	0	1	424	88.79%	2.66
9	The condition of xerox/photostat facilities provided at our college	43	44	4	0	0	423	88.57%	2.66
10	The condition of Drinking water facilities provided at our college	43	40	3	0	0	423	89.89%	2.70
OVER ALL PERCENTAGE							404.00	88.79%	2.66

S.No	Question's	Excellent	Very Good	Good	Fair	Poor	Total Weightage	Percentage	3-Scale Weightage
1	The condition of the sports facilities provided at our college	15	4	0	0	0	91	95.79%	2.87
2	The condition of the exterior and interior lighting facilities at our college	6	11	2	0	0	80	84.21%	2.53
3	The condition of the restrooms facilities available at our college	6	8	4	1	0	76	80.00%	2.40
4	The condition of the classrooms facilities provided at our college	9	6	2	0	2	77	81.05%	2.43
5	The availability of parking spaces facilities provided at our college	6	10	2	1	0	78	82.11%	2.46
6	The condition of Lab facilities provided at our college	6	11	2	0	0	80	84.21%	2.53
7	The condition of hostel facilities provided at our college	7	8	3	1	0	78	82.11%	2.46
8	The condition of Library facilities provided at our college	6	10	2	0	1	77	81.05%	2.43
9	The condition of xerox/photostat facilities provided at our college	11	4	4	0	0	83	87.37%	2.62
10	The condition of Drinking water facilities provided at our college	6	11	2	0	0	80	84.21%	2.53
OVER ALL PERCENTAGE							80.00	84.21%	2.53

FEEDBACK ANALYSIS & CORRECTIVE MEASURES TAKEN

Sl. No.	Suggestions	Action Plan	Corrective measures taken
1	The conditions of the classrooms Ambience to be improved	Plan to install LCD projectors in classrooms.	LCD projectors are installed in classrooms.
2	The condition of the restrooms facilities to be improved	Discussed with Maintenance engineer to improve cleanliness in restrooms	Check-list is maintained in rest rooms and follow up by the floor supervisor Liquidiser in rest rooms are filled periodically Napkin vending machine was installed in the girls rest room.
3	Magazines on carrier opportunities required	Additional Technical books and magazines on carrier opportunities planned to added	Additional books added and library hours has been extended beyond college hours for the benefits of students.

4	Indoor sports Facilities to be improved	Facilities to be improved in Indoor games are discussed in sports committee and planned to purchase carrom board.	Carrom board has been purchased
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9.4. Self-Learning

Experiential Learning, also known as “hands-on learning” is offered to our students in the form of Workshops and Industrial Visits. The focus of the industrial visit is to expose students to a real-world working environment. They also offer students an excellent opportunity to learn about industrial practices. Students learn about emerging technology through these visits. Our Institution encourages students to do projects by arranging internships and in-plant training. Usage of ICT tools, and project-based learning, enable them to experience the actual work done in industries/organizations. Our students use e-learning tools such as Swayam, NPTEL, Coursera and other platforms to enhance their experiential learning.

9.4.1 Academic year 2021 -22 – Self Learning

The institution underwent a massive revamp during the year 2021 and our students were enrolled and obtained value added certification in their respective domain through various online platforms.

S.No	Course Name	University name	Department & Year	No of students benefited
1	Python for Machine Learning	Great Learning Academy	II, III and IV year of Computer Science and Engineering	25
2	Machine Learning Specialization	Stanford University	III and IV year of Computer Science and Engineering	30
3	AWS For Beginners	Great Learning Academy	II, III and IV year of Computer Science and Engineering	15

4	IBM Data Science	IBM	III and IV year of Computer Science and Engineering	20
5	Cybersecurity for Everyone	University of Maryland	III and IV year of Computer Science and Engineering	35

9.4.2 Academic year 2020 -21 Add on certifications

During the year 2020-21 our students underwent completing the following value added certifications. Add on certifications from Coursera.

S.No	Course Name	University name	Department & Year	No of students benefited
1	Machine Learning	Stanford University	II, III and IV year of Computer Science and Engineering	35
2	Applied Data science with python	University of Michigan	II, III and IV year of Computer Science and Engineering	25
3	Analyzing Big Data with SQL	Cloudera	II, III and IV year of Computer Science and Engineering	30
4	Introduction to HTML5	University of Michigan	II, III and IV year of Computer Science and Engineering	20
5	Introduction and Programming with IoT Boards	Pohang University of Science and Technology	II,III & IV Computer Science and Engineering	25

9.4.3 Academic year 2019 -20 Add on certification

During the year 2019-20 our students underwent completing the following value added certifications. Add on certifications from Coursera.

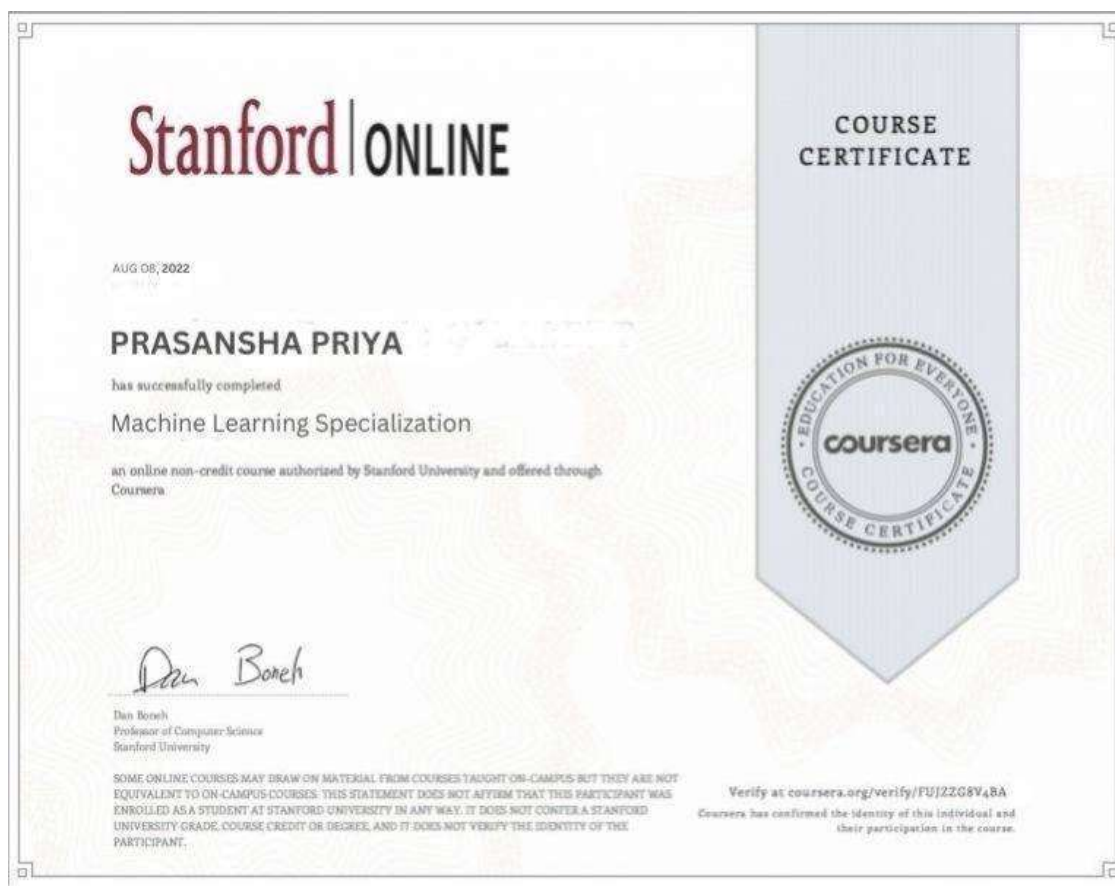
Student Self Learning (Department of Computer Science and Engineering)

Source Name: Coursera

Academic Year: 2019-20

S.No	Course Name	University name	Department & Year	No of students benefited
1	Computational Thinking of Problem Solving	University of Pennsylvania	III and IV year of Computer Science and Engineering	30
2	Python for Everybody	University of Michigan	II and III year of Computer Science and Engineering	25
3	Introduction to Machine Learning with Python	Arizona State University	III and IV year of Computer Science and Engineering	35
4	AI, Business and the future of work	Lund University	II, III and IV year of Computer Science and Engineering	20

9.4.4 Student self-learning certificates





9.5 CAREER GUIDANCE, TRAINING, PLACEMENT (10)

9.5.1. CAREER GUIDANCE

The Training & Placement Cell of Institution strives hard in the endeavors of inviting various industries for conducting campus placements. It is one of the satisfying and remarkable facts that the college is able to conduct campus interviews even during the tough situations like Global Recession; Industry's unwillingness to come far off places to conduct Campus Interviews etc.

CAREER GUIDANCE:

The Institution has a structured mechanism for career guidance including counselling for campus placement support, industry interaction for training, internship and placement through Training and Placement Cell. The Institution has a separate support system for the students appearing and qualifying in various competitive examinations and higher studies.

The training and placement cell has the vision of transforming every student as an

employer's choice and working with the mission of developing the students to face a global competitive world with confidence and attain desired placement.

Initiatives for career guidance

To enhance the competency level and threshold level of the students, the institution offers career guidance by conducting the following activities.

- Organizing guest lectures, workshops, training programs, employability skill enhancement programs for the benefit of the students.
- Creating awareness about various competitive examinations at PAN India level, state level through expert talks, seminars, and webinars.
- Creating awareness about various competitive exams to pursue higher education in institutions of national importance and international importance.
- Conducting capacity building programs and skill enhancement programs partnered with vendors and subject matter experts.
- Guiding and helping the students in pursuing internship opportunities with various reputed companies.

Strategic partnerships by the institution for student's capacity enrichment

- Apart from regular academics to enrich and enhance the competency, capacity of the students, the institution has entered strategic partnerships with professional bodies and professional development consulting firms. They are as follows.

Name of the organization/ professional body	Mode of career development activities
NIIT	Conducting seminars, guest lectures, on career development and capacity enrichment.
KC Overseas Education	Personality development programs through inbound and outbound training programs, webinars and other sessions

9.5.2 WEBINAR SESSIONS ON COMPETITIVE EXAMS AND HIGHER EDUCATION ENTRANCE EXAMINATIONS

The institution always aims for the students to attain higher positions in government offices. The aspirations of the students are catered by the institution by expert talks via webinars. Following are the initiatives undertaken by the institution during the Academic year 2020-21 regarding.

9.5.3 SESSIONS ON COMPETITIVE EXAMS AND HIGHER EDUCATION ENTRANCE EXAMINATIONS

The institution always aims for the students to attain higher positions in government offices. The aspirations of the students are catered by the institution by expert talks via seminars. Following are the initiatives undertaken by the institution during the Academic year 2022-23 regarding.

Academic year 2022-2023

S.No	Date	Program Name	Resource Person
1.	17-10-2022	Career Guidance Opportunities	Dr. MS. Arulmani, Actor and Motivational Speaker
2.	15-11-2022	Preparation for higher examinations	Dr. R. Shanmugam
3.	20-01-2023	Seminar on NIIT preplacement talk.	HR team of NIIT
4.	23-02-2023	Preparation For Higher Education Opportunities	KC Overseas Education

Academic year 2021-2022

S.No	Date	Program Name	Resource Person
1.	16-08-2021	Seminar on GRE Examinations	Mr. Anantha Krishnan, founder, GREedge, Chennai

2.	10-09-2021	Seminar On Be A Part Of Steel Frame	Mr. Elanbagavath, IAS, Director, Directorate of Public libraries Government of Tamilnadu.
3.	21-09-2021	Seminar On Career Guidance By Yuva Club	Mr. R. Prabhakar, Department of Training and Placement, J.N.N Institute of Engineering
4.	01-02-2022	Preparation for Self determined career research	Dr. S. Lavanya, NSS officer and Assistant professor In Bharathi womens college.

Academic year 2020-2021

S.No	Date	Program Name	Resource Person
1.	05-07-2020	Preparation for Career Guidance opportunities in India	Mr. U Poongundran, Assistant Professor, SRM Institute of Science and Technology
2.	23-09-2021 to 25-09-2021	Effective Time Management	Dr. P. Tharaniya, Assistant Professor, Rajalakshmi Institute of Technology
3.	01-10-2020	Entrepreneurial awareness	Dr. T. Srihari, Assistant Professor
4.	01-02-2021	Preparation for GATE and other government examinations	Mr. S.D. Kishore Kumar, Regional Manager.

9.5.3.1 Students qualifying in state/national/ international level examinations during the Academic year 2022-2023

Year	Registration number/roll number for the exam	Names of students selected/ qualified	Name of the Qualifying Exam
2023	102148	N.Bala Thirupura Sundari	IELTS

9.5.4 RECRUITERS LIST:

RECRUITERS (2019-2020)
CSS CORP
GEO ADITYA
SUTHERLAND

VCARE
MITSUBA SICAL
CSS CORP
WIPRO
AMAZON PAY
CONGRUENT
SUTHERLAND
VCARE
CSS CORP
VEE TECH
MIND TREE
HINDUJA GLOBAL SERVICES
SITEL, CHENNAI
INFOSYS,ALPHIND SOFTWARE SOLUTIONS
HCL TECHNOLOGIES
APTEAM
SUTHERLAND
SEQUENT ASIA IT P.LTD
TECH DIGITAL
Q-SPIDER,SUTHERLAND
HEXAWARE
JMAN
SUTHERLAND

CONGRUENT
SHIASH INFOTECH
ENOAH
JUST DIAL
EXIMIO SERVICES
MARUTI SERVICE MASTER
T.V.S SUNDARAM FASTENERELIMITED
BHUPENDRA INTERNATIONAL
RECRUITERS (2022-2023)
AESS
AXION INDIA PVT LTD / KIA MOTORS
CSS CORP
ECSOFT
FLOWSERVE
FOCUS EDUMATICS
PALLE TECHNOLOGIES
PRELUDSYS
QSPIDERS
RINEX
SUTHERLAND
TCS
TECH MAHINDRA
TEKION

RECRUITERS (2021-2022)
AVASOFT
CAPGEMINI
CSS CORP
DELLOITE
FACE PREP
FLOWSERVE
HEXAWARE
INFOSYS
MIND TREE
MPHASIS
PRELUDESYS
QUALITEST
RECRUITERS (2020-2021)
ACCENTURE TECHNOLOGY
AESS
APTEAM
BOSON LABS
COOVM SYSTEMS
EC SOFT SOLUTION
ERNEST & YOUNG , JAIPUR
HCL TECHNOLOGIES
INFINITE SOLUTION

MIND READERS SOFTWARE
MIND TREE
MOURI TECH
MSC TECHNOLOGY , AMBATTUR (JOB)
PRIMERA MEDICAL TECHNOLOGY
SITEL INDIA PRIVATE LIMITED
SJV MARINE , ACCOUNTANT
SJV MARINE , ADMIN
TCS
TECH DIGITAL
WIPRO TECHNOLOGIES

PLACEMENT DETAILS 2019-2020

STUDENTS NAME	UNIVERSITY SERIAL NUMBER	DISCIPLINE	YEAR OF PASSING FROM INSTITUTION	ON/OFF CAMPUS PLACED	NAME OF THE EMPLOYER	PACKAGE(LPA)
LAVANYA	110715104019	CSE	2020	ON	CSS CORP	2.3
KOPPALA SUNEEL KUMAR	110716103007	CIVIL	2020	ON	GEO ADITYA	1.68
LOKESH BABU P	110716103009	CIVIL	2020	ON	GEO ADITYA	1.68
NEETHU K	110716103011	CIVIL	2020	ON	GEO ADITYA	1.68
NIVETHA S	110716103012	CIVIL	2020	ON	GEO ADITYA	1.68

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VIJAYA KUMAR G	110716103020	CIVIL	2020	ON	GEO ADITYA	1.68
ALEKHYA VADDINENI	110716104001	CSE	2020	ON	MITSUBA SICAL.Q-SPIDER,SUTHERLAND,VCARE	2.4,2.6,2.6, 1.8
ARUNA	110716104002	CSE	2020	ON	Q-SPIDER,SUTHERLAND	2.6,2.6
ASWINI GURRAMPATI	110716104003	CSE	2020	ON	SUTHERLAND	2.6
DESHIKA K V	110716104004	CSE	2020	ON	VCARE	1.8
DHANUSHA B	110716104005	CSE	2020	ON	MITSUBA SICAL	2.6
DHIVYA PRIYA	110716104006	CSE	2020	ON	CSS CORP	2.3
DIVYA PRIYA	110716104006	CSE	2020	ON	Q-SPIDER	2.6
GREESHMITHA YADLAPALLI	110716104008	CSE	2020	ON	MITSUBA SICAL.,WIPRO	2.6,3.5
GUNDALA KEERTHI	110716104009	CSE	2020	ON	AMAZON PAY,Q-SPIDER,SUTHERLAND	2.6,2.6,2.6
HEMANTH V	110716104010	CSE	2020	ON	CONGRUENT,SUTHERLAND	2.2,1.8
HEMANTH V	110716104010	CSE	2020	ON	SUTHERLAND	1.8
JAYASHREE SNGK	110716104011	CSE	2020	ON	MITSUBA SICAL,VCARE	1.8,1.8
KATA SOWMYA	110716104013	CSE	2020	ON	CSS CORP	2.3
KAVYA K M	110716104014	CSE	2020	ON	VEE TECH	2.04
LAVANYA SIVADA	110716104015	CSE	2020	ON	MITSUBA SICAL,Q SPIDER	1.8,2.6
NIVETHA DHARANI R	110716104017	CSE	2020	ON	VCARE	1.8
RAJ ASHOK R	110716104019	CSE	2020	OFF	MIND TREE	2.8
RAMYA M	110716104020	CSE	2020	OFF	HINDUJA GLOBAL SERVICES	2.4
RANJITH KUMAR YELUVOLU	110716104021	CSE	2020	OFF	SITEL, CHENNAI	3.4
SHAREN D	110716104023	CSE	2020	OFF	INFOSYS,ALPHIND SOFTWARE SOLUTIONS	1.8,3.5
SHARMILA A	110716104024	CSE	2020	ON	SUTHERLAND	1.68
SHIVASUNDAR C R A	110716104025	CSE	2020	ON	SUTHERLAND	1.68
SRILEKHA G T	110716104026	CSE	2020	OFF	HCL TECHNOLOGIES	4
SUNEEL BACHU	110716104027	CSE	2020	OFF	APTEAM	2.9

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SURYA V	110716104028	CSE	2020	ON	SUTHERLAND	1.68
SWETHAA M	110716104029	CSE	2020	ON	CSS CORP,SEQUENT ASIA IT P.LTD	2.3,1.8
UMAMAHESH VELIVELLI	110716104030	CSE	2020	OFF	TECH DIGITAL	3
VEDANAPARTHY PALLAVI	110716104031	CSE	2020	ON	Q-SPIDER,SEQUENT ASIA IT P.LTD,BASON LABS	2.6,1.8,3.2
VENKATA TEJESWINI MULLAMURI	110716104032	CSE	2020	ON	Q-SPIDER,SUTHERLAND	2.6.2.6
VISHAL VARDHAN VUPPALAPAT	110716104033	CSE	2020	ON	CSS CORP	2.3
AJAY YADAV R	110716105002	EEE	2020	ON	GEO ADITYA	1.68
ASHBEL A	110716105004	EEE	2020	ON	SUTHERLAND,VEETECH	1.68,2.04
BHARATHI M	110716105007	EEE	2020	ON	VCARE	1.8
CHRISTINA K	110716105009	EEE	2020	ON	MITSUBA SICAL	1.8
DEEPIKA J	110716105010	EEE	2020	ON	MITSUBA SICAL	1.8
GIRIDHARAN K	110716105015	EEE	2020	ON	VCARE	1.8
HARI R	110716105016	EEE	2020	ON	SUTHERLAND,VCARE	1.68,1.8
MANOJ KUMAR B	110716105020	EEE	2020	ON	AMAZON PAY,Q-SPIDER,SUTHERLAND	2.6
SAKTHIPRIYA K	110716105028	EEE	2020	ON	VCARE	1.8
MANOJ KUMAR B E	110716105120	EEE	2020	ON	ENOAH	2.24
MD.KHAJA GARIBANNA WAZ	110716105302	EEE	2020	ON	QSPIDER,VCARE	2.6,1.8
A RAVI TEJA	110716106002	ECE	2020	ON	GEO ADITYA,QSPIDER	1.68,2.6
ALAM RAVI TEJA	110716106002	ECE	2020	ON	SUTHERLAND	1.68
	110716106002	ECE	2020	ON	VCARE	1.8
ASHWIN KANNAN P K	110716106004	ECE	2020	OFF	HEXAWARE	2.4
	110716106004	ECE	2020	OFF	JMAN	2.6
	110716106004	ECE	2020	ON	SUTHERLAND	1.68
ATTAKANITI PPA SELVI	110716106005	ECE	2020	ON	QSPIDER	2.6
	110716106005	ECE	2020	OFF	SEQUENT ASIA IT P.LTD	2.4

	110716106005	ECE	2020	ON	SUTHERLAND	1.68
S BABY	110716106006	ECE	2020	ON	MITSUBA SICAL	2.4
BHARATH N U	110716106007	ECE	2020	ON	SUTHERLAND	1.68
SAI KRISHNA	110716106010	ECE	2020	ON	GEO ADITYA	1.68
	110716106010	ECE	2020	ON	SUTHERLAND	1.68
DILEEP KUMAR	110716106013	ECE	2020	ON	QSPIDER	2.6
A DURGADDEVI	110716106015	ECE	2020	ON	MITSUBA SICAL	2.8
M ELAVARASI	110716106016	ECE	2020	ON	MITSUBA SICAL	2.8
GANAPA MAHESH	110716106018	ECE	2020	ON	GEO ADITYA	1.68
G GNANA SUKI	110716106021	ECE	2020	ON	GEO ADITYA	1.68
	110716106021	ECE	2020	ON	MITSUBA SICAL	2.8
	110716106021	ECE	2020	ON	SUTHERLAND	1.68
INDRAKUMAR B	110716106023	ECE	2020	ON	AMAZON PAY	2.6
	110716106023	ECE	2020	ON	SUTHERLAND	1.68
ISHWARYA M	110716106024	ECE	2020	ON	CONGRUENT	2.2
	110716106024	ECE	2020	ON	CSS CORP	2.3
	110716106024	ECE	2020	OFF	HEXAWARE	2.4
	110716106024	ECE	2020	ON	MITSUBA SICAL	2.8
N ISWARYA	110716106025	ECE	2020	ON	GEO ADITYA	1.68
VENU MADHAV	110716106026	ECE	2020	ON	QSPIDER	2.6
JANANI M	110716106027	ECE	2020	ON	CSS CORP	2.3
	110716106027	ECE	2020	OFF	HEXAWARE	2.4
	110716106027	ECE	2020	ON	SUTHERLAND	1.68
KALAIVANI R	110716106029	ECE	2020	ON	CONGRUENT	2.2
KAVIN NILAVU	110716106032	ECE	2020	OFF	SHIASH INFOTECH	2.5
	110716106032	ECE	2020	ON	SUTHERLAND	1.68
	110716106032	ECE	2020	ON	VEE TECH	2.04
KOKKU KAVITHA	110716106034	ECE	2020	ON	CONGRUENT	2.2

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K ANUSHA	110716106 035	ECE	2020	ON	GEO ADITYA	1.68
KOLA ANUSHA	110716106 035	ECE	2020	ON	SUTHERLAND	1.68
KOLA SILPA	110716106 036	ECE	2020	ON	GEO ADITYA	1.68
				ON	SUTHERLAND	1.68
KUNDURTHI DIVYA MADHURI	110716106 039	ECE	2020	ON	ENOAH	2.24
				ON	SUTHERLAND	1.68
S MALINI	110716106 041	ECE	2020	ON	MITSUBA SICAL	2.8
MANDATI KIRAN	110716106 042	ECE	2020	OFF	SHIASH INFOTECH	2.5
				ON	SUTHERLAND	1.68
M MANJULA	110716106 043	ECE	2020	ON	MITSUBA SICAL	2.8
MATHUMAT HI K H	110716106 044	ECE	2020	ON	ENOAH	2.24
				ON	JUST DIAL	1.64
				ON	SUTHERLAND	1.68
MONISHA P	110716106 045	ECE	2020	ON	SUTHERLAND	1.68
PAVAN KUMAR	110716106 052	ECE	2020	ON	QSPIDER	2.6
S PAVITHRA	110716106 053	ECE	2020	ON	GEO ADITYA	1.68
PEDDIREDDY LAKSHMI AMRUTHA SAI	110716106 055	ECE	2020	ON	SUTHERLAND	1.68
PIDIKITI VENKATA SUDHARSHA N NAIDU	110716106 056	ECE	2020	ON	CONGRUENT	2.2
P V SUDHARSHA N	110716106 056	ECE	2020	ON	QSPIDER	2.6
PIDIKITI VENKATA SUDHARSHA N NAIDU	110716106 056	ECE	2020	ON	VCARE	1.8
R PRIYANKA	110716106 059	ECE	2020	ON	MITSUBA SICAL	2.8
RAM KUMAR KS	110716106 061	ECE	2020	ON	AMAZON PAY	2.6
				ON	JUST DIAL	1.64
				ON	SUTHERLAND	1.68
R MANJUSHA	110716106 063	ECE	2020	ON	GEO ADITYA	1.68
RANGINENI MANJUSHA	110716106 063	ECE	2020	ON	SUTHERLAND	1.68
A SANGEETHA	110716106 065	ECE	2020	ON	MITSUBA SICAL	2.8
SEENU K	110716106 066	ECE	2020	ON	AMAZON PAY	2.6
				ON	GEO ADITYA	1.68
				ON	SUTHERLAND	1.68

SHAIK GULZAR	110716106068	ECE	2020	ON	CSS CORP	2.3
				ON	QSPIDER	2.6
				ON	SUTHERLAND	1.68
SHANMUGA PRIYA A	110716106069	ECE	2020	ON	SUTHERLAND	1.68
SHARMILEE S A	110716106072	ECE	2020	ON	SUTHERLAND	1.68
T USHA	110716106076	ECE	2020	ON	GEO ADITYA	1.68
				ON	QSPIDER	2.6
R VARSHA	110716106079	ECE	2020	ON	ENOAH	2.24
		ECE	2020	ON	GEO ADITYA	1.68
		ECE	2020	ON	MITSUBA SICAL	2.8
		ECE	2020	ON	QSPIDER	2.6
P VINODHINI	110716106080	ECE	2020	ON	QSPIDER	2.6
				ON	SUTHERLAND	1.68
VISHAL G	110716106081	ECE	2020	ON	SUTHERLAND	1.68
YAMINI S	110716106083	ECE	2020	OFF	EXIMIO SERVICES	2.24
				ON	QSPIDER	2.6
				OFF	SHIASH INFOTECH	2.5
YASHIKA VAISHNAV S	110716106084	ECE	2020	ON	CSS CORP	2.3
				ON	ENOAH	2.24
				ON	QSPIDER	2.6
				ON	SUTHERLAND	1.68
				ON	VEE TECH	2.04
HARINI	110716106301	ECE	2020	ON	SUTHERLAND	1.68
C MUTHURAJ	110716106701	ECE	2020	ON	GEO ADITYA	1.68
ABHISHEK RAJ S	110716114001	MECH	2020	ON	MARUTI SERVICE MASTER	1.64
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
ABINASH S	110716114002	MECH	2020	ON	GEO ADITYA	1.68
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
AKSHAY KUMAR R M	110716114006	MECH	2020	ON	MARUTI SERVICE MASTER	1.64
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
ARULKUMAR V	110716114007	MECH	2020	ON	BHUPENDRA INTERNATIONAL	2.64
				ON	GEO ADITYA	1.68
				ON	SUTHERLAND	3.5
BARATH M	110716114010	MECH	2020	ON	MARUTI SERVICE MASTER	1.64
DHARMA M	110716114014	MECH	2020	ON	BHUPENDRA INTERNATIONAL	2.64
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4

DINESH E	110716114 016	MECH	2020	ON	MARUTI SERVICE MASTER	1.64
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
DINESH K	110716114 017	MECH	2020	OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
DINESH RAAJ J	110716114 018	MECH	2020	OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
NANDHAKU MAR P	110716114 036	MECH	2020	ON	GEO ADITYA	1.68
NITIN SEKAR B	110716114 039	MECH	2020	ON	CSS CORP	2.3
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
POOJA C	110716114 041	MECH	2020	ON	CSS CORP	2.3
				ON	SUTHERLAND	3.5
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
				ON	VEE TECH	2.04
POWN KUMAR B	110716114 042	MECH	2020	ON	MARUTI SERVICE MASTER	1.64
MAHALAKSH MI	110716114 047	MECH	2020	ON	CSS CORP	2.3
SATHISH K	110716114 048	MECH	2020	ON	GEO ADITYA	1.68
				ON	MARUTI SERVICE MASTER	1.64
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
SELVAKUMA RAN B	110716114 050	MECH	2020	ON	MARUTI SERVICE MASTER	1.64
				ON	SUTHERLAND	2.5
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
VENKATESH J	110716114 063	MECH	2020	ON	GEO ADITYA	1.68
VIGNESH J	110716114 064	MECH	2020	ON	SUTHERLAND	3.5
VIGNESH S	110716114 065	MECH	2020	ON	GEO ADITYA	1.68
				ON	MARUTI SERVICE MASTER	1.64
				OFF	T.V.S SUNDARAM FASTENERELIMITED	2.4
YUKESH KUMAR S	110716114 068	MECH	2020	ON	MARUTI SERVICE MASTER	1.64

9.5.5 Memorandum of Understanding between JNN and Industries:

S.NO	Date of MOU signed	Name of the industry	Domain area	Duration	List the actual activities under each MOU and web -links year-wise	Contributed
1.	12-08-23	VyVoxel Private Ltd	Computer Science Engineering	5 years	Industrial Visit, Internship, Guest Lecture and FDP	In plant Training and Industry Oriented Training
2.	14-02-23	VLSI Mentors	Electronics and Communication Engineering	5 years	Industrial Visit, Internship, Guest Lecture and FDP	In plant Training and Industry Oriented Training
3.	19-04-22	It Expert Training	Computer Science Engineering	Life time	Industrial Visit, Internship, Guest Lecture and FDP	Student Placements
4.	12-04-22	IBM	Computer Science Engineering	5 Years	Industrial Visit, Internship, Guest Lecture and FDP	In plant Training and Industry Oriented Training, Student Placements
5.	28-12-21	It Expert Training	Electronics and Communication Engineering	5 years	Industrial Visit, Internship, Guest Lecture and FDP	In plant Training and Industry Oriented Training
6.	01-07-21	RIPE Consulting services	Computer Science Engineering	4 years	Industrial Visit, Internship, Guest Lecture and FDP	Student Placements

9.6 Entrepreneurship Development Cell (5)

The main objective of the Entrepreneurship Development Cell is to infuse creativity and innovation among the students in order to inculcate entrepreneurship culture and to equip them with the knowledge, skills, techniques and confidence that are required to act as torch bearers of enterprise for the new generation.

EDC encourages students to consider self-employment as a career option and provides educational sessions such as seminars, workshops, competitions, and others. Entrepreneurship Development Cell acts as a tool to promote entrepreneurship and self-employment among the technical students as an attractive and viable career option. EDC trains and develops "Successful Technocrat Entrepreneurs" towards the evergreen economic prosperity by linking Society with Institution.

1. The Objectives of Entrepreneur Development Cell:

- To cultivate institutional mechanisms for entrepreneurial culture among the stakeholders and to foster entrepreneurial spirit among the students, faculty and the society at large.

- To identify and encourage burgeoning entrepreneur's by exposing them to

Various Entrepreneurial opportunities.

- To encourage the students to visualize their start-ups and become active job providers rather than job seekers.
- To inculcate integrity, hard work, discipline, honesty etc, as constituents of Entrepreneurship.

2. The Functionalities of the Entrepreneur Development Cell:

- The institution conducts various programmes like seminars, guest lectures, workshops, awareness programmes on "Entrepreneurship Development Skills" and career advancement.

- The cell envisions the needs of entrepreneurs and prepares a training module to equip the students with necessary skills. It focuses on various skills like Leadership Skills, Marketing Skills, Business Development Skills and Managerial Skills.

3. The Process of Encouraging the Students for Entrepreneurship and Incubation:

- Awareness on entrepreneurship and its significance
- Develop thought provoking activities
- Create readiness to think innovatively
- Collecting, Supporting and developing innovative ideas
- Bringing ideas into reality
- Concepts of team building
- Sessions on problem solving skills
- Financial awareness
- Marketability of product
- Tie up with government organizations
- Industry visits
- Sessions on eminent personalities
- Talks with practical entrepreneurs

List of Activities Conducted by the EDC

Date	Title	Resource Person	Total No. of Participants
23.03.23 to 25.03.23	Field/Exposure Visit to UMACINE Chennai 2023	Ashok Jhunjhunwala	26
16.02.2023	Startup THAMIZH – WOMAN EMPOWERMENT PROGRAM	Dr.Sharmila Nagarajan	38
24.12.2022	My Story – Motivation Session by an Entrepreneur – Strategies for Improvisation of Institution’s Innovation Council Performance	Dr. V. Sulochana, Ambassador/IIC, Sankara College of Science and Commerce, Coimbatore	25
5.6.2021	Technological Augmentation	Mr.Sathish Kumar R,IT Professional	32
14.6.2021	Why is it important to learn programming?	Mr.Ragul T, Designer and Developer	25
17.6.2021	Universal Human Values- Realization of Harmony in Nature	Dr.S.Sangeetha, Sri Ramakrishna Institute of Technology, Coimbatore	37
9.4.2020	Entrepreneurship challenges in practising “ Make in India"	Mr. Benin lal Kingsly Kingsly Agro Product	35
07.01.2020	Seminar on Women Entrepreneurship	Mr. Praveen Pandiyan	50
4.1.2019 to 6.1.2019	Entrepreneurship Development Programme	Mr. S. Elango, BMQR Manager	36
27.3.2019	Entrepreneurship Awareness Programme	Mr. M.Vishnuvardhan, Regional Manager South India, BSE	40
24.1.2019	Voucher A & Voucher B ED Schemes in Tamilnadu	Mr. Balaji, RMKCET	30
28.08.2019	One day workshop on Intellectual Property Rights(IPR)	Dr.Balaji Asst Prof KPRIET Indian Patent Agent and Dr. Shanker MD Chase Research and Development	52

9.7 Co-curricular and Extra-curricular Activities (10)

9.7.1 Initiatives and Support on Co-curricular and Extra Co-curricular Activities

- Encouraging the students to participate in co-curricular and extra co-curricular activities to the overall development.
- Providing the required infrastructure in the campus to promote them in co-curricular and extra co-curricular activities.
- Providing sports track suits and financial assistance to students for participating in co-curricular and extra co-curricular activities at other institutions or Universities.
- Encourages participating in inter-collegiate tournaments on Volleyball, Basketball, Tennis, Table-Tennis, Athletics etc.,
- Appreciating the winners of co-curricular and extra co-curricular activities on College Annual Day in the form of Cash Awards, Medals, Mementoes and Certificates.
- Providing financial assistance to students participating in Workshops, Seminar, conferences and project expos for exhibiting their ideas at other institutions or Universities.
- Supporting the students who participate in Co-Curricular activities, Games and Sports in the form of remedial classes and extra coaching for improving their academics.
- Rendering valuable service by inculcating the habits of social and national responsibilities amongst the students through the NSS unit.

9.7.2 Details of Co-curricular and Extra Co-curricular Activities:

9.7.2.1 Sports, Ground and Facilities:

The Institution has a vast playground with well-equipped gymnasium and sports kits. Students are encouraged to participate in various zonal and inter-zonal tournaments. Students participate in inter college, intra college and University tournaments. Sports day is celebrated with various sports events like Athletics, Long Jump, Volleyball, Table Tennis, Cricket, Chess, and Carom etc. both for staff and students, as part of recreation. Institute has facilities such as Cricket ground, Running track, Volleyball Court, Football ground, Basketball court, Badminton Court. Well-qualified physical directors will manage all sport activities.

- With a motto that a sound mind requires a sound body, the Institution is bringing together the ideas of “Knowledge is Power” and “Health is Wealth” by promoting sports and games to inculcate the spirit of sportsmanship.
- To develop team spirit, leadership qualities and organizing abilities among the students, Sports & Games meets are organized regularly in the college. Students are encouraged to participate and prove their talents by allocating Sports & Games hours in the Time Table.
- The Institution has indoor and outdoor games facilities and well developed playgrounds for Basketball, Volleyball, Shuttle Badminton, Kho-Kho, Kabaddi, etc.

The inter-departmental annual sports meet held on the following events every year:

- Team Events: Football, Basketball, Volleyball, Badminton, Cricket, Table-Tennis, Tug-of-War, Carom and Chess.
- Individual Events: Martial Arts and Athletics
- Athletics: High Jump, Long Jump, Shot- put, Discus & Javelin Throws

Availability of Sports Facilities:

S. No.	Games & Sports Facilities	Number Available	
		Boys	Girls
1	KhoKho Court	1	
2	Basketball Court	1	
3	200m Track	1	
4	100m Track	1	
5	Chess Boards	13	
6	Carrom Boards	12	
7	Volleyball court	1	
8	Tennikoit court	1	
9	Throw Ball Court	1	
10	Kabaddi Court	1	
11	Table Tennis Boards	1	
12	Shuttle Badminton Court	1	
13	Football Court	1	

9.7.2.2 Gymnasium:

The air-conditioned Gymnasium is available for students and faculty. The facility is equipped with a 5-station Multi-Power Trainer for whole-body training. A treadmill, elliptical, dumbbells, barbells and squat station are also available. Weight plates, skipping ropes and gym balls are also available. Students enthusiastically use this facility to maintain their physical fitness. The services at the Gym are kept open before and after the regular college timings to facilitate optimum utilization. The Physical director supervises the functioning and maintenance of the Gym. He also guides the students on having balanced nutrition for physical well-being.



Fig: GYM Infrastructure

9.7.3 Achievements

S.No.	Year	Games	Zonal/Tournament/ Trophy	Placed	No. students participated
1.	2019- 2020	Kabaddi	Zonal	Runner	12
			Swami Vivekananda Trophy	Participation	
2.		Fistball	Zonal	-	5
			Tamil Nadu Fistball Association	5th	
3.		Chess	-	Winner	8
			Zonal Tournaments	2nd	
4.		Badminton	-	1st	6
			Zonal Tournaments	Winner	
5.		Badminton	-	1st	6
			Zonal Tournaments	Winners	
6.		Fencing	-		4
			Tamil Nadu Fencing Association	3rd	

S.No.	Year	Games	Zonal/Tournament/ Trophy	Placed	No. students participated
1.	2022- 2023	Kabaddi	Zonal	Runner up	12
			CM Trophy	Participation	
			Tournament (Saveetha)	Participation	
2.		Basketball	Zonal	4th	12
			CM Trophy	-	
			-	-	
3.		Cricket -	Zonal	Semifinalist	15
			CM Trophy	-	
			(ALPHA)Trophy	2nd	
4.		volleyball	Zonal	Runner up	12
			CM Trophy	-	
			-	-	
5.		Football	Zonal	3rd	18
			CM Trophy	Participation	
			Tournament (Saveetha)	Winners	
6.		Kho-Kho	Zonal	Participation	12
			CM Trophy	-	
			Tournament (Saveetha)	2nd	

Symposiums					
S. No.	Year	Name of the Symposium	College / Institutes	State/ National	Name of the Students
1	2022-2023	MEACON 2023	Velammal Engineering College	National	Bainaboina Nandini B DurgaMaleshwari
2	2021-2022	DYNAMIX 2022	S A Engineering College	National	Prateesh A Junaid Shareef
3	2019-2020	XENIOZ 2019	RMK College of Engineering And Technology	National	Sai Akhilesh Pakanati Hemashika

Cultural Achievement 2019-20						
S. No.	Year	Name of the Award / Medal	Team / Individual	University / State/ National / International	Sports / Cultural	Name of the Students
1	2019-2020	Cooking Without Fire	Individual	State	Cultural	Iyanar
2	2019-2020	T-Shirt Chromaz	Individual	State	Cultural	Moorthy G
3	2019-2020	Face Painting	Individual	State	Cultural	Karna Subash
4	2019-2020	Solo Dance	Individual	State	Cultural	Danush Babu V

9.7.4 NSS (National Service Scheme)

The motto of NSS, “Not Me, But You”, reflects the essence of democratic living and upholds the need for selfless service. NSS helps the students develop appreciation for other people's points of view and also show consideration to other living beings. The philosophy of the NSS is well reflected in the motto, which underlines the belief that the welfare of an individual is ultimately dependent on the welfare of the society on the whole and therefore, the NSS volunteers shall strive for the well-being of the society.

9.7.4.1 Activities of NSS Unit:

NSS UNIT has been organizing several useful programs for the society. The programs like Blood Donation Camp and Free Medical Camp helping towards flood affected people, Health Education Programs, Tree Plantation etc. are successfully conducted.

S.No	Programme	Venue of the Programme
1	Food Distribution	Kannigaipair orphanage home
2	Global warming	JNN Institute of Engineering
3	Teachers Day	JNN Institute of Engineering, Seminar hall - 2
4	Women Safety	JNN Institute of Engineering, Seminar hall - 1
5	Tree Plantation	JNN Institute of Engineering, Campus
6	Food Relief Measures	Kannigaipair
7	Independence Day	JNN Institute of Engineering
8	Youth day and Cultural Programs	JNN Institute of Engineering, Seminar hall - 2

Food Distribution in Orphanage

The entire student in the orphanage was fed adequately, and they were pleased with the arrival of J.N.N. Institutions for food distributions (2019).



Food Distribution in Orphanage

Eye Camp

J.N.N. Institutions hosted the medical camp, which included an eye and dental check-up, blood sugar testing, and a blood donation drive.



Tree Plantation

Our institution is concerned with encouraging students to foster atmospheric purity, so our NSS students organised a tree planting programme and distributed tree seed balls of different species in and around Kannigaipair. Furthermore, we expanded the tree-planting initiative, with over 5000 saplings planted on campus in neighbouring villages.



Food Relief Measures

During the time of floods in chennai, we organised a team to distribute food for the people who suffered and lost their places. We distributed with sufficient food and they were happy with the arrival of J.N.N. Institutions for the distribution of food.



Food Distribution by our Faculties & Students

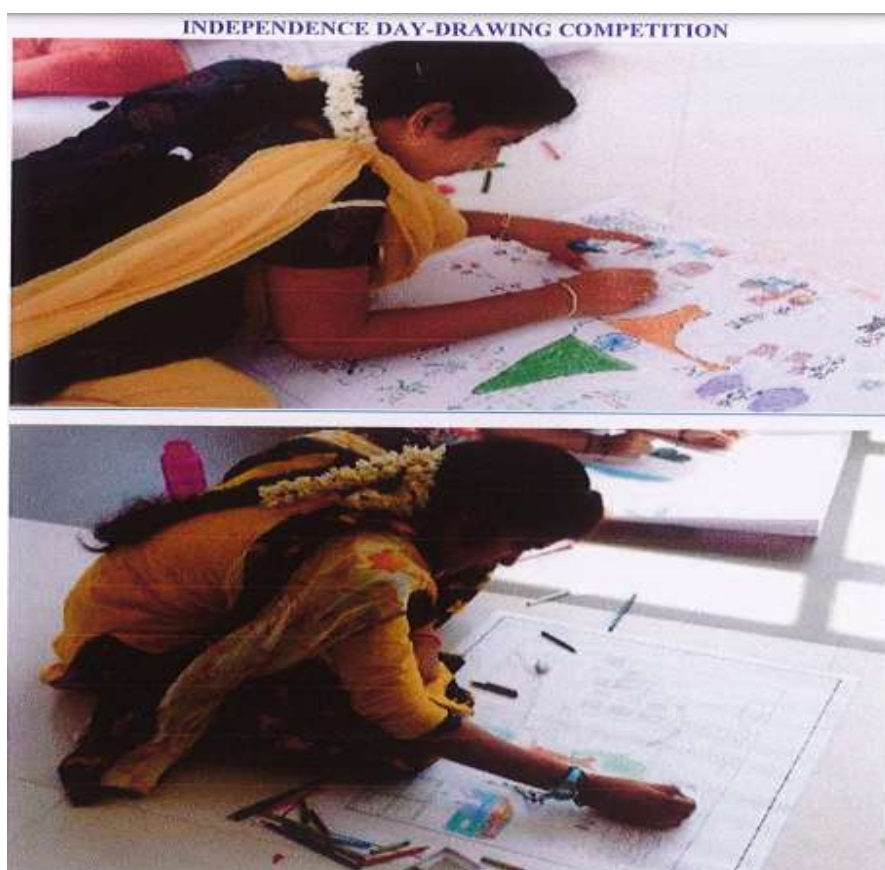




Independence Day

It is a grand event marked by the Chief Guest hosting the flag and a well-practiced march-past by several teams of Security Personnel. Cultural events associated with the independence movement are shown. Finally, we gave out candy to our students.





Drawing Competition

Women Safety

The program has been headed by our honourable chairman with an excellent speech on difficulties faced by women and how technology helps for women safety. Some of the faculties share women issues and different apps VithU, Scream, Alarm, bSafe, Pukar helping women to inform their relatives when they are in problems. That word which has been delivered was initiated as safety measures for their future.



Women Safety

Teacher's Day

Our chairman delivered an excellent speech on Teacher's day, sparking debate about the role of teachers and students in rural education in India. And his speech has inspired and impressed many of the faculty and students.



Teacher's Day Speech

Youth Day

Our college commemorates International Youth day with parades, sporting activities, festivals, seminars, service programmes and displays of young people's accomplishments.



Youth Day Celebration

CRITERION 10	Governance, Institutional Support and Financial Resources	120
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10. GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

10.1. Organization, Governance and Transparency (40)

10.1.1 State the Vision and Mission of the Institute (5)

(Vision statement typically indicates aspirations and Mission Statement states the broad approach to achieve aspirations)

VISION

Lead the transformation of engineering and management learning experience to educate the next generation of innovators and entrepreneurs who want to make the world a better place.

MISSION

- To develop the required resources and infrastructure and to establish a conducive ambience for the teaching-learning process.
- To nurture professional and ethical values in the students and to instil in them a spirit of innovation and entrepreneurship.
- To encourage a desire for higher learning and research in the students and to equip them to face global challenges.
- To provide opportunities for students to learn job-relevant skills to make them industry ready.
- To interact with industries and other organisations to facilitate transfer of knowledge and know-how.

Our Core Values

We, the J.N.N Institute of Engineering community, are committed to:

- **Excellence in Education** – Offer a rigorous, high quality education to all students
- **Student Success** – Place learner needs at the center of our academic and service planning, policies, and programs
- **Education Access** – Provide all qualified students with access to higher education
- **Diversity** – Achieve multicultural understanding as a priority of educational and civic life
- **Integrity** – Operate with fairness, honesty, and the highest ethical standards to sustain a community of trust
- **Civility** – Support a civil, engaging, and respectful campus climate
- **Environmental Sustainability** – Model environmentally responsible and sustainable operations and education

10.1.2 Governing body, administrative Setup, functions of various bodies, service rules, procedures, recruitment and Promotional policies (10)

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.

I GOVERNING BODY

The Governing Body has formulated the policy and has been directing the affairs of the institution. The Governing body conducts a meeting in the month of March every year. The Governing body of JNNIE consists of 13 members with 4 management members. It includes 5 members nominated by the Board of Trustees and nominated members from AICTE, DOTE, Anna University and Principal of the institution as member secretary and two faculty members. The governing body **has been conducting a meeting once a year** to assess the performance of the institution and to discuss future developmental activities.

Functions of the Governing Body

The Governing Body shall:

- Guide the college while fulfilling the objectives of the college.
- Institute scholarships, fellowships, studentships, medals, prizes and certificates on the recommendations of the Academic Council
- Approve new programmes of study leading to degrees.
- All recruitments of Teaching Faculty/Principal shall be made by the Governing Body as applicable in accordance with the policies laid down by the UGC and State Government from time to time.
- To approve annual budget of the college before submitting the same at the UGC.
- Perform such other functions and institute committees, as may be necessary and deemed fit for the proper development of the college

S. No	Name of the Member	Position
1	Mr. S Jayachandran	Chairman
2	Mrs. Usha Jayachandran	Chairperson
3	Mr. Naveen Jayachandran	Vice-Chairman
4	Ms. Nandhini Jayachandran	Representing Management
5	Prof Dr. Krishnan Baskar Director, IIIT, SENAPATHY, Manipur	Representing Educationist
6	Dr. S.Valli Professor and Head, Department of CSE GEG campus, Anna University, Chennai – 600 025	Nominee of the Affiliating University
7	Mr. M.Vasu Advisor, Kodambakkam, Chennai	Representing Educationist
8	Dr. S.Gopi Assistant Director - Planning Directorate of Technical Education (DOTE) 53, Sardar Patel Road, Guindy, Chennai	Nominee of the State Government
9	Mr. A.R.Vinod Kumar, CEO, King Foods, Chennai	Representing Industrialist
10	Dr. K.Ganesan Principal, JNNIE	Member Secretary
11	Dr. D.Joseph Jeyakumar, Professor Department of Electronics and Communication Engineering, J.N.N Institute of Engineering	Senior Faculty Member
12	Shri. P.G.Seetharam, Assistant Professor Department of Agricultural Engineering, J.N.N Institute of Engineering	Senior Faculty Member
13	Dr. T.Dinesh Controller of Examinations J.N.N Institute of Engineering	Senior Faculty Member



J.N.N INSTITUTE OF ENGINEERING

AUTONOMOUS

NAAC 'A' Grade | Approved by AICTE | Affiliated to Anna University

90, Ushaa Gardern, Kanigaipair, Chennai – Periyapalayam Hwy, Chennai - 601 102

Ref: Letter/GBM/AGENDA/2023-24/01

Date 14-06-2023

AGENDA FOR 16th GOVERNING BODY MEETING

Date: 15-06-2023, Time: 11.30 a.m.

Venue: Board Room

Welcome address by Dr. K.Ganesan, Principal, J.N.N. Group of Institutions, Chennai

Item No	Agenda Item	Annexure
16.01a	Opening Remarks - Chairman, Governing Council	
16.01b	Approval of 16th GBM agenda	
	A. General	
16.02a	To Confirm the minutes of the earlier meeting (15th GCM) held on 29-07-2022 at 10.00 a.m.	I
16.02b	To consider the report on the action taken on the recommendations and decisions taken in the last Governing Council Meeting. Action taken report by principal	II
16.02c	Report on Future Plan of Institution Development - Report by Ms. Naveen Jayachandran, Vice Chairman	III
16.02d	Report by the Principal on the progress of the College during the period June 2022 - May 2023	IV
16.03	To consider and ratify the members nominated for the Academic Council by the Governing Body	V
16.04	To Consider and Approve the MOM: The Resolutions and Regulation Passed in 1 st Meeting of the Academic Council and BOS	VI
	B. ADMINISTRATION	
16.05a	To peruse the role of the administration of the institute under the Autonomous Status Autonomous was sanctioned By UGC: UGC's Letter No.F.22-1/2022(AC) dated 10.10.2022. By Anna University: Letter No. 5417/AU/CAC/Autonomous/2022 dated 23.11.2022	VII
16.05b	New Teaching Learning process under Autonomous systems Curriculum and syllabus devolvement for all UG/PG programmes,	VIII

	New autonomous Regulation 2022	
16.05c	Establishment of COE office and appointment of COE	
16.05d	Change of vision and mission statements of the CSE department	IX
16.06	C. INCOME EXPENDITURE STATEMENT/ BUDGET	
16.06a	Approval of Audited statement of Income and expenditure for the financial year 2021-2022	X
16.06b	Approval of minutes of FCM	XI
16.07	D. APPROVAL OF THE PERSPECTIVE PLAN	
16.07a	To peruse and approve the perspective plan of the institution extension - Extension of AICTE approval - Extension of ANNA University affiliation approval - Changes in students intake for 2023-24	
16.07b	To peruse and approve the perspective plan of the institution for further development - NBA for CSE dept. - NBA for ECE dept. - Proposal for applying for permanent affiliation to Anna University	
16.08	E. ADMISSIONS	
	To Peruse and approve the UG/PG student admission in the academic year 2022-2023 (Note on Department-wise Admission status)	XII
16.09	F. INFRASTRUCTURE	
16.09a	To peruse and approve the infrastructure development - Girls hostel third floor: built-up area 5050 sq ft. - Sports Arena at Rajalakshmi Ammal block - Main Approach Road Paver block laying - A/C indoor Auditorium at AAB topfloor: 16900 sq ft. - Open air theatre Capacity in front of AAB: 1200 seating capacity 11000 sq ft. TECH HUB at Rajalakshmi Ammal Block - Apple I-Mac lab with 25 systems - Lab Establishment (Robot for RA lab. Electrical/Electronic labs. Agricultural Engg lab. Biomedical Engg lab) - Establishment of Centre of excellence-IOT - Relocation of IQAC room / COE office	XII
16.09b	To ratify the list of equipment/software procured since last meeting of the Governing Council. Purchase of - Examination Management Software - Colour Printer for Mark sheet and certificate printing	XIII

	3. Xerox machine 4. Furniture items/computers/books	
16.10	G. FACULTY/STAFF	
16.10a	To record and ratify the following faculty/staff members who are appointed in various posts on various dates in our institute	XIV
16.10b	To record and ratify the following faculty/staff members resignations	XV
16.10c	Faculty activities and achievements	XVI
16.10d	Current Staff and faculty strength: 1:20	
16.11	H. RESEARCH AND DEVELOPMENT	
	To peruse and review progress in R&D work: The incentive plan	XVII
16.12	I. ENTREPRENEURSHIP DEVELOPMENT CELL	
	To peruse the activities of the Entrepreneurship Development Cell	XVIII
16.13	J. NCC, NSS EVENTS	
	To peruse and approve the proposal to establish NCC in the institution	
16.14	N. STUDENTS	
16.14a	Students' activities and achievements	XVIII
16.14b	Arranging institution Extension activities NSS and Unnath Bharath Abhiyan	
16.15	Q UNIVERSITY EXAM RESULTS	
	To record the results of University examinations held during April/May/June. 2022	XIX
16.16	R. PLACEMENT	
	To report on the placement of students for the year 2022-23	XX
16.17	Any other item with the permission of the Chair.	
16.18	Vote of Thanks by Dr. K.Joseph Jayakumar	

Chairman,
Governing Body



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Ref: Letter/GBM/attendance/2023-24/01

Date 15-06-2023

List of Members Present

S.No	Name	Address	Signature
1	Shri S.Jayachandran, Chairman	Founder Chairman, J.N.N Group of Institutions	
2	Shri. Usha Jayachandran, Trustee	Chairperson, J.N.N Group of Institutions	
3	Shri. Naveen.Jayachandran, Representing Management	Vice-Chairman, J.N.N Group of Institutions	
4	Ms. Nandini Jayachandran, Representing Management	Director, J.N.N Group of Institutions	
5	Shri. M Vasu, Educationist	Advisor, J.N.N Institute of Engineering.	
6	Prof.. Dr. Krishnan Basker, Educationist	Director, IIIT, Manipur	
7	Mr. A R Vinod Kumar, Industrialist	CEO, King Foods, Chennai	
8	Dr. S Valli, Nominee, Anna University	Professor and Head, Dept. of CSE, CEG campus, Anna University	
9	Dr. S Gopi, State Government Nominee.	Assistant Director, Planning, DOTE	
10	Dr. D. Joseph Jeyakumar, Senior faculty Member	Professor, ECE Department, J.N.N Institute of Engineering	
11	Mr. P G Seetharam, Senior faculty Member	Assistant Professor, Department of Agricultural Engineering, J.N.N Institute of Engineering	
12	Dr. T Dinesh, Senior faculty Member	Controller of Examinations J.N.N Institute of Engineering	
13	Dr. K Ganesan, Member Secretary	Principal J.N.N Institute of Engineering	
14	Dr. P Rajalakshmi, Special Invitee	Principal J.N.N. Arts & Science Women's College	



90, Ushaa Garden, Kannigaipair, Chennai Periyapalayam Highway, Tamil Nadu 601102

**Action Taken Report for the 15th GOVERNING COUNCIL MINUTES OF MEETING
HELD ON 27th July 2022. AT 10.30 AM**

Item No. 3 – Intake Details

Council ratified the applications submitted to AICTE and Anna University for the Reduction of the Intake for the academic year 2022-23 and starting of the new course B.E. Computer Science Engineering (Cyber Security).

- i. B.E – Agriculture Engineering - Reduction in Intake from 60 to 30.
- ii. B.E – Biomedical Engineering - Reduction in Intake from 60 to 30.

New Course to be applied for AY 2022-23

- i. B.E. Computer Science Engineering (Cyber Security) with an applied intake of 60.

The AICTE and Anna University has accepted the reduction of intake B.E – Agriculture Engineering, B.E – Biomedical Engineering and approved the New Course B.E. Computer Science Engineering (Cyber Security) in the AY 2022-23 with an intake of 60

Item No. 4 – Autonomous Status

The Governing Body recommended the head of the institute to follow up on the status of Autonomous application and to enhance the facilities for Autonomous.

The UGC Autonomous Inspection held in September, has conferred autonomous status in the Month of October 2022. Anna University Issued the Order by November 2022, Accordingly Board of Studies, Academic Council Meeting, and Finance Committee meeting were conducted.

Item No. 5 – IQAC

Council reviewed the activities of the Internal Quality Assurance Cell (IQAC)

The IQAC was revamped according to the Autonomous requirements.

Item No. 6 – Laboratory Requirements

Council reviewed the Required Equipment for the Laboratories for the New Courses and Approved the Laboratories requirements for the academic year 2022-23.

New Laboratories were established for the new courses accordingly.

Item No. 7 – Placement statistics

The principal presented the report of placement records of 2021 passing out students. The committee appreciated the placement activities that showed the improvement in the average salary of the students.

More Value added Courses were conducted to enhance the skills of the Final Year Students. Training relevant to placement was arranged for third-year and fourth-year students for 15 days at the beginning of the 8th semester and 6 sem. respectively using an external training agency in addition to internal trainers

Item No. 8 – Budget Members reviewed the budget proposal and utilization for the academic year 2020-2021 and the members appreciated the management for sanctioning the requested amount for improving the infrastructure of the institution to improve the overall performance of the students and faculty members. Members approved the annual budget for the academic year 2022-2023.
Budget Utilization is reviewed and encouraged to use all the allocated funds effectively.
Item No. 9 – Research & Development To Report on Research & Development the brief background on the research activities carried out by the institution was discussed. Committee appreciated the efforts carried out by the faculty members in publishing papers in various reputed journals. Members reviewed the increase in citations and h-index of the institution in Google Scholar. The Scopus Members advised to improve the quality of publication and they asked to analyze the gap to get the NIRF ranking. Members were advised to improve the number of research publications through student's project works (minor and major project).
The incentive scheme for submitting the research proposal and patent application was also announced
Item No. 10 – Others Any other items with the approval of the Chairman The Chairman of Governing Council highlighted the following points: • Setting up of specific goals and following time-bound implementation so as to achieve excellence on par with reputed institutions. • Analyze the gap and work towards getting NIRF rank. • Improve the research publications by involving the students and giving more importance to student's research work.
The faculty members are advised to submit two SCI/SCIE/Scopus journal papers for publication per year for claiming the yearly increment We are adding faculty members having experience and expertise to carry out research and consultancy projects. An incentive program is devised to motivate faculty members to improve their publications and participation in conferences.



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Date 15-06-2023

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4	Ms. Nandini Jayachandran, Representing Management	Director, J.N.N Group of Institutions	
5	Shri. M Vasu, Educationist	Advisor, J.N.N Institute of Engineering.	online
6	Prof.. Dr. Krishnan Basker, Educationist	Director, IIIT, Manipur	online
7	Mr. A R Vinod Kumar, Industrialist	CEO, King Foods, Chennai	
8	Dr. S Valli, Nominee, Anna University	Professor and Head, Dept. of CSE, CEG campus, Anna University	
9	Dr. S Gopi, State Government Nominee.	Assistant Director, Planning, DOTE	
10	Dr. D. Joseph Jeyakumar, Senior faculty Member	Professor, ECE Department, J.N.N Institute of Engineering	
11	Mr. P G Seetharam, Senior faculty Member	Assistant Professor, Department of Agricultural Engineering, J.N.N Institute of Engineering	
12	Dr. T Dinesh, Senior faculty Member	Controller of Examinations J.N.N Institute of Engineering	
13	Dr. K Ganesan, Member Secretary	Principal J.N.N Institute of Engineering	
14	Dr. P Rajalakshmi, Special Invitee	Principal J.N.N. Arts & Science Women's College	



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16th GOVERNING COUNCIL MINUTES OF MEETING HELD ON 15th JUNE 2023. AT 11.30 AM

Minutes of Governing Council Meeting

Name and Address of Member	Position
Mr. JAYACHANDARAN S NO.2, OLD. NO. 24, Q-BLOCK, 17 STREET, ANNA NAGAR WEST – CHENNAI, - 600040	Chairman
Mrs. USHA JAYACHANDRAN NO.2, OLD. NO. 24, Q- BLOCK, 17TH STREET, ANNA NAGAR WEST – CHENNAI -600040	Chairperson
Mr. NAVEEN JAYACHANDRAN NO. 2, OLD NO.24, Q- BLOCK, 17TH STREET, ANNA NAGAR WEST – CHENNAI – 600040	Vice-Chairman
Ms. NANDHINI JAYACHANDRAN NO. 2, OLD NO. 24, Q- BLOCK, 17TH STREET - ANNA NAGAR WEST, CHENNAI - 600040	Representing Management
Dr. BASKAR K. Director, IIIT Manipur. (former Vice-Chancellor of Manonmaniam Sundaranar University, Tirunelveli)	Representing Educationist
Mr. VASU M Advisor KODAMBAKKAM, CHENNAI - 600024	Representing Educationist
Dr. S VALLI, Professor and Head, Department of Computer Science and Engineering, GEG Campus, Anna University, Chennai – 600 025	Nominee Anna University

Dr. S GOPI, Assistant Director, Planning, DIRECTORATE OF TECHNICAL EDUCATION (DOTE), 53, SARDAR PATEL ROAD, GUINDY, CHENNAI – 600 025.	Nominee of the State Government
Mr. A R VINOD KUMAR CEO, KING FOODS, CHENNAI	Representing Industrialist
Dr. T DINESH, Controller of Examinations J.N.N INSTITUTE OF ENGINEERING	Faculty Member
Dr. D. JOSEPH JEYAKUMAR, PROFESSOR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, J.N.N INSTITUTE OF ENGINEERING	Faculty Member
Mr. P G SEETHARAM ASSISTANT PROFESSOR DEPARTMENT OF AGRICULTURAL ENGINEERING, J.N.N INSTITUTE OF ENGINEERING	Faculty Member
Dr. P RAJALAKSHMI Principal J.N.N Arts and Science Women's College	Special Invitee
Dr. GANESAN K Principal J.N.N INSTITUTE OF ENGINEERING	Member Secretary

Welcome Address Dr. GANESAN K, Principal, JNNIE welcomed the Members of the Governing Council.

Principal gave a brief overview of JNNIE with respect to the programmes offered, NIRF Ranking, NAAC and NBA Accreditations, Autonomous status, Researcher Centres, Sports, Infrastructure, and other facilities.

Item No. 16.01b

Approval of 16th GBM agenda

Council ratified the 16th GBM agenda.

Item No. 16.02a

To Confirm the minutes of the earlier meeting (15th GCM) held on 29-07-2022 at 10.30 a.m.

Council ratified the minutes of the earlier meeting (15th GCM) held on 29-07-2022 at 10.30 a.m

Item No. 16.02b

To consider the report on the action taken on the recommendations and decisions taken in the last Governing Council Meeting.

Council ratified the action taken on the recommendations and decisions taken in the last Governing Council Meeting.

Item No. 16.02c

Report on Future Plan of Institution Development.

The Council appreciated the Future Plan towards the development of the Institution Development.

Item No. 16.02d

Report by the Principal on the progress of the College during the period June 2022 - May 2023

The Council appreciated about the various progress of the College during the period June 2022 - May 2023.

Item No. 16.03

To consider and ratify the members nominated for the Academic Council by the Governing Body

It is resolved to approve the nomination of the following members for the Academic Council

Item No. 16.04

To Consider and Approve the MOM: The Resolutions and Regulation Passed in 1st Meeting of the Academic Council and BOS

Resolved to approve the minutes of the first meeting of the Academic Council, BOS

Item No. 16.05a

To peruse the role of the administration of the institute under the Autonomous Status
Autonomous was sanctioned

By UGC: UGC's Letter No.F.22-1/2022(AC) dated 10.10.2022.

By Anna University: Letter No. 5417/AU/CAC/Autonomous/2022
dated 23.11.2022

The Governing Body congratulated the Chairperson, the Management Members, the Principal and all the Faculty members for their persistent efforts in attaining the Autonomous Status for J.N.N Institute of Engineering.

Item No. 16.05b New Teaching Learning process under Autonomous systems.

Resolved to approve Regulations, Curriculum and Syllabi for various courses of UG and PG Programmes offered in the College which was approved by the respective Board of Studies of all the departments and the Academic Council for the Academic year 2022 – 2023.

16.05c Establishment of COE office and appointment of COE.

Resolved to approve the establishment of COE Office and appointment of Dr. T DINESH, Professor & Head, Department of Robotics and Automation as the Controller of Examinations with effect from 11.01.2023.

Item No. 16.05d Change of vision and mission statements of the CSE department

Council ratified and approved the new vision and mission statements of the CSE department.

Item No. 16.06 C. INCOME EXPENDITURE STATEMENT/ BUDGET

Council ratified and approved Income Expenditure Statement/ Budget 2023- 24, The council also appreciated that there is a continuous improvement in the establishment of laboratory, R&D and Library in the past Income Expenditure Statement.

Item No. 16.06a

Approval of Audited statement of Income and expenditure for the financial year 2021-2022

Council ratified and approved Audited statement of Income and expenditure for the financial year 2021-2022 for the college.

Item No. 16.06b Approval of minutes of FCM

It is resolved to approve the minutes of FCM held on 06.01.2023.

Item No. 16.07 D. APPROVAL OF THE PERSPECTIVE PLAN

It is resolved to approve the perspective plan of the institution.

Item No. 16.07a

To peruse and approve the perspective plan of the institution extension

- Extension of AICTE approval
- Extension of ANNA University affiliation approval
- Changes in student's intake for 2023-24

It is resolved to approve the perspective plan of the institution.

Item No. 16.07b

To peruse and approve the perspective plan of the institution for further development

- NBA for CSE dept.
- NBA for ECE dept.

Proposal for applying for permanent affiliation to Anna University.

Governing Body appreciated the efforts taken regarding the NBA accreditation for the eligible departments such as Computer Science and Engineering and Electronics and Communication Engineering.

The Council asked to initiate the necessary action for the application for the permanent affiliation for the eligible courses.

Item No. 16.08 E. ADMISSIONS

To Peruse and approve the UG/PG student admission in the academic year 2022-2023

It is resolved to approve the UG/PG student admitted in the academic year 2022-2023.

Council has decided to concentrate on Admission process for the academic year 2023-24 through reputed consultants and strengthen the admission.

Item No. 16.09 F. INFRASTRUCTURE

16.09a

To peruse and approve the infrastructure development

1. Girls hostel third floor: built-up area 5050 sq ft.
2. Sports Arena at Rajalakshmi Ammal block
3. Main Approach Road Paver block laying
4. A/C indoor Auditorium at AAB topfloor: 16900 sq ft.
5. Open air theatre Capacity in front of AAB: 1200 seating capacity
6. 11000 sq ft. TECH HUB at Rajalakshmi Ammal Block
7. Apple I-Mac lab with 25 systems
8. Lab Establishment (Robot for RA lab. Electrical/Electronic labs. Agricultural Engg lab. Biomedical Engg lab)
9. Establishment of Centre of excellence-IOT
10. Relocation of IQAC room / COE office

Council ratified and approved the infrastructure development of the institution.

Item No. 16.09b To ratify the list of equipment/software procured since last meeting of the Governing Council.

Purchase of

1. Examination Management Software
2. Colour Printer for Mark sheet and certificate printing
3. Xerox machine
4. Furniture items/computers/books

Council ratified and approved equipment/software procured.

Item No. 16.10 G. FACULTY/STAFF

16.10a

To record and ratify the following faculty/staff members who are appointed in various posts on various dates in our institute.

Council ratified and approved faculty/staff members who are appointed in various posts on various dates in our institute till date.

Item No. 16.10b To record and ratify the following faculty/staff member's resignations.

Council ratified and approved faculty/staff member's resignations in various posts on various dates in our institute till date.

Item No. 16.10c Faculty activities and achievements

Council ratified and approved Faculty activities and achievements

16.10d Current Staff to student strength: 1:20

Council ratified and approved Current Staff to student strength 1:20.

Item No. 16.11 H. RESEARCH AND DEVELOPMENT

To peruse and review progress in R& D work. The incentive plan.

Council ratified and approved the current R& D work of the institution. The Council appricated the management for the announcement of the incentive plan to the faculty.

Item No. 16.12 I. ENTREPRENEURSHIP DEVELOPMENT CELL

To peruse the activities of the Entrepreneurship Development Cell

Council ratified and approved the activities of the Entrepreneurship Development Cell.

Item No. 16.13 J. NCC, NSS EVENTS

To peruse and approve the proposal to establish NCC in the institution

Council ratified and approved the proposal to establish NCC in the institution.

Item No. 16.14 N. STUDENTS

16.14a Students' activities and achievements

Council ratified and approved Students' activities and achievements held during the academin year 2022-23.

Item No. 16.14b

Arranging institution Extension activities NSS and Unnath Bharath Abhiyan

The council appreciated the institution for encouraging the students getting involved in Extension activities NSS and Unnath Bharath Abhiyan.

Item No. 16.15 Q UNIVERSITY EXAM RESULTS

To record the results of University examinations held during April/May 2022 and Nov / Dec 2022.

The Controller of Examination Dr. T Dinesh, Presented the results for the University examinations held during April/May 2022 and Nov / Dec 2022. The council ratified and approved the results. The council has suggested to conduct remedial special classes for the students for their improvement in results.

Item No. 16.16 R. PLACEMENT

To report on the placement of students for the year 2022-23.

Council ratified and approved the placement of students for the year 2022-23.

Item No. 16.17 Any other item with the permission of the Chair.

Dr. S Gopi, State Government Nominee suggested to include more Choice based subjects to be included from apartment from the Anna University Curriculum and Syllabus for all the UG and PG programmes.

Stream vise placemats training can be arranged.

A septate faculty can be nominated for concentrating National level hackathon events.

An Idea Lab can be established for students in an area of 1500 Sq feet, to create a product from their idea.

Answer scripts can be shown to the students to verify the marks before publication of end semester examination results.

Its always important on how the institution can effectively use the internships, mini and major project works, concomitancy and collaborative research.

Dr. Krishnan Basakar, Director, IIIT Manipur suggested pass percentage can be improved by giving more attention to dull students in terms of mentoring, effective special coaching.

Summer coaching classes will also support the students to score more marks. Spending more on quality aspects will support the institutions growth in long run.

New and Emerging courses can be introduced in the curriculum.

Shri. M Vasu, Advisor suggested to concentrate more on research activities and research Publications.

Item No. 16.18 Vote of Thanks by Dr. K.Joseph Jayakumar

The meeting ended with a vote of thanks to the Chairman & Members for active participation in the entire proceedings of the meeting. The meeting came to its close at 12:00 PM.


Principal


Chairman



J.N.N INSTITUTE OF ENGINEERING

NAAC 'A' Accredited. ISO 9001:2015 Certified Institution.
Approved by AICTE. Affiliated to Anna University, Chennai.

90, Ushaa Garden, Kannigaipair, Chennai Periyapalayam Highway, Tamil Nadu 601102

15th GOVERNING COUNCIL MINUTES OF MEETING HELD ON 29th July 2022. AT 10.30 AM

Minutes of Governing Council Meeting

Name and Address of Member	Position
Mr. JAYACHANDARAN S NO.2, OLD. NO. 24, Q-BLOCK, 17 STREET, ANNA NAGAR WEST - CHENNAI, - 600040	Chairman
Mrs. USHA JAYACHANDRAN NO.2, OLD. NO. 24, Q- BLOCK, 17TH STREET, ANNA NAGAR WEST - CHENNAI -600040	Chairperson
Mr. NAVEEN JAYACHANDRAN NO. 2, OLD NO.24, Q- BLOCK, 17TH STREET, ANNA NAGAR WEST - CHENNAI - 600040	Vice-Chairman
Ms. NANDHINI JAYACHANDRAN NO. 2, OLD NO. 24, Q- BLOCK, 17TH STREET - ANNA NAGAR WEST, CHENNAI - 600040	Representing Management
Dr. BASKAR K. Director, IIIT Senapati, Manipur. (former Vice-Chancellor of Manonmaniam Sundaranar University, Tirunelveli and THE DIRECTOR - CTDI AND COORDINATOR)	Representing Educationist
Dr. K Shanmuga Sundaram. Professor, Department of Mechanical Engineering Anna University Chennai - 600 025.	Nominee of the Affiliating University
Mr. VASU M Advisor KODAMBAKKAM, CHENNAI - 600024	Representing Educationist

REGIONAL OFFICER & DEPUTY DIRECTOR SOUTHERN REGIONAL OFFICE (SRO) SHASTRI BHAWAN, 26 HADDOWS ROAD, CHENNAI-600006	Nominee of the All India Council for Technical Education
COMMISSIONER DIRECTORATE OF TECHNICAL EDUCATION (DOTE), 53, SARDAR PATEL ROAD, GUINDY, CHENNAI - 600 025.	Nominee of the State Government
Mr. A R VINOD KUMAR CEO, KING FOODS, CHENNAI	Representing Industrialist
Dr. GANESAN K Principal 13 SIVA GARDEN, SINGANALLUR, COIMBATORE - 5	Member Secretary
Dr. D. JOSEPH JEYAKUMAR, PROFESSOR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, J.N.N INSTITUTE OF ENGINEERING	Faculty Member
Mr. M MURALI ASSISTANT PROFESSOR DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, J.N.N INSTITUTE OF ENGINEERING	Faculty Member

Welcome Address Dr. GANESAN K, Principal, JNNIE welcomed the Members of the Governing Council. Our Chairman Sri. S Jayachandran, introduced our Principal Dr. GANESAN K briefed on the appointment as the Principal w.e.f. 21st March, 2022, sought the ratification of the appointment from the Council members and the same was ratified.

Principal gave a brief overview of JNNIE with respect to the programmes offered, NIRF Ranking, NAAC and NBA Accreditations, Autonomous status, Researcher Centres, Sports, Infrastructure, and other facilities.

Item No. 1 - Action Taken Report

Action Taken Report with respect to the suggestions given by the Members of the Council during the meeting that was held on 03th February 2022 was presented.

Approved by the Members.

Item No. 2 – Institutional Details

Principal presented the activities carried out by the Institute during the period under the report.

- (a) Programmes Offered by JNNIE A brief on the list of programmes offered by the institute along with the respective intake was presented by the Principal.

Item No. 3 – Intake Details

Council ratified the applications submitted to AICTE and Anna University for the Reduction of the Intake for the academic year 2022-23 and starting of the new course B.E. Computer Science Engineering (Cyber Security).

- i. B.E – Agriculture Engineering - Reduction in Intake from 60 to 30.
- ii. B.E – Biomedical Engineering - Reduction in Intake from 60 to 30.

New Course to be applied for AY 2022-23

- i. B.E. Computer Science Engineering (Cyber Security) with the Applied intake of 60.

The council has also approved to release the required funds for the establishment of the New Course B.E. Computer Science Engineering (Cyber Security).

Item No. 4 – Autonomous Status

The Governing Body recommended the head of the institute to follow-up the status of Autonomous application and to enhance the facilities for Autonomous.

Item No. 5 – IQAC

Council reviewed the activities of the Internal Quality Assurance Cell (IQAC)

Item No. 6 – Laboratory Requirements

Council reviewed the Required Equipment's for the Laboratories for the New Courses and Approved the Laboratories requirements for the academic year 2022-23.

Item No. 7 – Placement statistics

Principal, presented the report of placement records of 2021 passing out students. The committee appreciated the placement activities that showed the improvement in the average salary of the students.

Item No. 8 – Budget

Members reviewed the budget proposal and utilization for the academic year 2020-2021 and the members appreciated the management for sanctioning the requested amount for

Improving the infrastructure of the institution to improve the overall performance of the students and faculty members. Members approved the annual budget for the academic year 2022-2023.

Item No. 9 – Research & Development

To Report on Research & Development the brief background on the research activities carried out by the institution was discussed. Committee appreciated the efforts carried out by the faculty members in publishing papers in various reputed journals. Members reviewed the increase in citations and h-index of the institution in the Google Scholar. The Scopus Members advised to improve the quality of publication and they asked to analyze the gap to get the NIRF ranking. Members advised to improve the number of research publications through student's project works (minor and major project).

Item No. 9 – Others

Any other items with the approval of the Chairman

The Chairman of Governing Council highlighted the following points:

- Setting up of specific goals and following time bound implementation so as to achieve excellence on par with reputed institutions.
- Analyze the gap and work towards to get NIRF rank.
- Improve the research publications by involving the students and give more importance to student's research work.

The meeting ended with a vote of thanks to the Chairman & Members for active participation in the entire proceedings of the meeting. The meeting came to its close at 12:00 PM.


Principal


Chairman

Fig. 10.1.2.1 Governing Body-Minutes of Meeting

II ADMINISTRATIVE SETUP

Established in 2005 in the fond memory of his beloved mother, Smt. Alamelu Ammaal, by the visionary and multifaceted Shri. S. Jayachandran, Alamelu Ammaal Educational Trust is a well-known name in the educational arena of Tamil Nadu. The Trust, which runs a number of educational institutions under the name 'J.N.N Institutions,' which has remained strongly dedicated to delivering quality education to the future of the nation, since the very beginning of its establishment.

The Institution has an enthusiastic and visionary Management. Sri S.Jayachandran is the Chairman, Mrs. Usha Jayachandran is acting as Chairperson, Mr. Naveen Jayachandran M.S is the vice-chairman, who is acting as a driving force of our J.N.N Institute of Engineering

To ensure the effective implementation of the Institution's policies and plans, the institution formed its regulatory bodies like (1) Governing Body, (2) Academic Council, (3) BOS, (4) Finance Committee and (5) Internal Quality Assurance Cell (IQAC) and Offices of Principal, Head of the Department, Training and Placement, CoE, EDC with the support from Technical and Non-technical staff for the smooth functioning of the organization.

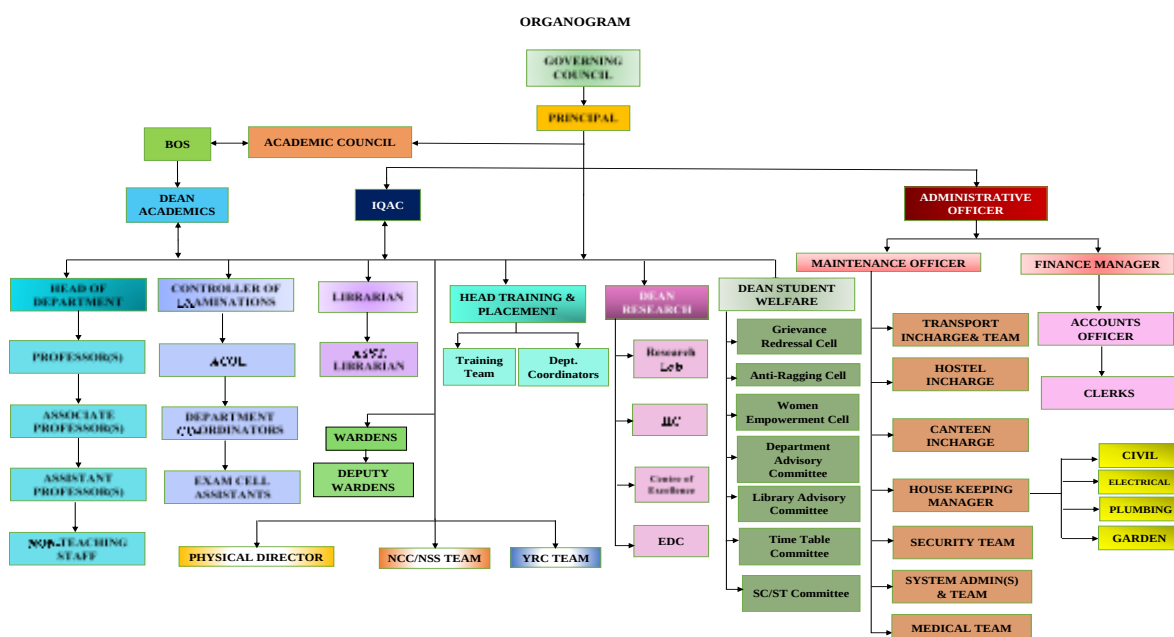


Fig. 10.1.2.2 Organization chart for J.N.N Institute of Engineering

Academic Council

S. No	Name of the Academic Body	Academic Council	
	Core Activity	- To take periodical review of the activities of the Departments / Centers and to take appropriate action with a view to maintaining and improving standards of instruction. - To maintain proper standards of the examination - To promote research within the institute and acquire reports on such research from time to time for further guidance and advice - To prescribe measures for departmental coordination - Ratifies and resolves the minutes of Board of Studies	
	Name of the Member	Designation	Position
1	Dr. K Ganesan	Principal J.N.N Institute of Engineering	Chairperson
2	Dr. A Jebaraj Ratnakumar	HOD, CSE J.N.N Institute of Engineering	Member
3	Dr. D Joseph Jeyakumar	HOD, ECE J.N.N Institute of Engineering	Member
4	Mr. G Ashok	HOD i/c, BME J.N.N Institute of Engineering	Member
5	Dr. T Dinesh	HOD, Robotics and Automation J.N.N Institute of Engineering	Member
6	Mr. P G Seetharam	HOD i/c, Agricultural Engineering J.N.N Institute of Engineering	Member
7	Dr. N Venkatesvara Rao	HOD, Artificial Intelligence and Data Science J.N.N Institute of Engineering	Member
8	Mrs. P Yasodha	HOD i/c, MBA J.N.N Institute of Engineering	Member
9	Dr. S Shalini	Coordinator, Humanities and Science J.N.N Institute of Engineering	Member
Nominated by Anna University			
10	Dr. G Subashini	Professor, R&AE PSG College of Technology	Member

		Coimbatore-641004	
11	Dr. K S Easwarakumar	Professor, CSE, CEG campus, Anna University Chennai	Member
12	Dr. S Poonguzhali	Professor, Centre for Medical Electronics, CEG campus, Anna University, Chennai	Member
Nominated by Governing Body			
13	Mr. Srivastan Sridhar	Cofounder & CEO Skydo Technologies Private Limited	Member
14	Dr. K Manivannan	Director-Industry & Academia Relations, Vinayaka Mission's Research Foundation (Deemed to be University)	Member
15	Dr. K Shanmuga Sundaram	Professor/Director AU-FRG, CEG Campus, Anna University, Chennai	Member
16	Dr. Suresh Ramasamy Kannaiyan	Founder and CEO, LPP Learning Technology Solutions, Uppilipalayam, Coimbatore	Member
Senior Faculty Members			
17	Mr. M Murali	Asst. Professor, Department of BME, J.N.N Institute of Engineering	Member
18	Mrs. N Malathy	Asst. Professor, Department of ECE, J.N.N Institute of Engineering	Member
19	Mrs. V Tharakeswari	Asst. Professor, Department of H&S, J.N.N Institute of Engineering	Member
20	Dr. T Srihari	Professor, Department of ECE, J.N.N Institute of Engineering	Member
21	Mrs. Ayisha Begum	Placement Officer J.N.N Institute of Engineering	Member
22	Mr. M Mariselvam	Asst. Professor, Department of ECE, J.N.N Institute of Engineering	Member
	Frequency of the Meeting	Once in a semester	

ACADEMIC ADVISORY COMMITTEE

Name of the Academic Body	Academic Advisory Committee	
Core Activity	- Monitoring the programs of internal reviews of learning and teaching - Advise on priorities, directions, and new frontiers for education, research, and outreach. - Suggest strategies that might be employed to achieve the College's goals. - Offer guidance to the College on existing and proposed academic programs and research. - Propose ways to maintain strong relations with the community and to establish effective institutional partnership. - Help in sustaining and enhancing the national reputation of the College - Provide feedback to the College on the status of alumni in the job market. - Recommend ways to improve and develop the training, and skills programs offered by the college. - Provide a connection to potential internships/training opportunities for students, employment opportunities for graduates, and to potential research and service opportunities for the faculty.	
S.No.	Name of the Member	Designation
1	Dr. K Ganesan, Principal	Chair Person
2	Dr. A Jebaraj Ratnakumar, HOD-CSE	Member- Faculty
	Dr. N Venkatesvara Rao, HOD- AI & DS	Member- Faculty
	Dr. D. Joseph Jayakumar, HOD- ECE	Member- Faculty
	Mr. G. Ashok, HOD i/c – BME	Member- Faculty
	Mr. P.G. Seetharam, HOD i/c- Agricultural Engineering	Member- Faculty
	Dr. T Dinesh, HOD- R&A	Member- Faculty
	Mrs. P Yasodha, HOD i/c- MBA	Member- Faculty
	Mrs. N Malathy, Asst. Professor-ECE	Member- Faculty
	Dr. T Srihari, Professor, ECE	Member- Faculty
	Mr. M Mariselvam, Asst. Professor-ECE	Member- Faculty
3	Ms. Joan Fenila J, Agricultural Engineering	Member- Student
	Ms. Duppla Kalyani, CSE	Member- Student
	Mr. Noor Jakeer, ECE	Member- Student
	Mr. Hayden Paul R, Artificial Intelligence & Data Science	Member- Student
	Ms. Shanmugapriya S, BME	Member- Student
	Mr. Nickson R, Robotics and Automation	Member- Student
Frequency of the meeting	Once in a semester	

NON STATUTORY COMMITTEES

LIBRARY ADVISORY COMMITTEE

Name of the Cell/ Committee:	Library Advisory Committee
Core Activity	▪ To maintain liaison between Central Library and various Academic Departments for the purchase of networking of Departmental libraries with the Central Library. ▪ The Mission of the library committee is to advice on resource development and other activities related to users' needs to library of institute. ▪ Library Advisory Committee's role is appreciated in as balancingact of all subject's resource development.
Chair Person	Dr. K.Ganesan, Principal
Co-Ordinator	Mrs. P. Meena PriyaDharshini, Librarian
Members- Faculty	Mr. K.T Pannerselvam, ECE Mr. A.Iyyanarappan, CSE Mr. P.G.Seetharam, Agriculture Engineering Mr. A.Ramachandran, R&A Mrs. D.Shanthini, S & H
Student Members	Mr. E Manikandan, IV R&A Mr. K Bhojendraraj– IV Agriculture Engineering Mr. S.Sanjay, IV CSE Mr. L.Karthikeyan-III ECE Ms. S.Swetha– IV BME Ms. D.Reeta, IV AI & DS
Frequency of the Meeting	Once in a semester or as when required

DISCIPLINE COMMITTEE

Name of the Cell/ Committee	Discipline Committee
Core Activity	▪ To monitor the classroom corridor during before start of first hour class, during break hours and lunch hour. ▪ If any student member in discipline committee finds any issue related to discipline in the campus, they should report it to the head of the discipline committee or any faculty member in discipline committee. ▪ Faculty member in this committee splits the set of students to monitor throughout the campus, which includes playground, canteen, classroom corridor etc. ▪ Faculty member in this committee will also act if they found untoward incident which disturbs the discipline of the college. ▪ All these duties are followed on a day-to-day basis during college working days to maintain discipline in the college. ▪ Head of the discipline committee should conduct periodic meetings with the committee members based on its necessity.
Chairperson	Dr. K.Ganesan, Principal
Convener	Dr. D Joseph Jeyakumar, HOD/ECE
Members- Faculty	Dr. D.Arun Kumar, AP/Physics Ms. B.Shanmathi, AP/ECE Mr. J.Thamilarasan, AP/R&A Mrs. K.Vanishree, AP/CSE
Members- Student	Ms. Thulasi., IV CSE Ms. Deepika.V, III ECE Mr. Jayasuriya.S, II R & A Ms. Kalaiselvi, III AGRI
Frequency of the Meeting	Twice in a Year/As when required

Training & Placement Cell

Name of the Cell /Committee	Training & Placement Cell
Core Activity	- Supervision in the labs during the aptitude conducted by the recruiting companies. - Maintain discipline and decorum in the Conference Hall where students are assembled during placement. - Assist in setting up labs along with the Lab Assistants during on-line tests. - Updating TPC data on the college website from time to time.
Chairperson	Dr. K.Ganesan, Principal
Coordinator	Mrs. Ayisha Begam, Head -Training & Placement
Members-Faculty	Mr. B.Raja Kumar, AP/AI&DS Mr. M.Mariselvam, AP/ECE Mr. R.Nandhakumar, AP/R&A Mr. V.Senthilkumar, AP/CSE Mrs. G.GnancySubha, AP/BME Mr. CH Ramakrishna, AP/Agricultural Engineering Mrs. K.Vanishree, AP/CSE
Members- Student	Ms. Mounika Aula- III CSE Ms. Genji Nagarathnamma- IV CSE Mr. Parrapu Kartheek-IV ECE
Frequency of the Meeting	Once in a semester/As when required

Transport Committee

Name of the Cell /Committee	Transport Committee
Core Activity	- Provide transportation facility to cover around 50 km radius both for students and staff. - Supervise the daily bus operation and giving instructions to the bus in-charges. - Coordinate various bus routes regularly with the help of bus in- charges. - Inspecting the condition of the buses and reporting for necessary actions. - Periodically Reporting to the superiors as when required. - Checking the documents of the buses. - Maintaining the documents.
Convener	Mr. G. Ashok, HOD i/c-BME
Transport in Charge	Mr. Lingam
Members- Student	Mr. Sakthivel, III AGRI Mr. Dhanush E, IV CSE Mr. Jagadish R, IV ECE Mr. Ohm Prakash M, IV BME
Frequency of the Meeting	Once in a year

Sports Club

Name of the Cell /Committee	Sports Committee
Core Activity	- Recommend the student to participate in the inter- intra college sports events. - Encourage the student to participate in the intra and inter collegiate cultural events intercollege. - To encourage students to express their thoughts, feelings and creativity through the various visual art forms. We provide an opportunity to the students to let their imagination run wild and provides them with the sight to see things in a different way. - The main objective is to encourage the students in various arts activities. - To improve the imagination skill in Entertainment.
Physical Director	Mr. Dillibabu
Members - Faculty	Mrs. C.Mullai Kodi, AP/ECE Mr. A.Suresh, AP/R&A Mr. CH Ramakrishna, AP/AGRI Mr. A.Iyyanarappan, AP/CSE Mrs. R.GlorySangeetha, AP/CSE Mr. C.Suresh, AP/MBA Mr. S Nagarajan, AP/AI&DS
Members- Student	Mr. R.Sowndhar III AGRI Mr. L.Karthikeyan, III ECE Ms. Putti Nandhitha, IV CSE Mr. M.Premkumar, IV R&A
Frequency of the Meeting	Once in a Year

ENTREPRENEURSHIP DEVELOPMENT CELL

Name of the Cell /Committee	Entrepreneurship Development Cell
Core Activity	- To create greater awareness of opportunities and benefits of entrepreneurship among the students, to make them realize their dream business through innovative products and to develop greater entrepreneurial culture within the institution. - To create greater number of sustainable startup business with potential for further growth. - To create awareness among students on industrial business and on the availability of financial assistance enabling them to start their own Industrial ventures.
Chair Person	Dr. K.Ganesan, Principal
EDC Coordinator	Dr. T.Srihari, Professor, ECE

Members- Faculty	Ms. S.Jenefar, AP/AGRI Dr. S.Yuvaraj, AP- R&A Mrs. P.B.Smitha, AP-ECE Dr. R.Meryl Sujatha, AP/BME Dr. D.Arunkumar, AP - S & H Ms. A.Poornima, AP/CSE Ms. C.Kavya, AP/MBA Mr. B.Raja Kumar, AP/AI&DS
Members- Student	Ms. Divya K, III ECE Mr. Valuru Balaji, IV CSE Mr. Tharun Aryan III R&A
Frequency of the Meeting	Once in a Semester/As Required

HOSTEL COMMITTEE

Name of the Cell /Committee:	Hostel Committee
Core Activity	▪ To ensure that students coming from different places learn to live together and strengthen their relations with mutual cooperation and goodwill. ▪ To ensure that the students are able to devote adequate time to their studies in the hostel. ▪ To support the relaxation of the students through recreational facilities at the hostel ▪ To motivate the students in participating in indoor and outdoor games in the hostel. ▪ To develop an affordable environment to the students by ensuring hygienic and peaceful circumstances. ▪ To observe the students adhering to rules and regulations and take actions or resolutions for in-disciplinary actions. ▪ To take care of the students to maintain their health and provide medical support in any kind of illness in the hostel.

Chief Warden	Dr. K.Ganesan, Principal
Members-Faculty	Mr. K.SivaShanmugam, Mens Hostel Warden Mr. A.Iyyanarappan , AP/CSE Ms. B.Shanmathi, AP/ECE Ms. L.Jain Caroline, AP- S & H/girls hostel warden
Members- Student	Ms. Bommu Uma Maheswari, IV CSE Mr. Gokul, IV BME Mr. A Santhosh, IV AIDS Mr. Bharathi, IV Agri
Frequency of the Meeting	Twice in a year

ALUMNI ASSOCIATION COMMITTEE

Name of the Cell / Committee:	Alumni Association Committee
Core Activity	▪ Role model and inspiration ▪ Career Mentor ▪ Providing Expertise ▪ Opportunity to access Professional Development ▪ Improve Student recruitment efforts ▪ Role model and inspiration ▪ Support the university's reputation
President	Ms. S. Vidhya-Civil Engineering
Vice President	Ms. J. Priya- Electronics and Communication Engineering
Secretary	Ms. B. Shanmathi – Electronics and Communication Engineering
Joint-Secretary	Mr. P. Mithun- Mechanical Engineering
Treasurer	Mrs. A. Geethanjali- Computer Science Engineering
Co-Ordinator	Mrs. J. Vishnu Priya- Master of Business Administration
Frequency of the meeting	Once in a year

NATIONAL SERVICE SCHEME UNIT

Name of the Cell /Committee:	National Service Scheme Unit
Core Activity	- Objectives of NSS in higher education which in turn create social responsibility among the students. - NSS volunteers work in rural areas, adopted villages and school to the serving the cause of society through survey, education and health awareness programme - Identifying the needs of the community in which they work and involve the local people in their task.
Convener	Dr. D.Arunkumar, AP/S&H
Members – Faculty	Mrs. D.Shanthini AP- S&H Mrs. N.S.NancyJebarani, AP/S&H
Student Members	Ms. Yasaswini,- IV CSE Mr. Adhishesan K, - IV AI & DS Mr. Barani J, - IV BME
Frequency of the Meeting	Twice in a semester or as when required

CLASS COMMITTEE

Name of the Cell / Committee	Class Committee
Core Activity	- The priority of this committee is to bring the class together as a whole by modeling and facilitating communication, participation, volunteerism, and philanthropy among classmates. - Embody the shared values of the Class Committee and communicate these values to classmates in word and action. - Discuss problems concerned with curriculum and syllabus, delivery methods, faculty performance capability, conduct of classes and non- academic issues concerned with students. - Prepare minutes of meeting and submitted to HOD & Principal
Convener	All Department HOD's
Chair Person	Senior faculty members from other department
Student Members	From every class 6 students are participated
Frequency of the Meeting	Two Meetings in a Semester

Department	Convener	Chair Person	Student Members
CSE	Dr. A.Jebaraj Ratnakumar	Mr. K.T.Paneerselvam AP/ECE Ms. B.Shanmathi AP/ECE Mrs. N.Malathy AP/ECE	Ms. N.SriVyshnavi IV/CSE Ms. B.Keerthana IV/CSE Ms. S.Nandinee IV/CSE Mr. G.Rupesh IV/CSE Ms. P.Sudeepthika IV/CSE Ms. V.Lasya IV/CSE Ms. C.Y.Kaviyarasi III/CSE Ms. PrashansaPriya III/CSE Ms. R.S.Tamilarasi III/CSE Mr. J.Niteesh III/CSE Mr. Syed Haseeb III/CSE Mr. D.Vignesh III/CSE Mr. Monish II/CSE Ms. Mohitha II/CSE Ms. Naveena II/CSE Mr. Lokesh II/CSE
ECE	Dr. D. Joseph Jeyakumar	Mr. J.Thamilarasan AP/R&A Dr. S.Yuvaraj AP/R&A Mr.R.NandhakumarAP/ R&A	Ms. Akalya.K IV/ECE Mr. PattapuKarthekIV/ECE Mr. ArunKumar.LIV/ECE Ms. ChekuriDivyaIV/ECE Mr. Jagadish.RIV/ECE Ms. Kirthiga.PIV/ECE Ms. Deepika.V III/ECE Ms. ReenaSree III/ECE Mr. ValmetiSuchendra ReddyIII/ECE Ms. Sangeetha LIII/ECE Mr. Dhanush Raj HIII/ECE Mr. Surendhar RIII/ECE Mr. Akash Varma V II/ECE Ms. Amirthaa S II/ECE Mr. Naresh Kumar D II/ECE Mr. Gowtham K II/ECE Mr. Nikeleshwaryaa SII/ECE Ms. Rayapaneni Lakshmi Priya II/ECE

Department	Convener	Chair Person	Student Members
Agricultural Engineering	Mr.P.G.Seetharam	Mrs. G.GnancySubha, AP/BME Mr. M.Murali AP/BME Mrs. V.Tharakeswari AP/S&H	Mr.A.Pranklinjero IV/Agri Ms.J.VishnupriyaIV/Agri Mr. B.Akash IV/Agri Ms. A.Jasmine IV/Agri Mr. V.N.Ramachandran IV/Agri Ms. S.Yuvasri IV/Agri Ms. S.Kalaiselvi III/Agri Mr.V.BalanIII/Agri Mr. K.Nirmalkumar III/Agri Ms. S.Pavithra III/Agri Ms. M Poorna III/Agri Ms. P.Sailaja III/Agri Ms. Keerthana V II/Agri Mr. Prithish Kumar S II/Agri Ms. Swathi D II/Agri Mr. Vigneshwaran S II/Agri Ms. Yuvalakshmi P II/Agri Mr. Jayamurthy M II/Agri
Robotics And Automation	Mr. T.Dinesh	Ms. C.Kavya AP/MBA Mr. C.Suresh AP/MBA Mrs. P.Yasodha AP/MBA	Mr. A.Aravinthan IV/R&A Mr. K.DaveshkumarIV/R&A Mr. P.HemachandranIV/R&A Mr. R.NicksonIV/R&A Mr. Siva Sakthi NIV/R&A Mr. Deva VIV/R&A Mr. Saicharan K III/R&A Ms. Sangavi CIII/R&A Mr. Arun Kumar RIII/R&A Mr. Yuvaraj SIII/R&A Mr. Mahadevan VIII/R&A Mr. Sanjay MIII/R&A
Artificial Intelligence	Dr. Venkatesvara Rao	Dr. J.VijayAnand AP/ECE Mrs. M.Sangavi AP/CSE	Mr. Karthik IV year Ms. Reeta IV year Ms. Kaviya SIV year

Department	Convener	Chair Person	Student Members
And Data Science		Mrs. A.Poornima AP/CSE	Ms. Santhosh R IV year Mr. Pradeep A V A IV year Mr. Sun Aakash IV year Ms. Akshaya N III year Mr. BorraVamsi III year Mr. Farooq Khan F III year Ms. Dhivya V III year Mr. BorraVamsi III year Ms. Gonugunta Nithya II year Mr. Hariharan B II year Ms. Anitha K II year Ms. Monisha K II year Mr. Bharath K II year
Biomedical	Mr. G. Ashok	Mrs. K.Vanishree AP/CSE Mr. S.Senthilnathan AP/CSE Mr. M.Karthikeyan AP/CSE	Mr. Ohm Prakash M IV year Ms. Gracy M IV year Mr. Jothiramalingam.S IV year Ms. Teja Sri.G IV year Ms. Vidya.R IV year Mr. Vijay.P IV year Mr. Mahesh M III year Ms. Keerthana J III year Mr. Dhanush.M III year Ms. Swathi.M III year Ms. Thamizhenthhi.S III year Ms. Monisha.G III year Mr. Mathan M II year Ms. Monisha J II year Ms. Pavithra M II year Ms. Ramya L II year Ms. Renuka Devi J II year Mr. Rohith M K II year

Department	Convener	Chair Person	Student Members
Science And Humanity	Dr. S. Shalini	Mr. B.Raja Kumar AP/AI&DS Mr. M.Vinoth Kumar AP/AI&DS Mr. S.Nagarajan AP/AI&DS	Ms. Swathi. Ms. Keerthana. Mr. Prithish Kumar Mr. Vigneshwaran. Ms. Monisha J Ms. Pavithra M Ms. Ramya L Ms. Renuka Devi J Mr. Naresh Kumar D Mr. Gowtham K Mr. Nikeleshwaryaa S Ms. Rayapaneni Lakshmi Priya
MBA	Mrs.Yasodha	Ms. V.Kavitha, AP/Agri Ms. S.Jenefar AP/Agri	Ms. Swetha Mr. Dinesh Mr. Bharathi Mr. Sarath Santhosh

YOUTH RED CROSS (YRC)

Name of the Cell / Committee:	Youth Red Cross
Core Activity	▪ Protection of Health & Life ▪ Service to the Sick & Suffering ▪ Promotion of National & International Friendship, to develop the mental and moral capacities of the youth ▪ Informing youth members and others the roles and responsibilities of the Red Cross and encourage them to contribute. ▪ Awareness on the care of their own health and that of others. ▪ Understanding and acceptance of civic responsibilities and acting accordingly with humanitarian concern, to fulfill the same. ▪ To enable the growth and development of, spirit of service and sense of duty with dedication and devotion in the minds of youth. ▪ To foster better friendly relationship with all, without any

	discrimination.
Convener	Mr. V.Senthil Kumar, AP/CSE
Members – Faculty	Mrs. N.Malathy, AP ECE Ms. S.Jenefar, AP AGRI Mr. A.Suresh AP R&A
Student Members	Ms. Mounika Aula, III CSE Mr. Noor Jakeer, IV ECE Ms. J.VishnuPriya, IV AGRI
Frequency of the Meeting	Once in a semester or as when required

PROGRAM LEVEL COMMITTEES

PROGRAM ASSESSMENT COMMITTEE (PAC)

Roles and Responsibilities	•Monitoring the achievements of Program Outcomes (POs), Program Specific Outcomes (PSOs) and Program Educational Objectives (PEOs). • Evaluating program effectiveness and proposing necessary changes. • Preparing periodic reports on program activities, progress, status or other special reports for management. • Motivating the faculty and students towards attending workshops, developing projects, working models, paper publications and engaging in research activities. • Interacting with students facilitating the achievement of POs, PSOs and PEOs.	
Name of the chairman	Dr. A.Jebaraj Ratnakumar	HOD-Computer Science and Engineering
Name of the coordinator (Convener)	Mrs. K. Vanishree	
Module coordinators	1. Mr. V.Senthilkumar 2. Mr. M.Karthikeyan 3. Mrs. M.Sangavi	

	4. Mr. A.Iyyanarappan	
Members from other department	1. Mr. B.Rajakumar 2. Mr. S.Nagaraj	Department of Artificial Intelligence and Data Science
Frequency of the meeting	Once in a semester	

DEPARTMENT ADVISORY COMMITTEE (DAC)

Roles and Responsibilities	1. The committee develops and recommends new or revised goals and objectives of the program 2. The committee also reviews and analyses the gap between curriculum and Industry requirement and gives necessary feedback or advice actions	
S.No	Name of the Committee Member	Designation
1.	Dr. K.Ganesan	Principal
2.	Dr. A.Jebaraj Ratnakumar	HOD-Computer Science and Engineering
3.	Mr. Selvakumar	Director Information Dynamics (Industry Representative)
4.	Mrs. Anitha	Delivery Manager Infosys-Mahindra City Campus (Industry Representative)
5.	Dr. Balakrishnan	Dean (Academics) Sri Krishna Engineering College Coimbatore-Faculty Representative
6.	Ms. Thripurasundari	Batch 2019-2023 Alumni Representative
7.	Mr. Yogith Reddy	Batch 2019-2023 Alumni Representative
8.	Mr. Senthilnathan	Programme coordinator
9.	Ms. M.Sangavi	Faculty Representative
10.	Ms. K.Yasaswini	Student Representative-IV year

11.	Ms. Kaviya	Student Representative-III year
12.	Ms. Chella Tejaswini	Student Representative-II year

PROJECT REVIEW COMMITTEE

Roles and Responsibilities	1. Record and maintain the meeting minutes of the PRC 2. Present the recommendations of PRC to Academic Advisory Committee 3. Receive all applicable applications and review each application for completeness	
S.No	Name of the Committee Member	Designation
1.	Dr. K.Ganesan	Principal
2.	Dr. A.Jebaraj Ratnakumar	HOD-Computer Science and Engineering
3.	Ms. M.Sangavi	Convener
4.	Mr. V.Senthilkumar Mr. A.Iyyanarappan Mr. R.Subramani Mr. S.Senthilnathan Mrs. A.Krishnaveni	Faculty Representatives

QUALITY IMPROVEMENT PANEL (QIP)

Roles and Responsibilities	1. Providing opportunities to faculty members of the degree level Engineering to improve their qualifications 2. Organising Short Term Courses for serving Faculty members	
S.No	Name of the Committee Member	Designation
1.	Dr. K.Ganesan	Principal
2.	Dr. A.Jebaraj Ratnakumar	HOD-Computer Science and Engineering
3.	Mr. A.Iyyanarappan	Convener
4.	Ms. M.Sangavi Mr. V.Senthilkumar Mr. R.Subramani Mr. S.Senthilnathan Mrs. A.Krishnaveni Mr. M.Karthikeyan Mrs. R.GlorySangeetha Mrs. K.Vanishree	Faculty Representatives

III FUNCTIONS OF VARIOUS BODIES

The roles of Governing Body, BOS, Academic Council, Administrative Officer, Principal, Head of the Department, Faculty members etc. are listed below:

1. Governing Body

- Attending J.N.N Institute of Engineering Governing Council Governing Council meetings. This is also governed by the by-laws. If a Governing Council member misses more than three meetings, they can be asked to step down.
- An organization, especially an all-volunteer organization, cannot function if its Governing Council fails to perform its duties. Therefore, it is essential to attend the meetings to take care of business.
- J.N.N Institute of Engineering strives to be economical in use of meeting times, and to take care of as much business as possible in other ways (e.g., electronic communication).
- Maintain personal annual membership dues.
- Make every effort to attend the annual meeting.
- Support resource development for whatever ways are best suited.
- Participate in the recruitment of new general members, committee members, committee chairs and officers.
- Encourage collaboration between other organizations.
- Work to increase awareness of J.N.N Institute of Engineering to the society.
- Participate in J.N.N Institute of Engineering committees and committee activities. The committees need to feel connected to the leadership of the organization and vice versa; therefore, every Governing Council member is encouraged to join a committee as a member, or a co-chair.
- Participate in activities related to the realization of the J.N.N Institute of Engineering mission.
- Become knowledgeable about the J.N.N Institute of Engineering budget and participating in the budget planning process.
- Be familiar with all J.N.N Institute of Engineering policies and activities.

2. Academic Council

- Scrutinize and approve the proposals with or without modification of the Boards of Studies with regard to courses of study, academic regulations, curricula, syllabi and modifications thereof, instructional and evaluation arrangements, methods, procedures relevant to etc., provided that where the Academic Council differs on any proposal, it shall have the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so.
- Make regulations regarding the admission of students to different programmes of study in the college keeping in view the policy of the Government.
- Make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels.
- Recommend to the Governing Body proposals for the institution of new programmes of study.
- Recommend to the Governing Body institution of scholarships, studentships, fellowships, prizes and medals, and to frame regulations for the award of the same.
- Advise the Governing Body on suggestions(s) pertaining to academic affairs made by it.
- Perform such other functions as may be assigned by the Governing Body.

3. Board of Studies

- Seeks feedback from all the stakeholders (students, parents, alumni, industry experts, academic peers, community persons)
- Discusses the feedback by the Departmental Curriculum Committee
- Makes change request and develops agenda items
- Discusses the changes required in BOS
- Makes recommendations to the academic council
- Makes the approved changes and come out of view version of curriculum and bring the necessary changes for implementing the curriculum

- To recommend the courses of studies, teaching and examination schemes in their respective subjects.
- To prepare a panel of paper setters and examiners for the semester-end examination.
- To advise on all matters relating to their respective subjects referred to them by the faculty or the Academic Council.
- To recommend books and reading materials for subjects concerned.

FUNCTIONS OF ADMINISTRATIVE HEADS

4. Principal

- Monitoring the functioning of the academic and administrative staff and to see that they fulfill all their responsibilities as prescribed.
- Monitoring the student discipline and conduct (including attendance) and maintaining the decorum of the institution.
- Monitoring effective teaching as per the prescribed curriculum and as per the teaching/institutional methodology suggested by the Anna University/AICTE/Management.
- Monitoring all the procedures to be followed by the office which include admission, fee collection, attendance, **recruitment**, salary payments, purchases and procurements, accounts, and audit and any such other matter related to the administration of the college.
- Monitoring all the liaisoning activities with governmental, corporate, and other academic bodies/institutions.
- Monitoring the liaison of activities with departments within the college and most importantly with the top management of J.N.N.
- Monitoring the conduct of meetings on behalf of the institution which include the meetings of staff, HOD's, Coordinators, College Academic Council, and the Governing Council

- Monitoring the procurement and purchase of the entire necessary infrastructure like furniture & fittings, lab equipment, books and any such other requirement for the institution as per the prescribed procedures.
- Monitoring the auditing and inspections of the institution conducted by the regulator bodies such as AICTE, government, and Anna University apart from the ones conducted by the top management.
- Maintaining the infrastructure of the institution with the help of concerned staff and protecting the life and property of all those connected with the institution.
- Maintaining cordial relations with the staff, students, parents, and with all those connected to the institution both directly and indirectly.
- Sanction of funds for teaching staff to participate in development courses, Conference etc.

5. Administrative Officer

- Assists the Principal in the day-to-day administrative functions of the college, and in developing policies, procedures, and systems which ensure productive and efficient operations.
- As the custodian of the college property records, manages the filing, storage, and security of documents.
- Assists in the preparation of contract agreement/document for canteen operations, Security services, general maintenance, and supply of Private Vehicles by Travel agencies, as required.
- Oversees and manages the transport operations with the assistance of Transport-in-charge and ensures provision of convenient, safe, and hassle-free transport to the students and staff as per the college policy and in conformance with J.N.N rules.
- Makes logistic arrangements for College Day, Graduation Day, Traditional Day, FDPs, placements, conferences, Governing Body meetings, Academic Council meetings, faculty selection interviews, Industrial visits, and such other events.
- Liaisons with consulting architects/engineers for translating college's needs into specific requirements.

- Co-ordinate's provision of, and maintains, the campus infrastructure, installations, office equipment like classroom, staff rooms, laboratories, washrooms, electrical installations, RO plants, bore wells, furniture, campus green cover, transport vehicles, telephones, photo copiers, Fax machines, Air conditioners, Computers, Printers, Cash Counting Machines, CC Cameras, Water Coolers etc.
- Manages admission process of students for Category seats and spot admission for unfilled management quota seats for all the programs.
- Ensures campus security and safety of personnel through administering the Agreement with security service providers, comprising monitoring of the work of security staff, enforcing the terms of the agreement, and compliance with the instructions issued by the college from time to time.
- Oversees the functions of Caretaker, responsible for care and upkeep of buildings, grounds, offices etc.
- Monitors CCTV and other surveillance equipment, if any, to guard against vandalism, break-ins and promptly reports such incidents to Principal, and management, and to Police, with proper approvals.
- Oversees canteen services, administers canteen service contract, with the assistance of Canteen committee.
- Co-ordinates response to legal notices, filing of petitions and liaisons with advocates representing the college.
- Co-ordinate's disposition/resolution of individual problems and disputes involving
- Students, staff, faculty, or members of the public as they arise.
- Manages distribution of incoming mails, and dispatch of out-going mails.
- Identifies training needs of office staff and organizes staff development programmers.
- Recruits contingency staff, and drivers in co-ordination with HR department, following proper procedures.
- Carries out periodical shuffling of department and contingency staff across departments/sections, in co-ordination with HOD's/ Sections-in-charge, following proper procedures.

- Monitors fuel efficiency of transport vehicles periodically and takes corrective actions as required.
- Monitors and controls repair and maintenance expenses towards vehicles, furniture, sanitary fittings, plumbing work, etc.
- Keeps an inventory of office equipment and furniture, identifies them with unique asset Nos., co-ordinates annual verification of the assets

6. Controller of Examinations

- Collection of student bio-data from the students.
- Mapping electives from the students for the current semester.
- Activities related to Continuous Internal Assessment of all courses of all programmes.
- Semester End Examinations – Theory and Practical.
- Collection of Practical Examination schedule from the departments.
- Exam schedule preparation for Semester End Examinations.
- Appointment of External Examiners for practical examinations.
- Appointment of Evaluators, Chief Examiners and Chairman for Valuation.
- Approving the payment of remuneration to the question paper setters and the examiners.
- Arrangement for valuation of Semester End Examinations theory scripts.
- Meetings on examination related matters.
- Processing and declaration of results after approval of Governing body
- preparing and sending the semester mark sheets and the cumulative mark sheets to the HOD's and keeps the record
- Recommend to Anna University for the award of degree to the qualified candidates.
- Issue of Duplicate Grade Sheet/ Certificate etc.,
- Addressing grievances of students, faculty and staff on examination related issues

7. Head of the Department

- To take advise/sanction from the Principal for implementation of academic, co-curricular and extracurricular activities.
- Assigns duties to teaching and non-teaching staff of the Department.
- Ensures allocation of workload (teaching load and practical load) to all faculty members and technical non-teaching staff
- To co-ordinate with the teaching and non-teaching staff of the department for smooth function of conduction of academic, co-curricular and extracurricular activities of the department.
- To present the departmental budget/requirement to the Principal.
- To take the lesson plan from the teachers and ensures they follow the plan and syllabi is completed in the stipulated time.
- To ensure smooth conduct of examinations including paper setting, assessment of theory and lab.
- To submit recommendations, if any, to the examination committee for processing of results.
- To ensure purchases and maintenance of stock registers are done properly by the Laboratory Assistant.
- To ensure Quality, Maintenance, and cleanliness of the department.
- To recommend leave of the departmental Colleagues.
- To motivate faculty towards Research Proposals to various research funding agencies such as AICTE, DST, DRDO, etc.
- To encourage research/innovative programs in the department.
- To organize need based workshop/seminars/symposia/visits/excursions etc.
- To invite guest speakers for interaction and guidance to UG/PG students.
- To guide the students for career opportunities.
- To facilitate faculty in the preparation and processing of self-appraisal of performance

- To ensure that college equipment/facilities under the department's control is properly maintained and serviced as required.
- Adherence to the procedures of staff (Teaching and Non-Teaching) of the department/college.
- Coordinating the activities of the department and assisting the Principal of the College.

8. Dean (Academics)

- Deciding the number of sections, batches for each theory and lab. Courses.
- Preparation of time table.
- Launch of new academic programmes, up gradation of existing programme structure, course content, etc.
- Adherence of academic rules by all teaching faculty.
- Regular and effective conduct of classes by teaching faculty.
- Follow up of evaluation system in its true spirit and maintain liaison with Dean (Evaluation & Academic Registration).
- Transparency in Evaluation System.
- Students' Feedback - collection, analysis and proper action.
- Development of human resources teaching and nonteaching technical.
- To prepare the Budget Proposal.
- To participate and contribute in the Committees for which they are ex-official, nominated or elected members.
- Shall work to facilitate and promote quality research in the College, Satellite Campuses and recognized research centers/laboratories.

9. Dean (Research)

- Shall coordinate and facilitate for timely Board of Research Studies meeting in various faculties.

- Ensure a suitable ecosystem for research and development in the institution
- Formulate and amend suitable research policies and practices that are to be followed in the Institution
- Ensure integrity and ethical practices in research activities by facilitating approvals in formal committees
- Equip faculty, research scholars and students through capacity building initiatives.
- Promote and facilitate collaborative and/or interdisciplinary research and enhancement of research networking capacity and infrastructure
- Encourage faculty and students to be involved in research projects and publish papers in indexed journals through incentives and awards
- Facilitate access to grants and funding for research projects through governmental and non-governmental organizations at national and international levels.
- To assist departments in establishing research centers with state-of-the-art equipment.
- Organizing the resources to the HODs and research faculty available in the R&D centers.
- Organizing review meetings on the progress of the research projects and consultancy works once in a quarter and to submit a report to the Dean (R&D).
- Interacting with the HODs in fixing the focus areas of research and consultancy assignments opted by the faculty, breaking the research areas into modules and modules into mini projects and major projects.
- Research and Development Cell, Institution Innovation council and startup Incubation centre would be created which would be function under Dean Research and the Cell would be responsible for timely disposal of all matters, including financial issues related to research projects, fellowships and scholarships.
- Shall recommend to the Principal, recurring and non-recurring expenditure provided under the sanctioned research projects.
- Shall be responsible to sign the Utilization Certificates of research projects and timely submission of utilization certificates to concerned funding agencies.

- Shall provide necessary guidance and encourage teachers/researchers to write research project proposals and suggest incentives/other initiatives to the Principal for the purpose.
- Shall prepare an annual research report and identify the initiatives to be taken for promoting/maintaining quality of the research work.
- In absence of the Principal the Dean Research shall chair the meeting of Committees related to research.
- Shall be responsible for the effective utilization of grants from Central/State agencies for development of research related infrastructure.
- Shall be responsible for timely purchase/procurement of scientific equipment in consultation with Principal

10. Dean (Student Affairs)

- Responsible in campus discipline of the students and coordinate the same with the hostel wardens.
- Chairperson of the Proctorial Committee to prevent ragging.
- Encourage healthy living and lively positive relationships among students and the campus community.
- Plan and organize various co- and extra-curricular activities.
- Analyze placement data to gather an understanding for future trends and articulate needs for institute level planning and budgeting.
- Student's projects- mid tem and final Placement activities.
- Involve faculty members in Pre-Placement Talk, project selection and final placement of students.
- Regularly meet with faculty members to solicit the expertise in placement activities with regard to initializing and planning for future activities.
- Interact with students to keep them informed about the latest market trends and skills demands so that they can update themselves and prepare best for their career.

- Boost up student morale and counsel them before they undergo summer and final placement activities.
- Provide feedback to faculty members on placement opportunities.
- Build relationships with Alumni through seminars, annual meets, etc.
- Act as Institute-Industry interface including publicity, news bulletins, brochures preparation/distribution, etc.
- Plan for accommodation of parents and family members of students during Admission, Convocation, etc.

11. Faculty Members

- Development of course handout material
- Development of audio-visual/multimedia materials for the topic presented
- Prepares and executes Lesson Plan.
- Completing syllabus within the stipulated time.
- Reports to the class on time.
- Utilizes classroom assessment techniques
- Develops test questions in consultation with the Dean Academics
- Evaluates tests (if appropriate, based on type of test)
- In consultation with the Dean Academics, assures that course content allows students to meet outcomes associated with that course
- Be available for student consultation on a regular basis, informing students of their availability for student consultations (both with and without appointments and makes sincere attempt to solve their difficulties (academic and personal counselling)
- Informs Dean Academics within a reasonable time about students' progress and how effectively students are learning.
- Keeps a secure record of each student's results, both electronically and in hard copy,
- Provides data relating to results in assessment tasks/exam events and attendance, if required, to the Dean Academics

- Attends meetings of the course instructors and Dean Academics to discuss issues affecting learning and other classroom issues
- Attends meetings with the class representatives for the course to obtain feedback
- A faculty shall help the concerned HOD to enforce and maintain discipline amongst the students.
- A faculty shall perform any other co-curricular work related to the College as may be assigned to him from time to time by the concerned HOD.
- Maintain attendance record of students
- Provides information about job opportunities in their respective field to placement cell.
- Guides students on career opportunities.
- Maintain teacher's handbook.
- If associated with the lab,
 - a) designs new experiments, if any,
 - b) prepares lab workbooks/lab manual
 - c) ensures the availability of him/herself in the lab during laboratory periods for explanation, if needed
 - d) ensures availability of equipment needed for the lab in proper functioning
 - e) evaluates lab workbooks and provides feedback to student on timely basis recommends for procurement of equipment if any for the smooth conduct of all experiments,
 - f) keeps the lab clean and tidy
- Ensures quality, maintenance, and cleanliness of the dept.
- Carries out research/innovative programs in the department.
- Organizes need based workshop/seminars/symposia/visits/excursions etc. by coordinating with the concerned HOD
- Invites guest speakers for interaction and guidance with UG/PG students.

12. Technical Staff

- Facilitates procurement of hardware, software, and other consumable items well before commencement of the semester. This can be done by visits to other colleges, by contacting teachers who are teaching or have taught similar subjects in our college or other colleges, etc.
- Requisition for consumables shall be submitted to the HOD, who in turn shall verify the same and forward to the Principal for necessary action.
- Ensures that the infrastructure facilities in the labs are adequate so that each batch has ample opportunity to complete practical subjects satisfactorily.
- Prepares lab manuals and arrange to get them printed as per the required number.
- Introduces new experiments, if any that can reinforce the student learning.
- Arranges to display the laboratory schedule
- If it's a computer lab
 - a) Arranges to manage network taps and server capacity and configurations.
 - b) Arranges to manage hardware and software configurations and updates.
 - c) If tests require server or client computer configuration changes, the changes need to be scheduled and communicated to other lab users.
 - d) Makes periodic server backups
- Coordinates periodical testing of equipment
- Develops and monitors the changes in the lab, if any, which defines who is allowed to make changes to the lab environment.
- Maintains lab documentation (such as lab descriptions, diagrams, and processes).
- Establishes physical security.
- The lab i/c takes measures to prevent unauthorized use of lab equipment and manages lab access with keys and locks.
- Sets up an inventory control system.
- Establishes a lab budget for support costs.

- Labels hardware, including cabling.
- Resolves environmental problems, if any.
- Implements a preventative maintenance program for equipment.
- To hold those responsible for any breakage / loss etc. and recover costs.
- In order to prevent theft/damage, the Lab In-charge shall take the following action:
 - a) Lab In-charge and Lab Assistants are to report the matter in writing immediately to the HOD as soon as they come to know about the missing/damaged item in their Lab.
 - b) They also have the responsibility to find out/enquire about the missing/damaged item/article and suggest further action to compensate the loss as well as prevent recurrence of the same.
 - c) Lab Assistants in turn shall note down the missing items in the respective Lab Register.
 - d) If the students are responsible for the loss/missing item, then an amount equal to the cost of the item as fine shall be levied from the concerned students. Students shall not be allowed to purchase and bring the item on their own, as compensation for the loss/missing item.
- Establishes an approval process for removing any equipment.
- Ensuring the lab is kept clean and orderly.
- Any other duty as may be assigned by the HOD/Principal from time to time.
- Ultimately, a lab I/C is responsible for making the lab as usable and flexible as possible.

13. Office Staff

- Taking up dictation and typing work to help the Head/Principal concerned in various ways such as maintenance in a methodical manner all confidential, personal papers, arranging of meetings, conferences, tours, telephone calls, interviews, appointments, and special duties.

- Initiates prompt action on files and proposals and their disposal including promptly putting up notes and files to the higher authorities and maintain all the files and records.
- Initiate various proposals and prepare drafts and submits the same to the higher authorities for consideration and approval in a time bound manner.
- Assists the Head/Principal in drafting letters, putting up items with suitable notes, precedents, etc.
- Maintains inward/outward registers and uses them for sending/receiving all official communication.
- Maintains leave record, permission records of faculty, staff and students as may be applicable
- Informs HOD regarding the faculty who are absent and assists in the adjustment of class work whenever a need arises
- Posts attendance of the students daily, prepares fortnightly attendance reports of the students, sends the same to class advisers/mentors and HOD
- Maintains personal register regarding the appointments etc. if any
- Provides any data and statistical particulars that has been requested by authorities and other sections of the institute and any other agency are to be provided in time
- Assists in holding of meetings, preparation of agenda, drafting the minutes of various committees of the Institute.
- Organizes the work schedule, sorting out routine incoming and outgoing papers promptly, in order of priority and maintaining registers for the same.
- Drafts letters/notes for the officer and handling correspondence independently as and when required.
- Maintains excellent public relations and arranging meetings, if any, as required.
- Summarizes from documents and prepares information for Annual Reports, Newsletter, etc. pertaining to the activities of the department/section.
- Refers/directs callers (in person/telephone)/papers to appropriate persons of the Department/College, as the case may be

- Supervises the work of the sub staff in the department/section.
- Be responsible for the safe custody of all the files in the department/section and maintain strict confidentiality on all matters related to the office work of any nature.
- Enters data, maintains data entered, and backs up data files periodically
- Be aware that the incumbent to the post may be transferred to any other section or department as per the exigency of situation.

14. Department's Coordinator (Placement, Alumni, and Career Guidance)

- Acts as a link between Students, Alumni, and the Placements Cell.
- Provides the list of students eligible for placements from time-to-time to the Placements Cell.
- Keeps close contact with Placements Cell on daily basis for information and circulate the same to concerned students, HOD and others related in the matter.
- Provides Campus Placements Training attendance statements of students undergoing such training to the placements cell, and HOD immediately the next day of the completed training session.
- Highlights the absentees' names along with Roll numbers and provide the same to the Placements Cell and HOD.
- Analyses students' performance in each of the tests conducted as part of Campus Placements Training from time-to-time and share the same with students, HOD, and Placements Cell. Keep a record of the same.
- Provides information regarding the students going abroad for higher education to the Placements Cell from time-to-time so that Placements Cell can update its database that can be shared later with the junior students whenever a need arises.
- Facilitates in up-gradation of the students' skill sets commensurate with the expectations of the industry.
- Interacts with students of parent department regarding any issues and bring the same to the notice of the Placements Cell in written form.

- Provides suggestions in improving the functioning of the Placements Cell may also be given in written form to the Placements Cell.
- Attends all meetings called by Placements Cell and conveys the outcomes of such meetings to the concerned students, and HOD.
- Facilitates printing the material provided for students (testing material, reading material, etc.) by Placements Cell.
- Facilitates Placements Cell in procuring any material that may be of some value addition to the students as suggested by Placements Cell.
- Contacts alumni of the department and finding the various opportunities that may be available to students for internships, placements, etc. in the organization in which alumni is working.
- Contacts alumni and appries them about the various activities undertaken by the institute.
- Contacts the alumni and requests them to deliver some lectures for the benefit of the department's students (lectures on special topics of relevance, career guidance to students, etc.)
- Contacts the alumni and requests them to attend alumni association meeting conducted from time-to-time.
- Maintains database of the department's alumni and sharing the same with the Placements Cell.
- Keeps close contact with alumni who went for higher education and enquire vis-à-vis their wellbeing and performance and share the same with the HOD, and the Placements Cell. Passes this information to the students concerned on request
- Conduct programmes to give awareness on higher education in Indian and Foreign Universities

15. System Administrator

- Performing systems requirements and related activities pertaining to obtaining quotations for procurement of hardware and software

- Administering and configuring servers and System performance tuning
- Facilitating development and maintenance of institute's websites and updating the same
- Installation and maintenance of software for the systems in the campus including operating system updates, patches, and configuration changes Installing and configuring new hardware and software
- Administering campus wide LAN and Internet services thereby ensuring that the network infrastructure is up and running
- Facilitating conduct of periodic computer awareness/literacy courses/training programs for the students, and other staff in the college
- Identify and help implement installation of ICT and MIS requirements for the institute
- Analysing system logs and identifying potential issues with computer systems.
- Introducing and integrating new technologies into existing data centre environments.
- Performing routine audits of systems and software.
- Performing backup of data and files.
- Adding, removing, or updating user account information, resetting passwords, etc.
- Answering technical queries
- Be responsible for security of systems and network
- Any other work assigned from time to time

16. Training and Placement officer

- Liaisons with industry
- Identifies and provides for training needs of students
- Arranges campus interviews
- Proposes annual Training& Placement budget

- Prepares database of some top international/national companies consisting of their addresses, details of operations, their expectations, their HR team etc. for which services of some students could be utilized.
- Assists students develop/clarify their academic and career interests, and their short and long-term goals through individual counselling and group sessions.
- Assists students develop and implement successful job search strategies.
- Works with faculty members/department Heads and administration to integrate career planning and academic curriculum as well as coordinate Project Work/ Summer Training/internship programs.
- Prepares an audio-video presentation or a colorful hand-out on the college to be presented before potential employers.
- Compiles and maintains a data bank on student profiles and resumes along with their photographs.
- Prepares a placement brochure having all the student profiles.
- Undertakes a rigorous placement campaign.
- Assists employers achieve their hiring goals.
- Empowers students with life-long career decision-making skills.
- Provides resources and activities to facilitate the career planning process.
- Acts as a link between students, alumni, and the employment community
- Up gradation of the students' skill sets commensurate with the expectations of the industry.
- Generation of awareness in the students regarding future career options available to them.
- Assists different companies in recruiting candidates as per their requirements.
- Assists students in obtaining final placement in reputed companies.
- Keeps track of all the advertisements related to placements appropriate to the profiles of aspirants.
- Communicates the resume of suitable candidates to the potential employers.

- Provides right placement to the right candidate so that students excel in their future life.
- Organizes placement training for the students and make them ready for interview and group discussion.
- Shall be a live wire connecting the students and the industrial houses.
- Arranges to find suitable summer assignments to the students and help, guide, and counsel them in securing permanent placement by bringing them in contact with the prospective employers.
- Provides information on the schedule of recruitment drives well in advance to all department's placements coordinator, HOD's, Principal, and students.
- Places request for resources required well in advance and coordinates with the concerned and ensures availability of the same
- Details of placed candidate's vis-a-vis the companies are sent to all HOD's, departments' placement coordinators, Students, immediately after the recruitment drive is completed and placements announced
- Sends hard copies of all appointment orders of students recruited to the concerned HOD

17. Librarian

- To facilitate the students, faculty, and staff with all the literature that may be needed for their scholarly activities.
- To manage library as well as digital library of the college.
- Arranges to prepare the library budget and policies relating to the library/Digital library.
- To encourage widespread usage of available information access facilities.
- To be continuously in touch with the students and faculty to understand/assess their needs of Books/ Journals /Magazines /CDs etc. and apprise the Principal, Academics about the same for procurement

- Ensures procurement of books, CD-ROMs, Software, Journals etc., which are essential and/or recommended by the faculty.
- Provides URL links/resources for information on various study material
- Weeding out obsolete study material as per the college norms
- Disposal of weeded out material
- Ensures availability of reprographic facilities at library
- Maintaining the books in good condition
- Seeks reviews on books recommended
- Seeks suggestions/feedback from the students.
- Provides digital library access.
- Establishes specialized search facilities for faculty's teaching and research needs.
- Establishes a repository of cases and keeps adding new cases on a continuous basis.
- Provides adequate access and borrowing facilities to faculty pursuing Doctoral program.
- Provides content page service.
- Encourages use of smart card for library services.
- Facilitates conduct of reading sessions.
- Organizes various functions and activities such as library week or to install clubs such as reading club essentially to develop a very interactive and vibrant reading culture among the students, faculty, and staff.
- Plans in the library for hooking up laptops.
- Develops a system for posting new additions online.
- Any other work related to library that may be assigned from time to time.
- Ensures availability of previous years question papers (semester end examination), lab manual, syllabus copies, thesis/dissertation reports
- Coordinates with departmental library in-charge for smooth functioning of department's library

- Provides all statistical information pertaining to the library

18. Physical Director

- Reports to Principal about Students' participation and achievements in sports activities
- Ensures smooth conduct of sports
- Ensures proper use of sports material and facilities
- Purchase of sport items by coordinating with AO
- Encourages students to participate in zonal/university tournaments
- Creation and upkeep of sports facilities
- Proposing annual budget for sports
- Ensures discipline among students in campus
- Ensures NO Ragging activity takes place
- Oversees medical facilities on campus
- Organizes training camps, if any, and report the same to office of HOD's, Students, with a copy forwarded to Principal on monthly basis
- Helps in the organization of various events in the college

19. Hostel Warden

- Received Instructions from Chief Warden/Principal and deliver it to the students
- Assists Principal (Chief Warden) in all the hostel related activities.
- Responsible for allotment of rooms to the students.
- Responsible for maintenance for Hostel.
- Looks after the quality of food served in the hostels.
- Keeps strict discipline in incoming and outgoing of students from the hostels.
- Reports to the Principal in case of any indiscipline or misbehaviour by the students.
- Looks into the grievances/complaints of the students if found genuine.

20. Faculty Advisor/Mentor

- Be familiar with the personal history of assigned student including Educational and Family background.
- Attempts should be made to determine the reason for the student's problem, counsel, and provide guidance to the student to correct the problem and recommend a remedial program, if necessary.
- Assists student in periodic evaluation of his/her academic progress.
- Assists student in initial exploration of long range occupational and professional plans, referring him/her to sources for specialized assistance.
- Explains to the student the program in general and basic education as it relates to the branch of the student, and to preparation for life pursuits generally.
- Helps student understand and examine the graduation requirements for the curriculum leading to the Bachelor's degree.
- Explains student importance of attendance and its implication to do well in examinations
- Explains importance of participation in the class activities
- Explains importance of Internal Assessment Test and its consequence in the end semester examinations
- Explains importance of marks in the previous semester examination and its consequence in the later part of the degree and subsequently in career as well
- Explains importance of submission of assignments and its consequence on the performance of Internal Assessment Test and End semester examinations
- Explains importance of laboratory exercises and their correlation with theory
- Helps the student explore the career fields in the student's branch of engineering and provides information about Higher education and job opportunities.
- Serves as a "Teacher Friend" to the student by demonstrating a personal interest in him / her and in his / her adjustment to college; by serving as a central contact person in obtaining information that can be used to help the student; and by allowing the

student freedom to make his own choices after the limitations, alternatives, and consequences involved in deciding.

- Explains importance of getting a meritorious Engineering Degree and how the degree helps in building a career in other areas and programs such as M.S/M. Tech, MBA, Civil Services, Group Services, etc.
- Assembles, organizes, channels, and centralizes all information, observations, and reports from every source related to his student's progress, needs, abilities, and plans
- Assists the student at regular intervals to make adequate Mentor manual
- Explains importance of Self-Motivation to do well in career and subsequently in life.
- Counsel's students whose progress is unsatisfactory and reports the same to HOD
- Monitors the interim whenever required.

21. Maintenance Officer

- Responsible for quality control and technical support of the reactive repairs services, annual servicing, maintenance and stock improvement works of the Association.
- Co-ordinate void property repair, medical alteration and insurance repair works.
- Provide technical support to co-workers, Maintenance Manager and Technical Management to improve and develop the organisations Technical services.
- Contribute to the organisations Asset Management Strategy by carrying out stock condition inspections.
- Through traditional and modern techniques communicate with contractors, residents and co-workers on progress and issues relating to reactive repairs, maintenance and stock improvement works.
- Carry out any other duties to meet the needs of the business.
- Inspect and report on void related works e.g. tenant transfers and terminations, void repairs and post work inspections. Liaise with tenants, staff and contractors accordingly.

- Inspect, authorize and advise on alterations/improvements for tenants Respond to and resolve property insurance claims, including inspecting and directing works after major/minor fire or flood damage.
- Ensure compliance with Abertay standard specifications.
- Resolve quality or specification problems on repairs, voids, etc.
- Resolve and/or recommend changes to specifications or quality issues on reactive repairs, insurance, medical, void or other maintenance works.
- Record issues and progress of issues in appropriate database (Microsoft Excel, SDM and Keystone).

22. Finance Manager

- Forecasting and planning: The financial manager needs to be aware of the current market trends and should be able to assume the future too.
- Finance Manager needs to interact with other executives and lay the business plans carefully, shaping the future of the organisation
- Coordination and control: Finance Manager should exhibit proper coordination with other departments and control the overall organization financially.
- Finance Manager needs to consider all the decisions and activities of the organization and integrate them into his financial planning.
- Raising of funds: An organization will need enough cash and liquidity to meet all its obligations. It can raise funds in the form of debt or equity.
- A financial manager needs to tactfully decide the ratio between equity and debt. Maintaining this ratio is quite necessary.
- Allocation of funds: After raising funds through various channels, it is necessary to allocate the funds properly. While allocating the funds, the finance should be used in an optimum manner.

23. Accounts Officer

- Writing and maintaining accounts, cash books / ledgers
- Preparation of monthly accounts including writing of cash books, journals
- Verifying bills prepared
- Preparation and consolidation of budgets pertaining to all departments/sections/centres
- Cash collection
- Supervision of challan writing and remittance to bank
- Supervision of postal accounts if any
- Preparation of daily receipts and challans and submission of associated details along with remittance details to Principal for scrutiny Verification of cheques and bills
- Writing daily collection register for college accounts.
- Writing demand draft register, and other forms of money value register
- Preparation of audit reports and replies
- Preparation of salary reports
- Preparation of acquittance register and obtaining signatures of all employees
- Attending to the subject of income tax, and performing TDS at source for all payment transactions
- Writing Caution deposit register if any
- Any other accounts related function assigned from time to time

IV Service rules, Procedures, Recruitment and Promotional Policies

Human Resource Planning

- The Principal shall assess in the month of April every year, the staff requirement for the subsequent academic year.
- He will obtain the staff requirement lists from all the Heads of department and arrive at the number of faculty members and Lab assistants required with the following guidelines in mind.
- He will consider appointing a professor to be the Head of every discipline, besides the number of Assistant Professors required in accordance with the teacher student ratio prescribed herein.
- The teacher student ratio shall be 1:20 and for this purpose the Professor shall also be included in counting the number of teachers.
- He will appoint a selection committee for recruitment in each discipline, composed of the Principal, HOD, and the Department's Advisors/Experts from the neighbouring institutions.

Recruitment

- In general, the following recruitment procedure is adopted. In April every Academic Year, the department wise faculty and staff requirement are calculated and HODs submit the required faculty and staff details. The faculty requirements are calculated based on AICTE & AU norms and workload.
- The Principal reviews the details submitted by HOD and final requirements of faculty and staff are finalized
- The faculty & staff requirements are submitted to the management and permission for recruitment is obtained.
- Wanted Advertisement is given in leading English daily and Tamil daily (if required) with last date for applying. Faculty/staff wanted details are displayed in the college website, as well.
- After the last date, HOD and Principal screen the applications received. In general, applicants are called for interview on the specified date in the 1: 3 ratios.

- The Staff Selection Committee (SSC) will interview the applicants. The composition of the SSC is as follows:
 - i. The Principal
 - ii. HOD of the concerned department
 - iii. 1 or 2 senior faculty of the department
 - iv. External experts (if management decides)
- Based on the approval of the Management, the Principal issues the appointment order.
- The advertisement will be released in April / May and appointment process is completed in May / June and newly recruited faculty will join in June / July.
- If there is any vacancy arises during the middle of the Academic Year, the Chairman, Principal and the HOD of the concerned department complete the recruitment of the faculty / staff.
- In case of college side supporting staff, similar procedure is followed up to the interview stage. The Chairman of the trust, Principal and the concerned department HOD conducts the selection interview.
- In case of Administrative, Maintenance, Hostel and Transport department supporting staff, the Administrative Officer carries out the staff selection.
- The interview is conducted and faculty and staff are selected by the SSC. The Principal decides the pay scale and pay by mutual discussion with the candidate. The final faculty and staff shortlisted for appointment is submitted to the management for approval.

Orientation

The new incumbents are inducted to the concerned departments where they are familiarized to the people, process and practices in order to orient them towards the work culture of JNNIE.

- To make them familiar with the other co staff members, the new recruits are introduced by the Management to all the members of the Institution at a gathering

- The Management of JNNIE strongly believes that continuous updating of knowledge and technology is the hallmark of a teacher. To meet this need, the Institution encourages the departments to organize FDP (Faculty Development Program) for the benefit of its faculty and lends support when the faculty wants to attend FDP in other reputed institutions. Besides FDP, research publications, too, are appreciated and given due weightage by including these components in the performance evaluation.

Salaries, Incentives

Positions and Pay Scales

- The college will have the following positions of Hierarchy in the teaching departments: Principal, Professors, Associate Professors, and Assistant Professors.
- HODs appointment should decide by the Management.
- In addition, each department shall support staff like programmers, Lab assistants.
- The college office will have the following positions of hierarchy in the administrative department: PA to Principal, Accountant, office supporting staff and office Assistants.
- The Scales of pay for various teaching positions will be as follows:
- Principal and Special Positions Pay as per AICTE norms, commensurate with the qualifications and experience.
- Professor- Rs.37,400-67,000 Grade pay 10,000
- Associate Professor-Rs.37,400-67,000 Grade pay 9,000
- Assistant Professor-Rs.15,600-39,100 Grade pay 6,000.

Leave Provisions

- Holidays observed by the Central and State Governments would be observed by the organization as a whole.
- Faculty/Staff are entitled for 12 days of Casual Leave (CL) and 8 days of Medical Leave (ML) each academic year. Medical Leave can also be taken as Casual Leave.

- Faculty/Staff can only take leave with the approval of the HOD and Principal, and only after proper alternative arrangements have been made. Only in the event of an emergency, Faculty will take leave, informing over the phone.
- Faculty can take Maternity leave for six months.
- Faculty members and staff will request one hour of time off twice a month.
- Leaves cannot be accrued and carried on to the next academic year.

Vacation

- Teaching staff are normally eligible for four weeks' vacation per academic year, one week in winter and three weeks in the summer or four weeks in summer.
- Non-teaching staff are normally eligible for 10-days' vacation per year.
- The Principal has the right to prevent any staff member from availing a portion or the whole of vacation if the services of the particular individual are considered essential.
- Only staff members who have completed 6 months of service, as on the date of commencement of the vacation period, are entitled for full vacation Proportionate
- No leave can be combined with the vacation. The staff member should be present on the last working day before the vacation and also on the first working day after the vacation to become eligible to draw the vacation salary.
- Personal On-Duties / leave will not be adjusted in the vacation in general. However, Principal may permit based on genuine needs (like serious health issues, marriage)

On-Duty Provisions

- On-Duty (OD) permission can be availed for official work, Career Development Programs (FDP, Conferences, Workshops, Research Work, Coursework examinations, STTP and others), and Anna University Examination Duty.
- Prior permission from the HOD and Principal with proper alternate arrangement is essential.

- A faculty can avail OD up to 10 working days per semester including university examinations related works. Based on special requests from University, Principal can permit the faculty additionally.
- In general, faculty shall not be eligible for OD for the examination related works of other universities.

Promotion Policy

- All promotions shall be considered based on merit - cum- seniority basis.
- Staff is eligible for promotion only after completion of one year of service in the Institution.
- Person entering the teaching profession with PG Degree shall be designated as Assistant Professor and shall be placed in the Pay Band of 15600 with AGP of 6000. Promotion of Faculty members to next level as per AICTE guidelines for Associate Professor and Professor.

Performance Appraisal

The objectives of performance appraisal of our institution are as follows:

- Provide feedback of the employees on their performance.
- Assessment of Training needs.
- Compensation (Increment) decisions.
- Bench mark for Promotions.
- Personal development of the employee.

The HR team will be responsible for the performance appraisal process, which will also provide guidance on conducting appraisals, will coordinate timely execution on the same. HR also imparts skill to concerned evaluators for executing on an objective on impartial basis. All performance appraisal evaluations are monitored by concerned Heads of the department (HODs). The evaluation scores are used to determine the annual increment and their promotions.

10.1.3 Decentralization in working and grievance redressal mechanism (10)

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

Decentralization in Working

The Institution encourages and motivates the culture of decentralization and participative management. The faculty members involve themselves in administrative roles and manage responsibilities by taking the roles such as Heads of the Departments, Faculty in-charges etc. They associate themselves with various committees namely Disciplinary committee, Class Committee, Grievance Redressal Committee, Internal Compliance Committee ICC, Internal Quality Assurance Cell and many more. The faculty members are actively involved in driving a change through the Mission of the Institution in order to identify and design the road map to attain the Vision of the Institution.

J.N.N Institute of Engineering is committed to address grievances of all stakeholders through a transparent Grievance Redressal Process. Students/Parents/Faculty can submit their grievances online through the following link:

<https://www.jnn.edu.in/committees-grievance-redressal-committee/>

Principal

Responsibilities include:

Reporting only to the top Management (Chairman, and Vice-Chairman) of the institute and assisting them in the following functions of the institute.

1. Regulation / Monitoring
2. Development
3. Leadership
4. Visionary

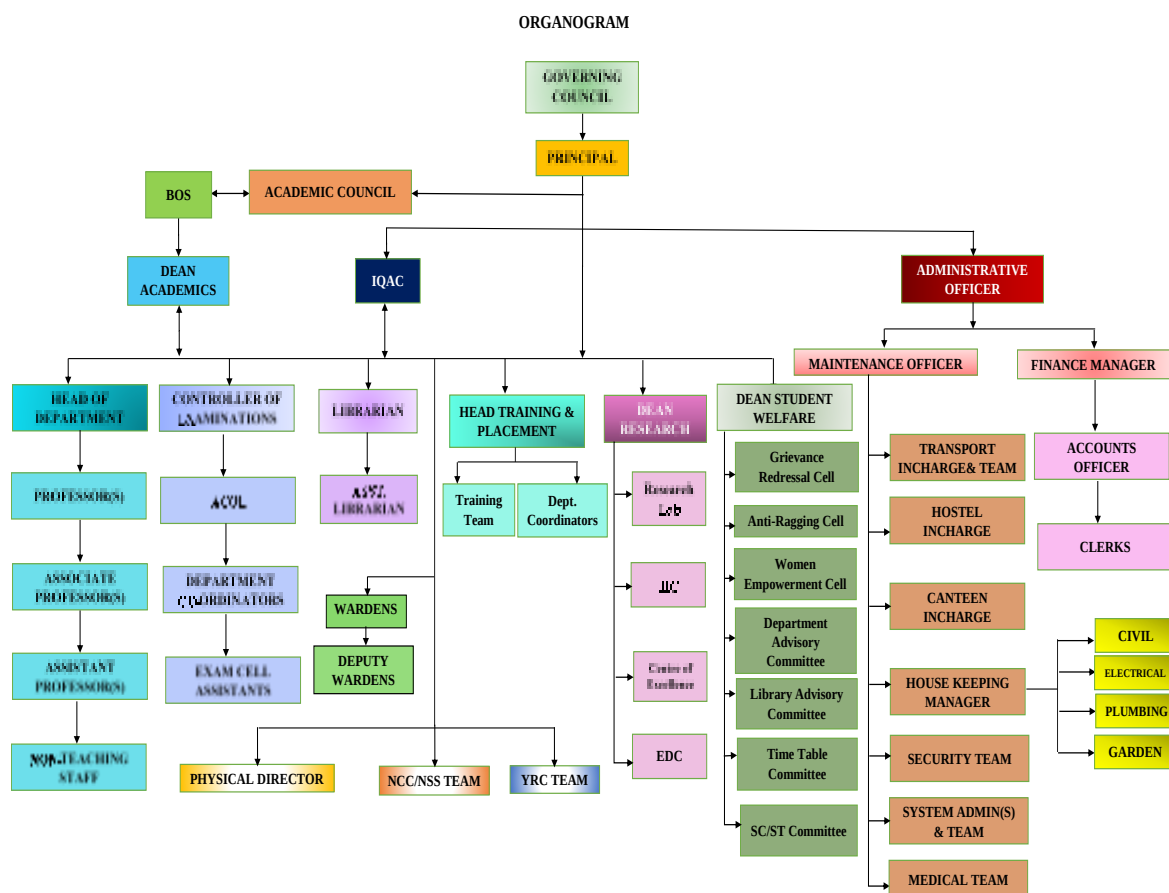


Fig. 10.1.3.1 Organogram of the Institution-Decentralisation of Authority

Principal and Heads of the Department

S.No	Names	Designation
1	Dr. K.Ganesan	Principal
2	Dr. A.JebarajRatnakumar	HOD/CSE
3	Dr. D.JosephJeyakumar	HOD/ECE
4	Mr. P.G.Seetharam	HOD i/c - Agricultural Engineering
5	Dr. T.Dinesh	HOD/Robotics and Automation
6	Mr. G.Ashok	HOD i/c - Biomedical Engineering
7	Dr. N.Venkatesvara Rao	HOD/Artificial Intelligence and Data Science
8	Dr. S.Shalini	Coordinator/Science and Humanities
9	Mrs. P.Yasodha	HOD i/c - MBA

Other Academic Heads

S.No	Names	Designation
1	Mr. C.R.Ravisanker	Administrative Officer
2	Dr. T.Dinesh	Controller of Examinations
3	Dr. A.Jebaraj Ratnakumar	Dean (Academics)
4	Dr. T.Srihari	Dean (Research)
5	Dr. D.Joseph Jeyakumar	Dean (Student Affairs)
6	Dr. N.Venkatesvara Rao	IQAC Coordinator
7	Mrs. AyishaBegam	Placement Officer
8	Mrs. P.Meena Priyadharshini	Librarian
9	Mrs. Durgadevi	Finance Manager
10	Mr. P.G.Seetharam	Maintenance Officer

Grievance redressal Mechanism

The Institutional Complaint Management Mechanism operates across three tiers within the institution:

- At the departmental level, grievances are addressed by the respective class Coordinators, Counselors, and Department Heads. They play an essential role in managing concerns specific to their departments
- To facilitate the resolution of grievances at the department level, student coordinators and staff coordinators within the grievance redressal cell act as intermediaries. They assist in communication and the initial sorting of grievances.
- If grievances remain unresolved at the departmental level, they are then escalated to the Grievance Redressal Cell of the institution, which deals with more complex or persistent issues.
- Additionally, the institution maintains transparency and accountability by regularly reporting the status of grievances. A monthly Status Report, detailing the number of grievances received, resolved, and pending as of the last day of the previous month,

is submitted to AICTE through the online feedback report on the AICTE web portal. Furthermore, to inform students and staff about the online Grievance Redressal Mechanisms, the institution displays relevant details near the office. This information includes the URL of the online Grievance Redressal Portal (<https://www.jnn.edu.in/committees-grievance-redressal-committee/>) and contact information, such as names, contact numbers, and email IDs of the Grievance Committee members.

- For any grievances, individuals can contact the Grievance Redressal Committee via email at grc@jnn.edu.in.

The Grievance Redressal Protocol outlines the steps followed in the grievance resolution process:

- Registration of grievances through email, in-person submission to GRC or Department Coordinators, or via the online registration system.
- Immediate acknowledgment of grievance receipt.
- Forwarding the grievance to the Grievance Redressal Cell for further action.
- Scrutiny of the redressal process by reviewing the grievances.
- If a resolution is not satisfactory within a stipulated time, a hearing or inquiry may be initiated.
- If necessary, the grievance may be forwarded to the student counselor.
- The final resolution or decision is reached by the grievance redressal committee.
- Communication of the final decision to both parties involved.
- Closure of the grievance and preparation of a report.
- Continuous feedback collection for the improvement of the redressal process.

Grievance Redressal Cell (For students)

Name of the Cell / Committee:	Grievance Redressal Cell	
Core Activity	- Grievances of students, if any, are brought to the notice of the Head of the institution, and the issues are amicably and promptly solved. - The college management is also considerate about any issues that might need their attention and intervention. - Suggestion boxes are kept in the campus in which the stakeholders can put their grievances/complaints. The authority will go through the same and tries to solve if possible and it will be treated with confidentiality. - The Grievance Redressal Cell intends to find solutions for problems like any kind of physical or mental harassment, complaints regarding class room teaching, classroom management, completion of syllabus, teaching methods etc. - Any grievance/complaint received by the stakeholders is discussed by the grievance redressal committee to arrive at a concrete solution	
Chair Person	Dr. K.Ganesan, Principal	
Anna University Representative	Dr. P.Nirmal Kumar, Prof ECE, CEG Campus Anna University, Chennai-600025	
Members	Dr. D. Joseph Jeyakumar/HOD-ECE Mr. J.Thamilarasan/AP-R&A Mr. A.Iyyanarappan/AP-CSE Dr. A.Jebaraj Ratnakumar/HOD-CSE Mr. G.Ashok/AP- BME Mr. J.Vijay Anand, AP-ECE	Mrs. V.Tharakeswari, AP- S & H Mrs. N.Malathy, AP/ECE Mrs. M.SangaviAP-CSE Ms. V.Kavitha/AP-AE Ms. L.Jain Caroline, Girls Hostel Warden
Student Members	Ms. R.Sharmila, IV ECE Ms. Palem Kota Bharath, IV CSE Ms. B.Kousika, IV AGRI	
Periodicity of the Meeting	Twice in a year/as when required	

Anti-Ragging Committee

Name of the Cell / Committee:	Anti-Ragging Committee
Core Activity	▪ Anti-Ragging Committee Student members assist the institution in implementing rigid anti-ragging measures so that the institution becomes ragging-free campus ▪ Faculty members for monitoring the premises, includes hostels, food court, parking places, different buildings, play grounds, buses etc. where students assemble and meet one another. ▪ Disseminate about anti-ragging in the forms of circulars, flexes, posters and displaying boards and in and around college premises.
Chair Person	Dr. K.Ganesan, Principal
Members	Mr. S.Madhiarasan, Member – Police Inspector Ms. P.Lakshmi, Member - VAO Ms. Esther, Member - Official of NGO Mr. S.Lingam-Transport in-charge Mr. Vijayan, Canteen Manager Mr. D.Sivasubramaniyan, Parent Mr. Selva Kumar, Technical Assistant
Student Members	Ms. Pavithra Easwari, IV CSE Mr. Atla Srinath- III ECE
Frequency of the Meeting	Once in a year/as when required

Internal Compliance Committee

Name of the Cell /Committee	Internal Compliance Committee
Core Activity	▪ To set forth the expectations of conduct and mutual respect regarding sexual harassment and the process of complaint if these expectations are not met or violated. ▪ This will create awareness on what sexual harassment is and how to deal with the conduct if it arises, to articulate the organization's strong opposition to sexual harassment, and to identify penalties that can be imposed for such prohibited conduct. ▪ To establish clearly that this institution is committed to providing a work environment that is free from discrimination and harassment in any form
Chairperson	Dr. K.Ganesan, Principal
External Member	C.Vijayalakshmi M.A., B.L., Kolathur, Chennai
Members- Faculty	Ms. B.Shanmathi,AP/ECE Ms. N.Malathy, AP/ECE Ms. L.Jaincaroline, AP/ S & H Ms. V.Kavitha, AP/AGRI
Members- Student	Mr. Palem Kota Bharath- IV CSE Ms. Yasaswini,- IV CSE Ms. L.Sangeetha-IV ECE Ms. HaydenPaul,IV AI & DS Ms. Dhanalakshmi, IV BME
Frequency of the Meeting	Twice in a year/as when required

Women Empowerment Cell

Name of the Cell /Committee:	Women Empowerment Cell
Core Activity	▪ To prevent sexual harassment and to promote general well-being of female students, teaching and non-teaching women staff of the College. ▪ To resolve issues pertaining to girls'/women's sexual harassment. ▪ To Women's Grievance Redressal Cell has been formed to resolve issues. ▪ To equip the female students, faculty and staff members with knowledge of their legal rights. ▪ To safeguard the rights of female students, faculty and staff members. ▪ To provide a platform for listening to complaints and redressal of grievances. ▪ To incorporate hygiene habits and ensure a healthy atmosphere in and around the college
Chair Person	Dr. K.Ganesan, Principal
Convener	Mrs. M.Sangavi-CSE
Members- Faculty	Ms. N.Malathy, AP-ECE Ms. S.Jenefar, AP/AGRI Mrs. G.GnancySubha, AP- BME
Student Members	Ms. Genji Nagarathnamma, IV CSE Ms. M.Kaviya –IV AGRI Ms. Sangavi – III R&A Ms. Gracy, IV BME
Frequency of the Meeting	Twice in a year or as when required



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 Tel: 044-27629613 / 9600057121, E-mail: info@jnn.edu.in, www.jnn.edu.in

Grievance Redressal Committee**Academic Year 2021-2022/Odd Semester****Minutes of Meeting****Date: 26/10/2021****Time: 11:30 am****Venue: Seminar Hall Ground
Floor AAB Block****Members Present****Redressal Committee Members for Boys**

SL.No.	Name	Present Designation / Department	Position
1	Dr. D. Joseph Jeyakumar	HOD - ECE	Senior Faculty
2	Mr. A. Ramachandran	AP – Mechanical Engineering	Senior Faculty
3	Mr. S. Basilahamed	AP – Civil Engineering	Senior Faculty
4	Dr. K. Somasundaram	AP – CSE	Senior Faculty
5	Mr. G. Ashok	ASP – ECE	Transport Incharge
6	Mr. Pelluru Vamsi,	IV Year Mechanical	Student

Redressal Committee Members for Girls

SL.No.	Name	Designation/ Dept.	Position
1	Ms. V. Tharakeswari	ASP- S & H	Senior Faculty
2	Ms. N. Malathy	AP - ECE	Senior Faculty
3	Ms. R. Nithya	AP – ECE	Senior Faculty
4	Ms. T. Sangeetha	AP – CSE	Senior Faculty
5	Ms. V. Kavitha	AP – Civil Engineering	Senior Faculty
6	Ms. L. Jain Caroline	AP- S & H	Deputy Warden, Girls Hostel
7	Ms. Loganandhini	III ECE	Student



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Minutes

S.No	Grievances	Received Through	Actions Taken
1	Need more mentor classes	Class Committee Meeting	All Department HOD instructed to arrange periodical mentor classes
2	Need Additional Lab Classes	Class Committee Meeting	All HODs are asked to arrange special lab Sessions for Students
3	Bus Transport to nearest points	Class Committee Meeting	Informed Transport In charge to arrange the buses to nearest stop points



Copy to

1. The Chairman
2. Members of Grievance Redressal Committee
3. All HODs

A. V. Mayakkannan
Principal

Dr. A.V. MAYAKKANNAN, M.E. (Ph.D.)
PRINCIPAL
J.N.N INSTITUTE OF ENGINEERING
90, Ushaa Garden, Kannigaipair,
Chennai - Periyapalayam Highway,
Tiruvallur Dist - 601 102.



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Prevention of Sexual Harassment Committee

Academic Year 2021-2022/Odd semester

Date: 13/10/2021

Time: 2:00 pm

**Venue: Seminar Hall Ground
Floor AAB Block**

Subject: The meeting for the PSHC was conducted on 13/10/2021 with the following members

Sr.No.	Name of Member	Position	Category
1	Dr. P. Subhashini	Chairperson	Professor/ CSE
2	Ms. R. Chandralekha	Internal Member	AP/ ECE
3	Ms. N. Malathy	Internal Member	AP/ ECE
4	Ms. S.D. Poojaa	Internal Member	AP/ S & H
5	Ms. U. Monica	Internal Member	AP/ Civil Engineering
6	Ms. Gayathri	Student Member	IV Year CSE
7	Ms. Genji Nagarathnamma	Student Member	II CSE
8	Ms. Devipriya	Student Member	III Year ECE
9	Ms. Reeta	Student Member	II Year AI & DS
10	Ms. Kowsalya	Student Member	II Year BME

Report of the Meeting:

- This meeting was conducted to monitor activities regarding PSHC for the odd semester 2021-2022. The meeting started at 12.00 pm and members in the meeting expressed various awareness program for the safety of woman faculty and female students in the college.

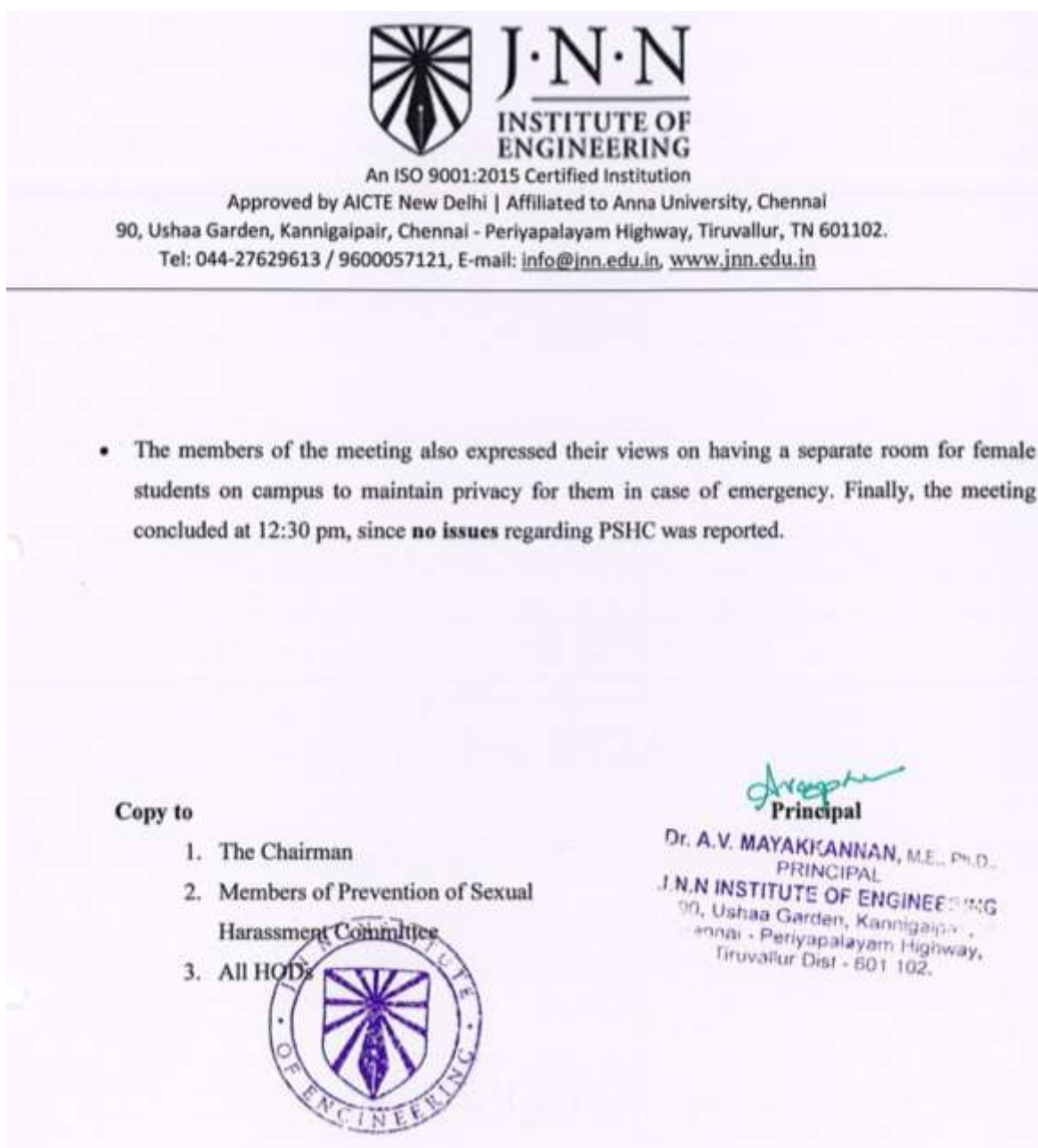


Fig. 10.1.3.2 Sexual Harassment Committee-Minutes of Meeting

10.1.4 Delegation of financial powers (10)

Institution should explicitly mention financial powers delegated to the Principal, Heads of Departments and relevant in-charges of workshops and laboratories. Demonstrate the utilization of financial powers for each year of the assessment years.

The Principal of the institution have complete financial powers pertaining to the college.

- The Principal is empowered to sanction the requisite amount of money after getting approval from the management committee.
- The HODs are delegated to use Rs 1,000 contingency in emergency purchases and repairs for the smooth running of the department.
- Annual Budget for the institution is prepared at the beginning of the year, by considering the possible income and expenditure involved. It is approved in the GB meeting.
- The HOD is the in-charge for the equipment and stores attached to the department concerned
- HOD prepares the lists of items of stores to be replenished at periodical intervals and arrange for the purchase of stores.
- Institution purchase committee carefully scrutinizes and allocates required funds to each department after acquiring proposals from all the departments regarding their requirements for the academic year.
- Purchase Committee: The Purchase Committee will consist of the following Members:
 1. Purchase Officer – Coordinator
 2. HOD – Member
- The Purchase Committee will go through the quotes and recommendations of the user and advise the concerned HOD. The concerned HOD will forward the recommendations of the Purchase Committee along with remarks to the Principal.
- The Principal will scrutinize the comparative statement and give his remarks and send the fill back to the concerned department. The HOD shall take copies of the comparative statement and the quotations and send the originals to Purchase Department for further action.
- The Principal will place order.

- Vouchers support all transactions. All bills/invoices/vouchers are scrutinized by account staff and approved by the administrative officer.
- The bill payments are passed after ensuring proper verification/evaluation of the items. Only duly authorized persons to operate the transactions through the bank
- Audited financial statements including Income and Expenditure Account, Balance Sheet etc. are prepared by qualified auditors and submitted to banks and other regulatory

Table 10.1.4.1 Delegation of Financial Powers

Designation	Power of Sanction
Principal	Up to Rs.10000
Dean	Up to Rs.5000
HOD	Up to Rs 1000

10.1.5 Transparency and Availability of Correct/Unambiguous Information in Public Domain (5)

(Information on policies, rules, processes and dissemination of this information to stakeholders is to be made available on the website)

- The Vision, Mission and objectives of the institution are displayed in the College campus at Notice boards, Department Notice boards, Canteen, Hostel building, library and other prime locations to engross the attention of all students, faculty, staff and visitors. The same is also communicated through college website and Newsletter to all the stakeholders for wide publicity.
- The web-site of the institution publishes the information pertaining to the institute and programs for circulation to stakeholders and the general public.
- The Quality policies of the institution are available on college web-site for information and dissemination.

- Annual audited reports are published and available to the stakeholders and public in the college website.
- Notices or Circulars concerned to students are circulated in the class rooms and displayed on the notice boards.
- Circulars or notifications from the university regarding academic matters are sent to all the Heads of the departments and circulated among the faculty members and students.
- The institution is transparent in providing timely information to its staff enabling better connectivity and proficiency in day-to-day academic and administrative works.
- Regular class work schedule & examination schedule and lecture schedule are displayed on notice boards.
- Marks in internal exams & attendance particulars are displayed in Camu
- Regularly we intimate to parents/ guardian regarding the attendance and academic progress of their wards.
- Question bank and other lecture notes are given to students and uploaded in Camu for their future reference
- Grievances are collected from the college website <https://www.jnn.edu.in/committees-grievance-redressal-committee/>
- The events and the activities conducted in the college has been posted in Social media.

PART C: DECLARATION

- 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 in force as on date and the institute's shall 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 will be initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, post-visit and subsequent to grant of accreditation.

Head of the Institute

Name: Dr. K. Ganesan

Designation: Principal

Signature:

Seal of the Institution:

Place: Kannigaipair

Date: 23.09.2023

APPENDIX I OF SAR

(A) PROGRAM OUTCOMES (POs)

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 Sustain ability: 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 multi-disciplinary 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 multi-disciplinary 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.

Program should specify 2-4 Program Specific Outcomes.

(B) PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1	To apply software engineering principles and practices for developing quality software for scientific and business applications.
PSO2	To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions for existing or novel problems.