



AISSMS

COLLEGE OF ENGINEERING





Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION I

Vision, Mission and Program Educational Objectives



CRITERION I	N I Vision, Mission and Program Educational Objectives							
1.1	State the Vision and Mission of the Department and Institute (05)	05						

A. Availability of statement of the department

Vision of Institute:

> Service to society through quality education

Mission of Institute:

- > Generation of national wealth through academics and research
- > Imparting quality technical education at the cost affordable to all strata of the society
- ➤ Enhancing the quality of life through sustainable development
- Carrying out high quality intellectual work
- ➤ Achieving the distinction of the highest preferred engineering college in the eyes of stake holders

Vision and Mission of Department

Vision of Department

Society Growth and Welfare through Competent Electronics and telecommunication Engineering Graduates

Mission of Department

- > To facilitate E & TC graduates with sight of innovation.
- ➤ To provide stimulating learning environment with modern tools & technologies.
- To produce dynamic graduates with ethics and moral values.
- > To impart quality education in the field of E & TC engineering to solve societal and industrial problems

The Vision and Mission statements of the Institute are set with broad scope. The Vision and Mission of the Department form a part of it. The Vision statement of Department perfectly aligns with Vision of the Institute. The Mission of the Department streamlines with broad scope of the Mission of the Institute.



B. Appropriateness/Relevance of the Statements

Vision of Institute:

➤ The vision statement of institute is appropriate because it emphasizes the primary purpose of the institution, which is to provide education that benefits society.

Vision of Department:

The Vision of Department: "Society Growth and Welfare through Competent Electronics and Telecommunication Engineering Graduates" is appropriate for Electronics and Telecommunication Engineering department within an educational institution, which is to contribute to societal growth and welfare through its graduates.

Mission of Institute:

- The mission of the Institute "Generation of national wealth through academics and research" is appropriate. Which highlights the importance of contributing to the Nation's wealth and development through academic and research.
- ➤ The mission of the institute "Imparting quality technical education at the cost affordable to all strata of society" is appropriate for providing affordable quality education to all the sector of the society.
- ➤ The mission of the institute "Enhancing the quality of life through sustainable development" is appropriate and aligns with the broader societal goals of promoting sustainable development and improving the quality of life.
- ➤ The mission of the institute "Carrying out high-quality intellectual work" appropriate by emphasizing intellectual and excellence work among the graduate.
- The mission of the institute "Achieving the distinction of the highest preferred engineering college in the eyes of stakeholders" is appropriate as the mission highlights the institution's aspiration for excellence and recognition in the eye of stakeholder which is important requirement to became reputed institute.

Mission of Department:

- The mission of the Department is "To facilitate E & TC graduates with a sight of innovation." is appropriate by placing a significant emphasis on nurturing innovation among its graduates.
- The mission of the department "To provide a stimulating learning environment with modern tools & technologies." is appropriate which, emphasizing the need for up-to-date technology and a helping learning environment in the department.



- ➤ The mission of the institute "To produce dynamic graduates with ethics and moral values." is appropriate, which emphasizing not only technical skills but also ethics and values which will producing all rounded engineering graduate
- The mission of the department "To impart quality education in the field of E & TC engineering to solve societal and industrial problems." is appropriate focusing on the practical application of education to solve industry and societal problems.

Overall, both the institute's and the department's mission statement is appropriate and relevant as they address key aspects of education, research, societal impact, and ethical values that are play vital role.

C. Consistency of the Vision and Mission statements of department with that of Institute

Following explanation will provide valuable information how Vision and Mission of Department are amalgamated with Vision and Mission of the Institute. The Department Vision and Mission thoroughly blend with that of the Institute.

Considering today's era, it is the responsibility of our institute to generate technically sound engineers with social awareness. An engineer must be technically sound, a good communicator and a sensible human being. Engineers must be industry ready.

Consistency of the vision statement:

The institute and department visions committed to serving to society. The institute vision focuses on quality education as a means of service, the department vision specifies the service will be achieved by producing capable graduates in the field of electronics and telecommunication engineering. Therefore, institute and department vision clearly aligned.

Consistency of the mission statement:

The department's mission statement and institute mission statement are consistent considering the following major aspect:

Institute and department are focusing on importance of quality education and research, commitment to societal development and problem-solving.

The department's mission also focusses on innovation, modern tools, ethics, and moral values, which will be enhancing the quality of life and intellectual work.



Institute and department mission statement committed to quality education, research, societal development, and ethical values among the electronics and telecommunication engineering graduate.

Table 1.1: Showing similar words in the institute and department statement

Institute	Department
Visio	n Statement
Service to Society through Quality Education	Society Growth and Welfare through Competent Electronics and Telecommunication Engineering Graduates
Missio	on Statement
Generation of national wealth through education and research .	To facilitate E & TC graduates with sight of innovation.
Imparting quality technical education at the cost affordable to all strata of Society.	To impart quality education in the field of E & TC engineering to solve societal and industrial problems
Enhancing the quality of life through Sustainable development.	To provide stimulating learning environment with modern tools & technologies.
Carrying out high quality intellectual work.	To impart quality education in the field of E & TC engineering to solve societal and industrial problems
Achieving the distinction of the highest preferred engineering college in the eyes of stake holders	To produce dynamic graduates with ethics and moral values



1.2 State the Program Educational Objectives (PEOs) 05

The Program Educational Objectives (PEO) are as follows:

- > To build strong fundamental knowledge among graduates required to pursue their higher education and continue professional development
- > To enable graduates to identify, analyze and solve Electronics Engineering problems by applying basic principles and modern techniques.
- ➤ To enable graduates to innovate, design and develop hardware & software components and groom their ability to succeed in multidisciplinary & diverse field.
- > To inculcate in graduate's professional attitude, effective communicational skills, team work skills for becoming a responsible, cultured human being.

Justification/motive of the PEO Statements

- ➤ Promotion of higher education, research and development and other innovative efforts in related subjects will build strong fundamental knowledge among graduates required to pursue their higher education and professional development
- ➤ The knowledge of contemporary science, engineering related subjects and domain skills imparted in the program will enable graduates to identify, analyze and solve Electronics Engineering problems.
- Projects and Competitions will enable students to innovate, design and develop hardware and software components and groom their ability to succeed in multidisciplinary and diverse field
- ➤ The education will enable graduates to become responsible, cultured human being in industry or higher education by improving technical, professional and communication skills.



Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders

10

A. Adequacy in respect of publication and dissemination

The Vision, mission and PEOs are published and disseminated for internal stakeholders (management, governing council members, faculty members and students) and external stakeholders (parents, employers, industry persons, professional bodies and alumni) at various locations through various modes and occasions.

Table 1.3.1: List of Internal	and External Stakeholder
Internal Stakeholder	External Stakeholder
Faculty	Alumni
Students	Parents
IQAC	Employer
Institute Academic Coordinator	Industry Experts
Principal Office	Guests
ILC Members	Examiners
Other central committee incharge	Faculties from other institute
CITP, Training and Placement	DAB Members
Management body (Members)	BOS/SPPU representatives
Governing Body	Professional Bodies

	Table 1.3.2: Publishing Mode of Vision Mission and PEOs											
	Level	SI	Medium of Publishing	Stake holders								
	Level	51	viculum of i doubling	Internal	External							
		1	The Institute website www.aissmscoe.com (https://www.aissmscoe.com)	Y	у							
	Vision Mission PEOs Institute 2 3 4	Academic Calendar	Y	Y								
Vision		3	Admission Brochure	Y	Y							
Mission PEOs		4	Administrative Office	Y	Y							
		5	Administrative Notice Board	Y	Y							
		6	Conference Room , Seminar Hall, CITP	Y	Y							
		7	Annual Magazine	Y	Y							
		8	Library	Y	Y							
	Department	1	HOD Office ,Seminar Hall.	Y	Y							

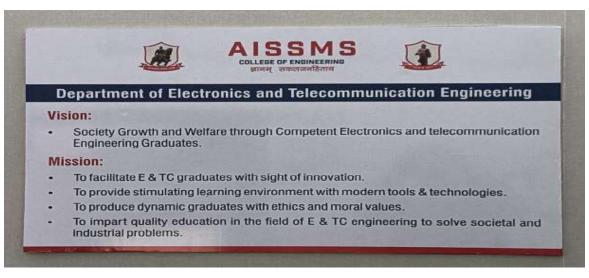


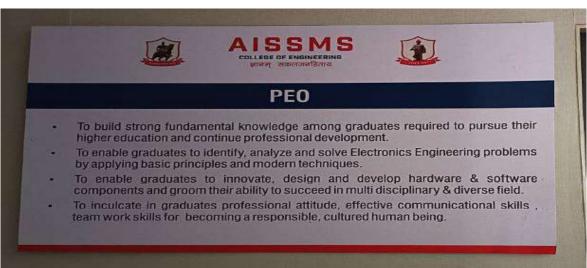
2	Institute Website – Department	Y	Y
3	Department Notice Board	Y	Y
4	Library Manuals	Y	Y
5	Course File	Y	Y
6	News Letter	Y	Y
7	FDP/STTP Boucher	Y	Y

B. Process of Dissemination among stakeholder

Table 1.3.3: Dissemination of Vision Mission and PEOs											
	Level	SI	Method of Publishing	Stake holders							
	Devel	51	Without of 1 donstring	Internal	External						
		1	Brochures' and Flyers of Programs	Y	Y						
		2	Invitation Cards	Y	Y						
		3	Conferences Organized	Y	Y						
		4	College Programs	Y	Y						
VISION MISSION		5	Parents' Teachers Meeting	Y	Y						
PEOs	Institute and Department	6	Placement Drives	Y	Y						
	-	7	Alumni Meeting	Y	Y						
		8	Student's Chapter Activities	Y	Y						
		9	Association Activities	Y	Y						
		10	Industry Visit by Faculty Members	Y	Y						
		11	e-mail correspondence	Y	Y						







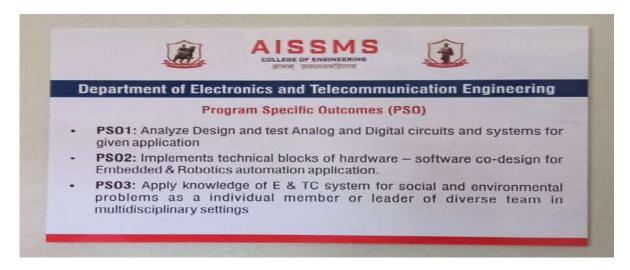


Figure 1.3.1: Vision Mission, PEO and PSO in HOD Cabin

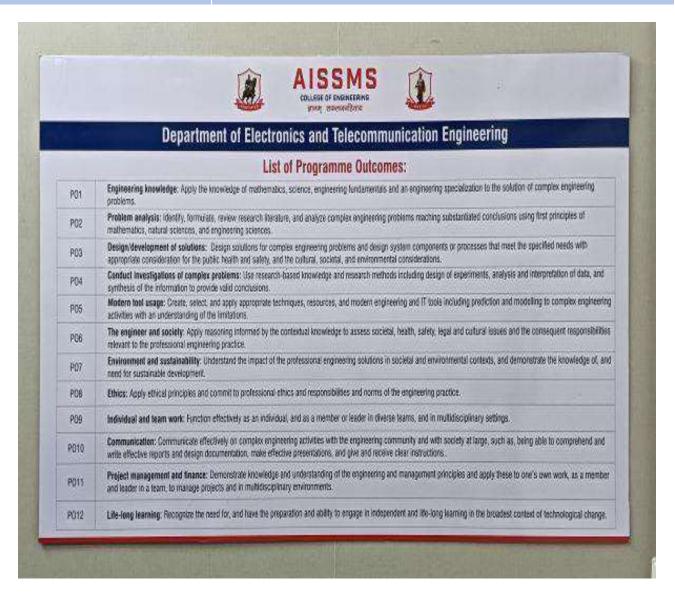


Figure 1.3.2: Program Outcomes (PO) in HOD Cabin



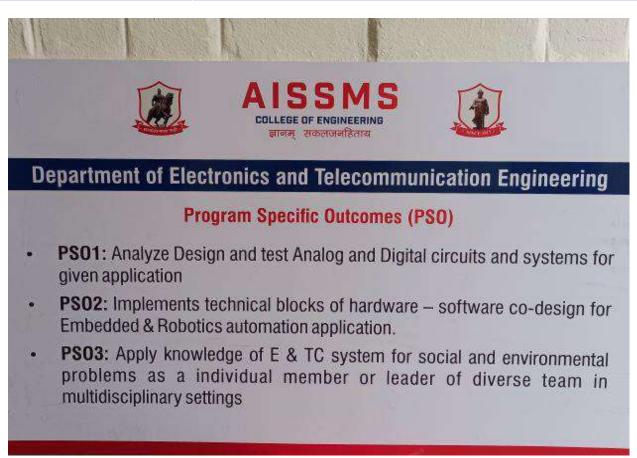


Figure 1.3.3: PSO board on Corridors

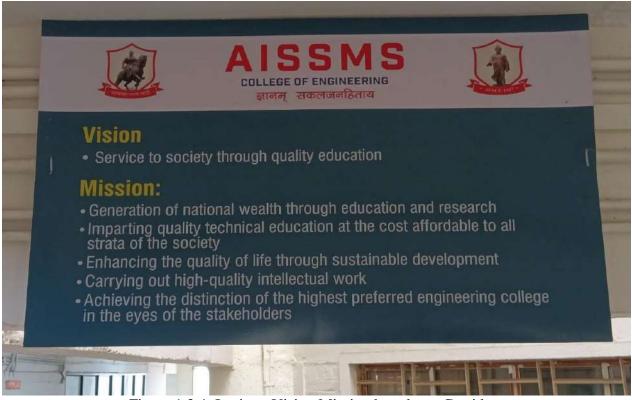


Figure 1.3.4: Institute Vision Mission board on Corridors



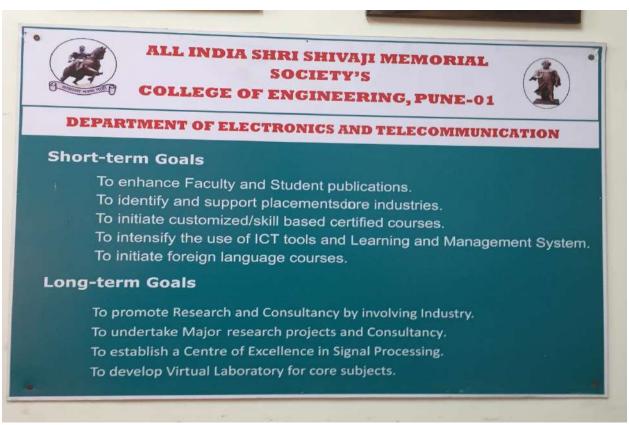


Figure 1.3.5: Short term and Long term goal board in HOD cabin

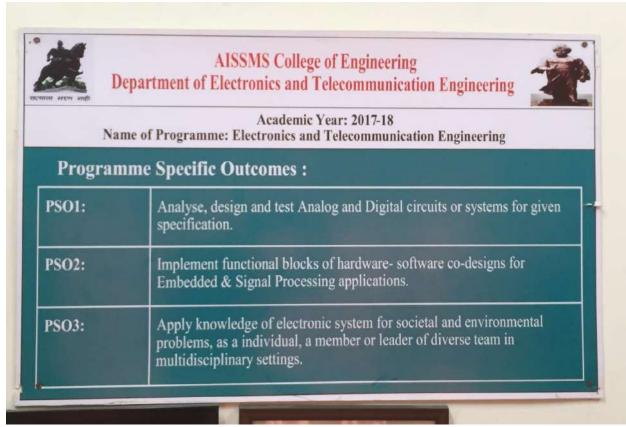


Figure 1.3. 6: Program Specific Outcomes board in laboratory



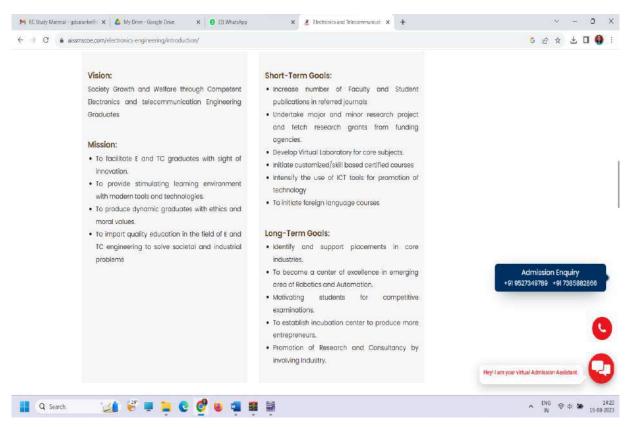


Figure 1.3.7: Department Vision Mission on College Website



Figure 1.3.8: Vision Mission Institute and Department on brochure



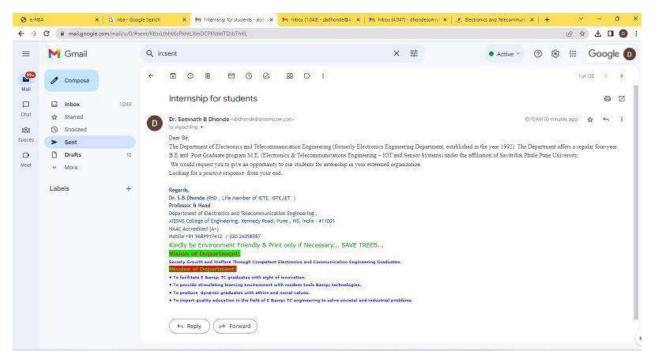


Figure 1.3.9: Department Vision Mission in E-Mail Signature



1.4

State the process for defining the Vision and Mission of the Department, and PEOs of the program

25

A. Description of process involved in defining the Vision, Mission of the Department:

Gathering input from department faculties, the department faculties give valuable insights and perspectives on the departments strengths, weaknesses, opportunities, and challenges

- ► Take the input from internal and external stakeholder
- ▶ Preparation of rough draft of Vision and Mission as per requirement and suggestions by industry, internal and external stakeholders and review and analysis is done
- ▶ Discussion in PAQIC to finalize the vision mission of department
- ▶ Discussion in DAB meeting and modified version is obtained
- ▶ Modified version sent to IQAC further suggestion and modification.
- ► Final vision mission sent to management for approval and freeze the vision mission and publish



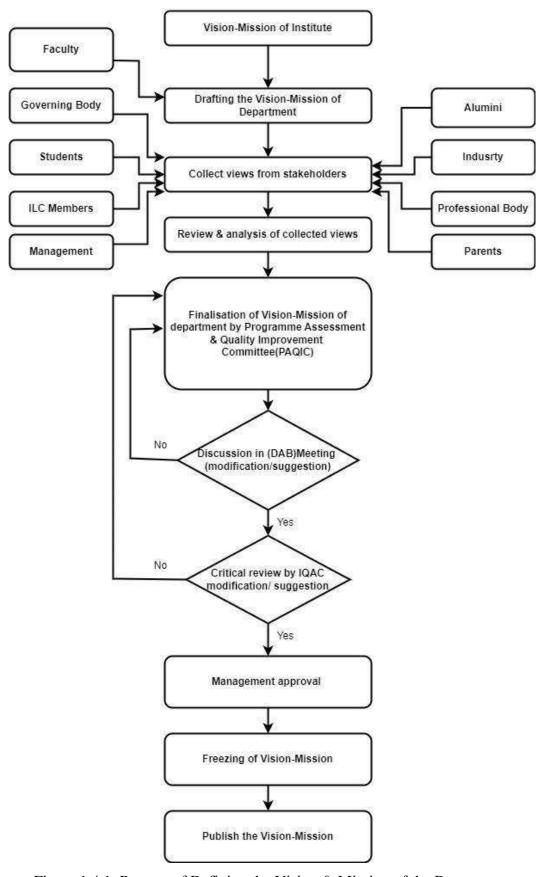


Figure 1.4.1: Process of Defining the Vision & Mission of the Department



B. Description of process involved in defining the PEOs of the program

Detail steps to define the PEOs of department is given in flow chart

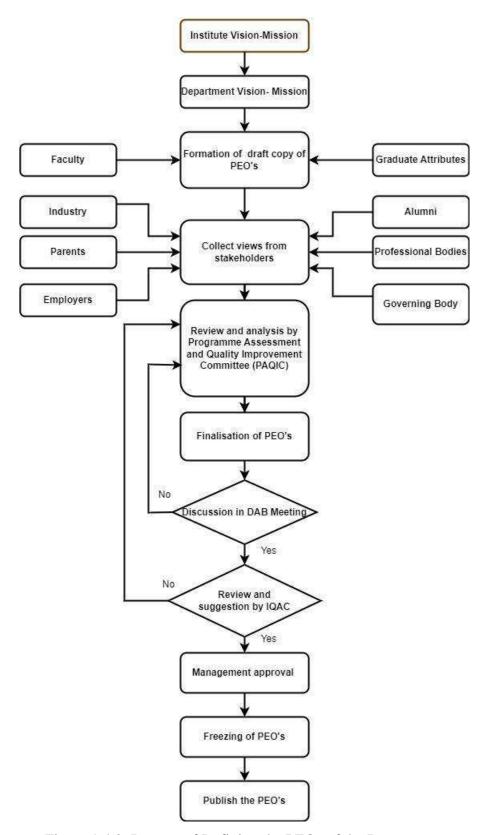


Figure 1.4.2: Process of Defining the PEOs of the Department



***** The Framework of defining PEOs:

- The Program Educational Objectives (PEOs) are the broad statements of the objectives for which the program is to be run. These objectives are established to help in fulfilling the Mission of the Department, and to the students graduating from the program to lead a fruitful and meaningful life in the society by being useful in its progressive development. The objectives are in consonance, to the extent possible, with the current scenario in the field of E&TC engineering and with the needs of the relevant Industry. The Industry needs are gauged through the feedback, received during the interaction with industry persons and even in the Center for Information Training and Placement (CITP) when companies come for campus placement.
- Moreover, the Alumni who have gone to Industry or to Institutes of high reputation are able to reflect whether the objectives are adequate.
- The inputs received from various sources are taken in to the consideration during the brain storming session in the Program Assessment and Quality Improvement Committee meeting and then the final PEO are finalized, published and disseminated.
- The needs of the Nation and Society are identified through the stakeholders' interactions, media and gauging futuristic technological advancement.
- Taking the above into consideration, the PEOs are established by Program Assessment and Quality Improvement Committee for final approval.



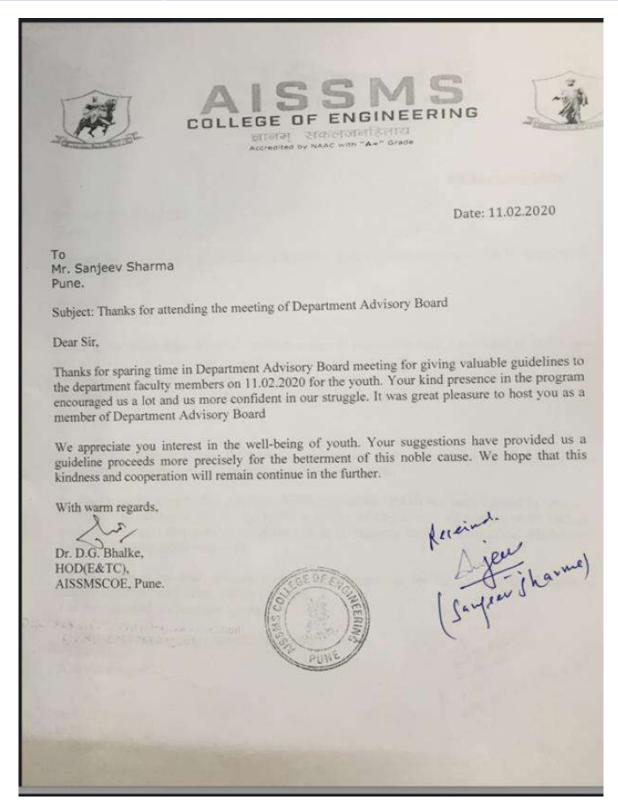


Figure 1.4.3: Thanks Latter to Department Advisory Board committee member for attended meeting



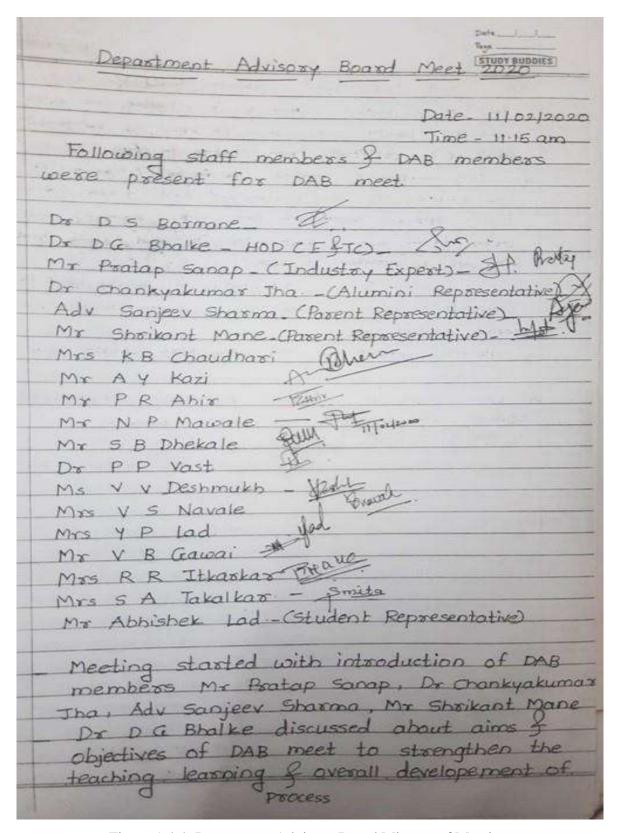


Figure 1.4.4: Department Advisory Board Minutes of Meeting









Figure 1.4.5: Photo of DAB Meeting

1.5

Establish consistency of PEOs with Mission of the Department

15

A. Preparation of a matrix of PEOs and elements of Mission statement (5)

In order to bring our dream Mission into reality, the department actively identifies gaps in the university curriculum and implements a range of initiatives to bridge these gaps. These efforts are geared towards fostering robust fundamental knowledge, enhancing problem-solving abilities, promoting innovation, and facilitating multidisciplinary learning. The overarching goal is to ensure that our programs are in harmony with the Program Educational Objectives (PEOs) and effectively respond to the dynamic demands of the industry and evolving technology. The department is consistently taking following initiative to bring our dream in to reality

Faculty Development: Encourage faculty members to stay updated with the latest developments in Electronics & Telecommunication engineering through workshops, seminars, and conferences. Support faculty members in integrating modern tools and technologies into their teaching methodologies.

Student Assessment and Feedback: Gather regular feedback from students, alumni, and industry partners to evaluate the effectiveness of the curriculum and teaching pedagogies

Extracurricular Activities: Promote student involvement in extracurricular activities, such as technical clubs, student's chapters, project exhibition, technical competitions, and research projects, to foster innovation, teamwork, team leader, communication skill, ethical values and hands-on experience among the graduate

Career Guidance and Counselling: Offer career counselling services to help students understand their options for higher education and professional development. Provide guidance on building professional attitudes, effective communication, and teamwork skills.

Collaboration with Industry:

Establish partnerships and collaborations with industry leaders to ensure the industry needs and trends. One faculty is connected one industry to facilitate internships, industry-sponsored projects for students and knowledge sharing

Professional Development for Students:

Organize workshops, industry expert talk and seminars on professional development, effective communication, and teamwork. Encourage students to participate in leadership and community service activities.



Cultural and Social Activities:

Promote cultural and social activities that encourage students to become responsible and cultured human beings through annual social gathering, NSS etc.

Faculty-Student Interaction:

Build strong faculty-student relationships through mentoring and open communication to guide students in their academic and personal development.

Feedback Loops:

Establish feedback mechanisms with alumni, industry, employer and internal, external stake holder to track the overall development of department

The Program Educational Objectives are as follows. (PEO)

- ➤ To build strong fundamental knowledge among graduates required to pursue their higher education and continue professional development in Electronics & Telecommunication field.
- To enable graduates to identify, analyze and solve Electronics Engineering problems by applying basic principles and modern techniques.
- To enable graduates to innovate, design and develop hardware & software components and groom their ability to succeed in multidisciplinary & diverse field.
- > To inculcate in graduate's professional attitude, effective communicational skills, team work skills for becoming a responsible, cultured human being.
 - ➤ M1: To facilitate E & TC graduates with sight of innovation.
 - ➤ M2: To provide stimulating learning environment with modern tools & technologies.
 - ➤ M3: To produce dynamic graduates with ethics and moral values.
 - ➤ M4: To impart quality education in the field of E & TC engineering to solve societal and industrial problems.



Table 1.5.1: PEOs and Mission statement mapping matrix

D., Ed., (DEO.)	Miss	sion of the I	Department	
Program Educational Objectives (PEOs)	M1	M2	М3	M4
To build strong fundamental knowledge among graduates required to pursue their higher education and continue professional development in Electronics & Telecommunication field.	3	3	2	3
To enable graduates to identify, analyze and solve Electronics Engineering problems by applying basic principles and modern techniques.	3	3	2	3
To enable graduates to innovate, design and develop hardware & software components and groom their ability to succeed in multidisciplinary & diverse field.	3	3	2	3
To inculcate in graduate's professional attitude, effective communicational skills, team work skills for becoming a responsible, cultured human being	2	3	3	2

Correlation levels are - 1: Slightly ,2: Moderately, 3: Substantially

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

1. PEO1 (To build strong fundamental knowledge among graduates):

M1 (Facilitate E & TC graduates with sight of innovation): Graduates with strong fundamental knowledge is better equipped to understand and apply innovative concepts and ideas in E&TC domain. This alignment is at substantial level because a strong foundation is a prerequisite for innovation. Technical expertise grooms the students to work in diversified areas of hardware, software design, manufacturing, automation, AIML, IOT, Embedded design etc.

M2 (Provide a stimulating learning environment with modern tools & technologies): Building strong fundamental knowledge often involves utilizing modern tools and technologies. This alignment is at substantial level because department has created the necessary environment essential for achieving PEO1 through student's clubs, Professional body student's chapters and organizing various workshop for students. This alignment is at a substantial level

M3 (Produce dynamic graduates with ethics and moral values): Building strong fundamental



knowledge indirectly supports the goal of producing graduates with ethics and moral values, as a solid foundation is needed for ethical decision-making. This alignment is at a moderate level.

M4 (Impart quality education in the field of electronic and telecommunication engineering to solve societal and industrial problems): Strong fundamental knowledge of Electronics and telecommunication engineering graduates having component of quality education are better prepared to address societal and industrial challenges. This alignment is at substantial level

PEO1 aligns well with all the mission statements of the department, with substantial alignment with M1, M2, and M4, and moderate alignment with M3. It plays a key role in preparing graduates to excel in various fields, including software and hardware, higher education, and professional development in the Electronics & Telecommunication field, while also contributing to the broader mission of the department.

1. PEO2 (To enable graduates to identify, analyze, and solve Electronics Engineering problems):

M1 (Facilitate E & TC graduates with a sight of innovation): Enabling graduates to identify, analyze, and solve engineering problems aligns substantial with committing to adapt to industry and market changes. E&TC graduates who can apply basic principles and modern techniques are better equipped to innovate and find solutions to industry and society. This alignment is at substantial level

M2 (Provide a stimulating learning environment with modern tools & technologies): PEO2 aligns well with M2 because it emphasizes the importance of a stimulating learning environment with modern tools and technologies. This alignment is at a substantial level, as modern tools are essential for problem identification and analysis. This alignment is at substantial level

M3 (Produce dynamic graduates with ethics and moral values): E&TC graduates who can identify and solve engineering problems are also expected to consider ethical implications. This alignment is at a moderate level, as PEO2 primarily focuses on technical skills.

M4 (Impart quality education in the field of E & TC engineering to solve societal and industrial problems): PEO2 directly aligns with M4 as it contributes to the department's goal of producing graduates who can effectively solve societal and industrial problems through their ability to identify and solve engineering problems. This alignment is at a substantial level.



PEO2 aligns very well with all the mission statements of the department, with substantial alignment with M1, M2, and M4, and moderate alignment with M3. It plays a pivotal role in preparing graduates to excel in electronic and software design, using modern tools to solve real-life problems, while also contributing to the broader mission of your department.

PEO3 (To enable graduates to innovate, design, and develop hardware & software components and succeed in multidisciplinary fields):

M1 (Facilitate E & TC graduates with a sight of innovation): PEO3 aligns substantial with M1 because it is directly focused on fostering innovation. E&TC graduates who can innovate, design, and develop components contribute significantly to the field's innovative progress. This alignment is at a substantial level.

M2 (Provide a stimulating learning environment with modern tools & technologies): PEO3 aligns well with M2 because providing a stimulating learning environment with modern tools and technologies is essential for enabling graduates to innovate, design, and develop components effectively. This alignment is at a substantial level.

M3 (Produce dynamic graduates with ethics and moral values): While the primary focus of PEO3 is on technical skills, it indirectly supports ethics and moral values by grooming E&TC graduates who can design and develop components while upholding moral values. This alignment is at a moderate level.

M4 (Impart quality education in the field of E & TC engineering to solve societal and industrial problems): PEO3 aligns substantial with M4 because graduates who can innovate, design, and develop hardware and software components contribute to solving societal and industrial problems through technological advancements. This alignment is at a substantial level

PEO3 aligns very well with all the mission statements of the department, with substantial alignment with M1 and M2, and moderate alignment with M3 and M4. It plays a significant role in preparing graduates to innovate, design, and develop hardware and software components, contributing to multidisciplinary fields and innovation, while also considering ethical and societal implications.

PEO4 (To inculcate professional attitude, effective communication skills, teamwork skills, and responsible, cultured behavior):

M1 (Facilitate E & TC graduates with a sight of innovation): PEO4 indirectly supports innovation because professionals with a professional attitude often promote an innovative and entrepreneurial mindset. Effective communication and teamwork skills are essential for



collaboration in innovative projects. This alignment is at a moderate level.

M2 (Provide a stimulating learning environment with modern tools & technologies): PEO4 aligns well with M2 because a stimulating learning environment with modern tools and technologies is good to developing effective communication and teamwork skills. This alignment is at substantial level.

M3 (Produce dynamic graduates with ethics and moral values): PEO4 substantial aligns with M3, as it focuses on producing E&TC graduates with not only technical skills but also ethical values. Effective communication and teamwork skills are crucial for ethical decision-making and collaboration. This alignment is at substantial level.

M4 (Impart quality education in the field of E & TC engineering to solve societal and industrial problems): PEO4 aligns moderately with M4 because E&TC graduates with professional attitudes, effective communication, and teamwork skills are better equipped to contribute to solving societal and industrial problems through collaborative efforts and responsible behavior. This alignment is at a moderate level.

PEO4 aligns well with all the mission statements of the department, with substantial aligned with M2 and M3, moderate aligned with M1 and M4. It plays a significant role in preparing E&TC graduates not only with technical skills but also with professional attitudes, effective communication skills, and the ability to work as responsible, cultured human beings.





AISSMS

COLLEGE OF ENGINEERING





Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION II

PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES







2. PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (120)

2.1 Program Curriculum (20)

2.1.1 State the process used to identify extent of compliance of the University curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I. Also mention the identified curricular gaps, if any (10)

(State the process details; also mention identified curricular 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.

As an affiliated institute to SPPU, we strictly follow syllabus and curriculum given by university. The curriculum in Electronics & Telecommunication Engineering maintains a balance among various categories of courses from Science, Mathematics, Engineering and Management, Project sand Internship components.

All courses' outcomes are framed and mapped with all-Program Outcomes (POs) and Program Specific Outcome (PSOs). On the basis of assessment of PO and PSO, academic activities are planned and conducted i.e., Skills based training, expert session by industry personnel, workshops, visits, statenational technical competition etc.







Process used to identify extent of compliance of university curriculum forattaining the POs and PSOs

Following process is used to identify extent of compliance of the University curriculum forattaining the Program Outcomes (POs) and Program Specific Outcomes (PSOs).

Table.2.1.1.1: Comparison of Model curriculum of AICTE and SPPU Pune

		AICTE Model Curriculum SPPU Curriculum 2015 SPPU Curricul 2019						
Sr. No.	Types of Courses	Courses	Credits	Courses	Credits	Courses	Credits	
1	Core Subjects	28	68	33	113	30	80	
2	Humanities and Social Science	5	15	2	6	7	15	
3	Basic Science	6	23	8	27	6	23	
4	Engineering Science	6	17	5	24	8	19	
5	Elective +Open Elective Subjects	8	24	4	12	6	25	
6	Project	3	17	2	8	3	8	
		56	160	54	190	60	170	

(as per the AICTE curriculum model https://www.aicte-india.org/education/model-syllabus) On the basis of credits and contact hours given by Model Curriculum of AICTE and SPPUthere exists a curriculum gap. These gaps can be bridged by taking extra efforts indifferent modes as conducting various activities

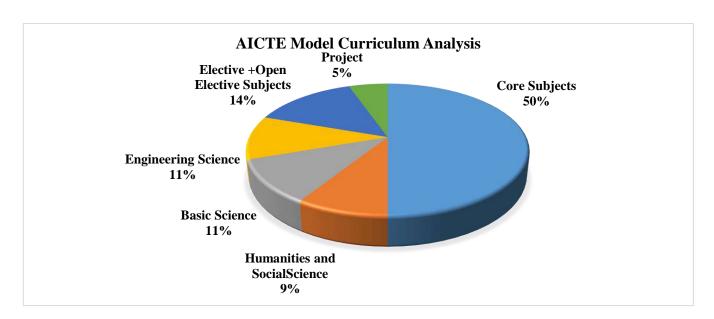


Figure.2.1.1.1 AICTE Model Curriculum Analysis



4%

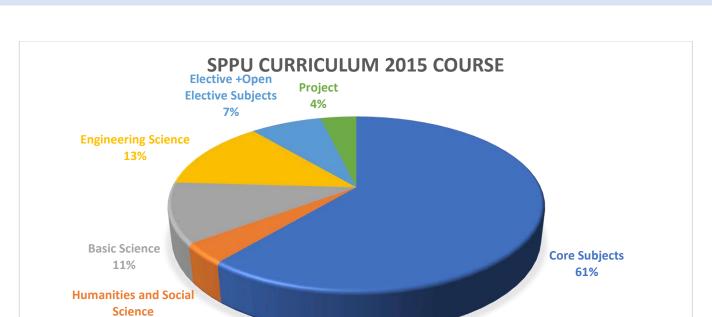


Figure.2.1.1.2 SPPU Curriculum Analysis 2015 course

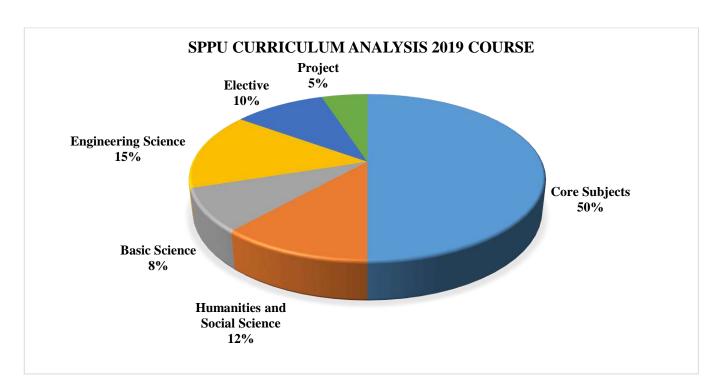


Figure.2.1.1.3 SPPU Curriculum Analysis 2019 course



Syllabus Structure of SPPU Pune:

Savitribai Phule Pune University Faculty of Science and Technology



Syllabus for

B.E (Electronics & Telecommunication Engineering)

(Course 2019)

(w.e.f. June 2022)

Figure.2.1.1.4 SPPU Syllabus







Savitribai Phule Pune University, Pune S.E. (Electronics / E&TC Engineering) 2019 Course (With effect from Academic Year 2020-21)

Semester-III

Code Course	Course Name		achii hem is/W	e	Examination Scheme and Marks					Credit				
		Theory	Practical	Tutorial	In-Sem	End-Sem	TW	PR	OR	Total	ТН	PR	TUT	Total
207005	Engineering Mathematics III	04	-	01	30	70	25	,	,	125	04	1	01	05
204181	Electronic Circuits	03	-	,	30	70	1	,	1	100	03	1	-	03
204182	Digital Circuits	03	-	-	30	70	1	-	-	100	03	-	-	03
204183	Electrical Circuits	03	-	-	30	70	-	-	-	100	03	-	-	03
204184	Data structures	03	-	1	30	70	1	,	1	100	03	1	1	03
204185	Electronic Circuit Lab	-	02	-	-	-	-	50	-	50	-	01	-	01
204186	Digital circuits Lab		02					50		50		01		01
204187	Electrical Circuit Lab	-	02	-	-	-	25	-	-	25	-	01	-	01
204188	Data Structures Lab	-	02	-	-	-	-	-	25	25	-	01	-	01
204189	Electronic Skill Development	-	02	ı	ı	-	25	-	ı	25	-	01	1	01
204190	Mandatory Audit Course 3 &	-	•	1					1	-	-	-	•	•
Total		16	10	01	150	350	75	100	25	700	16	05	01	22

Figure.2.1.1.5 SPPU SE Term-I Syllabus Structure







Savitribai Phule Pune University, Pune S.E. (Electronics / E&TC Engineering) 2019 Course

(With effect from Academic Year 2020-21)

Semester-IV

Course Code	Course Name		eachin schem urs/W	e	Examination Scheme and Marks							Credit			
		Theory	Practical	Tutorial	In-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total	
204191	Signals & Systems	03	-	01	30	70	25	-	-	125	03	-	01	04	
204192	Control Systems	03	-		30	70		-	-	100	03	1	,	03	
204193	Communication Systems	03	1	'	30	70	1	1	1	100	03	ı	1	03	
204194	Programming	03	1	1	30	70	1	1	1	100	03	ı	1	03	
204195	Lab		02				50			50		01		01	
204196	Principle of Communication Systems Lab	1	02	1	1	i	,	50	-	50	1	01	1	01	
204197	Object Oriented Programming Lab	1	02	1	•	1	-	-	50	50	1	01	1	01	
204198	Data Analytics Lab		02				,		25	25		01		01	
204199	Development	02	02	-	1	-	50	-	-	50	02	01	•	03	
204200	Project Based Learning 1	,	04				50		-	50		02		02	
204201	Mandatory Audit Course 4&	-	-	-	,	,	-	-	-	-	•	1	1	-	
	Total	14	14	01	120	280	175	50	75	700	14	07	01	22	

Abbreviations:

In-Sem: In semester End-sem: End semester TH: Theory TW: Term Work

PR: Practical OR: Oral TUT: Tutorial

Note: Interested students of S.E. (Electronics/E&TC) can opt any one of the audit course from the list of audit courses prescribed by BoS (Electronics & Telecommunications Engineering)

Figure.2.1.1.6 SPPU SE Term-II Syllabus Structure







Savitribai Phule Pune University, Pune T.E. (Electronics & Telecommunication Engineering) 2019 Course (With effect from Academic Year 2021-22)

Semester-V Teaching Examination Scheme and Scheme Marks Credit (Hours/Week) Course Code Course Name End-Sem Turtorial E Ž Ē E Ĕ 03 03 304181 Digital Communication 30 100 304182 Electromagnetic Field 25 04 03 01 30 125 01 Theory 304183 Database Management 03 100 03 30 70 304184 Microcontrollers 03 30 100 03 304185 Elective - I 03 03 30 70 100 03 304186 Digital Communication 02 50 01 50 01 Lab 02 01 304187 Database Management 25 25 01 Lab Microcontroller Lab 304188 01 01 02 50 50 ... _ 02 25 25 01 01 304189 Elective I Lab 304190 Skill Development 02 25 25 01 _ 01 _ 304191A Mandatory Audit Course 5.0 01 15 350 50 700 Total 150 125 10

Elective -I

- 1) Digital Signal Processing
- 2) Electronic Measurements
- Fundamentals of JAVA Programming
- 4) Computer Networks

Figure.2.1.1.7 SPPU TE Term-I Syllabus Structure

Total Credit

01

05

15

21







Savitribai Phule Pune University, Pune T.E. (Electronics& Telecommunication Engineering) 2019 Course (With effect from Academic Year 2021-22)

Semester-VI

Course		Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit			
Code	Course Name	Theory	Practical	Tutorial	In-Sem	End-Sem	TW	PR	OR	Total	ТН	PR	TUT	Total
304192	Cellular Networks	03	-	-	30	70	-	-	-	100	03	-	-	03
304193	Project Management	03	-	-	30	70	-	-	-	100	03	-	-	03
304194	Power Devices & Circuits	03	-	-	30	70	-	-	-	100	03	-	-	03
304195	Elective-II	03	-	-	30	70	-	-	-	100	03	•	-	03
304196	Cellular Networks Lab	-	02	-	-	-	-	-	50	50	-	01	•	01
304197	Power Devices & Circuits Lab	,	02	-	-	,	-	50	•	50		01		01
304198	Elective-II Lab	-	02	-	-	-	-	25	-	25	-	01	•	01
304199		-	-	-	-	-	100	-	-	100	-	-	04	04
304200	Mini Project	•	04	-	-	-	25	-	50	75	-	02	-	02
304191 B	Mandatory Audit Course 6 a	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	12	10	00	120	280	125	75	100	700				
						T	otal (Credi	t		12	05	04	21

Abbreviations:

TH: Theory TW: Term Work In-Sem: In semester End-Sem: End semester

OR: Oral TUT: Tutorial PR: Practical

Note: Students of T.E. (Electronics & Telecommunications) have to opt any one of the audit course from the

list of audit courses prescribed by BoS (Electronics & Telecommunications Engineering)

Elective -II

- 1) Digital Image Processing
- Sensors in Automation
- 3) Advanced JAVA Programming
- 4) Embedded Processors
- 5) Network Security

Figure.2.1.1.8 SPPU TE Term-II Syllabus Structure







Savitribai Phule Pune University, Pune B.E. (Electronics & Telecommunication) 2019 Course (With effect from Academic Year 2022-23)

Semester-VIII

Course			achi chem rs/W	ie	Ex	ami	nation Ma		eme a	and		Cre	dit	
Code	Course Name	Theory	Practical	Tutorial	In-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total
404190	Fiber Optic Communication	03	-	,	30	70	-	-	-	100	03	-	-	03
404191	Elective - 5	03	-	-	30	70	-	-	-	100	03	-	-	03
404192	Elective - 6	03	-	-	30	70	-	-	-	100	03	-	-	03
404193	Innovation & Entrepreneurship	-	-	02	-	-	50	-	-	50	-	-	02	02
404194	Digital Business Management	-	-	02	-	-	50	-	-	50	-	-	02	02
404195	Fiber Optic Lab	-	02	-	-	-	25	-	50	75	-	01	-	01
404196	Lab Practice - 3 (Elective - 5)	•	02	,	-	-	25	50	-	75		01	-	01
404197	4197 Project Stage - II			ı	ľ	-	100	-	50	150	-	05	-	05
	Total 09 14 04 90 210 250 50 100 700												,	,
						To	tal Cr	edit	S		09	07	04	20

Elective - 5	Elective - 6
 Biomedical Signal Processing 	1. System on Chip
Industrial Drives & Automation	2. Nano Electronics
3. Android Development	3. Remote Sensing
4. Embedded System Design	4. Digital Marketing
Mobile Computing	5. Open Elective

Figure.2.1.1.10 SPPU BE Term-II Syllabus Structure







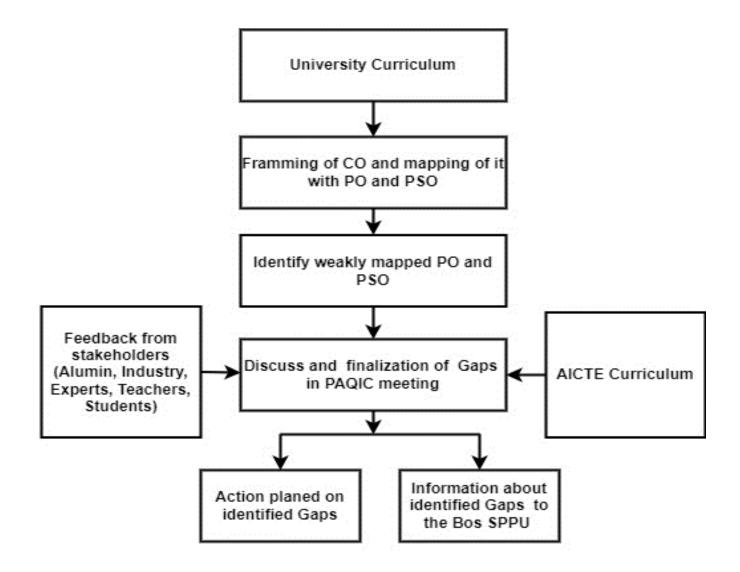


Figure.2.1.1.11 Process used to identify extent of compliance of university curriculum







Following processes are adopted by departments to identify the gaps

- Comparison of model curriculum of AICTE and SPPU Pune
- Analyzing the CO and PO-PSO mapping
- Inputs from internal and external stakeholders

PO- PSO mapping with curriculum components for 2015 course

Table 2.1.1.2: PO- PSO mapping with curriculum components for 2015 course

			0-130 m	of larra	8 '' '			T	1		1							
Sr No	Type of Course	Cou rse Cod e	Name of Course	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P 0 8	P O 9	P O 1 0	P O 1 1	P O 12	PS O1	P S O 2	PS O3
1		101 005	Basic Civil and Environ mental Engineer ing	2	2	1	1	1	1	1								
2		101 011	Engineer ing Mechani cs	2	2	1												
3		102 006	Engineer ing Graphics I	3	2								1					
4	Basic Science	102 013	Basic Mechani cal Engineer ing	2	2													
5		102 014	Engineer ing Graphics II	2	1			1										
6		103 004	Basic Electrica 1 Engineer ing	3	1	1										1.5	1	
7		104 012	Basic Electroni cs	2	1	1		1								2	2	1







			Engineer														
8		111 007	worksho p Practice	2	1	1		1									
9		107 001	Engineer ing Mathem atics I	3	2	1									1		
10		107 002	Engineer ing Physics	2	1	1	1								1	1	
11	Enginee ring Science	107 008	Engineer ing Mathem atics II	3	2	1									1		
12		107 009	Engineer ing Chemistr y	3	1	1											
13		207 005	Engineer ing Mathem atics III	3	2	1									1		
14		204 192	Audit Course 1 (Japanes e Languag e Module 1)		1	1		2	1	2	2	3	1	2			
15	Humani ties & Social Sci.	204 193	Audit course- II(Japane se Languag e Module 1)		1	1		2	1	2	2	3	1	2			
16			Audit course- III Cyber and Informat ion Security	1	1			2		1	2	3	1	2			
17			Audit course-I Embedd	2	2	1		2		1	2	3	1	2			







			ed System Using MSP430															
18			Audit course- V(Huma n Behavio urs)		1	1			2	1	2	2	3	1	2			
19			Audit course- VI(Envir onment Issues and Discusse r)		1	1			2	1	2	2	3	1	2			
20		204 191	Employa bility Skill Develop ment	1	2	1	1	1	1	1	2	3	2		1	1	1	3
21		304 188	Business Manage ment	1	2	2		2	2	2	2	2	1. 2	2	1			1
22		110 003	Fundame ntals of Program ming Languag es I	3	2	1		2										
23	Core	110 010	Fundame ntals of Program ming Languag es II	3	2	1		2										
24	Subjects	204 181	Signals & Systems	3	3	1	1				1		1			2	1	
25		204 182	Electroni c Devices & Circuits	2	2	2	2	2								2	2	
26		204 183	Electrica 1 Circuits and	3	3	1	1				1		1			2	1	







		Machine s														
27	204 184	Data Structure s and Algorith ms	2	2	1	2	3			1		1		2	1	1
28	204 185	Digital Electroni cs	2	2	2	2	2			1		1		2	1	
29	204 186	Electroni c Measuri ng Instrume nts & Tools	1	2	1	1	1	1	1	2	3	3	1	1	1	3
30	204 187	Integrate d Circuits	3	3	1	1				1		1		3	2	
31	204 188	Control Systems	1	2	1	1				1		1		1	1	
32	204 189	Analog Commun ication	3	1. 5		1	2	1		1	1			1		1
33	204 190	Object Oriented Program ming	2	2	1	1	3			1		1		2	1	
34	304 181	Digital Commun ication	3	3	3	1		1		1		1		2		
35	304 182	Digital Signal Processi ng	3	3	2	2	1			1		1		1	1	
36	304 183	Electrom agnetics	3	2	1	1	1					1		3	1	
37	304 184	Microco ntrollers	2	3	3	2	2			1		1	 	1	3	1
38	304 185	Mechatr onics	2	2	2	1	2	1	1					1	2	2
39	304 193	Electroni cs System Design	3	3	2	1	2			1	1	1		3	3	2
40	304 186	Power Electroni cs	2	3	1	2	2			1		1		2	2	1







41		304 187	Informat ion Theory, Coding and Commun ication Network s	3	3	2	2	2			1	1		2		
42		304 189	Advance d Processo rs	2	3	2	1	2			1	1		1	2	
43		304 190	System Program ming and Operatin g Systems	2	2	1	1. 5	3			1	1		2	1	
44		404 181	VLSI Design& Technol ogy	2	2	3	2	3	1	1		2		3	1	1
45		404 182	Compute r Network s & Security	3	3	2	2	2			1	1		1	1	
46		404 183	Radiatio n & Microwa ve Techniq ues	3	3		1				1	1		2	1	
47		404 184	Internet of Things	2	3	2	2	2	1		1	1	1	2	2	1
48		404 185	Artificial Intellige nce	2	2	2	3	3			1		2	3	2	
49		404 189	Mobile Commun ication	3	1	1	2	1				1			1	1
50	Elective s	404 190	Broadba nd Commun ication Systems	3	3	3	1		1		1	1		3		







55 56	Projects	404 188 404	and Mini Project Project Stage I Project	2	3	2	3	2 2.6	2	3	2 2. 5	2	2	3 2.	3	3	3	3
54		304 196	Employa bility Skills	3	3	3	3	3	2	2	2	3	3	3	2	3	3	3
53		404 192	Renewab le Energy Systems	2	2	1	2		2	2						1		2
52		404 191	Machine Learning	3	3	2	2	2	1		1	1	1	1	1	2	2	1
51		404 191	Audio Video Engineer ing	1	1	1	1	2		2					1	2	1	

Average of course category wise PO PSO for 2015:

Table 2.1.1.3: Average of course category wise PO PSO for 2015

	Basic Science	Engineering Science	Humanities &Social	Core Subjects	Electives	Projects
PO1	2.25	2.80	1.31	2.43	2.17	2.83
PO2	1.50	1.67	1.31	2.43	2.15	3.00
PO3	1.00	1.00	1.14	1.70	1.75	2.83
PO4	1.00		1.00	1.53	1.60	3.00
PO5	1.00	1.00	1.50	2.04	2.25	2.72
PO6	1.00		1.88	1.00	1.33	2.17
PO7	1.00		1.13	1.00	2.00	2.33
PO8			1.75	1.05	1.00	2.33
PO9			2.10	1.67	1.00	2.83
PO10	1.00		2.71	1.13	1.09	2.83
PO11			1.14		1.00	2.83
PO12			1.75	1.33	1.00	2.67
PSO1	1.75	1.00	1.00	1.88	1.92	3.00
PSO2	1.42	1.00	1.00	1.52	1.75	2.89
PSO3	1.00		2.00	1.45	1.50	2.72
	1.27	1.41	1.51	1.58	1.57	2.73







List of Curriculum Gaps:

Table.2.1.1.4: List of Curriculum Gaps

Gap	Description of Gap Identified
No	
1	The curriculum need to incorporate a more comprehensive range of content that emphasizes social and ethical responsibilities
2	The curriculum need to incorporate the content focused on environmental sustainability.
3	The curriculum needs to incorporate content that pertains to communication skills
4	The curriculum needs to incorporate advanced technological content and simulation tools

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

To.

The Chairman BoS(E&TC), SPPU, Pune

Subject: Suggestions for TE (E&TC/Elx) 2019 Course syllabus revision

Reference: Your mail regarding TE (E&TC/Elx) Syllabus Revision dated 20 Dec 2020

Respected Sir,

We have received your mail regarding TE(E&TC/Elx) Syllabus revision. We are verymuch thankful to you for this mail. We have collected and analyzed feedback from various stakeholders regarding curriculum revision. Based on feedback received, we request you to consider the following suggestions while framing TE syllabus.

- Six-month internship provision should be made into curriculum forbetter practical exposure. Some credits should be given to this.
- More credits to be given for practical's
- Provision of electives to be made for Third year
- Block chain and cryptography related subject to be added
- Programming with GUI and backend DBMS to be added in TE Sem-I
- Robotics and AI to be included
- Basics of file handling to be added in the syllabus







- Wireless sensor networks subject should be included in Third Yearsyllabus.
- In DSP, introduction to Multirate signal processing may be added
- TE E&TC ... Power Electronics Subject: Design of UPS/BatteryChargers to be added, Power Diode and Power Transistors to be added
- PLC and IoT based Industrial Automation need to be added
- Practical Interfacing of smart sensors with controllers to be incorporated
- Subject on data analytics or data science to be added.
- In Business Management: Technological Innovation, Business ethics tobe added
- In Microcontrollers or Advanced Processor subject, interfacing of Microcontrollers with wireless protocols needs to be included.
- One or two experiments on DSP processors may be added.
- In mini projects provision of Software projects such as web pagedevelopment, App. Development can be included
- communication protocol development topic may be added in one of thesubject
 Suggestion for Elective Subjects to be added from TE E&TC (2019Course)
- Computer graphics and microelectronics
- Industrial Automation
- Sensors and Interfaces
- DBMS
- Communication Protocol

You are always updating the curriculum as per industry requirements and helping to bridge the gap between Industry and academia. We also would like to express our gratitude to making the provision of Honor degree in the curriculum.

Kindly consider the above suggestions while framing Third year syllabus. Thanking you.

Regards,

Sue

Dr D G Bhalke Professor and Head, Dept of E&TC, AISSMSCOE Pune.







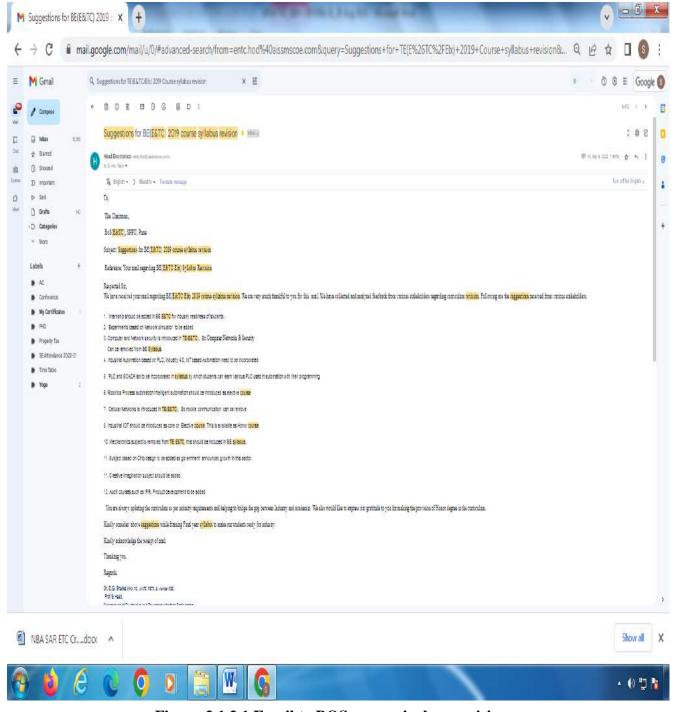


Figure: 2.1.2.1 Email to BOS on curriculum revision







Delivery details of content beyond syllabus (5):

- Faculty handling the course shall conduct special lectures (Add-on courses) to address the content beyond syllabus and to bridge the curriculum gap.
- Students shall be encouraged to work with innovative ideas and shall focus on current technological trends to do their Seminars and Projects in the final year, to acquire knowledge beyond syllabus.
- Expert classes shall help the students to get a better understanding of the concepts beyond the scope of the syllabus.
- Technical fests shall be organized by the students which enable them to be aware of thenew frontiers in engineering
- Department shall organize Industrial visits and support students to do Projects at industries to make them conscious of the challenges in the industry.
- Students shall be encouraged to attend various online courses (COURSERA, NPTEL) and trainings to address the content beyond syllabus.
- National Service Scheme (NSS) shall help students to take up socially relevant projects, there by imparting social commitment and environmental awareness which is minimally addressed by the curriculum.
- Students shall be encouraged to publish in-house technical Magazine and Newsletter whichnot only
 helps them to be aware of the recent trends in industry and research but also enhances the organizing
 skills
- Department Association and Professional Bodies student chapter and various informalstudent groups shall take initiative to organize Conferences, Industry institute interaction Programmes, Workshops, Seminars, and Invited Talks frequently for students by including experts from industries, reputed institutions and alumni







2.1.2.3. Mapping of content beyond syllabus with the POs & PSOs (3)

Table 2.1.2.1 Details of content beyond syllabus activities

Sr. No.	GAP	Action taken	DD/MM/ YYYY	Resource Person With Designation	No of students	Relevance to POs, SOs
2021	-22					
1	1	Webinar on Entreprenuership and Atmanirbhar Bharat for Start UP India	07/07/2021	Dr. Enty Ranga Reddy, Chairman, AISC, IE (I), Kolkata	90	PO6 PO8
2	4	Expert Session on 'BSNL- GSM and LTE Technology'	04/06/2022	Mr. Nilesh Wankhede, Principal, Regional Telecom Training Center, Pune	85	PO3
3	4	Event On Automation Anywhere	18/07/2021	Mr. Manoj Kumar	70	PO3
4	1,2	International Webinar on 'Smart, Clean and Green Electrical Energy for the Sustainable Future' on the occasion of IEEE Day 2021 Celebration	02/10/2021	Dr. Deepak Waikar, Chair, IEEE Education Society, Singapore Chapter	80	PO6,PO7
5	4	Expert Lecture on Current Software platforms for Career development	04/12/2022	Mr.Irfan Mopmin Prolific Soft Pvt Ltd	36	PO5
6	3	Opportunities and Preparation for Campus Placement.	23/08/2021	Mr. S P Raoborde, TPO, JSPM, Pune	92	PO10
7	1	Being Interview Ready and Cultivating Emotional Intelligence for Work Ready	23/08/2021	Ms. Monika Nehe, Assistant Manager, US West TCS	85	PO6,PO8
8	1,3	Panel Discussion	24/08/2021	BE E&TC 2020-21 Batch Students	80	PO6, PO8, PO10
)	1	Key to Stress and Time Management.	24/08/2021	Dr. R. Jalnekar, Director, VIT, Pune	80	PO6, PO8
10	1,2,3	1 Week Drone Operations Development	06/09/2021 10/09/2021	Speakers from RGB Buds Group	78	PO6, PO7, PO8, PO10







1	4	Embedded System And RTOS	09/02/2020	MR. Yanesh Joshi	85	PO3
2	1	Gender equality, Let's Rise From Shadows	15/07/2020	Mrs.Alka Joshi, Founder Member of the Abhivyakti group.	90	PO6
3	1	Learn Skills in Solar	02/10/2020		85	PO8
4	4	Expert Lecture DELSIM SIMULATOR	25/09/2020	Mr.Akshay Kudale Delsim, Pune	81	PO3,PO5
5	4	Expert Lecture on Recent Trends and technologies in Fiber Optics Communication	19/4/2022	Mr.Sudam Chavan Tata Communication Pune	76	PO5
6	4	Expert Lecture on Advance Communication System	12/04/2022	Mr.Anirudha Kulkarni	69	PO5
7	3	Science Exhibition	01/10/2021		92	PO10
2019	0-20		,			
1	1	Webinar on "Role of Youth in attaining Atmanirbhar Bharat in Energy."	25/08/2019	Dr. Anil Kakodkar, Mrs. Ela Gandhi, Dr. Diana Urge- vorsatz, Prof. Subhas Chaudhari, Licypriya Kangujam, Dr. Chetan Singh Solanki	90	PO6
2	1,3	Project Exhibition and Competition	10/10/2019	Dr. Sarika Panwar, Dr. D.P. Gaikwad	95	PO3,PO10
3	1	Webinar on "Leadership Development in Women Professional Entrants"	30/05/2019	Mrs. Priti Munshi, Senior Delivery Manager, Member of Rotary Clucb, Pune	72	PO8
4	4	Convolution and Recurrent Neural Network	04/01/2020	Mr.Suraj Gawade Design Tech. Ltd. Pune	80	PO3.PO5
5	4	Virtual DELD SIM Simulator for Digital Circuits	24/09/2000	Mr. Akshay Kudale Founder, DELDSIM, Pune	60	PO5
6	4	Expert Lecture on RF Circuit Design and new Technologies in it	11/09/2019	Ms Renuka Wekhande Project Manager, S M Technologies, Pune	61	PO3,PO5
7	1,4	On Expert Lecture Recent Trends in Wireless Communication&5G	07/10/2019	Mr Vishal Mhaskar Asst Manager Vadafone idea LTD.	55	PO1,PO5,PO6







8	4	Expert Lecture Block Chain Technology	25/02/2020	Mr. Vijay Balaji Elargo, Vice President, Emurgo India	47	PO5
9	3	Drone Competition EX-1	18/09/20191 9/09/2019	Air-O-Task (Drone)	46	PO10
10	3	Robo Competition EX-2	18/09/20191 9/09/2019	Robo Revolution 2.0 (Robo Soccer)	72	PO10

2.2 Teaching - Learning Processes (100)

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

(Processes may include adherence to academic calendar and improving instruction methods using pedagogical initiatives such as real world examples, collaborative learning, quality of laboratory experience with regard to conducting experiments, recording observations, analysis of data etc. encouraging bright students, assisting weak students etc. The implementation details and impact analysis need to be documented)

A.Adherence to Academic Calendar:

The institute is affiliated with SPPU and aligns its academic calendar with that of the university. Prior to the start of each semester, the institute develops its own academic calendar, which is inline with the university's schedule. Subsequently, the department formulates its academic calendar to highlight the department's planned events, aligning with the institute's calendar.

- The department academic calendar is prepared based on SPPU Pune and institute academic calendar before starting of every semester.
- Commencement and conclusion of semester, university Insem, oral practical and Endsem examinations are planned and executed as per the university and institute academic calendar.
- Subject allotment is done well in advance for the staff to prepare teaching plans.
- The lectures and practical are conducted according to the department time table. The faculty of department adopts various innovative teaching and learning methodologies to create the best learning environment for the students.
- Assignments, Internal Unit Tests, makeup classes, remedial classes are executed according to the planning in the academic calendar.
- Assignment scheduling and distribution of corrected sheets are executed as per academic calendar.
- Department examination coordinator prepares time table of internal class tests as per the academic calendar as well as evaluation of answer sheets.







- Industrial visits, Guest Lectures, Seminars, Workshops, Mock practical's and Oral examinations, Project presentation, Project exhibition are conducted as per the academic calendar.
- Academic teaching and other department facility feedback is taken twice in a semester.

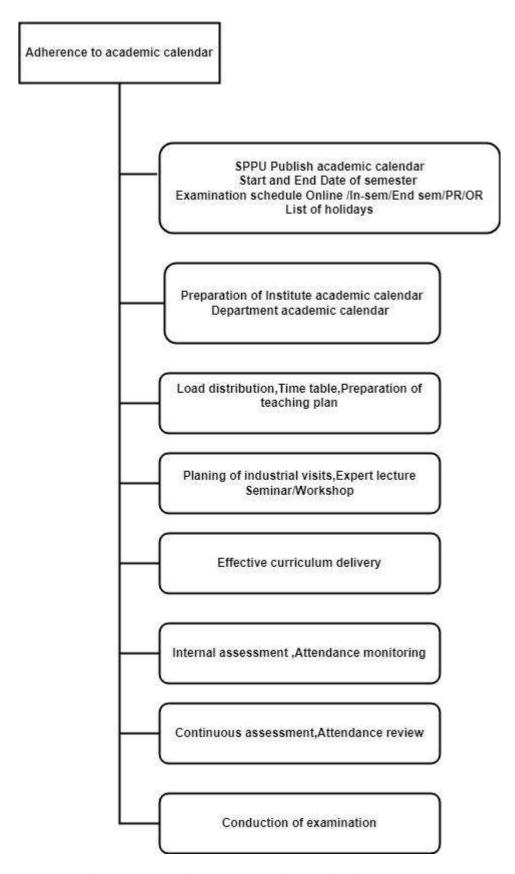


Figure 2.2.1.1 Adherence to Academic Calendar







Sample academic calendars of Savitribai Phule Pune University (SPPU), Institute academic calendar and department academic calendar for academic year (AY) 2021-22 Term- II are presented in Fig.2.2.1.2, Fig.2.2.1.3, and Fig.2.2.1.4 respectively.

University Academic Calendar:

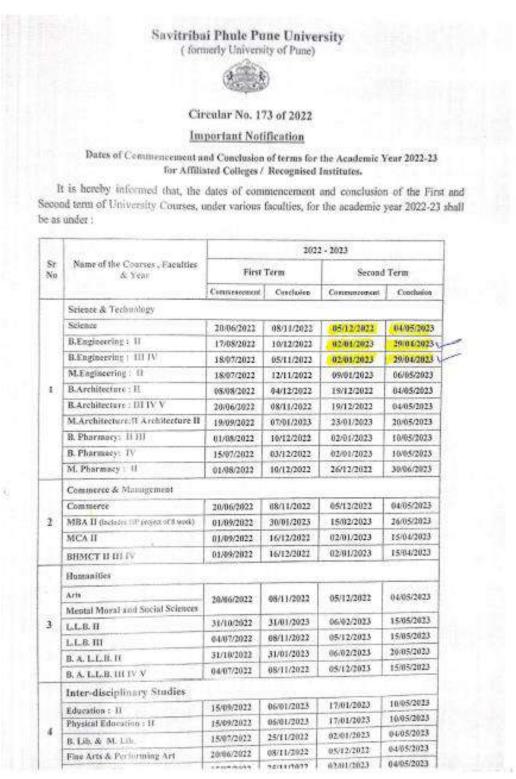


Figure 2.2.1.2 SPPU University Academic Calendar







Institute Academic Calendar:

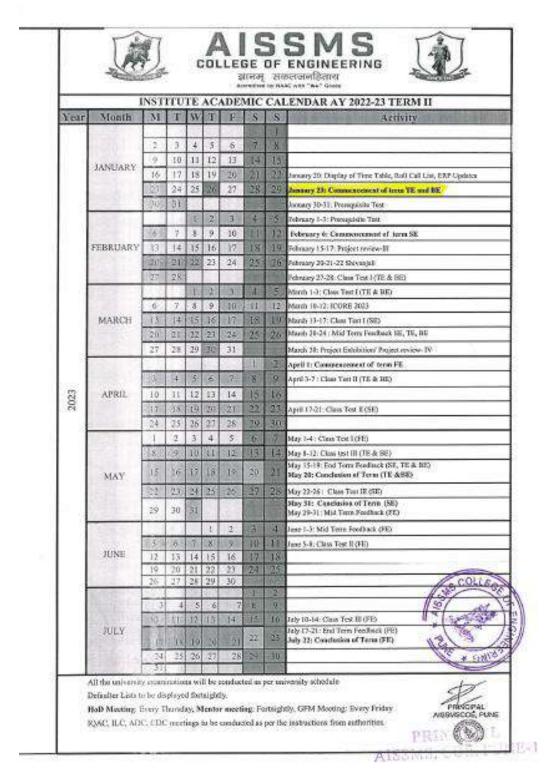


Figure. 2.2.1.3 Institute Academic Calendar







Department Academic Calendar:

Following major activities are included in Department Academic Calendar:

- Departmental Vision and Mission statement.
- Commencement and conclusion of UG term as per the Institute and university academic calendar.
- Insem, practical, Term work, Oral and Endsem examinations as per the Institute calendar in line with the university schedule.
- Engineering Today
- Departmental class tests scheduled, assessment and distribution of answer sheets
- Schedule for assignment and distribution of Corrected sheets.
- UG Level Time table and Roll call list display date.
- Mid-term review of Academics
- Mid-term and End-term Feedback from the students.
- HOD Meeting
- Mentor Meeting
- GFM Meeting
- DAB Meeting
- PAQIC Meeting
- Student chapter Activities.
- Defaulter's list display schedule.
- Expert talks, Industrial Visits Schedule
- Technical Activities like Webinar, Workshop, Consultancy, STTP, FDP etc.



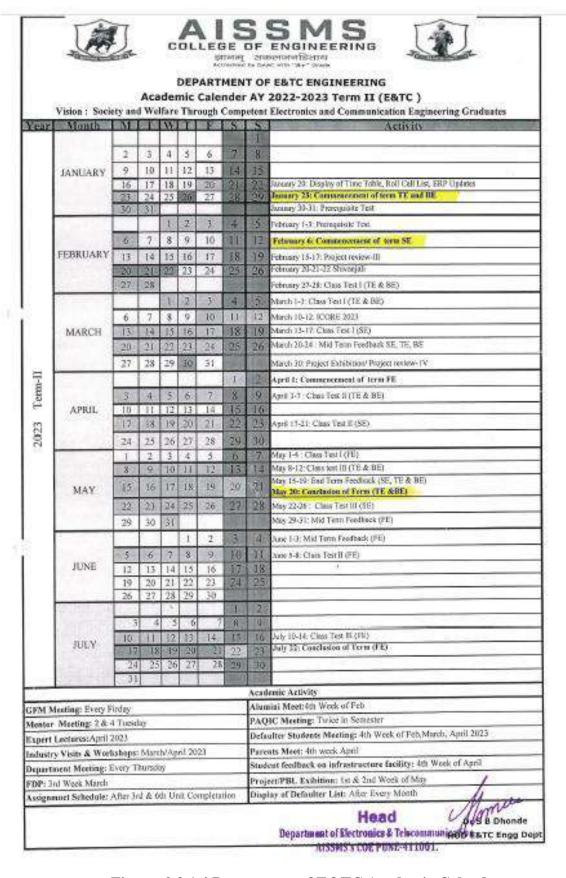


Figure. 2.2.1.4 Department of E&TC Academic Calendar





Department Academic Planer:

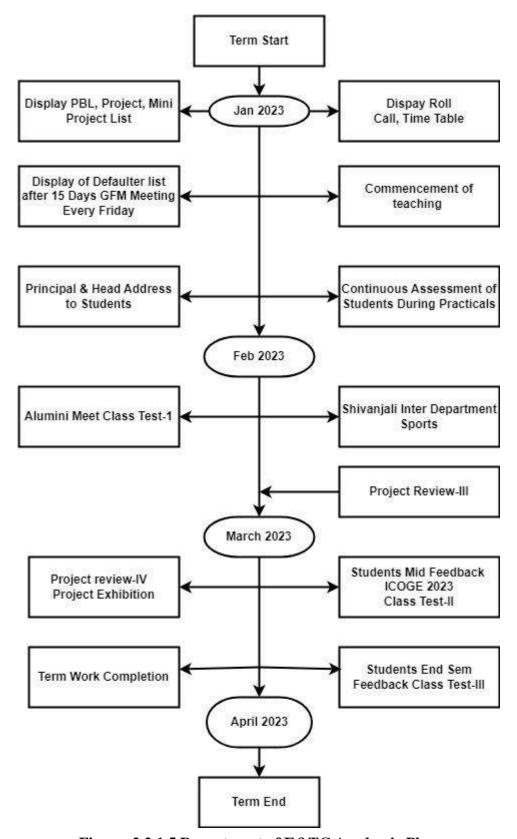


Figure. 2.2.1.5 Department of E&TC Academic Planner







B. Use of various instructional methods and pedagogical initiatives

The latest teaching and learning instructional methodologies were used to motivate students to learn and retain the knowledge through better understanding. Using the following methods, a positive attitude towards the subjects taught were developed in the students:

1) Active learning:

- The faculties adopted an active learning methodology by involving students in the learning process more directly using activities like:
- Brainstorming, quiz, debate, group discussions, role play, games, model making, miniproject, presentations, essay, elocutions, case studies and simulations on technical content. Replacing some lectures with animated PPTs.
- Hands-on experiences.
- Challenging students to take up open ended problems requiring critical/creative thinking. Short pauses for reflection during lectures, brief demonstration

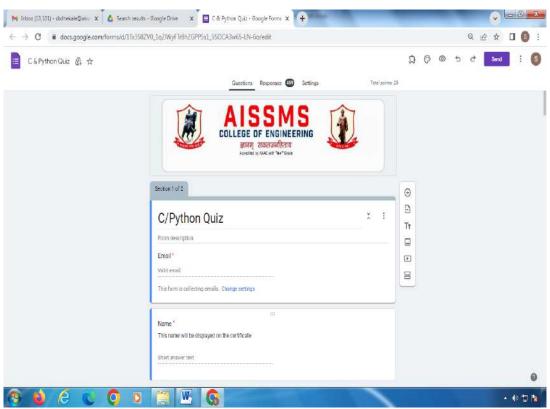


Figure: 2.2.1.6 Online Quiz







- 2. Collaborative Learning: This is implemented by forming student teams working jointly to solve a problem, complete a task/project, participate in debates or design a product.
- **3.** Cooperative Learning: The department also focuses on cooperative learning methodologies. Students work together to maximize their own and each other's learning capabilities within the student chapters and also while performing various activities like think-pair-share, round table techniques, etc.
- **4. Peer Led Team Learning:** Institute provides an environment for students to engage in intellectual discussions and work in team for problem-solving under the guidance of a peer leader to perform various activities.



Figure: 2.2.1.7 Peer Led Team Learning

5. Experiential learning: Field based experiential learning like Internship, practicum, service learning and class based experiential learning like role plays, games, case studies, simulation, virtual lab, presentations are practiced.

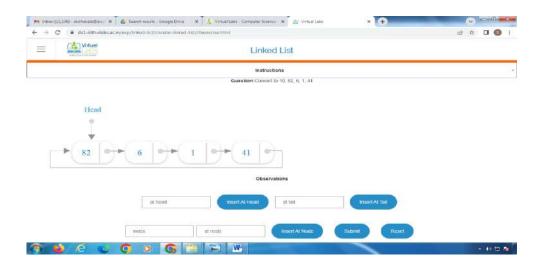


Figure: 2.2.1.8 VLab Simulation







Effective course deliveries:

ICT Usage:

Students are provided with knowledge and proficiency in the usage of simulation software like Matlab, Protues, Multisim, Powersim etc. Study material is also shared with students through Google Classrooms, WhatsApp groups, ERP and MOODLE. Students are asked to enroll for Swayam, NPTEL courses, Spoken tutorials.

Following ICT are being used in the Department:

- Digital Social Learning
- · Smart Board
- Lecture Capture System
- Online Quiz
- Google Classroom
- V-Labs
- You tube Channel
- Digital Library
- Spoken Tutorial

Course File:

Each faculty prepares a course file for each course that he/she is allotted to teach before 15 days of start the semester. Course file contains course details, Vision and Mission of Department, Programme Educational Objectives, Programme Outcomes, Programme Specific Outcomes, Course Outcomes, Evaluation Scheme, Teaching-Learning Pedagogy which is to be applied suchas chalk/talk, link address for course materials and additional relevant information, academic calendar, Teaching Plan having date, topic, learning outcomes of each topic, Entire syllabus, List of e-books, List of NPTEL,MOOC,SWAYAM Courses/Videos, List of topics beyond the syllabus, List of mini- projects/projects, List of technicaltrainings and additional information.







ONLINE TEACHING AT AISSMS COE PUNE (During Covid pandemic):

Lockdown due to COVID 19 had not stopped teaching learning process at AISSMS COE. Systematic efforts have been put in for initiating and implementing the teaching-learning through online platform.

The immediate transition from conventional to Online, made the faculties to rely on available ZOOM platform to conduct different webinars, FDP and the pending teaching learning activities. Other options like Google classroom, Whatsapp, telegram were also used. For academic year 2020-21 and 2021-22 Term I, institute has used Microsoft Teams platform for online teaching.

For effective implementation of teaching learning through MS teams following steps were observed:

- Awareness sessions for the use of MS teams were conducted at institute level by delegates from Microsoft
- 2. Review through survey was taken to understand the availability of internet and other facilities for students.
- 3. For individual faculty and student, MS team login credentials were generated.
- 4. Class wise Teams were allocated and respective channels were assigned for theory and practical
- 5. Time-table for conducting theory and practical was prepared owing to the curriculum requirement and scheduled on MS team accordingly.
- 6. For every class, daily four theory classes of 60 minutes each and one practical session for 60 minutes each were allotted. Tutorials, Seminars & Project were also scheduled and executed through online mode.
- 7. Unit wise tests and assignments were conducted through MS team platform. Assessment of tests and assignments also were carried through MS teams.
- 8. Study material like subject notes, PPTs, e books, previous question papers, unit-wise MCQs were made available on MS team. Other LMS platforms were also used like Google Classroom, CANVAS etc
- 9. Recorded videos on MS teams were also shared with students to compensate the academic loss of students because of power failure and network connectivity.
- 10.Demonstrations of experimental set, equipment, observation were recorded and made available for ready reference to students on the Microsoft teams. Suitable Virtual Lab sessions were identified for different domains and subjects and demonstrated to students.
- 11.Mentoring meetings were conducted by every faculty on MS teams, as per schedule to address various concerns of students related to academics and to boost the confidence of student and his family undergoing the pandemic stress.
- 12. Training sessions on virtual labs also have been conducted by institute for institute faculty and university faculty as well. In fact, that initiative was very well appreciated by university authorities and faculty from other institutes.

E & TC Engineering Department





- 13. Academic Monitoring and the adequacy was ensured through weekly review sheets being circulated through Google forms
- 14.Besides Academics, Expert Talks, Panel Discussion, Virtual Tour, Alumni Interaction, FDP, Traditional Day, BE Farewell, Women's Day, Startups, Entrepreneurship development, NSS activity etc, were executed online to provide students technical, co-curricular, extracurricular exposure.
- 15. Also the administrative meetings by the head of Institute, the department meetings by the respective department heads were conducted both online and offline following all the covid appropriate behavioral norms time to time.
- 16. The Institute and the respective departments in cooperation with the AISSM Society management, have put in
- 17. All possible efforts to ensure smooth conduction of academics, safeguarding the Students, Faculties,
- 18. Administrative and support staff during the worldwide pandemic and the National Lockdown

C: Methodologies to support weak students and encourage bright students

A class is a blend of all cadres of students, some of the students having extraordinary learning can be called as advanced learner. Some students may lack these abilities in them called slow learners. The role of the teacher is to identify such students in classrooms sessions. (LAb

Some students need guidance and some of them require hard work and extra attention. This abilityin students may vary from subject to subject so we may find variation in advanced and slow learners.

Overall purpose of the identification is only to improve their academic and overall performance.

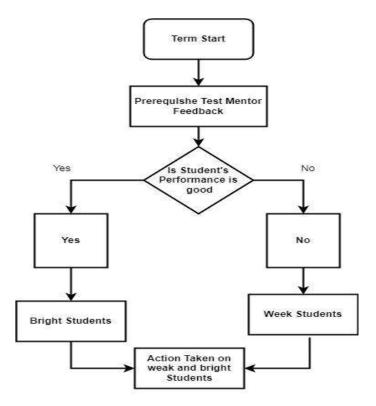


Figure. 2.2.1.9 Bright and Weak Students Identification







Criteria/ Parameters to identify slow and bright Students:

- 1. Prerequisite test conducted on every subject at the beginning of semester
- 2. Previous Year University results of related subjects
- 3. Mentor observations
- 4. Unit test performance
- 5. Observations in classroom and laboratory sessions by subject teacher

Process for identify slow and bright Students:

- Assessment of prerequisite test result of each subject conducted at the beginning of each semester
- 2. After first unit of respective subject
- 3. Incorporate previous examination result of the students
- 4. Mentor feedback
- 5. After all parameter prepare list of advanced and slow learner for respective subject.

Activities identified for Bright Students:

- Encouragement to register for SWAYAM courses
- Induction in various students Clubs
- Paper publication and presentation
- Workshop/Seminar on current trends
- Participation in university, national level Competitions like Avishkar, Hackathon etc.

Impact Analysis

- Participation in Technical Events
- Participation in Conferences
- Taking up the real time projects

Activities Weak Students:

- Remedial /Make-up/ Extra/ lectures and Extra practical
- Re-test for improvement
- Extra practical sessions

E & TC Engineering Department







- Counseling special hints & techniques
- Question bank
- Guidance for Seminar/Project presentation

Impact Analysis:

- Improvement in academic performance of students
- Active participation of the students in various programs

D: Quality of classroom teaching (Observation in a Class)

- Classrooms in the institute are well designed to offer best learning environment
- The classrooms are equipped with LCD projectors and internet connection
- There is also a dedicated classroom having attached a Smart Board to enhance effective delivery of teaching learning process.
- Faculty reaches the class room in time, revise the previous class portions, ask questions and then commence the successive topic.
- Video lectures of NPTEL, Swayam, YouTube etc. of respective courses are shared with students by faculty
- Emphasis is given on logical learning wherein real-life examples related to application, analysis, synthesis and evaluation/ creation are given to the students so that their learning will be fruitful.

F: Conduct of experiments (Observation in Lab)

Laboratory manual is prepared by respective subject teacher and provided to the students before performing the experiments. Faculty member and a technical staff are always present to help the students to perform the experiments. To ensure the quality of conduct of laboratory classes in the Department, a concern Laboratory in charge ensure readiness of laboratory. Head of Department takes runtime corrective measures to ensure quality of experiments. Continuous evaluation of each laboratory experiment is done based on the following parameters.

Students performance during the laboratory session is assessed by the teacher and maintain records in continues Assessment sheet (CAS)

Lab Manuals

Equipment Manuals

Lab Manual: List of Experiments and new experiments added

Log book record

Lab Maintenance

CAS







F: Continuous Assessment in the laboratory (3)

Faculty member give marks to each student depending on his/her performance during lab session. After very experiment teacher used to take viva of students.

The Department gives more importance and believes in continuous improvement principle.

- Continuous Assessment (CAS) is used by each teacher to evaluate students' performance in experiment conduction and continuous improvement
- Standard CAS Sheet is used by teacher
- The students' performance assessment in the CAS sheets is based on the parameters as attendance, involvement, understanding and timely submission of the experiment

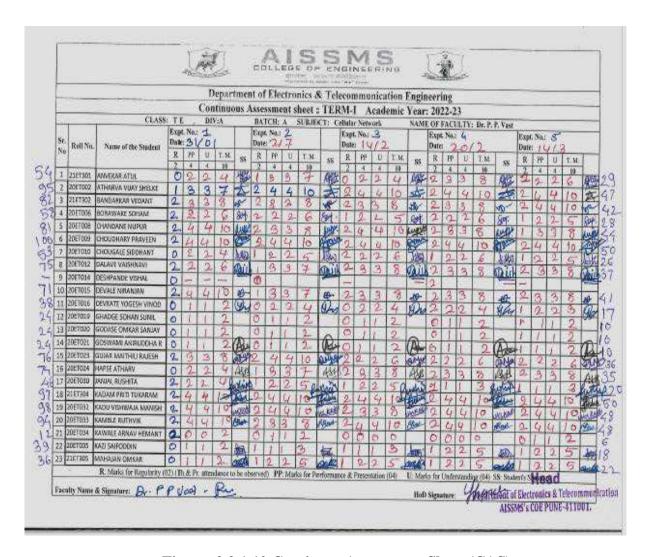


Figure. 2.2.1.10 Continues Assessment Sheet (CAS)







G: Student feedback of teaching learning process and actions taken (6)

Student feedback on class room and Laboratory teaching are taken twice in a semester on ERP. Student's feedback is circulated to respective faculty by the HOD.

Feedback Analysis Process:

- The suggestions are analyzed by the concerned HOD. Every question has a weightage up to 10 points.

 Based on the average points accrued for all the questions the faculty performance level is assessed.
- The teacher is subjected for any corrective measures as decided by Head of the Department.
- Performance rating of faculty through the student feedback system is one of the factors in evaluating the annual performance appraisal of the faculty.
- Based on the feedback received from the students the faculty is rewarded by issuing a letter of appreciation from the Head of the Department.

The parameters for performance assessment are as follows

- Has teacher cover entire syllabus as prescribed by university
- Has teacher cover relevant topics beyond syllabus
- Effectiveness of teacher in terms of course content, communication skill.
- Pace on which contents were covered
- Motivation and inspiration for students to learn
- Support for development of student skill practical demonstration, hands on training.
- Clarity of expectations of students.
- Feedback provide on students' progress
- Willing to offer help and advice to students

Feedback Rating:

- 1. Not satisfactory
- 2. Satisfactory
- 3. Good
- 4. Very good
- 5. Excellent



COLLEGE FOR STATE OF THE STATE



Figure. 2.2.1.11 Students Feedback Report







ASSMS COE, PONE DEPARTMENT OF EATC ENGINEERING

FACULTY REIOBACK SUMMARY ACADEMIC YEAR 2022-23 , SOMESTER 9

	Name Of the Faculty	Class	Subject	10/1796	Mid Serio	And Semi	Remarks	Signature
	1 or b 5 thake	HE (OATC)	MAIT	TH	- 65		quel	
	DECKE SEE	THE SENTED	eve	108	88		7	
	200 S & Chonde	motamo	05	THE	24		100	100
	310,150,000,00	70.08701	ch .	29	10		gend	Is not
		The state of the state of	RMT	74	141		A	Marie
		(86 (08/1C)	100	-		-	1000	0
-		(M) EVIC	KMT	74	- 0			-
	2 Mr. E.R.Chamburi	SE SERVE	00	10	- 25		Southard	100
		SE (CATC)	05	pro.	- 76	77		(1535
		BESTANO	00.	101	165			Co
	MAN 19 Cheksle	motarci	and a	214	86	80	feed bank	Sec. 2. 40
	100	THULATED	int	216	9.0	- 94	Imported by	634.00
	8.24	BEST NTCS	Aine	The .	67		company with	
			1500	_			gold resent	100
		BEITETT	Alexe	14.	- 11	+		
	A Mir N II Manale	THE STOL	tion bowlegment	M	7	_	0.000	Show
		SE (8810)	9151	Tal	- 0	- 10		174
		secorano.	WASH	1/4	81	- 67		and the same
	COPPUSE	700570	Microcontroller	794		- 10	Land Land	63
		TREESTED	Microsetteller	78	- K		CHOOSE	1
		and the fact that the fact		74	81	-	1	
-		NUMBER OF	Still Devoluperant	100		_	Co. has not been	
	6 MAY D NIGHTS	THE DEATH OF	Still Coveragement	Di	6.	1	CENT ALMERITATION	Arres
		THE PARTY OF THE P					Separate intensity ordered	870
								1
	Ÿ.	france	Transit Water	Ire	1 40	19,01	News Harris	1
	L	TRUERTO	Designed Management	les.	80	19,01	To record the property of	(Z)
	2000 A IS OLDSHIPPINGS	19 (88,10) 18 (8,50) 56 (8,50)	Olyman Christian Myllind Christian			70 70 70	want to the pass the property and	Shir-
	2000 V V OKSHRALIKIY	18,05,653	Olyman Christins	rn rn lie	41	75 75 70 100	product to an expension of	AST.
		MORNO MORNO MORNO MORNO MORNO	Digital Crisiles Metal Crisiles Congress Materials Congress Materials	re re le	41	200 200 200 200 200	Area donners haven	gra
	2 May V II German	M MANU M MANU MMANU MMANU MMANU MMANU	Olymer Christins English Christins Congruent Bulletins in Congruent Bulletins in Congruent Bulletins in Bulleting Machines	THE FM THE THE THE	61 67 81 91 91	100 200 1000 900 200	Area donners haven	gra
		M M AND M M AND MIRANG MIRANG MIRANG MIRANG	Olgani Chiniss Intel Chinis Chinis Internation Chiniste Internation Chiniste Internation Chiniste Internation Chiniste Internation Chiniste Internation	re re le	61/ 61/ 93 90 93 93	97) 25, 29, 100, 99, 70, 71	Annual on Shirt of the	gos
	# More I florence	MINAMA MINAMA MINAMA MINAMA MINAMA MINAMA MINAMA	Organis Chicates Applied Chicates Comparish Technique Comparish Technique Comparish Technique Comparish Technique Comparish Technique Comparish Technique Comparish Co	yes per per per per	61 67 81 91 91	90) 20, 20, 100; 90 70 71	property of the property of the control of the property of the	gos
		M M AND M M AND MIRANG MIRANG MIRANG MIRANG	Olgani Chiniss Intel Chinis Chinis Internation Chiniste Internation Chiniste Internation Chiniste Internation Chiniste Internation Chiniste Internation	(10) (10) (10) (10) (10) (10) (10)	41/ 41/ 81 81 83 83 84	90) 25- 29- 100- 90 70 71	property of the property of the control of the property of the	gos
	MANUAL PARAMETERS	M (KAN) M (KAN	Olganic Chicaltes Chicaltes - Chicaltes Chica	100 100 100 100 100 100 100 100	41 47 43 43 43 43 44 41 44 41	7/0 25, 29, 109, 20, 20, 21, 21, 41, 46,	property of the state of the st	Jel
	# More I florence	MINISTER MIN	Olymet Christis Anglind Christis Comparise Memorial Comparise Memorial Comparise Memorial Memoria	100 100 100 100 100 100 100 100	41 47 81 81 73 73 84 41 86	7/0 25, 29, 109, 20, 20, 20, 21, 41, 41, 42, 42, 42, 43, 44, 44, 44, 44, 44, 44, 44, 44, 44	property of the state of the st	Jel
	MANUAL PARAMETERS	BOASSI MORPSI MO	Digital Chicalis Applied Chicalis Comparise Memories Comparise Memories Comparise Memories Thermore Marked Thermore Mar	100 200 100 000 710 910 910 910 111 111 111	41 47 91 91 93 93 94 41 96 90 90 90 90 90 90 90 90 90 90 90 90 90	700 700 700 700 700 700 700 700 700 700	property of the state of the st	get get
	White PANE	BOASS MURED MIASS	Organist Chronics Applied Chronics Compared Memory to Compared Memory Compared Mem	100 100 100 200 200 200 211 200 211 200 211 200 211 200 200	41 47 81 81 82 82 83 84 84 86 86 87 87 87 87 87 87 87 87 87 87 87 87 87	200 200 200 200 200 200 200 200 200 200	property of Toppere	get get
	MANUAL PARAMETERS	BOASSI MORPSI MO	Digital Chicalis Applied Chicalis Comparise Memories Comparise Memories Comparise Memories Thermore Marked Thermore Mar	100 200 100 000 710 910 910 910 111 111 111	41 47 91 91 93 93 94 41 96 90 90 90 90 90 90 90 90 90 90 90 90 90	200 200 200 200 200 200 200 200 200 200	property of the state of the st	get get
	W MAN Y PARKS	BOASSI MURTO MIRESO MIRESO MUREO MUR	Olganic Chicalte Chapted Chicalte Chicagonical Businesses Chicagonic	104 (78 (16) (16) (16) (17) (17) (17) (17) (17) (17) (17) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19	41 47 41 55 57 41 41 60 60 60 60 60 60 60 60 60 60 60 60 60	200 200 200 200 200 200 200 200 200 200	property of Toppere	Jel
	W MAN Y PARKS	BOASSI MORPSI MO	Digital Chicalis Applied Chicalis Comparised Management (AP) I beneficially Comparised (THE	41) 417 417 419 417 417 417 417 417 417 417 417 417 417	200 200 200 200 200 200 200 200 200 200	property of Toppere	get get
	W No. of PANA. STORAL OF BANKS STORAL OF BANKS STORAL OF BANKS	BOASSI MURTO MIRTO	Olganic Chronites Chapted Chronites Companied Baltanieries Companied Baltanieries Chronited Baltan	100 100 100 100 100 100 100 100 100 100	41 47 47 41 53 53 54 41 41 42 50 50 50 50 50 50 50 50 50 50 50 50 50	200 200 200 200 200 200 200 200 200 200	property of the property	get get
	W MAN Y PARKS	BLOASSI MURASI M	Olymer Chronite Chapter Chronite Chapter Memorish Chapter Memor	104 178 168 168 174 174 174 174 174 174 175 176 177 178 178 178 178 178 178 178 178 178	93 97 93 73 74 94 95 97 97 97 98 98 98 98 98 98 98 98 98 98 98 98 98	200 200 200 200 200 200 200 200 200 200	property to southern the same of the same	get out
	W No. of PANA. STORAL OF BANKS STORAL OF BANKS STORAL OF BANKS	BLOASSI MURASS	Olymer Chronics Chapter Memories Chapter Memories Chapter Memories Chapter Memories Chapter Memories Chatter Memories Chatter Memories Chatter Memories Chatter Memories Chatter Memories Chapter Contains And Tourisons And	100 100 100 100 100 100 100 100 100 100	41 47 41 53 53 54 41 41 50 50 50 50 50 50 50 50 50 50 50 50 50	200 200 200 200 200 200 200 200 200 200	property of Southern And the store of Southern S	get out
	W No. of PANA. STORAL OF BANKS STORAL OF BANKS STORAL OF BANKS	BLOASSI MURASI M	Olymer Chronite Chapter Chronite Chapter Memorish Chapter Memor	790 100 100 100 100 100 100 100 100 100 1	93 97 93 73 74 94 95 97 97 97 98 98 98 98 98 98 98 98 98 98 98 98 98	200 200 200 200 200 200 200 200 200 200	process to Southern for the state of the state of the southern the state of the sta	get get

Figure. 2.2.1.12 HoD Remarks on Feedback Report







2.2.2 Quality of internal semester Question papers, Assignments and Evaluation (20)

(Mention the initiatives, implementation details and analysis of learning levels related toquality of semester question papers, assignments and evaluation)

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

- Internal class test is conducted for every subject in each semester.
- The question papers are prepared based on course outcomes. Each question is mapped with the corresponding course outcome.
- Questions are framed as per the Blooms levels and performance indicator
- The question papers are verified by the PAQIC ensuring the quality of question papers

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

- Each question in the class test is designed to measure any one CO
- The marks gained by each student in each CO for internal assessment component is taken into consideration for the calculation of CO-PO-PSO attainment.
- The class tests and assignments are designed to assist the evaluation of learning levels such as analytical skills, design, logical reasoning and applications.
- The questions in the test and assignments are reviewed by module coordinators and PAQIC

C. Evidence of COs Coverage in Continuous Internal Assessments Examination:

- Process of Setting of question paper, evaluation and effective process implementation by PAQIC
- In PAQIC meeting Guidelines are set for unit test papers as per instructions from Institute level Academic Coordinator. Blooms Taxonomy & Course outcomes are taken into account.
- Question paper Format approved by PAQIC is circulated to all course teachers.
- Question papers for all courses are checked by Module coordinator.
- In case of some modifications needed, those question papers are reverted back to concerned course teacher for revision.
- After approval by Module coordinator question papers are forwarded to HOD for approval.







- After HOD's Approval Question papers are floated to particular class during examination.
- Assessment of answer sheets is done by respective course teacher.
- Result of examination is communicated to students.
- In case of any query, student contact corresponding course teacher to clarify their doubts
- Examination record (Question Paper, Model Answer sheet, Marksheet & Sample sheets) is submitted to Department Examination Coordinator.



Department of Electronics & Telecommunication Engineering

Unit Test: I

Subject Name	Cloud Computing	Time	1 Hr
Class:	BE E&TC	Academic Year.	2022-23
Total Marks:	38	Sem:	

Q. No.	Question	Marks	CO	BL	Pl
(l. a)	What is Cloud Computing? Explain Characteristics and benefits of it in detail.	5	CO)	LT	6.1.1. 7.1.2
b)	Explain NIST Cloud architecture in detail.	5%	COL	LU	6.1.1 7.1.2
63	Describe all cloud stack in brief.	5	COL	LI	6.1.1 7.1.2
	OR				
Q7.a)	Ellustrate all deployment model of cloud in detail.	- 5	CO1-	1.1	2.2.4
b)	Define and recite Cloud Cube model in detail.		COL	CT.	6.1.1 7.1.2
<1	Explain basic architecture of cloud in detail.	:5;	COL	LI	6.1.1, 7.1.2
Q3. n).	Describe Software as a Service "SAAS" cloud computing.	5	CO2	1.1	2.4.4
bi	Illustrate Infrastructure as a Service "IAAS" cloud computing.	- 5	CO2	LI	2.4.4
(1)	Compare SAAS, PAAS and IAAS.	5	CO2	1.2	2.2.4
	OR				
Q4.s)	Recite Platform as a Service "PAAS" cloud computing.	5	CO2	1.1	2.4.4
10	Summarize Identity and Network as a Service of cloud computing.	5	CO2	1.2	2.4.4
C)	Summarize cloud services and their benefits and characteristics.	5	C02	1.2	6.1.1,

BL—Blooms's Taxonomy Levels (1-Remembering, 2-Understanding, 3-Applying, 4-Analyzing, 5-Evaluating, 6-Creating), CO-Course Outcomes

PO – Program Outcomes; Pl Code – Performance Indicator Code

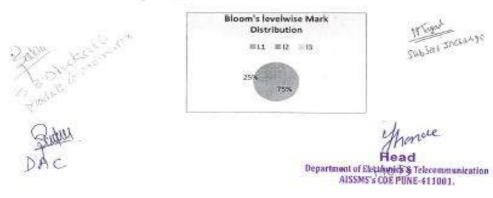


Figure. 2.2.2.1 Unit Test Question Paper













Department of Electronics & Telecommunication Engineering

BE Unit Test-I Schedule 2022-23, Sem-I

Sr. No.	Subject	Day/Date	Time
1.	Cloud Computing	Monday, 22/08/2022	08.30am to 09.45am
2.	E-4: Deep Learning/ Electronic Product Design	Tuesday, 23/08/2022	08.30am to 09.45am
3.	VLSI Design and Technology	Wednesday, 24/08/2022	08.30am to 09.45am
4.	E-3: Java Script/ Modernized IOT	Thursday, 25/08/2022	08.30am to 09.45am
5.	Radiation and Microwave Theory	Friday, 26/08/2022	08.30am to 09.45am

Mr. S. B. Dhekale Exam Coordinator

Dr. D. G. Bhalke HOD

Head Department of Electronics & Telecummunication AISSMS's COE PUNE-411001.

Figure. 2.2.2.2 Unit Test Time Table

DAC



Figure. 2.2.2.3 Class Test







D. Quality of evaluation:

The evaluation class tests and assignments are performed by using rubrics defined in PAQIC. Quality of evaluation is ensured by the PAQIC and Institute academic coordinator for each course through checking the sample answer sheets. The samples of answer sheets are maintained in course file.

Table 2.2.2.1: Rubrics for Internal Exam

Sr. No.	Excellent	Good	Fair	Needs
				Improvement
Category	4	3	2	1
Mathematical /	90-100% steps	85-89% steps	75-84% steps	More than 75%
Technical/	and solution	and solution	and solution	of steps and
Descriptive	have no	have no	have no	solution have
Error	mathematical /	mathematical /	mathematical /	mathematical /
	Technical/	Technical/	Technical/	Technical/
	Descriptive	Descriptive	Descriptive	Descriptive
	error	error	error	error
Neatness	Explanation is	Explanation is	Explanation is	Explanation is
	detailed and	clear	difficult to	difficult to
	clear		understand but	understand and
			includes critical	do not include
			component	critical
				component
Organization	The work	The work	The work	The Work
	appears in neat,	appears in neat	appears in	appears
	clear, and	and organised	organised	unorganised and
	organised	fashion and is	fashion, but	hard to know
	fashion and is	easy to read	many be hard to	what
	easy to read		read at times	information
				goes together
Diagram	Neat and Clean	Neat and Clean	Drawn but not	Incomplete
	by using	by but not used	readable	diagram
	geometrical	geometrical		
	tools	tools		





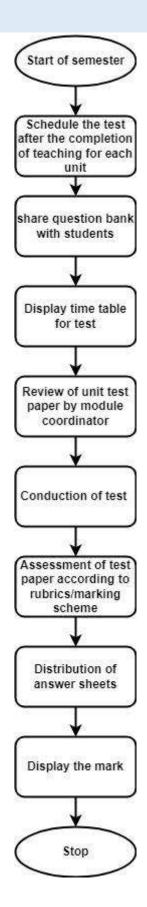
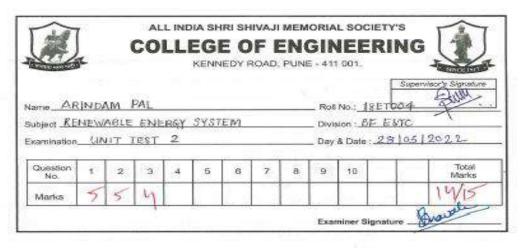


Figure. 2.2.2.4 Conduction of Class Test





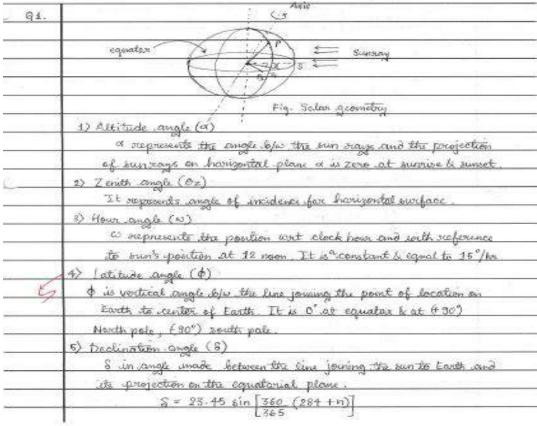


Figure. 2.2.2.5 Unit Test Answer Sheet







E: Quality of Assignment:

Assignment is one of the internal assessment components in each subject. Two assignment questions are given in group of five students. Assignment questions include real time and complex analytical problems. The questions are framed in such a way to encourage self-learning habit of students. It also ensures that the students refer different books to answer the questions. Assignments are assessed according to defined rubrics and marking scheme. Assessment marks are conveyed to the students by subject teacher for further improvement if necessary.

Table 2.2.2.2: Rubrics for Assignment:

Sr. No.	Excellent	Good	Fair	Needs
				Improvement
Category	4	3	2	1
Mathematical /	90-100% steps	85-89% steps	75-84% steps	More than 75%
Technical/	and solution	and solution	and solution	of steps and
Descriptive	have no	have no	have no	solution have
Error	mathematical /	mathematical /	mathematical /	mathematical /
	Technical/	Technical/	Technical/	Technical/
	Descriptive	Descriptive	Descriptive	Descriptive
	error	error	error	error
Neatness	Explanation is	Explanation is	Explanation is	Explanation is
	detailed and	clear	difficult to	difficult to
	clear		understand but	understand and
			includes critical	do not include
			component	critical
				component
Organization	The work	The work	The work	The Work
	appears in neat,	appears in neat	appears in	appears
	clear, and	and organised	organised	unorganised and
	organised	fashion and is	fashion, but	hard to know
	fashion and is	easy to read	many be hard to	what
	easy to read		read at times	information
				goes together
Timely	If submitted on	Delayed by a	Delayed more	Submitted at the
Submission	time	day	than a day	end of Semester
Diagram	Neat and Clean	Neat and Clean	Drawn but not	Incomplete
	by using	by but not used	readable	diagram
	geometrical	geometrical		
	tools	tools		







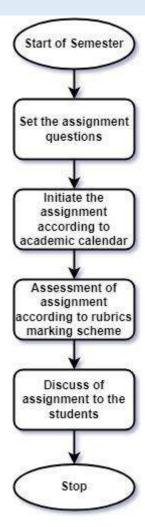


Figure. 2.2.2.6 Assignment Conduction





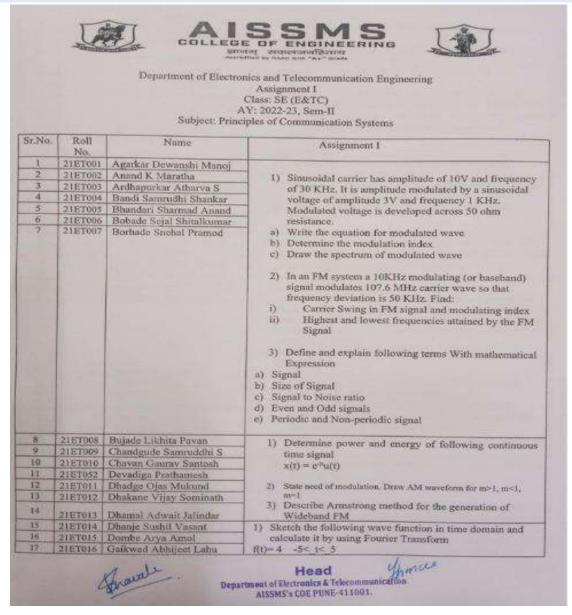


Figure. 2.2.2.7 Sample Assignment







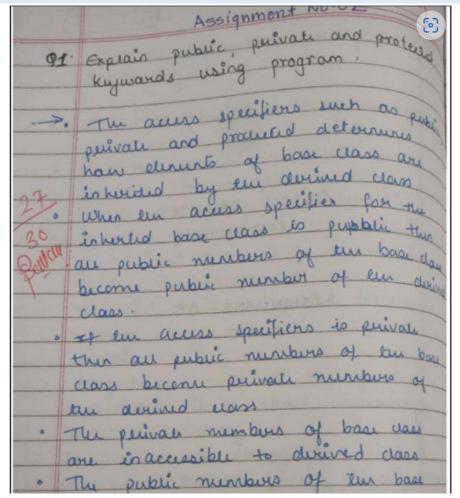


Figure. 2.2.2.8 Solved Assignment

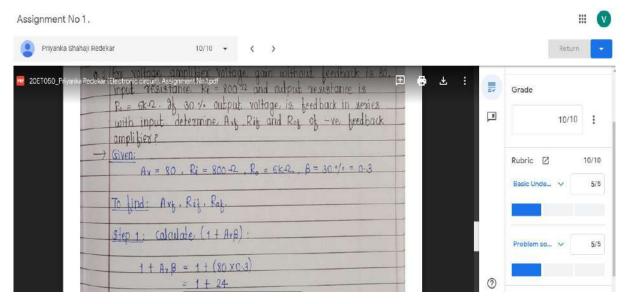


Figure. 2.2.2.9 Online Submitted Assignment







2.2.3. Quality of student projects (25)

A. Projects identification and guide allocation Process

- 1. Project Process is initiated within 15days from commencement of the VII semester
- 2. Orientation session is organized for the students by HOD and Project Coordinator. Following points are discussed with the students.
 - Guidelines for selection of Project.
 - Phases involved in project development
 - Overview of project Evaluation
- 3. Previous 3 years' project list is displayed and projects reports are made available in department library for student reference.
- 4. Students are given choice in finalizing the projects. They may opt for sponsored projects or in-house projects or extension of mini projects/ internships.
- 5. Students are asked to submit the names of students in the group along with the domain of interest within one week after the orientation.
- 6. After submission of domain, guide is allocated by the project committee on the basis of area of interest of guide.
- 7. Students discuss and finalize the title, objectives, scope of project with the assigned project guide.
- 8. Project evaluation committees are formed. Project guide is one of the committee members.
- 9. Problem statement and title are presented by the students in front of the committee. Committee gives suggestions in finalizing the title, scope, and objectives based on feasibility of the project, market, and literature survey.
- 10. Students submit the project synopsis with the approval of guide.





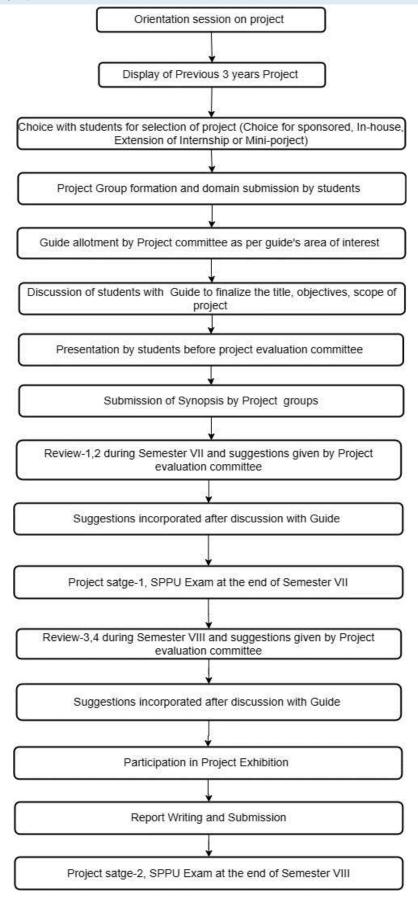


Fig 2.2.3.1: Project Process for Identification, Allocation and Evaluation







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

Students are motivated to come up with innovative ideas to solve real world problems. The projects are classified on the basis of environment, safety, ethics, agriculture, societal and type like application, product, research, review etc. As every project has its own characteristics and requirement, this classification helps to ensure the suitable strategies and methodologies that is applied to achieve successful outcomes and quality of the projects.

POs such as Engineering knowledge, Problem Analysis, Design, investigation, Modern tools usage, team work, Ethics and Environmental issues are attained through final year projects. Each project is internally and externally evaluated and the project course outcomes are mapped with program outcomes and program specific outcomes. The internal evaluation and SPPU examination evaluation is considered for attainment of POs and PSOs.

The projects are assessed on basis of Depth of Knowledge, Literature survey, Methodology adopted, Modern tool usage, Impact on societal needs, Novelty of work, Team work, Presentation skills and documentation.

Table:2.2.3.1 Project Classification

	AY 2020-21									
Gr. No	Sr. No.	Name	Guide	Title	Classification					
	1	Aniket Dalvi		Diagnosis and						
1	2	Anushka Tidke		Detection of Covid19,	Application,					
1	3	Shivam Deshmukh	Mrs. R R Itkarkar	Pneumonia using Deep Learning	Societal					
	4	Komal Jadhav								
2	5	Diksha Ingale	Mr. S B	Smart mirror	Application					
	6	Mansi Shirode	Dhekale							
	7	Shreya Gorte		A Hybrid Approach for	Product,					
3	8	Prateek Jha	Ms. V D	helmet detection	Societal,					
	9	Rohit Jain	Nagrale	nomici detection	Safety					
	10	Devendra Kondalkar		Automated Paralysis	A1: 4:					
4	11	Swar Malu		Patient Healthcare	Application, Societal					
	12	Pranav Lalwadia	Mr. A Y Kazi	System	Societai					
	13	Rishikesh Nikam	Dr. D S Bormane	Automated handwritten	Application					
5	14	Rakesh Sawant	Co-Guide	character recognition	Application, Societal					
	15	Prathmesh Pardeshi	Mrs R R Itkarkar	character recognition	Societai					
	16	Shiv Kumar Dange	Mrs. V V	Smart and secure Voice controlled ATM with	Product,					
6	17	Shivani Singh	Deshmuk h/ Mrs. V	biometric	Societal,					
	18	Astha Sharma	S Navale	authentication	Safety					
7	19 20	Vedant Kasat Kattapa Koli	Mrs. Y P Lad	Gesture control Robotic Arm	Product					







	21	Shewta Gaddi				
	22	Pragna Chatla				
		Samiksha			Application,	
8	23	Metha		Pot hole and hump	environment,	
		Neha	Dr. D G	detection	Safety	
	24	Waghmare	Bhalke			
	25	Rutuja Patil				
		Priyanka				
	26	Sawant		IWear - The IOT based	-	
9		Pranjal		protection jacket for	Product,	
	27	Choudhari		women	safety	
	20	Shubham	Mr V B			
	28	Pujari	Gawai			
	20	Komal				
	29	Deshmukh				
1	20	Shreya		Smart ECG Monitoring	A 11	
0	30	Usturage		System	Application	
	21	Shweta	Mr. V B	,		
	31	Bhoskar	Gawai			
4	32	shrishti Mishra		010		
1	33	diksha rane	Mr. N P	Secured Smart	Product	
1	34	Lahu Jogdand	Mawale	Shopping Cart		
	2.5	Swapnali				
	35	Katke				
1	26	Aishwarya		IOT based System to	Product,	
2	36	Kamble		avoid wastage of fruits	environment	
	27	Pramila	Dr. P P	-		
	37	Bansode	Vast			
	38	Pooja Patil.				
1	39	Chaitali		IoT based COVID alert	Product,	
1 3	39	Mahajan.		multi-sensor integrated	societal	
3	40	Sonali	Mrs S A	self-Sanitizing System	societai	
	40	Gardade.	Takalkar			
	41	Nikita Shelar				
1	42	Prajakta		A Wireless Sensor	Application,	
4		Khatavkar	Mrs. K B	Network monitoring	safety	
	43	Geeta Sude	Chaudhar	system for walls and	sarcty	
	44	Satyam Kasbe	i	Civil Structures		
	45	Saurabh				
1	7.7	Shinde				
5	46	Suryakant		Gesture Vocalizer	Application	
		Mane	Dr. D G			
	47	sagar bhakare	Bhalke			
	48	Vaishnavi		Classification of ECG		
1		Kamble		Arrhythmias using		
6	49	Pooja Kadam		discrete wavelet	Research	
	50	Vaishnavi	Mr. S P	transform and neural		
		Khangale Bhosale		networks.		
1	51	Kasturi Phalle			Product,	
7	52	Ram Tapse	Mrs. Y P	Elevator safety system	safety	
	32	Patil	Lad			







	52	Taushif				
	53	Ahmed				
1	54	Rajashri Yalla	Mrs. K B	DOMO A A STATE		
1	55	Abhishek Lad	Chaudhar	RONOA Assistant	Product	
8	56	Nikita Killedar	i	Robot		
	57	Ankush				
	57	Basarge				
	50	Shreyas				
1	58	Kadam	Mrs R R	Smart Surveillance	Product	
9	59	Rushikesh	Itkarkar	Robot	Product	
	39	Darwatkar				
	60	Prathmesh				
	00	Bhondave				
	61	Yukta		Automated Patient		
2		Bharambe		Room using Neural		
0	62	Akshata Loya		Network based Speech	Research	
	63	Saakshi Pawar	Mrs. V S	Recognition		
	64	Rajas Soman	Navale	_		
	~ 1		AY 20	221-22		
Gr.	Sr.	Name	Guide	Title of Project	Classification	
No	No.	A 1		<u> </u>		
	1	Arindam Pal	Dr. D S	Ontimizina Water		
	1	Pooja Dilip	Bormane	Optimizing Water Parameters	Application,	
1	2	Kulkarni	Co-Guide	Maintenance in	Environment	
	2	Prathmesh	Mr. V B	Aquaculture	Liiviioiiiieiit	
	3	Borle	Gawai	riquaeunare		
		Daideep				
	4	Bhingarde				
2		Siddhi	Dr D G	Stock Price Prediction	A 11	
2	5	Deshmukh	Bhalke	and Sector wise Stock	Application	
		Digvijay		Recommendation		
	6	Dhere				
	7	Neha Kanade	D I/D	0 4 11'4	D 1 4	
2		Vaishnavi	Dr. KB	Satellite remote sensing	Product,	
3	8	Mohite	Chaudhar i	application for	Agriculture, Environment	
	9	Vinit Gujarkar	1	agriculture sector	Environment	
		Himanshu				
	10	Abhiraj			Application	
4		Saurabh	Mrs. Y P	Flood monitoring	Application, Environment,	
	11	Jangam	Lad	system	safety	
		Aishwarya			builty	
	12	Patil				
	13	Miheeka Khair	Mr S B	Voice Tone		
5	14	Mamta Patni	Dhekale	recommendation	Application	
	15	Sana Subhedar	Diickaic	recommendation		
		Abhishek		Design and		
	16	Bande	Mr. N P	Design and		
6	17	Aniket Ajur	Mr. N P Mawale	implementation of 3	Product	
		Vishal	iviawaie	Axis CNC PCB drilling machine	1	
	18	Bandage		maciniic		







		Dhanashree				
7	19	Chore	Dr. P P	Breast Cancer	D 1-	
7	20	Rinki	Vast	Detection Using ML	Research	
	21	Kunal Varade				
		Vinay				
	22	Pohankar	Ms V D	Environment behavior	Dagagala	
8	23	Preeti Kumari		Environment behavior	Research, environment	
		Tanmay	Nagrale	prediction	environment	
	24	Dahale				
	25	Lalit Tiwade				
		Apurva	Ms VV	Home Automation		
9	26	Kumbhar	Deshmuk	using Alexa	Product	
		Rasika	h	using Alexa		
	27	Hasurkar				
		Suvidhan				
1	28	Mane	Mrs V S	Automated Data entry		
0	29	Krutika Jagtap	Navale	using Robotic process	Product	
		Tanmayee	Navaic	Automation		
	30	Gajare				
		Khushboo				
1	31	Khobragade	Mrs Y P			
1		Aishwarya	Lad			
1 1	32	Kadu	Laa	Water Surface Cleaning	Application,	
	33	Rekha Rajguru		Machine	environment	
	34	Kedar Pawar				
1 -	35	Ishan Gupta	Mr V B			
2	36	Rutuja Kothari	Gawai	CNC PCB Router	Application	
		Abhishek	Gawai			
	37	Khedkar				
1		Ashwajeet	Mrs R R	Zeus: Smart electric	Product,	
3	38	Kamble	Itkarkar	Vehicle	Environment	
		Paarth				
1	39	Umbarkar	Mrs R R	Driver Monitoring	Application,	
4	40	Akshat Gupta	Itkarkar	System for Digital	safety	
· L	41	Anuja Joshi	Ithaikai	Twin	sarcty	
	42	Tanmay Pawar				
	43	Mihir Hambir				
1	44	Aniket Jadhav	Dr. D G	IoT in Pre-Forging	Application	
5		Shyamkrishna	Bhalke	Process	. Ppinounon	
	45	n Nair				
		Rohit				
	46	Khandare				
1		Harshavardhan	Dr K B	ML Based Secured	Product,	
6	47	Darekar	Chaudhar	Voting System	societal	
	48	Omkar Raut	i	. 50	5 5 5 5 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6	
		Manjusha				
\vdash	49	Burange				
		Suyash		Timer controlled		
1 1	50	Rajpure	Mr. S P	automatic switch for 3	Application	
7	~ ·	Monali	Bhosale	phase induction motor.	1 ipplication	
	51	Londhe		·		

Vision: Society Growth and Welfare through Competent Electronics and Communication Engineering Graduates







	52	Megha Tadge					
1	53	Atharva Mane	14. G D	T. (7)	A 11		
$\frac{1}{2}$	54	Satyajeet Patil	Mr S B	IoT based water quality	Application,		
8	55	Sakshi Singh	Dhekale	monitoring system	environment		
1		Jalinder	3.5	System To Detect Thief			
1	56	Yewale	Mrs S A	Events Using	Product		
9	57	Anmay Awale	Takalkar	Raspberry Pi			
		Kaustubh					
	58	Adhav	Dr P P				
$\begin{bmatrix} 2 \\ 0 \end{bmatrix}$		Neha	Vast	Bike Security System	Product		
	59	Khandale	vast				
	60	Azim Attar					
			A Y 2	022-23			
Gr. No	Sr. No.	Name	Guide	Tilte	Classification		
	1	Abhishek	Dr K B	Smart and integrated			
1		Khande	Chaudhar	home automation	Application		
	2	Diksha Khade	i	system	1. Philomon		
	3	Ram Patil					
•	4	Sapna					
2	5	Vishakha	Dr S B	Under water	A 1'		
2		Gaikwad	Dhonde	communication using	Application		
	6	Pratiksha Kavthale		Li-Fi technology			
		Samruddhi					
	7	Jadhav					
3		Prathamesh	Mrs. Y P	Sanitary Napkin	Product,		
3	8	Vishwas	Lad	vending Machine	societal		
	9	Diya Vora					
		Shweta					
	10	Jagdale					
4		Sumedha	Dr S B	Intelligent control of	Product,		
	11	Chaudhari	Dhonde	Elevator	safety		
•	12	Tanvi Gavhane					
	13	Pratima Lole		M 1. 115 ' C			
_	1 4	Mrunmayee	Mr S B	Multimodal Fusion of	Product,		
5	14	Chothe	Dhekale	text, speech and vision	societal		
	15	Pranav Patil		for sentiment Analysis			
	16	Siddhesh		2D to 3D using neural			
6		Maskare	Dr P P	radiance field and	Application		
	17	Aditya Dhapse	Vast	volumetric rendering	1 ipplication		
	18	Vedant Dere					
	19	Chaudhari					
	-	Piyush	Mr V B	The crop monitoring	Product,		
7	20	Mahajan Nagara	Gawai	robot using IoRT	Agriculture		
	21	Neeraj			_		
	21	Patil Nikita Shirish		Foor as 1-4: f			
8	22	Snirisn Nandkar	Dr. R R	Easy solution for accurate analysis of	Product,		
0	23	Niraj Sabale	Itkarkar	normal and orthotic leg	societal		
	43	Titaj Savaic		normal and ormotic leg			







	24	Mubin				
		inamdar				
	25	Palash Dhande	Mr. N P	IoT based smart grid	Application,	
9	26	Yash Honkalse	Mawale	system using Ardunio	environment	
	27	Deepak Pathak	Mawaic	system using Ardumo	CHVIIOIIIICII	
	28	Sayali Nikam				
1	29	Rohit There	Mr. S P	Navigation system for	Application	
0	30	Shraddha	Bhosale	AISSMS COE Pune	Application	
	30	Deshmukh				
1	31	Ganesh Kadam				
1	32	Shivam Kalane	Mr. N P	Smart Cylinder trolley	Product,	
	33	Aditya	Mawale	for home safety	safety	
	33	Kumkar				
	34	Deepali Dalvi				
1	25	Prachi	D., D. D.	Medical Assistive robot	D	
1	35	Kshirsagar	Dr.R R	supervised through	Product,	
2	26	Satyam	Itkarkar	android application	societal	
	36	Walekar				
	37	Amble Vijay				
	37	D	D. K.D	Contain Ohiaat Jistana		
1	38	Iyer Vignesh	Dr K B	Custom Object distance	A ==1: ==t: ==	
3	39	Rathod Amol	Chaudhar i	and detection using	Application	
	39	V	1	computer vision		
	40	Desai Mayuri				
	41	Himalay				
1	71	Khachane	Mrs. Y P	Multi-banking ATM	Product,	
4	42	Minal Pandey	Lad	system service using	safety	
-	43	sanika wadake	Lau	biometrics	Saicty	
	44	Rutuja Raut				
	45	Pritam Munde	Dr D S	Design and		
	46	Shruti Patil	Bormane	implementation of		
1 5	47	Rutam Khati	Co-Guide Dr V V Deshmuk h	protocol for defense safety in 5G using D2D communication	Application, safety	
	48	Vrushali				
1	40	Gaikwad	Ms. V D	Smart agricultural	Product,	
6	49	Divya Sutar	Nagrale	pesticide spraying robot	agriculture	
	50	Amisha Yeole				
	51	Ashutosh				
	J1	Pardeshi				
1	52	Abhishek	Mr. S B	smart pasticida hot	Product,	
7	32	Jangam	Dhekale	smart pesticide bot	agriculture	
	53	Shaista				
		Mujawar				
	54	Harsh Shah	$\overline{}$	Non invesive alueges		
1	55	Ishika	Dr P P	Non-invasive glucose testing using microstrip	Rasaarah	
8	J.S	Chankeshwara	Vast	antenna	Research	
	56	Siddhi Nasare		antoma		
1	57	Shreyash	Mrs. V S	Text To Image AI using	Application	
9	31	Parkhe	Navale	Deep learning	Аррисацоп	

	58	Aman Sagar				
	59	Arjun Singh				
2	60	Ayush Shetty	Dr. V V	Machine Translation		
0	61	Rajesh Parale	Deshmuk	using Seq2Seq with	Research	
U	62	Gaurav Singh	h	Attention/Transformers		
	63	Kiran Zure	D., V.V.			
2	64	Nisha Nelge	Dr. V V Deshmuk	Smart Cooking Chef	Product	
1	65	Pravin Kunte	h	Smart Cooking Cher	Flouuct	
	66	Akshay Jadhav	11			
	67	Saumya		Designing a control		
2	68	Shruti Gadhave	Ms. V D	system and software application to monitor	Application	
2	69	Janhavi Dabhade	Nagrale	advertisement/display screen	1	
	70	Chetna Rathod				
2 3	71	Rushikesh Bunde	Mrs. V S Navale	IoT based smart Blood bank system	Product, societal	
	72	Ashwini Ballal		-		
2	73	Abhishek Shinde	Mr. S B	Microstrip Patch Antenna for 5G	Duo duo et	
4	74	Sahil Varule	Dhekale	Network	Product	
	75	Abhijit Rakh		INCLWOIK		
	76	Kunal Kadnor				
2 5	77	Vaibhav Holkar	Mr. V B Gawai	Solar Cleaning System	Product, environment	
	78	Yash Bakare				

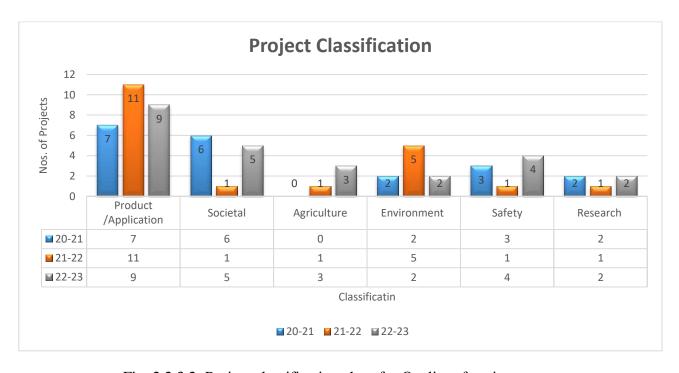


Fig: 2.2.3.2: Project classification chart for Quality of project







Course outcomes and its Mapping with POs and PSOs

Course outcomes -Project Stage-1

CO1: Identify project for society and industry need by applying engineering knowledge gained throughout the E and TC Engineering program

CO2: Investigate identified complex engineering problem using appropriate research methods and techniques

CO3: Test the solution of identified engineering problem with appropriate simulation tool.

CO4: Work in team and effective budget Planning to meet the project requirement

CO5: Effectively communicate the project progress through presentations and technical report.

CO6: Develop self-learning skills and follow the ethical code of conduct for project.

Table 2.2.3.3 CO-PO mapping Project Stage-1

Course	PO	PSO1	PSO2	PSO3											
Outcome	1	2	3	4	5	6	7	8	9	10	11	12			
CO1	3	3	2	3		3	3						3	2	2
CO2	2	3	3	3	2	2							3	3	2
CO3					3			2	3		3		3	3	3
CO4									3	2	3				2
CO5									2	3	3				2
CO6								3	2			3			2

Course outcomes -Project Satge-2

CO1: Develop solutions to the real world problems using modern engineering tools and technologies.

CO2: Demonstrate practical skills and knowledge in testing and debugging for both hardware and software based projects.

CO3: Work in team to demonstrate the project by using visual aids and visualization techniques.

CO4: Effectively communicate project work through publications, competitions, presentations and technical report.

CO5: Showcase the project management and self-learning skills for lifelong learning.

CO6: Adherence to ethical code of conduct for project execution.







Table 2.2.3.3 CO-PO mapping Project Stage-1

Course	PO	РО	РО	РО	PO	PSO1	PSO2	PSO3							
Outcome	1	2	3	4	5	6	7	8	9	10	11	12			
CO1	3	3	3		3	2	2						3	3	
CO2	3	3	3	3	3								3	3	
CO3					2			2	3	3					3
CO4										3		3			3
CO5										3	3	3			3
CO6								3			2	3			3

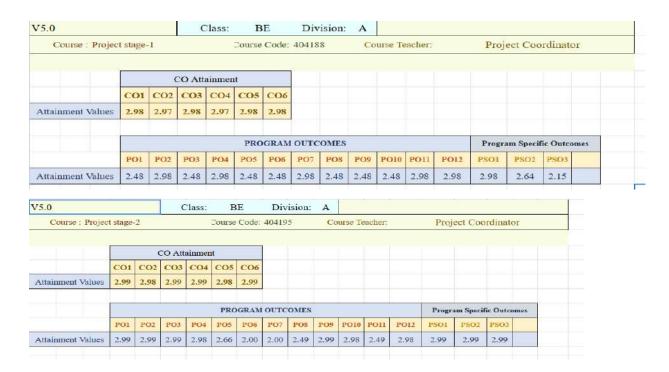


Fig 2.2.3.3: Sample CO-PO PSO attainment through Project for 2020-21

C. Continuous monitoring mechanism and evaluation

As per the guidelines in the prescribed curriculum for project, the students need to complete the project in two phases, project stage-1 & project stage-2. Students as team are required to meet their project Guide on weekly basis. A monthly assessment report duly signed by the Guide needs to be submitted to the project coordinator at the end of semester in the form of log book.

To monitor the progress and evaluate the project, two review presentations are conducted in each Semester. The presentations are evaluated by Project evaluation committee.

	Project Phase-I Review						
Project Title Presentation Based on the presentation and the discussion during the review,							
	the title of the project is finalized.						
Review-1	Evaluation based on Literature survey, market survey,						
	identification of methodology, component selection						
Review-2	Evaluation based on design and development of Methodology						
	is identified to solve the problem.						
Phase-1 Exam	External Evaluation carried out as per SPPU schedule						
Project Phase-II Review							







Review-3	Evaluation based on Implementation of methodology as per software/Hardware requirement, testing and result validation.
Review-4	Evaluation based as Final product/system demonstration as team and individual.
Final Project demonstration	Demonstration and evaluation through exhibition.
Phase-II Exam	External Evaluation carried out as per SPPU schedule







Department of Electronics and Telecommunication Engineering

Notice

09/11/2022.

All BE- E& TC Students are informed that final project satge-1 presentation is scheduled on 14th Nov 2022 and also to submit the following on or before 14/11/2022.

- 1. Seminar Report/Project stage-1 Report
- 2. Plagiarism check report of Seminar
- 3. Updated Log Book
- 4. Seminar/Project Stage! Report
- A Project stage-1 presentation (PPT) printout

R R Itkarkar

Project Coordinator

HOD- E & TC

Head

Department of Electronics & Telecommunication AISSMS's COE PUNE-411001.

Fig 2.2.3.4: Notice for Project Presentation













ज्ञानम् सकलजनहिताय Accredited by NAAC with "A+" Grade

Department of Electronics & Telecommunication Engineering

BE (E&TC) Project Stage-1 Presentation Schedule 2022-23, Sem

Class room/ Lab	Day & Date	Time	Groups	Faculty
417	14/11/2022	9.15 am	1, 13, 7, 15, 10	K B Chaudhari V B Gawai P P Tayade S P Bhosale
425	14/11/2022	9.15 am	2,4 , 16, 22, 9,11	Dr S B Dhonde V D Nagrale N P Mawale
432	14/11/2022	9.15 am	3,14, 19,23, 8, 12	Y P Lad V S Navale R R Itkarkar
452	14/11/2022	9.15 am	6,18, 5,17, 20,21	Dr P P Vast S B Dhekale V V Deshmuki

Project Co-ordinator

R R Itkarkar

Dr. S B Dhekale

Head

Department of Electronics & Telecommunication AISSMS's COE PUNE-411001.

Fig 2.2.3.5 Schedule for Project Presentation



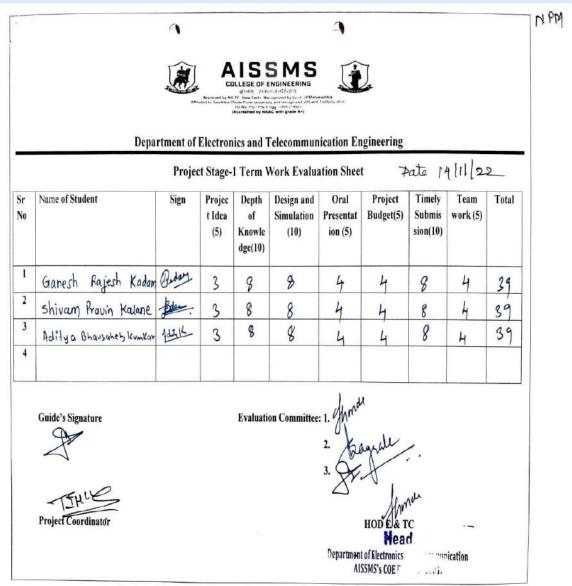


Fig 2.2.3.6: Sample Evaluation Sheet



AISSMS College of Engineering

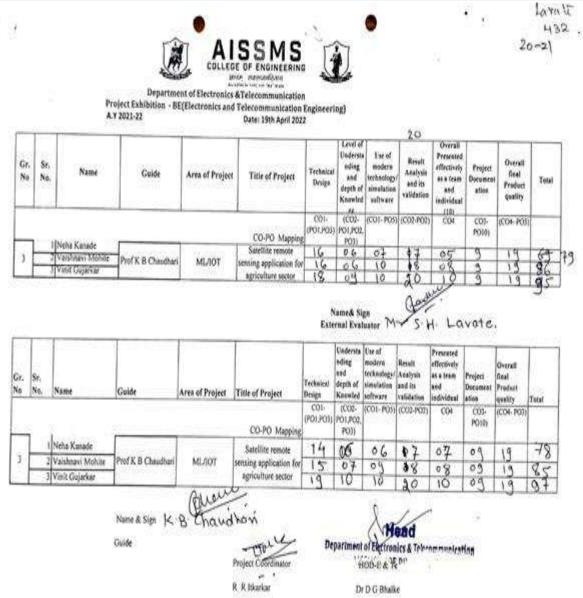
Department of Dectronics & Telecommunication Project Group List - BECElectronics and Telecommunication Engineering)
A.Y 2021-22 Final Evaluation Project Servinar Persentation toward, self-self, etcl (8) Title of Project Area of Project Acordon Pa 36 Present 36 Present Dr. D.S Borrana Armani Pooja Dilip Kulkani Prachinesh Borle Optimizing Water Parameters HA. KOT Co-Gode Y B Maintainance in Aquaculture Giver 36 Present 37 Present Daideep Blangarde Stock Price Prediction and 60 2 37 Present Dr D G Shake Data Science * ML Sector wise Stock Digripsy Dhere Recommendation 37 Present icha Kanade Salefule remote sensing 39 Present 17 16 16 16 Vanhuavi Mohile Vent Coyafkar Himanahu Abbira to Present to Present 60 1 of K B Chaudha application for agriculture MICHAE 18 Present 38 Present ŧ Prof Y P Lad Florid monitoring system TO 38 Present b Absent 0 Absent 25 \$ Mamle Patri Prof S & Dhekale Vesce Tone recommendation Absent SAM SURVEY Althorist Bunde 17 Present 15 战战战 J Axis CNC PCB drilling. 6 Anket Apar Prof. N.P. Mensie Embedded system N Present 60% Vishal Bandage Chanashros Chore machine 40 Present firest Canor Detection Using ML. 40 Dr. P.P. Vive 37 Present 2 KOUT VEHICLE ML. 7 Present O'Absent Environment behavior Absent Present ŧ YORKS KARMAN Prof V D Nagrale 10 production Jet Treate Apurva Kumbhar Prof. V.V.)) Present)) Present 107 ome Automation using Alexa 45 9 Deshmakh 7 Rasika Hasurkan 10 Present 30 Present Chica Mass Pretent St. Pretent G. Abornt Albert Tannapor Gujara Krustiko Krobragada Fred V S Name 10 Water Surface Cleaning Embelded Systems Prof Y P Last C Absent
C Absent
C Absent
C Absent
C French
C F 11 TO WHAT IN KIND Machine-Prof V B Gavai Embedded Systems CNC PCB Router 12 Prof. R.R. Harrion Robotics DE Advesped Kamble or reason Conseques with record Conseques or Artiga Annie The Robo Cook 13 Driver Monitoring System for 54 Prof. R.R. Marke AL+10T 70 Digital Twin 15 Dr. D. G. Blocke IA + TOI loT in Pre-Forging Process Absent Absent Absent C Absent ML bused Security Visting 60 Prof. K.B. ML + 10T System Chaodhan 35 Present 15 notice bollen 15 Present
Present
Present
Present
Present
Present
Absent Embedded systems witch for 3 phase induction 17 Prof. S.P. Bhorale 20 STONE STONE loT based water quality Prof S B Dhekale 107 18 monitoring system 45 MINDS TOWARD Prof. S.A. Takalkar EVENTS USING O Absent 19 Annuy Avale BACKSUPBY BL Present. 60 35 Present Bike Security System NUMBER OF STREET Dr P.P. Vest. IOT 20 A) Present SADIT ADDE STANSON Prof. V D Nagrale 21 HOD Dr D G BA Project Coordinator Head Department of Electronics & Telecommunication AISSMS's COE PUNE-411001.

Fig 2.2.3.7: Sample Evaluation during online Learning.









Sample Evaluation sheet









साजम् राकलजनहिलाय अल्लाम ७ ४४४६ जन "४४" Grade



Department of Electronics and Telecommunication Engineering

Final Year Final Project Review- Rubrics

Title of Project: Remote Sensing Based - Ctop monitor. Academic year: 2021-22

Name of Student Vinit Guiatkat ing System

Name of Student Vinit Gujackat

DA V & Chaudhasi Name of Guide-

S N	Assessment indices	Inadequate (1)	Average (2)	Admirable (3)	Outstanding (4)	Score
1	Technical DesignCO1- (PO1,PO3)	Nearly meet expectations	Partially Meets expectation	Satisfactorily meets expectation	Exceeds	4
2	Level of Understanding and depth of Knowledge(CO2- PO1,PO2,PO3)	Work done but unable to explain the concepts	Partially understanding and Knowledge of project	Satisfactorily meets expectation	Excellent understanding and Knowledge of project	_4
3	Use of modern technology(CO1- POS)	Poor use of advance tool for design & simulation	Partial use of advance tool for design & simulation	satisfactory use of advance tool for design & simulation	Excellent use of advance tool for design & simulation	3
4	Result Analysis and its validation (CO2-PO2)	Generated results but no interpretations and conclusion	Generated results with partial interpretations and conclusion	Satisfactory Generated results & interpretations and conclusion	Excellent Work in Generation of results & interpretations and conclusion	3
5	Log book & report documentation(CO3- PO10)	Lack of Timely submission and Incomplete log Book and report	Timely submission of documentation but unsatisfactory report preparation	Timely submission and Satisfactorily submission of documentation using traditional application like word	Timely submission of Detailed and appropriate documentation and made use of \(\frac{1}{2}\) documentation software like latex	4
6	Overall final Product quality(CO4- PO3)	Not suitable for real world application and Nearly meet expectations	Partly applicable for real world problem and Partially Meet expectation	Direct applicable for real world application and Satisfactorily meet expectations	Direct applicable for real world application and Excellent work done on product quality	3
	Guide Name with Sign				Total	21

Fig 2.2.3.8 Use of Rubrics for Evaluation







D. Process to assess individual and team performance

Project coordinator displays the presentation schedule after submission of project synopsis by the students. The presentation is scheduled and conducted twice in each semester by project evaluation committee. Students project progress is documented in form of marks.

The performance of the individual team member of the project is assessed at the time of review presentations and rubrics on following criterions:

- Design and Component selection
- ➤ Market survey and Literature survey
- ➤ Simulation
- > Oral presentation and Effective communication as team member
- > Estimation of Project Budget
- ➤ Depth of Knowledge
- ➤ Hardware/Software Design
- ➤ Use of modern technology
- ➤ Hardware testing / Software testing
- ➤ Analysis and validation of results
- > Contribution as a team member

Following Rubrics are used for Assessment of individual / Collective contribution

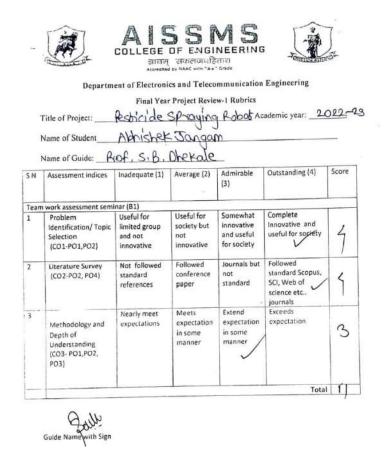


Fig 2.2.3.9 Rubrics for Review-1











ज्ञागम् स्वातनाजनहितास Accredited by NAAC with "A+" Grade



Department of Electronics and Telecommunication Engineering

Final Year Project Review-2 Rubrics

Title of Project:	Pesticide Spraying Robot Academic year: 2022-23
Name of Student_	Abhishek Jangam
Name of Guide	Prof. S. B. Dhekale

Assessment indices	Inadequate (1)	Average (3)	Admirable (5)	Outstanding (6)	Score
m work assessment s	seminar (B1)			5 - Hand Mosk	
Design and Component selection (CO3- PO1,PO2,PO3, PO4)	Design done no selection of components	Partial Design done and selection of components	Satisfactory Design and Component selection	in Design and Component selection	6
Simulation (CO3- PO5)	No Simulation executed	Low use of advance tool for design & simulation	Moderate use of advance tool for design & simulation	Extensive use of advance tool for design & simulation	6
Oral presentation and Effective communication as team member (CO4- PO10)	Demonstration with poor technical skills and communication	Demonstration with average technical skills and communication.	Demonstration with good technical al details and communication skills.	Demonstrated Excellently technical al details and communicated effectively.	5
Estimation of Project Budget (CO3-PO11)	Poor planning and Management	Average planning and Management	Good planning and Management	Excellent planning and Management	5
	m work assessment s Design and Component selection (CO3- PO1,PO2,PO3, PO4) Simulation (CO3- PO5) Oral presentation and Effective communication as team member (CO4- PO10) Estimation of Project Budget	m work assessment seminar (B1) Design and Component selection (CO3- PO1,PO2,PO3, PO4) Simulation (CO3- PO5) No Simulation executed Oral presentation and Effective communication as team member (CO4- PO10) Estimation of Project Budget and Poor planning and	m work assessment seminar (B1) Design and Component selection of components Selection (CO3-PO1,PO2,PO3, PO4) Simulation (CO3-PO5) No Simulation executed No Simulation for design & simulation Oral presentation and Effective communication as team member (CO4-PO10) Estimation of Project Budget Poor planning and Partial Design done no selection of components Partial Design done no selection of components Demonstration with average technical skills and communication. Average planning and	m work assessment seminar (B1) Design and Component selection of selection of (CO3-PO1,PO2,PO3, PO4) Simulation (CO3-PO5) No Simulation executed No Simulation executed Demonstration with poor communication as team member (CO4-PO10) Estimation of Project Budget Posign and Component selection of components Demonstration with average technical skills and communication. Average planning and Component selection Partial Design Component Satisfactory Design and Component selection Demonstration with average technical skills and communication. Demonstration with average technical skills and communication. Sestimation of Project Budget Poor planning and Average planning and Management	m work assessment seminar (B1) Design and Component selection of selection of (CO3-PO1,PO2,PO3, PO4) Simulation (CO3-PO5) Oral presentation and Effective communication as team member (CO4-PO10) Estimation of Project Budget indices Design and Component selection of selection of components Simulation (CO3-Poor planning and planning and selection of selection of components Design and Component selection Design and Component selection Excellent Work in Design and Component selection Moderate use of advance tool for design & simulation Extensive use of advance tool for design & simulation Demonstration with average technical skills and communication skills. Demonstrated Excellently technical all details and communicated effectively.

Fig 2.2.3.10 Rubrics for Review-2









COLLEGE OF ENGINEERING



Department of Electronics and Telecommunication Engineering

	Final Year Project Review-3- Rubrics
Title of Project:	Pestigide Spraying Pobot Academic year: 2022-23
Name of Student_	Abhishek Jangan
Name of Guide;	Profis. B. Dhekale

hardware and software design (CO1-PO1,PO2,PO3,PO5) 2 PCB Making Hardware testing / Software testing (CO2-PO5) 3 Oral presentation and Effective communication (CO3-PO10) 4 Contribution as a team member(CO4-PO9) CO1-PO2,PO3,PO5) Demonstration with poor technical skills and communication. COntribution in documentation and team member(CO4-PO9) Execution Fartially Meets expectation Execution Executi	S N	Assessment indices	Inadequate (1)	Average (3)	Admirable (5)	Outstanding (6)	Score
hardware and software design (CO1-PO1,PO2,PO3,PO5) PO2 PCB Making Hardware testing / Software testing (CO2-PO5) Oral presentation and Effective communication (CO3-PO10) CO3-PO10) Demonstration with poor technical skills and communication (CO3-PO10) COntribution as a team member(CO4-PO9) Demonstration with average technical skills and communication only in documentation preparation preparation preparation and presentation preparation and presentation preparation and communication, and presentation preparation and communication preparation and communication preparation and communication preparation and communication, and communication preparation and communication preparation and communication preparation and communication preparation and communication communication and communication preparation and communication communication communication and communication preparation and communication communi	Tea	m work assessment se	eminar (B1)				
Hardware testing / Software testing (CO2-PO5) 3 Oral presentation and Effective communication (CO3-PO10) 4 Contribution as a team only in member (CO4-PO9) 4 Contribution as a team presentation member (CO4-PO9) 5 Oral presentation expectation	1	hardware and software design (CO1-	No Execution	Execution	1-0700000000000000000000000000000000000	1	C
Demonstration with poor technical skills and communication (CO3-PO10) 4 Contribution as a team member(CO4-PO9) CO3-PO10 CO3-PO10 Demonstration with average technical skills and communication. COntribution in documentation and presentation preparation preparation Demonstration with good technical al details and communicated effectively. Contribution in documentation, presentation, requirements and	2	Hardware testing / Software testing		PROCESSOR STATES AND ADDRESS.	meets		5-
team only in documentation and presentation, presentation, preparation preparation and	3	and Effective communication	with poor technical skills and	with average technical skills and	with good technical al details and communication	Excellently technical al details and communicated	5
specification	4	team	only in	documentation and presentation	documentation, presentation, requirements		5



Fig 2.2.3.11 Rubrics for Review-3









A 155 M 5 COLLEGE OF ENGINEERING



शातम् स्कल्जनहितास Accredited by NAAC with "A+" Grade

Department of Electronics and Telecommunication Engineering

Final Year Project Review-4- Rubrics

Title of Project: Peshicide Spraying Robb Academic year: 2022-23

Name of Student Abhishek Jongan

Name of Guide: Prof. S. B. Dhekale

S N	Assessment indices	Inadequate (1)	Average (3)	Admirable (5)	Outstanding (6)	Score
Tea	m work assessment s	seminar (B1)				
1	Analysis and validation of results (CO2-PO2,PO3)	Generated results but no interpretations and conclusion	Generated results with partial interpretations and conclusion	Satisfactory Generated results & interpretations and conclusion	Excellent Work in Generation of results & interpretations and conclusion	G
2	Draft copy of Project Report(CO3- PO10)	Incomplete documentation	Partially documentation	Satisfactorily completed documentation using traditional application like word	Detailed, appropriate documentation and made use of documentation software like latex	s-
3	Oral presentation and Effective communication (CO3-PO10)	Demonstration with poor technical skills and communication	Demonstration with average technical skills and communication.	Demonstration with good technical al details and communication skills.	Demonstrated Excellently technical al details and communicated effectively.	5
4	Contribution as a team leader(CO4-	Unable to lead the team	Few efforts to lead the team	Satisfactory efforts to lead the team	Leaded the team with excellent coordination	5
	PO9)				Total	3



Fig 2.2.3.12 Rubrics for Review-4









A155M5 COLLEGE OF ENGINEERING



झानम् सक्लजनहितारा Accredited by NAAC with "A+" Grade

Department of Electronics and Telecommunication Engineering

	Final Year Project Seminar Review Rubrics	
Title of Project:	Pesticide spraying RobotAcademic year: 2022	-23
Name of Student_	Althishek Jangam	
Name of Guide:	end, s. B. Obekale	

S N	Assessment indices	Inadequate (2)	Average (4)	Admirable (6)	Outstanding (8)	Score
Tea	m work assessment se	eminar (B1)				
1	Depth of Knowledge (CO3- PO1,PO2)	Nearly meet expectations	Partially Meets expectation	Satisfactorily meets expectation	Exceeds expectation	8
2	Hardware, Software Design (CO3- PO2,PO3,PO4,PO5)	No Simulation executed	Low use of advance tool for design & simulation	Moderate use of advance tool for design & simulation	Satisfactory use of advance tool for design & simulation	3
3	Oral presentation and Effective communication (CO4- PO10)	Demonstration with poor technical skills and communication	Demonstration with average technical skills and communication.	Demonstration with good technical al details and communication skills.	Demonstrated Excellently technical al details and communicated effectively.	6
4	Contribution as a team member(CO4- PO9)	Contribution only in documentation	Contribution in documentation and presentation preparation	Contribution in documentation, presentation, requirements and specification	Contribution in over all work	8
5	Partial Demonstration (CO4- PO3,PO4)	Nearly meet expectations	Partially Meets expectation	Satisfactorily meets expectation	Exceeds expectation	8
			(12.0)		Total	32

Guide Name with Sign

Fig 2.2.3.13 Rubrics for Seminar – Project satge-1









COLLEGE OF ENGINEERING



Department of Electronics and Telecommunication Engineering Final Year Final Project Review, Rubrics

Title of Project:	Pesticide spraying	Robot Academic year:	2022-23
-------------------	--------------------	----------------------	---------

Name of Student Abhishek Jongam

Name of Guide: Prof 15, B. Dhekale

S N	Assessment Indices	Inadequate (1)	Average (2)	Admirable (3)	Outstanding (4)	Score
1	Technical DesignCO1- (PO1,PO3)	Nearly meet expectations	Partially Meets expectation	Satisfactorily meets expectation	Exceeds expectation	4
2	Level of Understanding and depth of Knowledge(CO2- PO1,PO2,PO3)	Work done but unable to explain the concepts	Partially understanding and Knowledge of project	Satisfactorily meets expectation	Excellent understanding and Knowledge of project	3
3	Use of modern technology(CO1- PO5)	Poor use of advance tool for design & simulation	Partial use of advance tool for design & simulation	satisfactory use of advance tool for design & simulation	Excellent use of advance tool for design & simulation	3
4	Result Analysis and its validation (CO2-PO2)	Generated results but no interpretations and conclusion	Generated results with partial interpretations and conclusion	Satisfactory Generated results & / interpretations and conclusion	Excellent Work in Generation of results & interpretations and conclusion	3
5	Log book & report documentation(CO3-PO10)	Lack of Timely submission and Incomplete log Book and report	Timely submission of documentation but unsatisfactory report preparation	Timely submission and Satisfactorily submission of documentation using traditional application like word	Timely submission of Detailed and appropriate documentation and made use of documentation software like latex	4
5	Overall final Product quality(CO4- PO3)	Not suitable for real world application and Nearly meet expectations	Partly applicable for real world problem and Partially Meet expectation	Direct applicable for real world application and Satisfactorily meet expectations	Direct applicable for real world application and Excellent work done on product quality	4

Fig 2.2.3.14 Rubrics for Final Project -Project satge-2







E: Quality of completed projects/working prototypes (5)

Based on the following points Quality of the completed projects is decided

- Department organizes project demonstration/exhibition. Department invites external experts for evaluating the demonstrations and based on the evaluation best projects are awarded.
- Students participate in Project competitions.
- Students publish papers in reputed journals.
- Industry sponsored project.

۴

Project applicable to society or project having potential for converting into product.







Department of Electronics and Telecommunication Engineering

Accredings by NAAC with "A+" Grade

Notice

Date: 02/05/2023

Project Exhibition is scheduled on Friday, 05/05/2023 at 11.00 am. Prepare the following

Final Demonstration,

Poster containing Project Idea, Block Schematic, Project Specifications, Results and Conclusion. (A3 Size)

Project Presentation with minimum 6 slides

Lab	Groups	Guide and Faculty Team for Evaluation	External Evaluator
432	1, 13, 19,23, 18	Dr K B Chaudhari V S Navale Shartle Dr P P Vast Q	External Evaluator1
437	2,4 , 16, 22 6,	Dr S B Dhonde V D Nagrale Dr P P Vast QC	External Evaluator2
451	3.14, . 8, 12 Electronics(1) 5,	Y P Lad Dr R R Itkarkar S B Dhekale	External Evaluator3
429	17, 24 20,21, 15	S B Dhekale Sau. Dr V V Deshmukh.	External Evaluator4
456	9,11 10 7, 25	N P Mawale S P Bhosale V B Gawai	External Evaluator5

Dr.R R Itkarkar Project Coordinator

Department of Electronics & Telecommunication AISSMS's COE PUNE-411001.

Fig 2.2.3.15 Notification of Project Exhibition















Department of Electronics and Telecommunication Engineering BEST PROJECTS FOR INSTITUTE LEVEL COMPETITION AY: 2022-23-II

Date: 08/05/2023

As per guidelines received from central project committee, E & TC department had organized an project exhibition on 5th may 2023. The exhibition was inaugurated by Principal Dr D S Bormane. The projects were evaluated by internal and external evaluator. The evaluation was done on the basis of Technical knowledge, Usage of modern tool, hardware software design, demonstration and oral communication and presentation skills. Following groups were selected for institute level competition.

Grou p no	Sr	Name of Sstudents	Guide	Title of Project		
- 110	1	Shweta Sharad Jagdale	Guide	Title of Project		
4	2	Sumedha Shekhar Chaudhari	Dr S B	Intelligent control of Elevator		
	3	Tanvi Parmeshwar Gavhane	- Dhonde	<u> </u>		
5	4	Pratima Lole	C.D.	Multimodal Fusion of text,		
	5	Mrunmayee Chothe	S B Dhekale	speech and vision for sentiment		
	6	Pranav Patil	Dhekale	Analysis		
6	7	Siddhesh Maskare	D. D.D	20. 20		
	8	Aditya Dhapse	Dr P P	2D to 3D using neural radiance		
	9	Vedant Dere	Vast	field and volumetric rendering		
-	10	Chaudhari Piyush Dinesh	WD C	The crop monitoring robot usin		
7	11	Mahajan Neeraj Vinod	V B Gawai	IoRT		
	12	Patil Nikita Ajitsinh				
	13	Shirish Nandkar	Easy solution	Easy solution for accurate		
8	14	Niraj Sabale	R R Itkarkar	analysis of normal and orthotic		
	15	Mubin inamdar	Tikarkar			
21	16	Kiran Zure		Smart Cooking Chef		
	17	Nisha Nelge	V V Deshmukh			
	18					
	19	Akshay Jadhav				

Head

Department of Electronics & Telecommunication AISSMS'S COE PUNE-411001.

Fig 2.2.3.16 Evaluation of Project Exhibition







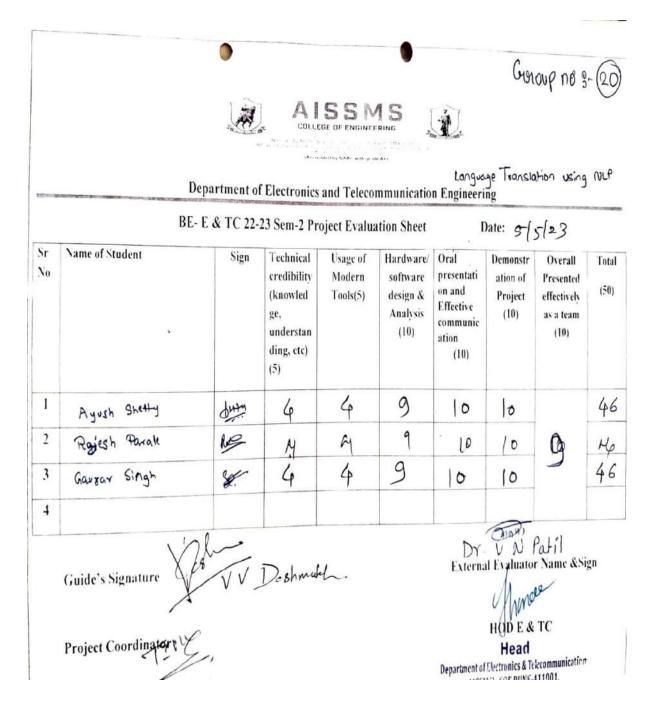


Fig 2.2.3.17 Winners of Project Exhibition







List of Student participation in project Competitions and paper presentations at national & International conference stating quality of project.

Table 2.2.3.4 List of student participation in Project Competitions and Conferences.

Sr	Name of the	Competition	Date	Winner/Partic
no	Student		.1	ipation
1	Divya Vora	Project competition 2K23,	5 th	Participation
	Vishwas	Dept of Computer Engg.& IT	May	Competition
	Prathemesh	at PVGCOET & GKPIM,	2023	
	Samruddhi Jadhav	Pune	2.1 st	
2	Divya Vora	Presented paper in 3 rd	31 st	Paper
	Vishwas	National conference on	May	Presentation
	Prathemesh	innovation in Engg &	2023	national
	Samruddhi Jadhav	technology at AISSMS COE		Conference
3	II:malari	Pune A VINIVA 2022 National	27 th	Doutisinstian
3	Himalay Khachane	AVINYA 2023, National	'	Participation
		Level technical Festival, by	April	Competition
	Minal Pandey	BVCOEW, Pune National	2023	
	Rutuja Raut	Level Project competition sponsored by IETE		
4	Sanika Wadke	Presented paper in 3 rd	31 st	Paper
'	Samka Wadke	National conference on	May	Presentation Presentation
		innovation in Engg &	2023	national
		technology at AISSMS COE	2023	Conference
		Pune		Comerciae
5	Shirish Nandkar	"Ideathon 2022-23"	9 th Fe	First prize
	Mubin inamdar	competition on 9 th February	bruar	•
		2023. Startup & Innovation	y	
		Cell at AISSMS COE	2023.	
6	Niraj Sabale	IETE Intercollegiate Project	24 th	Participation
		Competition 2023 by E & Tc	April	Competition
		dept, Modern Education		
		society's COE, Pune		
7	Shirish Nandkar	EUREKA 22-23 State level	April	Participation
		Innovation Idea Competition	2023	Competition
		in collaboration with ESDS		
		Software Solutions ltd		
		organized by Ashoka Centre		
		for Business and Computer		
		studies nashik		
8	Kiran Zure	Presented paper in 3 rd	31 st	Paper
	Akshay Jadhav	National conference on	May	Presentation
	Pravin Kunte	innovation in Engg &	2023	national
	Nisha Nelge	technology at AISSMS COE		Conference
	W. 5	Pune	eth.	-
9	Kiran Zure	State Level Project	6 th	Participation
	Akshay Jadhav	Competition in association	May	Competition
	Pravin Kunte	with IEI of AISSMS COE	2023	
	Nisha Nelge	Pune, Dept of Electrical		
		Engineering		







10	Kiran Zure	AVINYA 2023, National	27 th	Participation
	Akshay Jadhav	Level technical Festival, by	April	Competition
	Pravin Kunte	BVCOEW, Pune – National	2023	r
	Nisha Nelge	Level Project competition		
		sponsored by IETE		
11	Shivam	Presented paper in 3 rd	31 st	Paper
	Kalane, Ganesh	National conference on	May	Presentation
	Kadam , Aditya	innovation in Engg &	2023	national
	Kumkar,	technology at AISSMS COE		Conference
	,	Pune		
12	Shivam	IETE Intercollegiate Project	24 th	Participation
	Kalane, Ganesh	Competition 2023 by E & Tc	April	Competition
	Kadam , Aditya	dept, Modern Education	P	comp e tition
	Kumkar,	society's COE, Pune		
13	Piyush Chaudhari,	Presented paper in 3 rd	31 st	Paper
	neeraj mahajan,	National conference on	May	Presentation
	Nikita Patil	innovation in Engg &	2023	national
	- 1222	technology at AISSMS COE	_0_0	Conference
		Pune		
14	Piyush Chaudhari,	State Level Project	6 th	2 nd Prize
1 '	neeraj mahajan,	Competition in association	May	- 11120
	Nikita Patil	with IEI of AISSMS COE	2023	
	TVIKITA I ATII	Pune, Dept of Electrical	2023	
		Engineering		
15	Kunal Kadnor,	Project Competition by	May	Participation
13	Vaibhav Holkar,	Softech Solutions, Pune	2023	Competition
	Yash Bakare	Softeen Sofutions, 1 the	2023	Competition
16	Deepali R Dalvi,	IETE Intercollegiate Project	24 th	Participation
	Prachi Kshirsagar,	Competition 2023 by E & Tc	April	Competition
	Satyam Walekar	dept, Modern Education	P	c omp c uiton
		society's COE, Pune		
17	Deepali R Dalvi,	Presented paper in 3 rd	31 st	Paper
1	Prachi Kshirsagar,	National conference on	May	Presentation
	Satyam Walekar	innovation in Engg &	2023	national
	Sarjani (alonai	technology at AISSMS COE	_0_0	Conference
		Pune		20111101100
18	Saumya	Presented paper in 3 rd	31 st	Paper
	Shruti Gadhave	National conference on	May	Presentation
	Janhavi Dabhade	innovation in Engg &	2023	national
		technology at AISSMS COE	_ ~ _ ~	Conference
		Pune		
19	0:111 137	Institute Level Project	10 th	Ist Prize
	Siddhesh Maskare	Competition A.Y 2022-23	May	
	Aditya Dhapse	Sem-II at AISSMS College of	2023	
	Vedant Dere	Engineering in Association	_ ~ ~ ~ ~	
		with		
		ISTE Students chapter		
20	Aishwarya Patil	Regional Level Project	2 nd	Participation
	Saurabh Jangam	Competition, Sponsored by	may	Competition
	Himanshu Abhiraj	DTE, regional office Pune in	2022	Competition
		association with SPPU, Pune	_0	
		at AISSMS COE Pune		







21	Arindam Pal	Regional Level Project	18 th	Participation
	Pooja Dilip	competition Sponsored by	Jan	Competition
	Kulkarni	DTE, regional office Pune in	2022	-
	Prathmesh Borle	association with SPPU, Pune		
		at VIT Pune		
22	Parth Umbarkar	National Level poster	25^{th}	Participation
		competition on	Nov	in Poster
		"Interdisciplinary Innovative	2021	Competition
		Ideas" organized by JSCOE,		
		hadapsar in association with		
		IEE pune section on 25 th Nov		
		2021		
23	Sana Subhedar	Presented paper in 2 nd	20 st	Paper
	Miheeka Khair	National conference on	May	Presentation
	Mamata Patni	innovation in Engg &	2022	national
		technology at AISSMS COE		Conference
		Pune		
24	Daideep	Presented paper in 2 nd	20 st	Paper
	Bhingarde	National conference on	May	Presentation
	Siddhi Deshmukh	innovation in Engg &	2022	national
	Digvijay Dere	technology at AISSMS COE		Conference
		Pune		
25	V. A. Gujarkar, P.	Paper presented Remote	1-3	Paper
	D. Kulkarni, A.	Sensing Based Crop	July	Presentation
	Pal, K. Chaudhari	Monitoring System," 2022	2022	International
	and V. A. Mohite,	IEEE Region 10 Symposium		conference
		(TENSYMP), Mumbai, India,		
		2022, pp. 1-5, doi:		
		10.1109/TENSYMP54529.20		
		22.9864416.		



Fig 2.2.3.18 Student Participation in Project Exhibition





Fig 2.2.3.19 Student Certificates



Fig 2.2.3.20 Project Presentations.



Fig 2.2.3.21 Project Exhibition 2022 and 2023









Fig 2.2.3.22 Project on Smart Electric Vehicle



Fig 2.2.3.23 Project on Smart Chef Robo

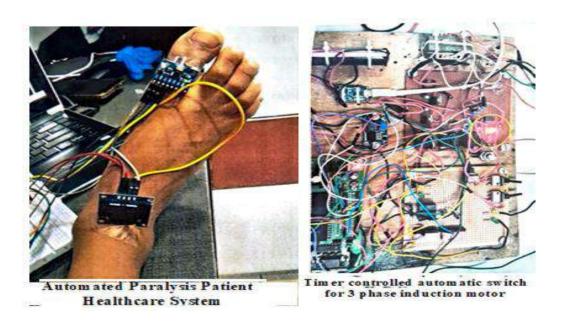


Fig 2.2.3.24 In House Projects







F: Evidences of papers published /Awards received by projects etc. (2)

Students are motivated to publish technical paper on project work in reputed conference or Journals and to participate in project competitions.

Awards received at project Competitions

Sr no	Name of the Student	Competition	Date	Award
1	Shirish Nandkar Mubin inamdar	"Ideathon 2022-23" competition on 9th February 2023. Startup & Innovation Cell at AISSMS COE	9 th February 2023.	First prize
2	Piyush Chaudhari, Neeraj Mahajan, Nikita Patil	State Level Project Competition in association with IEI of AISSMS COE Pune, Dept of Electrical Engineering	6 th May 2023	2 nd Prize
3	Siddhesh Maskare Aditya Dhapse Vedant Dere	Institute Level Project Competition A.Y 2022-23 Sem-II at AISSMS College of Engineering in Association with ISTE Students chapter	10 th May 2023	First Prize

Below table shows the evidences of papers Published

			A.Y 2020-21	
Sr.no	Names of	Title of Paper	Publication details	Link
	Authors			
1	S B Dhekale, Komal Jadhav, Diksha Ingle, Mansi Shirode	Smart Mirror Using Raspberry Pi	International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), e-ISSN: 2319-8753, p-ISSN: 2347-6710 ,Impact Factor: 7.569 Volume 10, Issue 7, July 2021 DOI:10.15680/IJIRSET.2021.1 007252	252 Smart NC.pd f (ijirset.com)
2	R R Itkarkar, Shivam Deshmuskh, Aniket Dalvi, Anushka Tidke	Detection And Diagnosis of Covid-19 Using Pnuemonia	SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, Volume 14, Special Issue (2), 391-396, Dec 2022.	Detection And Diagnosis of Covid-19 Using Pnuemonia SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology (smsjournals.com)







	A.Y 2021-22						
Sr.no	Names of	Title of Paper	Publication details	Link			
	Authors						
1	D.G. Bhalke, Daideep Bhingarde, Siddhi Deshmukh, Digvijay Dhere	Stock Price Prediction Using Long Short Term Memory	SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, Vol. 14, Special Issue 2 (2022), ISSN: 2229 - 7111 (Print), ISSN: 2454 - 5767 (Online)	Stock Price Prediction Using Long Short Term Memory SAMRIDDHI : A Journal of Physical Sciences, Engineering and Technology (smsjournals.com)			
2	Santosh Dhekale, Mamta Patni, Miheeka Khair, Sana Subhedar	Voice Tone Analyzer Using Ml	SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, Vol. 14, Special Issue 2 (2022), ISSN: 2229 - 7111 (Print), ISSN: 2454 - 5767 (Online)	Voice Tone Analyzer Using MI SAMRIDDHI : A Journal of Physical Sciences, Engineering and Technology (smsjournals.com)			
3	V. A. Gujarkar, P. D. Kulkarni, A. Pal, K. Chaudhari and V. A. Mohite,	Remote Sensing Based Crop Monitoring System	2022 IEEE Region 10 Symposium (TENSYMP), Mumbai, India, 2022, pp. 1-5, doi:10.1109/TENSYMP54529.2 022.9864416	Remote Sensing Based Crop Monitoring System IEEE Conference Publication IEEE Xplore			

A.Y 2022-23

Paper selected for UGC recognized journal, Indian journal of Technical Education, ISSN No.: 0971-3034

- Divya Sutar, Amisha Yeole, Vrushali Gaikwad, V d Nagrale, "Wireless EV charging Robot,, International Research Journal of Innovations in Engineering and Technology, ISSN 2581-3048, VOL 7, ISSUE5, PP325-329, May 23
- 2. Kunal Kadnor, Vaibhav Holkar, Yash Bakare, International Journal for Research in Applied Science and Engineering Technology (IJRASET), ISSN: 2321-9653
- 3. S B Dhonde, Sapna, Vishakha Gaikwad . Pratiksha KavthaleUnderwater Communication Using Li-Fi Technology.
- 4. R. R. Itkarkar, Deepali R Dalvi, Prachi Kshirsagar, Satyam Walekar, Autonomous Medical Assistive Robot
- 5. S B. Dhonde, Shweta S. Jagdale, Sumedha S. Chaudhari, Tanvi P. Gavhane, Elevator Control Using Voice Command.
- 6. Yogita Lad, Samruddhi Jadhav, Prathamesh Vishwas, Diya Vora, Iot Based Sanitary Napkin Vending Machine (SNVM)







- 7. Vipin Gawai,Mr. Piyush Chaudhari, neeraj mahajan, Nikita Patil, Crop Monitoring and Analysis Robot using IoRT
- 8. Shivam Kalane, Ganesh Kadam , Aditya Kumkar, Nitin Mawale, Smart Cylinder Trolley for Home safety
- 9. P.P.Vast1 , Siddhi Nasare2 , Ishika Chankeshwara3 , Harsh Shah4, Design and Development Of Microstrip Antenna For Non-Invasive Glucose Testing
- 10. Vaishnavi Navale, Aman Sagar, Arjun Singh, Shreyash Parkhe, Text-To-Image AI Model Using Deep Learning
- 11. Vidya Deshmukh, Kiran Sunil Zure Akshay Gautam Jadhav Pravin Kailas Kunte Nisha Balwant Nelge, Smart Chef: Automated Cooking System with Robotic Arm
- 12. Vidya Deshmukh Ayush Shetty Gaurav Singh, Rajesh Parale, Breaking Language Barriers: Transformer Based Sentence Translation

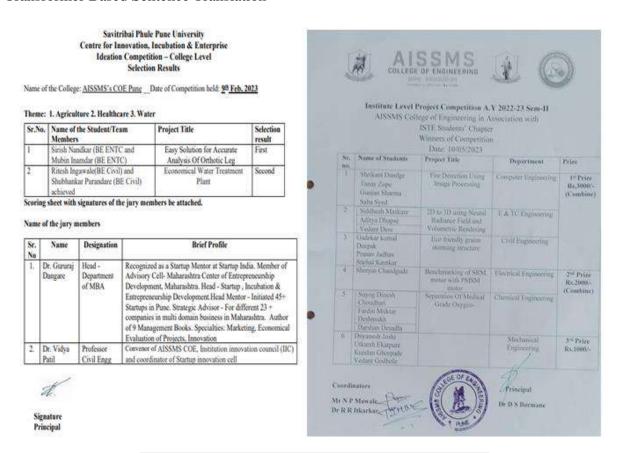


Fig 2.2.3.25 Project Competition/Exhibition Winners



Fig 2.2.3.26 Project Competition Winners







2.2.4 Initiative related to industry interaction (15)

A. Industry supported laboratories

Department have two industry supported laboratories

- 1. Center of Excellence (BOTLAB)
- 2. AI & ML Integrated IoT Laboratory

1. Centre of Excellence (BOTLAB)

Centre of excellence in the field of robotics and automation is established in department in association with Automation Anywhere Pvt. Ltd. College and Department teachers' and students' undergone basic and advance level training under center of excellence.



Figure 2.2.4.1: Inauguration of Centre of excellence

Impact:

• MoU Signed in 2019 and Revised in May 2023.

Centre of Excellence

- 500 students got basic training.
- 53 Students completed advanced training.

Training program organized







- 3-day training for students and faculty.
- After successful training Mr. Arindam Pal got third prize in Hackathon event organized by Automation Anywhere Pvt. Ltd. (Apple I- Pad).
- Advanced five days faculty training at Bangalore.
- Two-day A-lister training for students at Bangalore.
- Advanced certification completed by 39 students.

2. AI and ML Integrated IoT Laboratory:

AI and ML Integrated IoT Laboratory is an AICTE funded project under MODROB and Industry sponsored Laboratory (Netalla Innovations Pvt. Ltd.)

Table 2.2.4.1: Amount Sanction by AICTE & Netella Innovations Pvt. Ltd

Sr. No.	Expenditure by	Amount
1	AICTE	6,91,429/-
2	Amount paid by sponsoring industry Netalla Innovations Pvt. Ltd (Industry	7,83,301/-
	Sponsored)	
	Total amount Sponsored	14,74,730/-
3	AISSMS Contribution	5,00,000/-
	Total Cost of Equipment	19,74,730/00

Objective

- 1. To provide a platform for students to gain practical experience in AI-ML and IoT technologies.
- 2. To promote learning environment, problem-solving, critical thinking, and creativity among the teachers and students in AI-ML and IoT domain.
- 3. To establish partnerships with industry leaders.
- 4. To bridge the gap between academia and industry in AI-ML and IoT domain.

Utilization:

BE and TE students utilize laboratory to implement

- BE Project
- MIoT Course Practical
- TE Mini Project in the domain of AI-ML and IoT.







B. Industry involvement in the program design and partial delivery of any regular courses for students.

Our Institute is affiliated to SPPU, Curriculum is designed by BOS, E and TC of SPPU Pune. Industry Experts are invited for their suggestions on recent development in Industry. Their suggestions are incorporated in the revised curriculum.

Conduction of Technical Workshop/ Expert lectures / Seminar by Industrial Experts.

Department conducts hands on workshops, Expert talk and seminars by Industry Experts for the partial delivery of course content.

Table 2.2.4.2: Lectures by industry expert

Sr. No.	Description of Event	Date (s) DD/MM/YY	Resource Person / Organization	Participation Details (No of Students, Class)	Faculty Coordinator			
	AY 2022-23							
1	Expert Talk on "Electric Vehicle"	9/11/2022	Mr. Hemant Padhye, Pro-Business Innovations	117	Mrs. V. S. Navale			
2	Expert Talk on 'Search Engine Optimization'	14/02/2023	Ms. Spurti Sushil Icfaian Business School, Pune	51	Dr. K. B. Chaudhari Mr. N. P. Mawale			
			AY 2021-22					
1	Internship and Innovation as a Career Opportunity.	25/08/2021	Mr. Suryakant Dodmise, SIBIC Business Incubator, Founder and Chief Executive Officer	90	Dr. K. B. Chaudhari Ms. V. D. Nagrale			
2	'Recent Trends and Technologies in FOC'	19/04/2022	Mr. Sudam Chavan Deputy General Manager Tata Communications	70	Dr. P. P. Vast			







3	Students Internship.	26/08/2021	Speaker: Mr. Rajesh Vartak	100	Ms. V. V. Deshmukh
4	Expert Talk on Battery Management and Designing – A Practical Approach.	13/11/2021	Mr. Rushab Shingi, Design Engineer, AX Design Pune	100	Mrs. R. R. Itkarkar
5	Expert Lecture on GSM Technology and 4G LTE technology	06/04/2022	Mr. Nilesh Wankhede from BSNL Pune	67	Mrs. R. R. Itkarkar
			AY 2020-21		
1	Organized webinar on 'Introduction to industrial IoT and its prospect'	06/11/2020	Mr. Sandeep Shroff	100	Mr. S. B. Dhekale
2	Financial Management	08/07/2020	Mr. Siddharth Shah,	200	Ms. V. V. Deshmukh
3	IEEE sponsored webinar on Embedded System & RTOS	30/9/2020	Mr. Dnyanesh Joshi Senior Software Engineer, Magic Leap, San Jose, California	100	Dr. P. P. Vast







C. Impact analysis of industry institute interaction and actions taken there of

The department takes following initiatives related to industry interaction by organizing:

- ➤ Guest lectures
- > Industrial visits
- > MOUs
- Sponsored projects
- > Internship

Table 2.2.4.3: The number of activities conducted related to each industry institute interaction

Sr. No.	Activities	Number of Activities Conducted for A.Y.			
NO.		2022-2023	2021-2022	2020-2021	
01	Guest Lecture by Industry Person	06	29	31	
02	Industrial Visits	03	02	01	
03	Memoranda of Understanding	03	09	02	
04	Sponsored Projects	04	02	01	
05	Internship Training done by students	68	35	41	

One Faculty One Industry:

One faculty one industry is the best practice followed by department. Each faculty identify at least one industry and will take some activities like, seminar, expert talk, visit, project sponsorships, Internship for students.

Table 2.2.4.4: List of MOU's identified industry by faculties are follows

Sr. No.	Name of Company	Year	Duration in Years
1	Automation Anywhere	2022-23	3
2	Diligence Tech. Pvt. Ltd.	2022-23	5
3	Nexus Infosec LLC, USA	2022-23	5
4	Sunshine Powertronics Pvt. Ltd. Pune	2021-22	5
5	Firenest Reality Pvt Ltd	2021-22	5
6	Startech Enginneers, Mumbai	2021-22	3
7	Automate Engineering	2021-22	1
8	Elon Power, Pune	2021-22	5
9	PMP Automation Pvt Ltd	2021-22	3
10	CMS Digital Automation Pune	2021-22	3







11	Wish Energy, pune	2021-22	3
12	Softcon Pvt Ltd	2021-22	5
13	MICROCON Power Electronics Pune	2020-21	3
14	Jha Scientific Research Pvt. Ltd	2020-21	1

Table 2.2.4.5: Sponsored Project List						
Sr.	Name	Guide	Area	Title	Sponsorshi	In-
No.					p	house
			2022-23	3		
1	Saumya , Shruti Gadhave , Shruti Gadhave	Ms. V. D. Nagrale	Embedded+IOT	Designing a control system and software application to monitor advertisement/display screen	Brand Publicity Graphic Designing & Printing Pune	21
2	Chaudhari Piyush Dinesh, Mahajan Neeraj Vinod, Patil Nikita Ajitsinh	Mr. V. B. Gawai	IOT+Automatio n	The crop monitoring robot using IoRT	Automate Engineering Pune	
3	Samruddhi Jadhav, Patil Nikita Ajitsinh, Diya Vora	Mrs. Y. P. Lad	Automation	Sanitory Napkin vending Machine	Indotech Industries Pvt Ltd, Pune	
4	Kunal Kadnor	Mr. V B Gawai	Automation	Solar Cleaning System	Atomic Enterprises Pune	
			2021-22	2		
1	Kedar Pawar, Ishan Gupta, Rutuja Kothari, Abhishek Khedkar	Mr. V B Gawai	Embedded Systems	CNC PCB Router	My Future Town Pune	18
2	Ishan Gupta, Rutuja Kothari, Abhishek Khedkar, Abhishek	Mrs. R. R. Itkarkar	AI + IOT	Driver Monitoring System for Digital Twin	Intangles Lab Pvt Ltd, Pune	







	Khedkar							
	2020-21							
1	Komal	Mr. S. B.	machine	Smart mirror	ioCare Pvt.	19		
	Jadhav,	Dhekale	learning, image		Ltd Pune			
	Diksha		processing					
	Ingale,					ļ		
	Mansi							
	Shirode							

Table 2.2.4.6: Impact analysis of industry institute interaction

Sr. No.	Name of the Industry	Project	Workshop/ Expert Lecture	Placement
1	INTANGLES, Pune	Sponsored Project	Lecture	Paarth Umberkar, Anuja Joshi
2	Automation Anywhere, Pune.	-	Essential certifications: 500, Advance Certifications: 50	-
3	Softcon India Pvt Ltd, Pune.	-	Sponsorship for 17th AISSMSET-2022 Rs. 5000/-	-
4	IMFS, Pune.	-	Expert Lectures on Higher Study: 05, Global Edufest: 1, Sponsorship: 25,000/- for AISSMSET-2022 and 1,20,000/- for ICOGE-2023	
5	Dzine Arena Pune.	-	Industrial Visit on 19 march 2018 & 14 Oct 2019 for TE students, exposure to Embedded and Industrial Projects.	







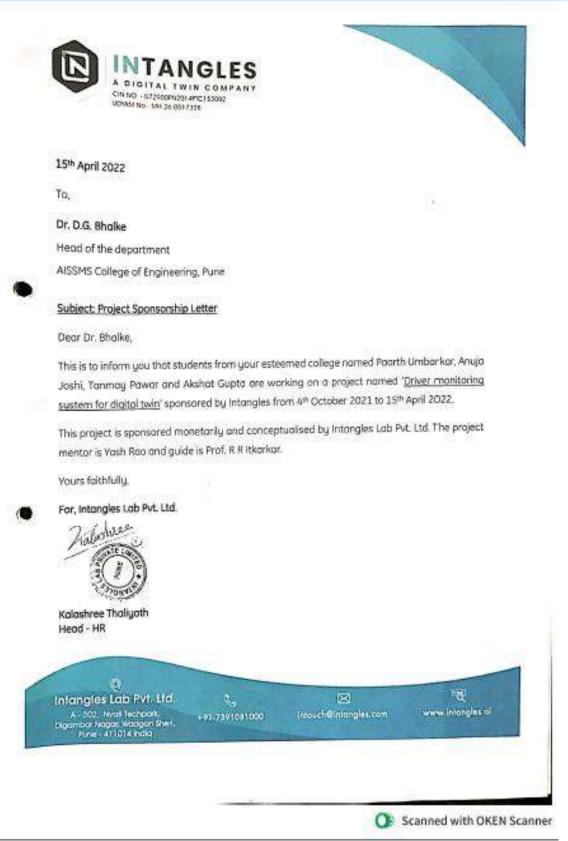


Figure 2.2.4.3: Project Sponsorship Letter







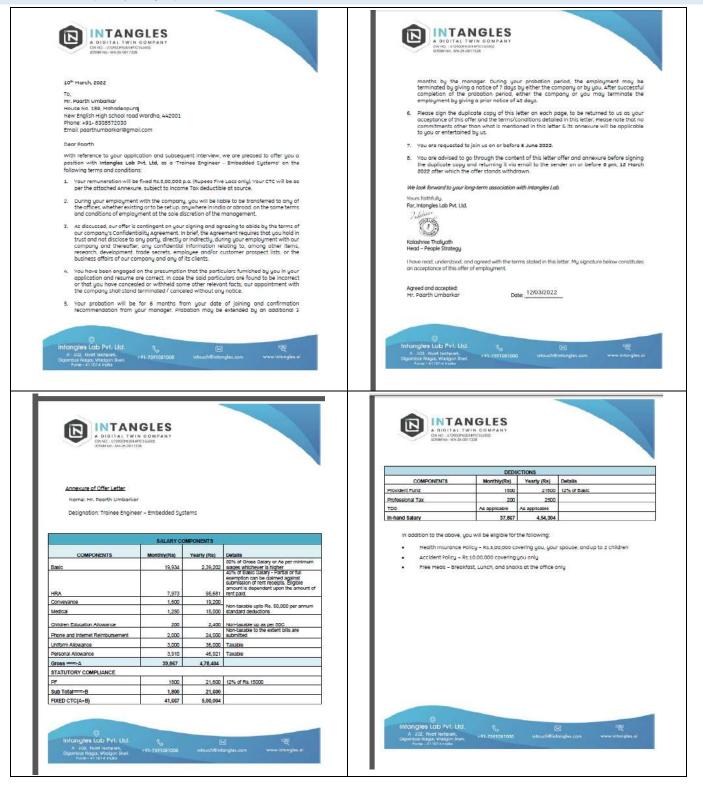


Figure 2.2.4.4: Offer Letter from same company







2.2.5 Initiative related to industry internship/summer training (15)

A. Industrial training/tours for students

Department organizes Industrial tours for students to bridge the gap between theoretical learning and Industry practice. Department also motivate students for Industrial training.

Table 2.2.5.1: Industry Tour organized

Sr.	Visited Industry	Date	No. of	Coordinator	PO	PSO
No.			Students			
			2022-23			
1	Dankel Tech, Pune	7/11/2022	86	Dr. R. R.	1,6,7,10,12	1,2
				Itkarkar		
2	GMRT, Khodad	27/01/2023	50	Mr. S. B.	1,6,7,10,12	1,2
				Dhekale		
	(Narayangaon)			Mr. N. P.		
				Mawale		
				Mrs. Y. P. Lad		
3	Industry /Visit to	06/05/2023	40	Mrs. V. V.	1,6,7,10,12	1,2
	MAPRO, Satara.			Deshmukh		
			2021-22			
1	Industry /Visit to	08/04/2022	70	Mrs. V. V.	1,6,7,10,12	1,2
	MAPRO, Satara.			Deshmukh		
2	CSM Digital	04/10/2021	34	Ms. P. P.	1,6,7,10,12	1,2
	Technology		online	Tayade		
	(Chinchwad Station,					
	Pune)					
			2020-21			
1	Elon Power Pvt Ltd.	26/02/2021	50	Mr. V. B.	1,6,7,10,12	1,2
				Gawai		











Industrial Tour Report

Date: 6th May 2023

Name of Event: "Industrial Tour to Mapro Food Park, Shendurjane, Tal-Wai, Dist, Satara.

Dr. V. V. Deshmukh and Mr. N. P. Mawale **Event Co-ordinator:**

Industry Co-ordinator: Mr. Vijay Bhilare

Participants: SE Electronics and Telecommunication Engineering Students

No. of Participants: 40 Students + 3 (2 teaching + 1 Non-teaching) Faculty

Department of Electronics and Telecommunication Engineering had organized an industrial visit on 6th May 2023, Saturday at Mapro Food Park Shendurjane, Tal- Wai, Dist. Satara to study the PLC automation manufacturing processand experience and the current trends in automation like Humanmachine interface, SCADA system. Students experienced the industrial manufacturing process. Total of 40 SE students along with faculty members visited the plant.

Objectives:

The visit arranged the following Objectives:

- > PLC industrial applications.
- > Food manufacturing process.
- > To create interest of students towards industrial automation

Outcome:

- > Students understood the real time PLC based automation in industries.
- > HMI and PLC interface.
- > Students were made aware about current industrial automation









Conclusion:

The Visit gave students the understanding about the applications of PLC for industrial automation. How PLC and HMI are effectively used for automation. Students also benefited with the current industrial manufacturing process. Students also came to know the journey of an entrepreneur Mr. Vora (Founder of Mapro Pvt. Ltd.) how he established India's number one fruit crush manufacturing Industry.



Figure 2.2.5.1: Students at Mapro

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

Table 2.2.5.2: Students undergone Industrial Internships 2022-23

Sr. No.	Name of the student	Name of Industry /	Date of Joining	
		Company/ MNC / Factory /	1	Completion
		Plant internship done		
1	Bhoskar Pradnya Sarjerao	Automate Engineer, Narhe	21/01/2023	21/02/2023
2	Angre Kishor	Suven Consultants & Technology Pvt. Ltd.	10/12/2022	31/01/2023
3	Atharva Shelke	Sunshine Powertronicspvt ltd.	05/12/2022	01/02/2023
4	Ajay Atkire	Suven Consultants	10/12/2022	31/01/2023
5	Virakshi Birajdar	Codered pvt.Ltd	03/12/2022	10/01/2023
6	Shubham Bodhe	Suven Consultants	10/12/2022	31/01/2023







7	Soham Dhananjay Borawake	YBI FOUNDATION	16/01/2023	14/07/2023
8	Nupur Chandane	Suven Consultants	10/12/2022	31/01/2023
9	Praveen choudhary	CSM digital technology	02/12/2022	25/12/2022
10	Siddhant Suresh Chougale	Suviraj Services India Pvt Ltd	05/12/2022	03/02/2023
11	AniketDaddi	Gravity Industries Pvt Ltd	21/01/2023	31/01/2023
12	Vaishnavi Dalave	Elite Software	05/12/2022	03/02/2023
13	Desai Pranav Sanjay	Suven Consultants & Technology pvt. ltd.	10/12/2022	31/01/2023
14	Niranjan Nivrutti Devale	Sai mhalhar Electra	05/12/2022	25/01/2023
15	Yogesh Vinod Devkate	Oasis infobyte	05/01/2023	21/01/2023
16	Rishi Gandhi	WiSH Energy Solutions PvtLTd	05/12/2022	03/02/2023
17	OmkarGodase	VCB electronics	02/01/2023	16/02/2023
18	Aniruddha Goswami	AP Software solutions, pune	01/12/2022	25/01/2023
19	Aditya Sanjay Gujar	Wish Energy Solutions Pvt. Ltd, Wagholi Pune	02/12/2022	03/02/2023
20	Maithili Gujar	Automate Engineering, Narhe, Pune	22/01/2023	22/02/2023
21	Atharv Hapse	Automate Engineering	14/12/2022	14/01/2023
22	Hirave Akshay Dattatray	Oasis Infobyte	01/01/2023	31/01/2023
23	Manali Gopal Jadhav	Oasis infobyte. Pvt. Lmt	01/01/2023	26/01/2023
24	Anjali Manik Jagtap	Automate Engineering	22/01/2023	22/02/2023
25	Janhvi Shendre	Bhagyashree IT solutions	02/01/2023	17/02/2023
26	Atharva Kadam	Automate Engineering	22/01/2023	22/02/2023
27	Vishwaja Manish Kadu	Elite Softwares ,Pune	19/12/0022	03/02/0023
28	Ruthvik Kamble	AUTOMATE ENGINEERING	14/12/2022	14/01/2023
29	Arnav Kawale	Hawkscode	14/01/2023	14/02/2023
30	Saifoddin Kazi	Elite Softwares	12/12/2022	10/02/2023
31	Gaurav Santosh Londhe	Oasis Infobyte	10/01/2023	15/02/2023
32	mohit mane	Surya electronic	02/01/2022	08/02/2023







33	Krishna Balaji Mare	Sunshine Powertronics Pvt Ltd manjariBudruk, Hadapsar. Pune	05/11/2022	01/02/2023
34	Mohd Aqib	Innovation Cool Engineering Works, Pune	12/12/2022	06/01/2023
35	More Deepraj Balasaheb	VCB Electronics Pvt. Ltd	01/01/2023	16/02/2023
36	More Dhiraj Shashikant	SMiT Solutions, Solapur	30/01/2023	27/02/2023
37	Ketaki Subhash Nanaware	CyberArt Solutions Pvt Ltd	20/01/2023	21/02/2023
38	Niraj Sunil Patil	Elite softwares	05/12/2022	03/02/2023
39	Vishweshwar Subhash Patil	Elite Software	05/12/2022	03/02/2023
40	Aditya Satyawan Pawar	Ekalipi Technologies Pvt Ltd	10/12/2022	10/02/2023
41	Rajwee Wable	Aviot-o-Virtue	01/12/2022	07/01/2023
42	Yash Ravangave	Sunshine PowertronicsPvt Ltd	05/12/2022	10/02/2023
43	Priyanka Shahaji Redekar	Twintech control system	05/12/2022	25/12/2022
44	Prathamesh Yogesh Shahapure	SMiT solution	24/01/2023	14/02/2023
45	Yashraj Yuvaraj Shelar	Oasis Infobyte	01/01/2023	31/01/2023
46	Shikalgar Atif Ahmadali	Aviot-o-Virtue	05/12/2022	27/01/2023
47	Aishwarya Shinde	S.R. Engineering, Pune	05/12/2022	03/01/2023
48	SakshiSurendra Shinde	Ekalipi Technologies Pvt Ltd	21/01/2023	10/02/2023
49	Samruddhi Rupesh Shivarkar	Automate Engineering	22/01/2023	22/02/2023
50	Siddhesh Vishwasrao Badgujar	LetsGrowMore	01/01/2023	01/02/2023
51	Shristi Singh	Elite softwares	05/12/2022	03/02/2023
52	Sonar Jotsna Pramod	Suven consultant and technology pvt.ltd	10/12/2022	31/01/2023
53	Sudhansh Dongare	Brainovision Solution pvtltd,Hyderabad	20/02/2023	23/03/2023
54	Omkar Vitthal Tanpure	Automate Engineering	22/01/2023	22/02/2023
55	AtharavVyawahare	Suven counsultant PVT LTD	10/12/2022	31/01/2023
56	Abhishek Walke	Brainovision Solutions India Pvt.Ltd	20/02/2023	23/03/2023
57	Shivam Rajendra Zinjurde	Suven Consultants & Technology Pvt. Ltd	10/12/2022	31/01/2023







58	Suraj Mete	IT - Software Companny	20/02/2023	23/03/2023
59	Rutam Uday Khati	Dankel Tech	01/01/2022	31/01/2022
60	Anvekar Atul Rameshwar	Atomic Industries	12/12/2022	04/02/2023
61	Vedant Bandarkar	Automate Engineering	14/12/2022	14/01/2023
62	Anish Jadhav	Oasis Infobyte	01/02/2023	28/02/2023
63	Priti Tukaram Kadam	Avant Garde Solutions, Pvt. Ltd. Aundh, Pune	06/12/2022	06/02/2023
64	Omkar Mahajan	Automate Engineering	14/12/2022	14/01/2023
65	Pakale Om Sudhir	Oasis Infobyte	10/02/2023	10/03/2023
66	Sherkhane Pramila	Elite Software	02/01/2023	10/02/2023
67	Tandale Nitin Annasaheb	Sunshine Powertronics	05/12/2022	01/02/2023
68	PawarAbhay Sanjay	Suven Consultants & Technology Pvt ltd	10/12/2022	31/01/2023

Table 2.2.5.3: Students undergone Industrial Internships 2021-22

Sr. No.	Name of students	Name of Industry / Company/ MNC / Factory / Plant internship done	Date of Joining	Date of Completion
1	Aman Sagar	Tata Sons Ltd	20/12/2021	20/03/2022
2	Khachane Himalay	Emomey Solution	21/12/2021	19/01/2022
3	Raut Rutuja Nitin	Kalpataru Plasts	25/01/2022	25/02/2022
4	Parkhe Shreyash	Sunshine Power Electronics	20/12/2021	31/01/2022
5	BakareYash Sanjay	Automic Engineers Pvt Ltd	10/01/2022	10/02/2022
6	Pravin Kailas Kunte	ENCON	06/02/2021	26/02/2022
7	DabhadeJanhavi	Bolts IOT	27/12/2021	05/02/2022
8	Jangam Abhishek Rajesh	Sunshine Power Electronics	20/12/2022	31/01/2022
9	HonkalseYash	Eptune Enterprises	11/01/2022	10/02/2022
10	Vishwas Prathamesh Devidas	Teknik Engineers	27/12/2021	24/01/2022
11	Ganesh Rajesh	Kalika Steel Private Ltd.,Jalna	27/12/2021	04/02/2022
12	Kumkar Aditya	Chaitanya	01/01/2022	28/02/2022
13	Deshmukh Shraddha Avinash	Aviator Automation India	27/12/2021	27/1/2022
14	Saumya	DRDO Pune	10/01/2022	31/05/2022







15	Ballal Ashwini	Diligence Tech	11/01/2022	01/03/2022
16	Sapna	Society For Space Education Research and Development	10/01/2022	21/02/2022
17	Rathod Chetana Kush	Dankel Tech	01/01/2022	31/01/2022
18	Sutar Divya Vishnu	Diligence Tech	10/01/2022	18/02/2022
19	Ashutosh Pardeshi	CSMDigital Technologies	22/12/2021	15/02/2022
20	Pratiksha Pradip Kavthale	CSM Digital Technologies /ENCON	06/02/2022	26/02/2022
21	Vora Diya Nischal	Shiksha	01/03/2022	31/03/2022
22	Yeole Amisha M	DiligenceTech	11/02/2022	01/03/2022
23	Patil Ram D	Shiksha	01/03/2022	31/03/2022
24	Kiran Zure	Microcon	21/12/2021	31/01/2022
25	Satyam Walekar	Microcon	21/12/2021	31/01/2022
26	Harsh Shah	CSM Digital Technologies	22/12/2021	15/02/2022
27	Gaikwad Vishakha V	Aviator Automation India	27/12/2021	20/01/2022
28	Mujawar Shaista J	Elon	27/12/2021	12/02/2022
29	Samruddhi N Jadhav	CSMDigital Technologies	22/12/2021	15/02/2022
30	Pandey Minal Suresh	Shiksha	01/01/2022	31/03/2022
31	Patil Shruti Sunil	Dankel Tech	01/01/2022	31/01/2022
32	Ayush Shetty	CSM Digital Technologies and Tata Technologies	04/01/222	19/04/2022
33	Chankeshwara Ishika Amit	CSM Digital Technologies	22/12/2021	13/02/2022
34	Akshay Jadhav	Microcon and Elcon	05/01/2022	20/02/2022
35	Arjun Singh	PicshortPrivateLimited	06/11/2021	06/01/2022







Table 2.2.5.4: Students undergone Industrial Internships 2020-21

Sr. No.	Name of the student	Name of Industry / Company/ MNC / Factory / Plant internship done	Date of Joining	Date of Completion
1	Pragana Chatala	Micron Power Electronic	24/10/2020	24/12/2020
2	Samiksha Mehta	Micron Power Electronic	24/10/2020	24/12/2020
3	Diksha Mahendra Ingle	Pie Infocomm Pvt Ltd	27/07/2020	27/08/2020
4	Abhishek Khedkar	Suven Consultants & Technology Pvt. Ltd.	01/06/2019	15/06/2019
5	Astha Sharma	Thuse Elecrtronics pvt ltd.	15/06/2020	17/07/2020
6	Akshay Gautam Jadhav	Curiosity Automation Pvt Ltd	15/05/2019	26/06/2019
7	Swapnali katke	Pie Infocomm Pvt Ltd	23/11/2020	24/12/2020
8	Swar Malu	M & S Training(Staetup	06/07/2020	05/08/2020
9	Priyanka sawant	Pie Infocomm Pvt Ltd	01/08/2020	30/08/2020
10	Shreya Sidramappa Usturage	Pie Infocomm Pvt Ltd	05/08/2020	04/09/2020
11	Shivani Singh	VI Solution Banglore	15/06/2020	17/07/2020
12	Shivam Ramdas Deshmukh	Spark Foundation	19/09/2020	19/10/2020
13	Taushif Ahmed	EdGate Technologies Pvt Ltd	13/07/2020	22/07/2020
14	PrathmeshPardeshi	VI Solution Banglore	15/06/2020	17/07/2020
15	Kedar Pawar	Thuse Elecrtronics pvt ltd.	01/06/2019	15/06/2019
16	Chaitali Pramod Mahajan	EdGate Technologies Pvt Ltd	13/07/2020	22/07/2020
17	Aishwarya Kadu	Mohit Enterprises	02/05/2018	01/10/2018
18	Rutam khati	Microspectr	15/05/2019	25/06/2019







		a		
19	Shruti patil	Microspectr a	15/05/2019	25/06/2019
20	Niraj Sabale	Techgyan Technologies	21/06/2021	04/08/2021
21	Vedant Kasat	Macbell Infotech pvt ltd Bhopal	01/08/2020	31/08/2020
22	Rushikesh Sunil Kale	IndEyes, Pune	01/11/2020	21/11/2020
23	Amol Dhole	IndEyes, Pune	01/11/2020	21/11/2020
24	Sumeet Supe	IndEyes, Pune	01/11/2020	21/11/2020
25	Sahil Sethi	IndEyes, Pune	01/11/2020	21/11/2020
26	Prashant Sanjay Dodke	IndEyes, Pune	01/11/2020	21/11/2020
27	Sanket Manohar Bansode	IndEyes, Pune	01/11/2020	21/11/2020
28	Monisha Patil	IndEyes, Pune	01/11/2020	21/11/2020
29	Vishal Patil	IndEyes, Pune	01/11/2020	21/11/2020
30	Shreyash Lohakare	IndEyes, Pune	01/11/2020	21/11/2020
31	Pranav R Kadam	IndEyes, Pune	01/11/2020	21/11/2020
32	Shrutika Dattatray Chavan	IndEyes, Pune	01/11/2020	21/11/2020
33	Akansha Shirbhate	IndEyes, Pune	01/11/2020	21/11/2020
34	Priyanka Rudrawar	IndEyes, Pune	01/11/2020	21/11/2020
35	Vedant Bhalke	IndEyes, Pune	01/11/2020	21/11/2020
36	Shivani Rajendra Dere	IndEyes, Pune	01/11/2020	21/11/2020
37	Aashutosh Jodh	IndEyes, Pune	01/11/2020	21/11/2020
38	Aashutosh	IndEyes, Pune	01/11/2020	21/11/2020
39	Akib Raut	IndEyes, Pune	01/11/2020	21/11/2020
40	Patil Piyush	IndEyes, Pune	01/11/2020	21/11/2020
41	Bhushan Dhangar	IndEyes, Pune	01/11/2020	21/11/2020







C: Impact analysis of industrial training

The following graduate attributes are inculcated in the students after the completion of internship / summer programs, industrial tours, industrial training leading to their employability skills.

- Modern Tools Usage
- Engineer and Society
- Environment & Sustainability
- Ethics
- Individual & Team work
- Communication
- Lifelong Learning
- Project management & Finance

Table 2.2.5.5: Impact analysis of industrial training

		Table 2.2.5.5: 1	mpact analysis of indu	ustriai training	
Sr.	Name of the	Internship	Project	Workshop/	Placement
No.	Industry			Expert	
				Lecture	
1	AI2AW	2 months	One year on custom	-	The students were
	Systems Pvt.		Object distance		offered placement
	Ltd.		detection and size		offer. Currently
			analysis using		working with the
			computer vision		same company.
2	Sunshine	2 students	Project Sponsorship	-	-
	Powertronics	during	in AY:2023-24		
	Pvt. Ltd.	AY:2021-22, 4			
	Pune	students during			
		AY:2022-23			
3	IOCARE,	3 Students	2 Sponsored	1 Workshop,	-
	Pune		Projects	2 Seminars,	
				Technical	
				Sponsorship	
				for	
				AISSMSET	
				for Digimania	
				Event	
4	Wish Energy	2 students-E		Received	
	Pvt. Ltd.	and TC,		15000/- for	
	Pune.	3-Mechanical		consultancy	
				aork	
5	Bobble AI,	1 Student	Project Sponsorship		Vedant Dere
	Delhi				







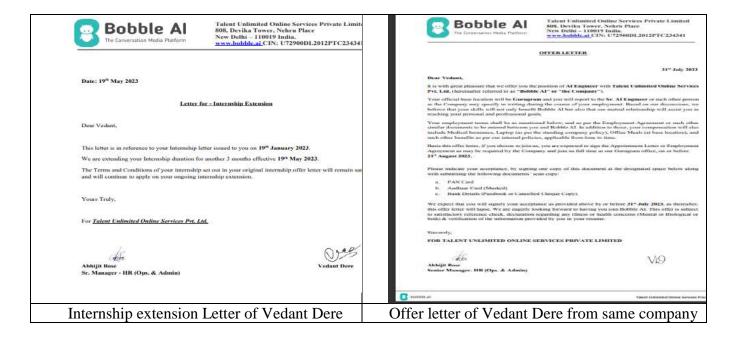
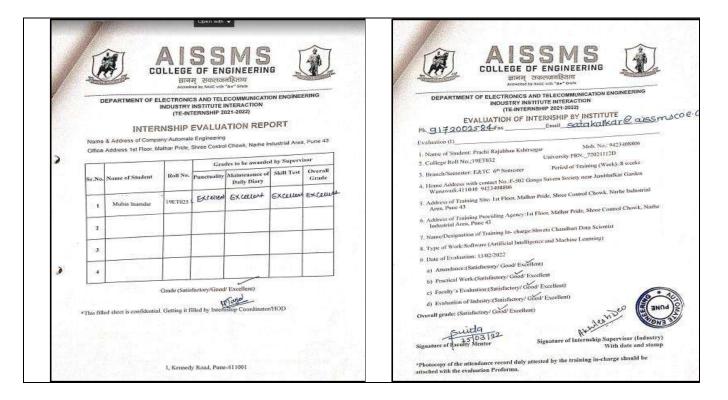


Figure 2.2.5.2: Impact of internship

Internship Assessment and Evaluation: -







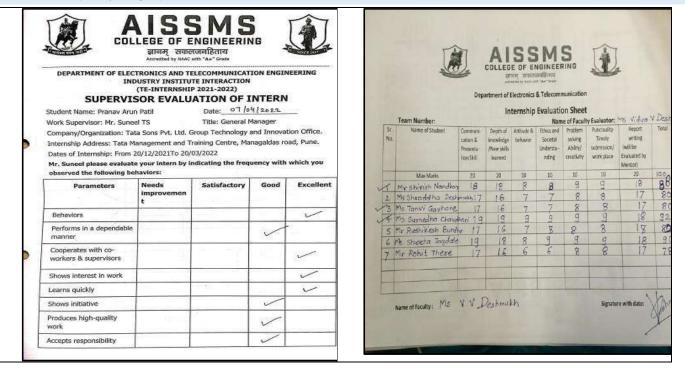


Figure 2.2.5.3: internship Evaluation Report







D. Student feedback on initiative

Department takes students feedback on various initiatives of industry institute interaction.

M	AIS S	रजनहिंसाध
	Architecture on many	HILL -W-9 - CHARGO



DEPARTMENT OF E & TC ENGINEERING IMPACT ANALYSIS and FEEDBACK ON INDUSTRY INTERACTIONS DUSTRIAL VISITABLE AND TRAINING JUSTRASHID JUSTRASHIP OF DEPOTE

(INDUSTRIAL VISIT/INPLANT TRAINING/INTERNSHIP/INDUSTRY PROJECTS)

Academic Year:2022-2023	Term:I/II		
Mode of Interaction with Industry:	\$(7533338)),		
Class: FE/SE/TE/BE/ME	Faculty Coordinator:		
Name and Address of Industry:			20
Date and Duration of Interaction: DD/	1 / monton	(Duration in days)	

FEEDBACK ON INDUSTRY INTERACTION

Please rate on the scale of 1 to 5 (5 is at higher side) (5: Excellent; 4: Very Good; 3;Good; 2:Average; 1:Poor)

S.N.	Description	Rating	Remark
1	Duration of interaction was satisfactory for you to acquire enough Knowledge.	8)	*
2	Need and usefulness of the interaction.		
3	Rate your practical exposure during the interaction/training.	8	5
4	Interaction was helpful for you to select your field after education.		
5	Courses you finished in the college helped you to execute the projects given by the industry.		
6	Additional personality development/training initiatives needed at the college /department level for industry readiness.		
7	Knowledge and skills gained after this industrial exposure.		
8	Rate your overall interaction with industry.	31	<i>(</i>
9	Long learning and exposure to social awareness		*
10	Ability to solve industrial problems and exposure to modern technology/ tools.		

Signature of	Student:	
Name of the	Student:	
Date	Q:	

Figure 2.2.5.4: Students Feedback on Initiatives







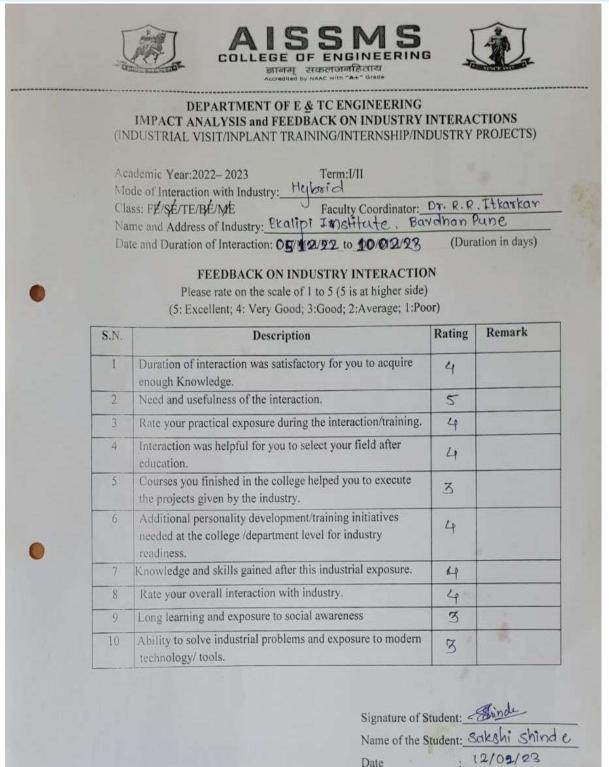


Figure 2.2.5.5: Sample Student's Feedback on Initiatives







Table 2.2.5.6: Feedback Analysis on Industry Interaction Samples:25

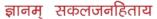
Sr. No.	Description	Excellent (5)	Very Good (4)	Good (3)	Average (2)	Poor (1)
1	Duration of interaction was satisfactory for you to acquire enough Knowledge.	20	5			
2	Need and usefulness of the interaction.	18	5	2		
3	Rate your practical exposure during the interaction/training.	22	2	1		
4	Interaction was helpful for you to select your field after education.	19	3	2	1	
5	Courses you finished in the college helped you to execute the projects given by the industry.	23	1	1		
6	Additional personality development/training initiatives needed at the college /department level for industry readiness.	19	2	2	2	
7	Knowledge and skills gained after this industrial exposure.	22	1	1	1	
8	Rate your overall interaction with industry.	24	1			
9	Long learning and exposure to social awareness	22	1	1	1	
10	Ability to solve industrial problems and exposure to modern technology/ tools.	20	22	1	1	1





AISSMS

COLLEGE OF ENGINEERING





Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION III

Course Outcomes & Program Outcomes



3.1 Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs)

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)

SE: Sem 1 AY:20-21 Sub: Digital Circuits

On comple	On completion of the course, students will be able to -								
C203.1	Classify various Digital Logic Families with their characteristics.								
C203.2	Compute Boolean expressions using reduction techniques of Digital Logic Circuits								
C203.3	Implement Combinational Logic Circuits								
C203.4	Execute Sequential Circuits								
C203.5	Analyze FSM using Mealy and Moore Machines.								
C203.6	Compare Semiconductor Memories.								

SE: Sem 2 AY:20-21 Sub: Principles of communication Systems

On comple	On completion of the course, students will be able to -							
C214.1	Analyze signals in time and frequency domain							
C214.2	Evaluate the performance of different Amplitude modulated systems							
C214.3	Examine techniques of generation and detection for FM systems							
C214.4	Exhibit sampling theorem for pulse modulation techniques							
C214.5	Compare various digital representation techniques							
C214.6	Illustrate various aspects in baseband digital transmission							



TE: Sem 1 AY:21-22 Sub: Digital Communication

On compl	etion of the course, students will be able to -										
C301.1	Explain various signals in a communication system using statistical theory.										
C301.2	Categorize various digital modulation techniques used in digital communication system in presence of AWGN noise.										
C301.3	Compare various higher order digital modulation techniques used in digital communication system.										
C301.4	Describe the digital communication system with spread spectrum modulation.										
C301.5	Estimate a communication system using information theoretic approach.										
C301.6	Illustrate error control coding techniques to improve performance of a digital communication system.										

TE: Sem 2 AY:21-22 Sub: Project Management

On completion of the course, students will be able to -											
C313.1	Apply fundamental knowledge of project management for effectively handling projects.										
C313.2	Identify the project based on its feasibility study with its effective planning.										
C313.3	Assimilate effectively the organizational structure of project to handle project management related issues.										
C313.4	Demonstrate Project Plan using project scheduling techniques										
C313.5	Recognize project risks and manage finances										
C313.6	Prepare a business plan for Product development and Entrepreneurship.										

BE: Sem 1 AY:22-23 Sub: VLSI Design and Technology

On comple	On completion of the course, students will be able to -								
C402.1	Develop effective HDL codes for digital design								
C402.2	Demonstrate real time issues in digital design								
C402.3	Model digital circuit with HDL, simulate, synthesis and proto type in PLDs								
C402.4	Design CMOS circuits for specified applications								
C402.5	Analyze various issues and constraints in design of an ASIC								
C402.6	Apply Built In Self-Test (BIST) circuit for testability in design								



BE: Sem 2 AY:22-23 Sub: Fiber Optic Communication

On complet	ion of the course, students will be able to								
C410.1	Explain the working of components and measurement equipments in optical fiber networks.								
C410.2	Estimate the important parameters associated with optical components used in fiber optic telecommunication systems.								
C410.3	Compare the performance of major components in optical links.								
C410.4	Evaluate the performance viability of optical links using the power and rise time budget analysis.								
C410.5	Summarize different Optical Networks used in Fiber Optics Communication								
C410.6	Describe the measurement equipments/Systems in optical fiber networks.								

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)

SE: Sem 1 AY:20-21 Sub: Digital Circuits

СО	Program Outcomes											
	1	2	3	4	5	6	7	8	9	10	11	12
C203.1	3	3	2	1				1		1		
C203.2	3	3	3	3	2			1		1		
C203.3	3	3	3	3	2			1		1		
C203.4	3	3	3	3	2			1		1		
C203.5	3	3	3	2				1		1		
C203.6	3	3	2	1				1		1		
Average	3	3	2.66	2.16	2			1		1		

SE: Sem 2 AY:20-21 Sub: Principles of communication Systems

СО	Program Outcomes											
	1	2	3	4	5	6	7	8	9	10	11	12
C214.1	3	3	1	1	1			1		1		
C214.2	3	3	1	1	1			1		1		
C214.3	3	3	1	1	1			1		1		
C214.4	2	3	1	1	1			1		1		



C214.5	2	3	1	1	1		1	1	
C214.6	2	3	1	1	1		1	1	
Average	2.5	3	1	1	1		1	1	

TE: Sem 1 AY:21-22 Sub: Digital Communication

CO		Program Outcomes										
	1	2	3	4	5	6	7	8	9	10	11	12
C301.1	3	3	3	2	2	1		1		1		
C301.2	3	3	3	2	2	1		1		1		
C301.3	3	3	3	2		1		1		1		
C301.4	3	3	3	2	2	1		1		1		
C301.5	3	3	3	2	2	1		1		1		
C301.6	3	3	3	2	2	1		1		1		
Average	3	3	3	2	2	1		1		1		

TE: Sem 2 AY:21-22 Sub: Project Management

CO		Program Outcomes										
	1	2	3	4	5	6	7	8	9	10	11	12
C313.1	3	1				2	1	2	3	1	1	
C313.2	3	2	1	1		2		2	3	3	2	2
C313.3	2	1						2	3	3	1	
C313.4	3	2	1	1	2	2	1	2	3	3	3	1
C313.5	3	2	1	1	2			2	3	3	2	2
C313.6	3	3	3	3		2	2	3	3	2	3	2
Average	2.83	1.83	1	1.5	2	2	1.33	2.17	3	2.5	2	1.75

BE: Sem 1 AY:22-23 Sub: VLSI Design and Technology

СО	Program Outcomes											
	1	2	3	4	5	6	7	8	9	10	11	12
C402.1	3	3	2	3	3			1		1		
C402.2	3	3	2	3	3			1		1		
C402.3	3	2	2	2	3			1		1		



C402.4	2	3	2	2	2		1	1	
C402.5	2	3	1	1	2		1	1	
C402.6	2	3	2	2			1	1	
Average	2.50	2.83	1.83	2.16	2.60		1	1	

BE: Sem 2 AY:22-23 Sub: Fiber Optic Communication

СО		Program Outcomes										
CO	1	2	3	4	5	6	7	8	9	10	11	12
C410.1	3	3	3	3				1		1		
C410.2	3	3	3	3				1		1		
C410.3	3	3	3	3				1		1		
C410.4	3	3	3	3	2			1		1		
C410.5	3							1		1		
C410.6	3	3	3					1		1		
Average	3	3	3	3	2			1		1		

CO-PSO Matrices of courses selected in 3.1.1

SE: Sem 1 AY:20-21 Sub: Digital Circuits

(Term - I)

CO	PSO1	PSO2	PSO3
C203.1	2	2	1
C203.2	3	3	1
C203.3	3	3	1
C203.4	3	3	1
C203.5	3	3	1
C203.6	2	2	1
Average	2.66	2.66	1

SE: Sem 2 AY:20-21 Sub: Principles of communication Systems

(Term – II)

CO	PO1	PO2	PO3
C214.1	2	1	



C214.2	2	1	
C214.3	2	1	
C214.4	2	1	
C214.5	2	1	
C214.6	2	1	
Average	2	1	

TE: Sem 1 AY:21-22 Sub: Digital Communication

(Term - I)

CO	PSO1	PSO2	PSO3
C301.1	3		
C301.2	3		
C301.3	3		
C301.4	3		
C301.5	3		
C301.6	3		
Average	3		

TE: Sem 2 AY:21-22 Sub: Project Management

(Term - II)

CO	PSO1	PSO2	PSO3
C313.1	2		3
C313.2	2		3
C313.3			3
C313.4	2	2	3
C313.5	2	2	3
C313.6	2	2	3
Average	2	2	3

BE: Sem 1 AY:22-23 Sub: VLSI Design and Technology

(Term - I)

СО	PO1	PO2	PO3
C402.1	3	3	



C402.2	3	3	
C402.3	3	3	
C402.4	3	3	
C402.5	2	2	
C402.6	2	2	
Average	2.66	2.66	

BE: Sem 2 AY:22-23 Sub: Fiber Optic Communication

(Term - II)

СО	PSO1	PSO2	PSO3
C410.1	3		
C410.2	3		
C410.3	3		
C410.4	3		
C410.5	3		
C410.6	3		
Average	3		

3.1.3 - A Program Level Course-PO matrix of all courses INCLUDING first year courses

Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Class: FE AY:2017-2018													
101005	Basic Civil and Environmental Engineering	2	2	1	1	1	1	1					
101011	Engineering Mechanics	2	2	1									
102006	Engineering Graphics I	3	2								1		
102013	Basic Mechanical Engineering	2	2										
102014	Engineering Graphics II	2	1			1							
103004	Basic Electrical Engineering	3	1	1									
104012	Basic Electronics Engineering	2	1	1		1							
107001	Engineering Mathematics I	3	2	1									
107002	Engineering Physics	2	1.33	1		1							
107008	Engineering Mathematics II	3	2	1									
107009	Engineering Chemistry	3	1	1									
110003	Fundamentals of Programming Languages I	3	2	1		2							
110010	Fundamentals of Programming Languages II	3	2	1		2							
111007	Workshop Practice	2	1	1			1						



		Class: S	SE	AY	:2018-2	019							
204181	Signals & Systems	3	3	1	1				1		1		
204182	Electronic Devices & Circuits	2.17	2	2	1.83	1.8							
204183	Electrical Circuits and Machines	3	3	1	1				1		1		
204184	Data Structures and Algorithms	1.83	2.33	1.5	1.5	3			1		1		
204185	Digital Electronics	2.33	2	1.5	1.5	2			1		1		
204186	Electronic Measuring Instruments & Tools	1.17	1.67	1	1	1	1	1	2	3	2.67		1
207005	Engineering Mathematics III	3	2	1									
204187	Integrated Circuits	3	3	1	1				1		1		
204188	Control Systems	1	2	1	1				1		1		
204189	Analog Communication	2.67	1.5		1	2	1		1	1			
204190	Object Oriented Programming	1.83	2.33	1.5	1.5	3			1		1		
204191	Employability Skill Development	1.25	1.5	1	1	1	1	1	2	3	2.5		1
		Class:	TE	AY:	2019-20	20			l .	Į.	ı	I	I
304181	Digital Communication	3	3	3	1		1		1		1		
304182	Digital Signal Processing	3	3	2.5	2.17	1			1		1		
304183	Electromagnetics	3	2	1	1	1					1		
304184	Microcontrollers	2	3	2.67	2	2			1		1		
304185	Mechatronics	1.67	1.67	2	1.5	2	1	1					
304193	Electronics System Design	3	3	2	1	2			1	1	1		
304186	Power Electronics	2.33	2.83	1.33	2.17	2			1		1		
304187	Information Theory, Coding and Communication Networks	3	3	2.17	1.67	2			1		1		
304188	Business Management	1	2	2		2	2	1.75	2	1.8	1.2	2	1
304189	Advanced Processors	2	3	2.5	1	2			1		1		
304190	System Programming and Operating Systems	1.83	2.33	1.5	1.5	3			1		1		
304196	Employability Skills and Mini Project	3	3	3	3	3	2	2	2	3	3	3	2
		Class:	BE	AY:	2020-20	21		1		I.	I.	I.	I.
404181	VLSI Design& Technology	1.83	2.17	2.83	2.33	3	1	1			2		
404182	Computer Networks & Security	3	3	1.67	1.67	1.67			1		1		
404183	Radiation & Microwave Techniques	3	3		1				1		1		
404184	Internet of Things	2.33	2.6	2.5	2.4	2.5	1		1		1.17		1
404185	Artificial Intelligence	2	2	2	3	3			1				2
404188	Project Stage I	2.5	3	2.5	3	2.5	2.5	3	2.5	2.5	2.5	3	3
404189	Mobile Communication	3	1.5	1	2	1					1		
404190	Broadband Communication Systems	3	3	3	1		1		1		1		
404191	Audio Video Engineering	1	1	1	1	2		2					1
404191	Machine Learning	2.67	2.6	2	2.4	2.5	1		1	1	1.17	1	1
404192	Renewable Energy Systems	2.17	1.83	1	2		2	2.17					
404195	Project Stage II	3	3	3	3	2.67	2	2	2.5	3	3	2.5	3

Course Code	Course Name	PSO1	PSO2	PSO3	
Class: FE AY:2017-2018					
101005	Basic Civil and Environmental Engineering				
101011	Engineering Mechanics				



102006	Engineering Graphics I			
102013	Basic Mechanical Engineering			
102014	Engineering Graphics II			
103004	Basic Electrical Engineering	1.5	1	
104012	Basic Electronics Engineering	2	1.83	1
107001	Engineering Mathematics I	1	1.00	
107002	Engineering Physics	1	1	
107008	Engineering Mathematics II	1		
107009	Engineering Chemistry	1		
110003	Fundamentals of Programming Languages I			
110003	Fundamentals of Programming Languages II			
111007	Workshop Practice			
111007		2018-2019		
204181	Signals & Systems	2	1	
204182	Electronic Devices & Circuits	1.83	1.75	
204183	Electrical Circuits and Machines	2	1	
204184	Data Structures and Algorithms	2	1	1
204185	Digital Electronics	1.5	1	
204186		1	1	2
207005	Electronic Measuring Instruments & Tools Engineering Mathematics III	1	1	3
			2	
204187	Integrated Circuits	3	2	
	Control Systems	1	1	1.2
204189	Analog Communication	1	1	1.2
204190	Object Oriented Programming	2	1	2
204191	Employability Skill Development	1 2010 2020	1	3
204101		2019-2020		
304181	Digital Communication	2	_	
304182 304183	Digital Signal Processing	1	1	
	Electromagnetics	3	2.67	1
304184	Microcontrollers	1 1 22	2.67	1 222
304185	Mechatronics Floctronics System Design	1.33	2.5	2.33
304193	Electronics System Design	3		
304186 304187	Power Electronics	2.33	2.33	1
	Information Theory, Coding and Communication Networks	2.33		1
304188	Business Management	1	2.5	1
304189	Advanced Processors System Programming and Operating Systems	1	2.5	
304190	System Programming and Operating Systems	2	1	3
304196	Employability Skills and Mini Project	3	3	3
404181	VLSI Design& Technology	2 020-2021 2.67	1	1
404181				1
	Computer Networks & Security	2	1	
404183	Radiation & Microwave Techniques	2	2.5	1
404184	Internet of Things Artificial Intelligence	2		1
404185	Artificial Intelligence	3	1.67	2.47
404188	Project Stage I	3	2.67	2.17



404189	Mobile Communication		1	1
404190	Broadband Communication Systems	3		
404191	Audio Video Engineering	1.67	1	
404191	Machine Learning	2	2.5	1
404192	Renewable Energy Systems	1		2
404195	Project Stage II	3	3	3

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

(Examples of data collection processes may include, but are not limited to, specific exam/ tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams etc.)

Process Details: Assessment of Course Outcome

Assessing Course Outcomes (COs) is an important part of evaluating the effectiveness of a course and determining whether it has achieved its intended goals. This process is carried out using following steps:

- 1. Define the Course Outcome statements: The first step is to clearly define the CO statements of the course using Bloom's Taxonomy. Domains of COs such as cognitive, psychomotor or affective are identified while framing the CO statements. This includes identifying the specific knowledge, skills, and abilities that students are expected to gain by the end of the course. For each course 4-6 measurable CO statements are defined.
- 2. Identify and Implement: Once the CO statements have been defined, the next step is to identify and implement assessment tools that measure the extent to which outcomes are achieved.
- 3. Collect data: Collect data from students' performance on the assessment tools. This is done by grading exams, projects and through surveys.
- 4. Analyze data: Once data has been collected, it is analyzed to determine how well students have achieved the course outcomes.
- 5. Use data to identify areas of improvement for the course.



Assessment Tools

Assessing CO is an iterative process that involves continuous refinement and improvement. Assessment tools are designed to evaluate the attainment of the COs. It is important to select assessment tools that align with the specific COs of the course and to use multiple assessment tools to provide a comprehensive evaluation of student learning. The assessment tools are chosen based on the specific COs being assessed and the teaching methodologies being used in the course.

The evaluation of the COs involves the use of both direct and indirect assessment tools, with greater weightage assigned to the former. Specifically, 80% weightage is given to direct assessment tools, which include both internal assessments (20%) and external assessments (80%), whereas indirect assessment tools are assigned a weightage of 20%. The performance of students in both internal and external assessments is taken into account, with appropriate weightage assigned to each.

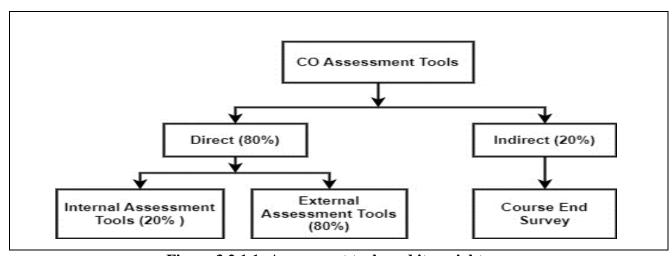


Figure 3.2.1.1: Assessment tools and its weightage

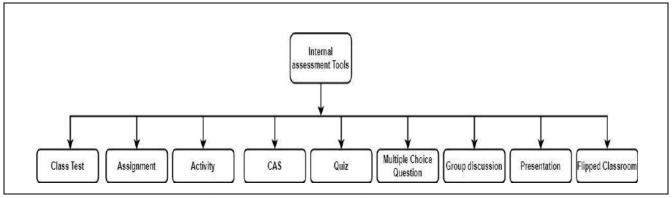


Figure 3.2.1.2: Internal Assessment tools

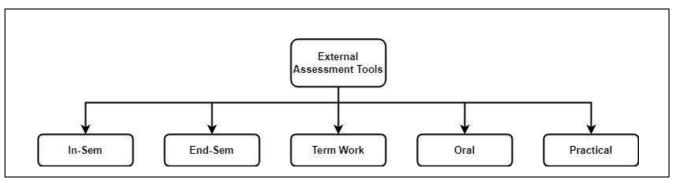


Figure 3.2.1.3: External Assessment tools

Direct Assessment Tools:

Internal Assessment:

In order to ensure that students are keeping up with the course content, primarily class tests and assignments are used as effective measures of their progress. The course is divided into six units, each of which is evaluated through appropriate assessment tools. Based on domain of COs such as cognitive, psychomotor or affective the assessment tool is selected and is mapped to the specific CO of the course. The direct internal assessment tools are class tests, quiz, multiple choice questions, group discussion, assignments, presentation, flipped classroom etc.

Practical sessions offer students a valuable opportunity to gain hands-on experience in applying the concepts they learn in class and to develop the skills necessary for success in their field of study. To assess students' performance in these practical aspects of the course, a Continuous Assessment Sheet (CAS) is used. This sheet evaluates several parameters, including regularity, quality of experiment write-ups, understanding and overall performance during each experiment.

The project work of the student is assessed through periodic project reviews. These reviews are conducted by the departmental project progress monitoring committee. Through reviews, teachers are able to track students' progress and provide constructive feedback to help them improve their skills and understanding of the project work.

External Assessment:

University Examination: The university conducts both in-semester and end-semester examinations to evaluate students' understanding of the course contents. In-semester and end-semester examination covers the entire syllabus and evaluates all COs. These examinations are designed to test students' knowledge and comprehension of the course contents, as well as their ability to apply that knowledge to real-world situations.

Practical and tutorial sessions conclude in an end-semester examination, which may take the form of



a term work, oral examination, or practical examination. This evaluation is conducted by both an external and internal examiner. This ensures impartial and objective assessment. Through this examination, students are tested on their ability to apply the knowledge and skills they have acquired throughout the course to practical scenarios.

Indirect Assessment Tool:

A Course end survey is used as indirect assessment tool which is a feedback tool used to gather information from students at the conclusion of a course. Its purpose is to assess the effectiveness of the course. Typically administered in the final week of the course, the survey covers course content in the form of CO statements.

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

Program shall have set Course Outcome attainment levels for all 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 to the Course Outcomes of a course in addition to the performance in the University examination)

Evaluation of CO Attainment by Direct Assessment Tool

The evaluation of CO attainment by assessment tool involves a systematic process of collecting and analysing data to determine the extent to which the course outcomes have been met. The process of CO evaluation is as per flowchart shown below.

Attainment Levels

Attainment levels for COs are a measure of students' achievement in meeting the course objectives. These levels are assessed using a variety of tools, and the attainment level may be stated as a percentage of students expected to achieve a certain threshold of marks. The attainment level is then measured as the actual percentage of students who meet or exceed the set threshold.

The defined attainment levels are;

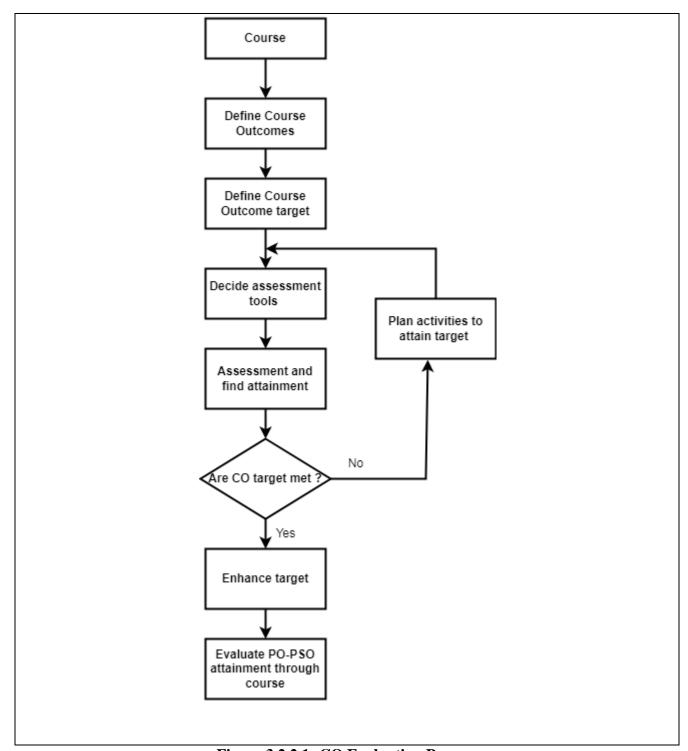


Figure 3.2.2.1: CO Evaluation Process

Attainment Level 1(A1):40% to less than 60% students scoring more than 60% marks out of the relevant maximum marks.

Attainment Level 2(A2):60% to less than 70% students scoring more than 60% marks out of the relevant maximum marks.

Attainment Level 3(A3):70% and more than 70% students scoring more than 60% marks out of the relevant maximum marks.



Though 40% to 60% students are considered for attainment level 1, the percentage may vary from course to course. The course teacher decides this level from previous university examination results and the difficulty level of the course. Percentage of students for level 2 and 3 is changed subsequently.

Mapping of COs with Assessment Tools

Mapping COs with assessment tools is an important part of the assessment process and can help to ensure that student performance is evaluated consistently and effectively.

Weighted average method

The steps involved in calculation of CO attainment are as follows:

- i. Decide the assessment tools to be employed in calculating CO attainment. These tools are based on the domain of course outcome.
- ii. Establish the level of attainment for each tool used in the process, which will be measured on a scale of 1 to 3.
- iii. Assign weights to each tool based on its maximum marks. The weight for each tool will be calculated as the ratio of its maximum marks to the total marks assigned for all selected tools.
- iv. Multiply each tool's level of attainment by its corresponding weight.
- v. Sum up the weighted attainment values for all the tools to get CO attainment.

For example, if three tools are used with maximum marks assigned as 20, 30, 40 (Total Maximum Marks = 90), and the CO attainment levels for the tools are 2, 1, and 3 then weights assigned are as (20/90), (30/90) and (40/90), respectively, based on the maximum marks for each tool in measuring the CO attainment.

To calculate the weighted average CO attainment, following formula is used:

Σ weightage * CO attainment

Weighted average CO attainment = (Tool 1 attainment * Weight 1) + (Tool 2 attainment * Weight 2) + (Tool 3 attainment * Weight 3) + ...

In the example above, the weighted average CO attainment would be:

Weighted average CO attainment = (2 * 20/90) + (1 * 30/90) + (3 * 40/90) = 2.11

Therefore, the weighted average CO attainment for the three tools is 2.11.



Table 3.2.2.1: Mapping of Cos with Assessment Tools

Assessment Tool	Class Test 1	Assignment 1	CAS	In-Sem	Termwork	Practical
COs Mapped	CO1	CO1	CO1	CO1, CO2	All COs	All COs
Maximum Marks	M1	M2	M3	M4	M5	M6
CO Attainment Level	A1	A2	A3	A1	A3	A2

Since different assessment tools are used to evaluate each CO, the average attainment of each CO will depend on the attainment level obtained from each tool. For instance, the average attainment level of CO1 will depend on the attainment levels obtained through various internal assessment tools, such as class test 1 or assignment 1 or CAS or other activity, as well as external assessment tools, such as In-Sem, End-Sem, Practical/Oral examination, and Term work. If an assessment tool is used for multiple COs, the maximum marks can be distributed equally among those COs.

Table 3.2.2.2: CO Attainment calculations for Internal Assessment Tools

Assessment Tool	Class Test 1	Assignment 1	CAS			
Marks for CO1	M1	M2	M3	Mint=M1+M2+M3		
Weightage	WT1=M1/Mi nt	WAs1=M2/Mi nt	WCAS=M3/Mint			
CO Attainment	A1	A2	A3			
Average CO Attai	nment (Aint)	Aint=WT1*A1+WAs1*A2+WCAS*A3				

Table 3.2.2.3: CO Attainment calculations for External Assessment Tools

Assessment Tool	In-Sem	Termwork	Practical	
				Mext=
Marks for CO1	M4/2	M5/6	M6/6	(M4/2)+(M5/6)
				+(M6/6)
Weightage	WIn=(M4/2)/	WTw=(M5/6)/Mext	WPr=(M6/6)/Mext	



	Mext			
CO Attainment level	A1	A3	A2	
Average CO attai	nment (Aext)	Aext=WI	n*A1+WTw*A3+WI	Pr*A2

The CO attainment level by direct tools is calculated by giving 20% weightage to the average CO attainment level obtained from internal assessment tools and 80% weightage to the average CO attainment level obtained from external assessment tools.

Direct CO attainment for CO1 = 0.2 * Aint + 0.8 * Aext

CO Attainment Level by Indirect Assessment Tool

At the end of each course, a course end survey form is created with questions directly linked to the COs. Responses to these questions are collected through forms that typically use a 1-3 scale (with low to high ratings). Average of all the responses to respective CO is considered as CO attainment. The data is then used to compute the indirect CO attainment, which is given a weightage of 20% in the overall CO attainment assessment.

Overall CO Attainment Level for Course

Thus, overall CO attainment for the course using all the tools is

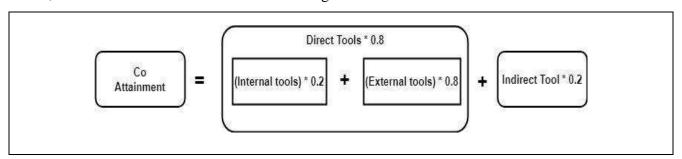


Figure 3.2.2.2: External Assessment tools

Table 3.2.2.4: CO Attainment for AY: 2017-18 to AY: 2020-21 (Cycle – 1)

Course Code	Course Name	CO1	CO2	соз	CO4	CO5	CO6
	Class: FE A	Y:17-18					
101005	Basic Civil and Environmental Engineering	2.9	2.9	2.48	2.48	1.69	1.69
101011	Engineering Mechanics	1.08	1.06	0.96	0.96	0.89	0.87
102006	Engineering Graphics I	1.84	1.84	1.84	1.84	1.3	1.3
102013	Basic Mechanical Engineering	1.59	1.59	1.59	1.59	1.69	1.69
102014	Engineering Graphics II	2.9	2.9	2.9	2.9	2.9	2.9
103004	Basic Electrical Engineering	1.55	1.55	1.55	1.55	1.62	1.62



104012	Basic Electronics Engineering	1.37	1.36	1.35	1.32	1.64	1.49
107001	Engineering Mathematics I	1.21	1.23	1.26	1.32	1.23	1.49
107001	Engineering Physics	2.98	2.98	2.43	2.43	1.77	1.77
107002	Engineering Mathematics II	1.3	1.3	1.3	1.3		1.77
						1.3	
107009	Engineering Chemistry	1.38 0.5	1.38	1.38	1.38	1.08	1.08
110003	Fundamentals of Programming Languages I		0.5	0.5	0.5		
110010	Fundamentals of Programming Languages II	1.25	1.25	1.25	1.25		
111007	Workshop Practice	3	3	3	3		
		:18-19					
204181	Signals & Systems	1	1	1.72	1.74	1.61	1.61
204182	Electronic Devices & Circuits	1.44	1.42	1.4	1.58	1.75	1.77
204183	Electrical Circuits and Machines	1.23	1.33	1.23	1.2	1.3	1.32
204184	Data Structures and Algorithms	1.64	1.66	1.66	1.38	1.56	1.56
204185	Digital Electronics	1.6	1.64	1.62	1.64	1.77	1.81
204186	Electronic Measuring Instruments & Tools	2.96	2.98	2.98	2.96	2.98	2.98
207005	Engineering Mathematics III	1.55	1.54	1.55	1.55	1.74	1.76
204187	Integrated Circuits	1.49	1.51	1.51	1.51	1.86	1.88
204188	Control Systems	0.86	0.86	0.99	0.99	0.97	0.96
204189	Analog Communication	1.81	1.82	1.8	1.89	1.99	1.99
204190	Object Oriented Programming	1.8	1.82	1.82	1.8	2.71	2.71
204191	Employability Skill Development	2.88	2.94	2.94	2.88		
		19-20	2.51	2.5 .	2.00		
304181	Digital Communication	1.61	1.5	1.15	1.5	1.54	1.5
304182	Digital Signal Processing	1.55	1.57	1.5	1.57	1.55	1.6
304183	Electromagnetics	1.05	1.05	1.05	1.05	1.04	1.05
304184	Microcontrollers	1.67	1.66	2.01	1.99	1.98	1.96
304185	Mechatronics	2.22	2.24	2.2	1.99	2.01	2.01
304193	Electronics System Design	0.82	0.84	0.85	0.83	0.83	
304186	Power Electronics	2.96	2.98	2.98	2.96	2.98	2.98
	Information Theory, Coding and Communication						
304187	Networks	1.91	1.91	2.28	2.31	2.27	2.24
304188	Business Management	1.92	1.92	1.9	1.52	1.52	1.52
304189							
	Advanced Processors	1.86	1.88	1.99	2.05	2.07	2.1
304190	System Programming and Operating Systems	1.86 2.94	1.88 2.96	1.99 2.97	2.05	2.07 2.98	2.1
304190 304196							
	System Programming and Operating Systems Employability Skills and Mini Project	2.94	2.96	2.97	2.96	2.98	
	System Programming and Operating Systems Employability Skills and Mini Project	2.94	2.96	2.97	2.96	2.98	
304196	System Programming and Operating Systems Employability Skills and Mini Project Class: BE AY:2	2.94 2.9 020-21	2.96 2.92	2.97 2.94	2.96 2.92	2.98 2.92	2.97
304196 404181	System Programming and Operating Systems Employability Skills and Mini Project Class: BE AY:2 VLSI Design& Technology	2.94 2.9 020-21 2.88	2.96 2.92 2.84	2.97 2.94 2.88	2.96 2.92 2.86	2.98 2.92 2.88	2.97
304196 404181 404182	System Programming and Operating Systems Employability Skills and Mini Project Class: BE AY:2 VLSI Design& Technology Computer Networks & Security	2.94 2.9 020-21 2.88 2.9	2.96 2.92 2.84 2.94	2.97 2.94 2.88 2.9	2.96 2.92 2.86 2.9	2.98 2.92 2.88 2.94	2.97 2.88 2.9
304196 404181 404182 404183	System Programming and Operating Systems Employability Skills and Mini Project Class: BE AY:2 VLSI Design& Technology Computer Networks & Security Radiation & Microwave Techniques	2.94 2.9 020-21 2.88 2.9 2.48	2.96 2.92 2.84 2.94 2.47	2.97 2.94 2.88 2.9 2.49	2.96 2.92 2.86 2.9 2.28	2.98 2.92 2.88 2.94 2.3	2.97 2.88 2.9 2.3
304196 404181 404182 404183 404184	System Programming and Operating Systems Employability Skills and Mini Project Class: BE AY:2 VLSI Design& Technology Computer Networks & Security Radiation & Microwave Techniques Internet of Things	2.94 2.9 020-21 2.88 2.9 2.48 2.58	2.96 2.92 2.84 2.94 2.47 2.58	2.97 2.94 2.88 2.9 2.49 2.52	2.96 2.92 2.86 2.9 2.28 2.01	2.98 2.92 2.88 2.94 2.3 2.03	2.97 2.88 2.9 2.3 2.03
304196 404181 404182 404183 404184 404185	System Programming and Operating Systems Employability Skills and Mini Project Class: BE AY:2 VLSI Design& Technology Computer Networks & Security Radiation & Microwave Techniques Internet of Things Artificial Intelligence	2.94 2.9 020-21 2.88 2.9 2.48 2.58 2.92	2.96 2.92 2.84 2.94 2.47 2.58 2.91	2.97 2.94 2.88 2.9 2.49 2.52 2.93	2.96 2.92 2.86 2.9 2.28 2.01 2.91	2.98 2.92 2.88 2.94 2.3 2.03 2.92	2.88 2.9 2.3 2.03 2.92
304196 404181 404182 404183 404184 404185 404188	System Programming and Operating Systems Employability Skills and Mini Project Class: BE AY:2 VLSI Design& Technology Computer Networks & Security Radiation & Microwave Techniques Internet of Things Artificial Intelligence Project Stage I	2.94 2.9 020-21 2.88 2.9 2.48 2.58 2.92 2.98	2.96 2.92 2.84 2.94 2.47 2.58 2.91 2.97	2.97 2.94 2.88 2.9 2.49 2.52 2.93 2.98	2.96 2.92 2.86 2.9 2.28 2.01 2.91 2.97	2.98 2.92 2.88 2.94 2.3 2.03 2.92 2.98	2.88 2.9 2.3 2.03 2.92 2.98



404191	Machine Learning	2.9	2.84	2.9	2.94	2.9	2.9
404192	Renewable Energy Systems	2.9	2.92	2.94	2.92	2.92	3
404195	Project Stage II	2.99	2.98	2.99	2.99	2.98	2.99

3.3 Attainment of Program Outcomes and Program Specific Outcomes

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

(Describe the assessment tools and processes used together the data upon which the evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

To ensure alignment of CO with Program Outcomes (PO) and Program Specific Outcomes (PSO), a bottom to top process is employed, where outcomes are cascaded from CO to PO-PSO.

Assessing PO and PSO typically involves gathering evidence of student learning, analysing that evidence, and using it to improve teaching and learning. Process of assessment of POs and PSOs is as per flowchart shown below.

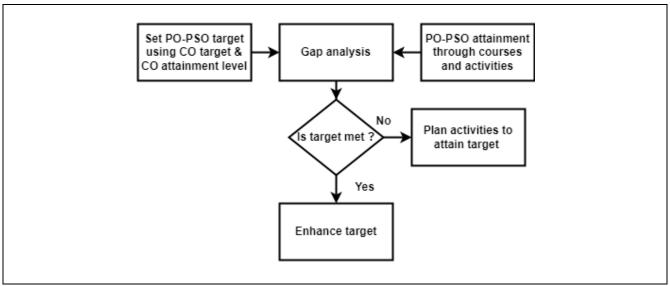


Figure 3.3.1.1: POs and PSOs Assessment Process

POs and PSOs Assessment tools

POs and PSOs assessment tools are used to evaluate the overall effectiveness of a program and to ensure that it meets the required standards. The evaluation of the POs and PSOs involves the use of both direct and indirect assessment tools:

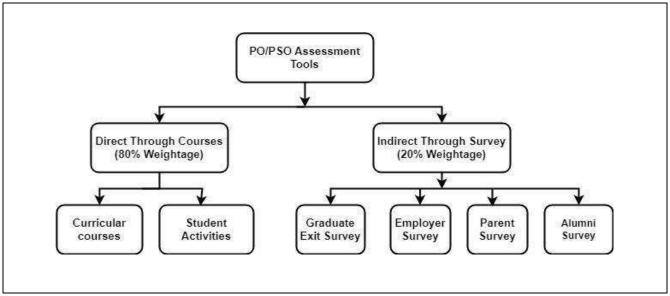


Figure 3.3.1.2: POs and PSOs Assessment tools

Direct Assessment tools:

The CO directly contributes to the assessment of POs and PSOs.

Indirect Assessment Tools:

The department conducts various activities for multidimensional growth of students. The students actively participate in social activities organised by the department and NSS cell. Students participate in various technical and cultural competitions. Department has many clubs and student chapters of professional bodies. These clubs provide a vibrant platform for students to hone their abilities.

In addition, various surveys, such as exit surveys, parent feedback, employer's feedback and student satisfaction surveys are conducted. Exit surveys are conducted with graduating students to evaluate the overall effectiveness of the program.

Attainment of POs and PSOs

Direct assessment of POs and PSOsis based on the attainment levels of COs and the degree of correlation between them.

Sample calculation for POs and PSOsattainment is described in following three steps:

Step - 1

CO Attainment and CO – POs and PSOs mapping is defined for course by correlation level low to high (1 to 3).



Table 3.3.1.1: CO-POs and PSOsMapping

Course Outcomes	CO Attainment	PO1	PO2	PO3	PSO1
CO1	2.5	3	1		
CO2	2.8	3	2	1	1
СОЗ	2.3	2	2		2
CO4	1.5	2	1	1	1
CO5	2.0	1	1		
CO6	3.0	3	3		

Step – 2Direct POs and PSOsattainment is calculated using following formula:

POs and PSOsattainment = (Level of Mapping of CO with PO/PSO * CO attainment Level) / 3

Table 3.3.1.2: POs and PSOsAttainment Calculations

Course Outcomes	CO Attainment	PO1	PO2	PO3	PSO1
CO1	2.5	=2.5*3/3	=2.5*1/3		
CO2	2.8	=2.8*3/3	=2.8*2/3	=2.8*1/3	=2.8*1/3
CO3	2.3	=2.3*2/3	=2.3*2/3		=2.3*2/3
CO4	1.5	=1.5*2/3	=1.5*1/3	1.5*1/3	=1.5*1/3
CO5	2.0	=2.0*1/3	=2.0*1/3		
CO6	3.0	=3.0*3/3	=3.0*3/3		

Step – 3POs and PSOs attainment is calculated by taking the average of POs and PSOs attainment by each CO attainment.

Table 3.3.1.3: Average POs and PSOs Attainment by Course

Course Outcomes	CO Attainment	PO1	PO2	PO3	PSO1
CO1	2.5	2.5	0.83		
CO2	2.8	2.8	1.87	0.93	0.93



CO3	2.3	1.53	1.53		1.53
CO4	1.5	1.00	0.50	0.50	0.50
CO5	2.0	0.67	0.67		
CO6	3.0	3.00	3.00		
Average PC Attair	os and PSOs nment	1.92	1.40	0.72	0.99

Attainment of POs and PSOs through Indirect Tools

By combining direct and indirect tools, department gain a more comprehensive understanding of the program's effectiveness in achieving its intended learning outcomes. Graduate Exit Survey, Employer Survey and Parents Feedback are conducted at the end of the program. The department conducts surveys using a relevant questionnaire in order to assess the attainment of POs and PSOs. The questionnaire provides 5 response options, namely Excellent, Very Good, Good, Average, and Poor, which are assigned scores of 5, 4, 3, 2, and 1, respectively. The survey results are then tabulated, and the average scores for each PO and PSO are calculated. To determine the attainment level for each PO and PSO, the average score is converted to a scale of 0 to 3.

For indirect POs and PSOs attainment 20% weightage is given.

Total PO/PSO attainment = Direct Attainment by all courses * 0.8 + Indirect Attainment * 0.2

The template used to execute Graduate Exit Survey is as follows.

Graduate Exit Survey: Relevant questionnaire in graduate Exit survey form to evaluate attainment of POs and PSOs, and relation of POs & PSOs with questionnaire is given below

Questionnaire Format

Kindly rate the following criteria on a scale of 1-5. Your genuine response will be helpful for the continuous quality improvement of our UG programme.

5. Excellent 4. Very Good 3. Good 2. Average 1. Poor

Q. No.	Question
Q1	Are you able to apply knowledge of Mathematics, Science and Engineering in real time from value added certifications, workshops and training programs conducted during your stay in college?
Q2	Are you able to apply engineering knowledge to design experiments, analyze and interpret data to obtain valid conclusions?
Q3	Are you able to identify and design a solution for E&TC engineering problem with an appropriate consideration for the public health and safety and the cultural, societal, and environmental considerations?



0.4	
Q4	Are you able to conveniently investigate complex problems using research-oriented knowledge and methods to provide appropriate solution through courses and
	project?
Q5	Are you able to use techniques, skills and modern engineering and IT tools necessary for engineering practice through internship, laboratories and various clubs?
Q6	Are you able to grasp the impact of professional engineering solutions in the context of society and environment and apply it for sustainable development?
Q7	Are you able to understand that you have about the available resources and ensure judicious use of them without affecting the environment for sustainable progress?
Q8	Are you able to apply ethical principles and commitment to professional ethics and responsibilities acquired through courses, project, seminar and Gymkhana activities?
Q9	Are you able to lead team / work in team / work as an individual gained from the co-curricular and extracurricular activities?
Q10	Are you able to communicate effectively, write precise reports, design documentation applying the engineering knowledge, speaking in a large group which you have acquired?
Q11	Are you able to complete interdisciplinary projects and carry them out in time and utilize fund in a meaningful way with the training provided by the department, through various activities of student chapter and clubs?
Q12	Are you able to work as a successful self-reliant engineer with the training provided by department, entrepreneurship development cell, Innovation cell and Audit courses etc?
Q13	Have you acquired competencies in analyzing, designing and testing, analog and digital circuits and systems for given application?
Q14	Have you developed skills to implement technical blocks of hardware – software co-design for Embedded &Robotics automation application?
Q15	Have you acquired an ability to apply knowledge of the E & TC system for social and environmental problems as an individual member or leader of a diverse team in multidisciplinary settings?

Relation of POs and PSOs with questionnaire of Graduate Exit Survey

Question	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
Question	Q9	Q10	Q11	Q12	Q13	Q14	Q15	
PO/PSO	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	



Table 3.3.1.4: PO Attainment for AY: 2017-18 to AY: 2020-21 (Cycle – 1)

Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
			Class: FE	AY	:2017-20	18							
101005	Basic Civil and Environmental Engineering	1.57	1.53	0.56	0.83	0.83	0.76	0.78					
101011	Engineering Mechanics	0.51	0.51	0.24									
102006	Engineering Graphics I	1.66	1.08								0.55		
102013	Basic Mechanical Engineering	0.85	0.72										
102014	Engineering Graphics II	1.93	0.97			0.97							
103004	Basic Electrical Engineering	1.18	0.39	0.39									
104012	Basic Electronics Engineering	0.72	0.38	0.37		0.4							
107001	Engineering Mathematics I	0.86	0.57	0.29									
107002	Engineering Physics	1.4	0.99	0.77		0.72							
107008	Engineering Mathematics II	0.86	0.57	0.29									
107009	Engineering Chemistry	0.99	0.31	0.33									
110003	Fundamentals of Programming Languages	0.5	0.33	0.17		0.33							
110010	Fundamentals of Programming Languages	0.45	0.3	0.15		0.3							
111007	Workshop Practice	2	1	1			1						
		Cl	lass: SE	A	Y:2018-2	.019	l	l	<u>I</u>	l	<u>I</u>	<u>l</u>	1
204181	Signals & Systems	1.44	1.44	0.48	0.48				0.48		0.48		
204182	Electronic Devices & Circuits	1.12	1.04	1.08	0.96	0.97							
204183	Electrical Circuits and Machines	1.27	1.27	0.42	0.42				0.42		0.42		
204184	Data Structures and Algorithms	0.95	1.22	0.78	0.8	1.57			0.52		0.52		
204185	Digital Electronics	1.31	1.12	0.83	0.83	1.12			0.56		0.56		
204186	Electronic Measuring Instruments & Tools	1.16	1.65	0.99	0.99	0.99	0.99	0.99	1.98	2.97	2.64		0.99
207005	Engineering Mathematics III	1.61	1.08	0.54									
204187	Integrated Circuits	1.63	1.63	0.54	0.54				0.54		0.54		
204188	Control Systems	0.31	0.63	0.31	0.31				0.31		0.31		
204189	Analog Communication	1.66	0.94		0.66	1.2	0.61		0.63	0.62			
204190	Object Oriented Programming	1.21	1.71	1.06	1.01	2.11			0.7		0.7		
204191	Employability Skill Development	1.22	1.46	0.97	0.97	0.97	0.96	0.97	1.94	2.91	2.43		0.97
204192-A	Japanese Language module-I								1.2	1.8		2.12	
204193-A	Japanese Language module-II								1.56	2.17		2.04	
		C	lass: TE	A۱	′:2019-2	020							
304181	Digital Communication	1.47	1.47	1.47	0.51		0.49		0.49		0.49		
304182	Digital Signal Processing	1.56	1.56	1.3	1.12	0.52			0.52		0.52		
304183	Electromagnetics	1.05	0.7	0.35	0.35	0.35					0.35		
304184	Microcontrollers	1.25	1.88	1.67	1.27	1.27			0.63		0.63		
304185	Mechatronics	1.18	1.14	1.45	1.04	1.39	0.67	0.73					
304193	Electronics System Design	0.84	0.84	0.56	0.28	0.56			0.28	0.28	0.28		
304186	Power Electronics	2.31	2.81	1.32	2.15	1.98			0.99		0.99		
304187	Information Theory, Coding and Communication Networks	2.15	2.15	1.55	1.19	1.4			0.72		0.72		
304188	Business Management	0.51	1.26	1.26		1.26	1.26	0.98	1.1	1.04	0.69	1.01	0.51
304189	Advanced Processors	1.33	1.99	1.67	0.68	1.36			0.66		0.66		
304190	System Programming and Operating Systems	1.81	2.31	1.48	1.48	2.97			0.99		0.99		



304196	Employability Skills and Mini Project	2.92	2.92	2.92	2.92	2.92	1.95	1.95	1.95	2.92	2.92	2.92	1.95
304194 B	Cyber & Information Security						1.85		1.05		0.63		2.65
304198A	Embedded System Using MSP430	1.46	1.05	0.93	1.21				0.86				0.76
	Class: BE AY:2020-21												
404181	VLSI Design& Technology	1.76	2.07	2.71	2.23	2.87	0.96	0.96			1.92		
404182	Computer Networks & Security	2.91	2.91	1.62	1.62	1.62			0.97		0.97		
404183	Radiation & Microwave Techniques	2.39	2.39		0.8				0.8		0.8		
404184	Internet of Things	1.82	1.93	1.89	1.8	1.77	0.68		0.76		0.88		0.68
404185	Artificial Intelligence	1.94	1.94	1.94	2.92	2.92			0.97				1.94
404188	Project Stage I	2.48	2.98	2.48	2.98	2.48	2.48	2.98	2.48	2.48	2.48	2.98	2.98
404189	Mobile Communication	2.48	1.17	0.97	1.51	0.76					0.76		
404190	Broadband Communication Systems	2.91	2.91	2.91	0.97		0.97		0.97		0.97		
404191	Audio Video Engineering	0.98	0.98	0.98	0.98	1.96		1.94					0.98
404191	Machine Learning	2.57	2.51	1.93	2.31	2.42	0.97		0.97	0.97	1.13	0.97	0.97
404192	Renewable Energy Systems	2.12	1.79	0.98	1.96		1.96	2.12					
404195	Project Stage II	2.99	2.99	2.99	2.98	2.66	2	2	2.49	2.99	2.98	2.49	2.98
404188-B	Human Behaviors						1.37	1.56	2.72		1.67		
404196 B	Environment Issues & Discusser Management						1.69	2.62	1.38		1.36		2.46
	Direct Attainment	1.52	1.44	1.13	1.28	1.45	1.24	1.58	1.05	1.92	1.06	2.08	1.60
	Indirect attainment through survey	1.9	1.97	1.94	1.86	1.97	1.88	1.84	1.95	2.01	1.81	1.94	1.87
	Direct Attainment through Student Activities				1.37	1.86	1.575	1.84	1.238	1.95	2.007	1	1.806

Table 3.3.1.5: PSO Attainment for AY: 2017-18 to AY: 2020-21 (Cycle -1)

Course Code	Course Name	PSO1	PSO2	PSO3
	Class: FE AY:2017-2018			
101005	Basic Civil and Environmental Engineering			
101011	Engineering Mechanics			
102006	Engineering Graphics I			
102013	Basic Mechanical Engineering			
102014	Engineering Graphics II			
103004	Basic Electrical Engineering	0.59	0.39	
104012	Basic Electronics Engineering	0.74	0.68	0.36
107001	Engineering Mathematics I	0.29		
107002	Engineering Physics	0.7	0.7	
107008	Engineering Mathematics II	0.29		
107009	Engineering Chemistry			
110003	Fundamentals of Programming Languages I			
110010	Fundamentals of Programming Languages II			
111007	Workshop Practice			
	Class: SE AY:2018-2019			
204181	Signals & Systems	0.96	0.48	
204182	Electronic Devices & Circuits	0.98	0.97	
204183	Electrical Circuits and Machines	0.85	0.42	
204184	Data Structures and Algorithms	1.05	0.55	0.52



204185	Digital Electronics	0.83	0.55	
204186	Electronic Measuring Instruments & Tools	0.99	0.99	2.97
207005	Engineering Mathematics III	0.55		
204187	Integrated Circuits	1.63	1.08	
204188	Control Systems	0.31	0.31	
204189	Analog Communication	0.63		0.75
204190	Object Oriented Programming	1.41	0.6	
204191	Employability Skill Development	0.97	0.97	2.91
204192-A	Japanese Language module-I			0.73
204193-A	Japanese Language module-II			0.68
	Class: TE AY:2019-2020	•		
304181	Digital Communication	1.02		
304182	Digital Signal Processing	0.52	0.52	
304183	Electromagnetics	1.05	0.35	
304184	Microcontrollers	0.63	1.67	0.63
304185	Mechatronics	0.96	1.78	1.61
304193	Electronics System Design	0.84	0.84	0.56
304186	Power Electronics	2.31	2.31	0.99
304187	Information Theory, Coding and Communication Networks	1.65		
304188	Business Management			0.57
304189	Advanced Processors	0.66	1.66	
304190	System Programming and Operating Systems	1.98	0.98	
304196	Employability Skills and Mini Project	2.92	2.92	2.92
304194 B	Cyber & Information Security			2.43
304198A	Embedded System Using MSP430	1.34	1.11	0.78
	Class: BE AY:2020-21	•		
404181	VLSI Design& Technology	2.55	0.96	0.96
404182	Computer Networks & Security	0.97	0.97	
404183	Radiation & Microwave Techniques	1.59	0.8	
404184	Internet of Things	1.5	1.89	0.77
404185	Artificial Intelligence	2.92	1.62	
404188	Project Stage I	2.98	2.64	2.15
404189	Mobile Communication		0.83	0.83
404190	Broadband Communication Systems	2.91		
404191	Audio Video Engineering	1.63	0.98	
404191	Machine Learning	1.93	2.41	0.96
404192	Renewable Energy Systems	0.98		1.96
404195	Project Stage II	2.99	2.99	2.99
404188-B	Human Behaviors			2.49
404196 B	Environment Issues & Discusser Management			1.41
	Direct Attainment	1.32	1.18	1.41
	Indirect attainment through survey	1.87	1.84	1.96
	Direct Attainment through Student Activities		0.94	1.183





AISSMS

COLLEGE OF ENGINEERING





Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION IV

Student Performance



CRITERION IV	Student Performance	150

Item(Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	CAY (22-23)	(21- 22)CAY m1	(20- 21)CAY m2	(19-20) CAYm3	(18-19) CAYm4	(17-18) CAYm5	(16-17) CAYm6
Sanctioned intake of the program (N)	60	60	60	60	60	60	0
Total number of students admitted in first year <i>minus</i> number of students migrated to other programs/institutions plus no. of students migrated to this program (<i>N</i> 1)	70	68	69	62	52	54	0
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	9	9	18	20	29	0
Separate division students, if applicable (N3)	0	0	0	0	0	0	0
Total number of students admitted in the Program $(N1 + N2 + N3)$	70	77	78	80	72	83	0

Table 4.1

Year of entry	N1 + N2 + N3 (As defined above)	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	I Year II Year III Year			
2022-23 (CAY)	70					
2021-22 (CAYm1)	77	36	33			
2020-21 (CAYm2)	78	37	43	43		
2019-20 (CAYm3)	80	29	46	42	42	
2018-19 (LYG)	72	20	31	31	31	
2017-18 (LYGm1)	83	28	38	31	31	
2016-17 (LYGm2)	0	0	0	0	0	

Table 4.2



Year of entry	N1 + N2 + N3	Number of students who have successfully graduated (Students with backlog in stipulated period of study)			
-	(As defined above)	I Year	I Year II Year		IV Year
2022-23 (CAY)	70				
2021-22 (CAYm1)	77	68			
2020-21 (CAYm2)	78	69	77	76	
2019-20 (CAYm3)	80	55	70	68	67
2018-19 (LYG)	72	40	59	59	59
2017-18 (LYGm1)	83	48	69	64	64
2016-17 (LYGm2)	0	0	0	0	0

Table 4.3

4.1 Enrollment Ratio	20
----------------------	----

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2022-23 (CAY)	60	70	116.67
2021-22 (CAYm1)	60	68	113.33
2020-21 (CAYm2)	60	69	115.00

Average [(ER1 + ER2 + ER3) / 3]: 115.00

4.2	Success Rate in the stipulated period of the program (40)	40
-----	---	----

4.2.1 Success rate without backlogs in any semester/year of study(25)

SI= (Number of students who have graduated from the program without backlog)/ (Number of students admitted in the first year of that batch and actually admitted in 2nd year via lateral entry and separate division, If applicable)

Average SI = Mean of Success Index (SI) for past three batches Success rate without backlogs in any year of study = $25 \times Average SI$



Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017- 18)	Latest Year of Graduation minus 2 LYGm2 (2016- 17)
X Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable		83	0
Y Number of students who have graduated without backlogs in the stipulated period	31	31	0
Success Index (SI) [SI = Y / X]	0.43	0.37	0

Average SI [(SI1 + SI2 + SI3) / 3] : 0.40

Assessment [25 * Average SI]: 10.00

4.2.2 Success rate with backlog in stipulated period (15) (With backlog)

SI = (Number of students who graduated from the program in the stipulated period of course duration) / (Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry and separated division, if applicable)

Average SI = mean of Success Index(SI) for past three batches

Success rate = 15 × AverageSI

Item	Latest Year of Graduation, LYG (2018-19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2 LYGm2 (2016-17)
X Number of students admitted in the corresponding First Year + admitted in 2nd year via lateral entry and separate division, if applicable	/2	83	0
Y Number of students who have graduated with backlog in the stipulated period	59	64	0
Success Index (SI) [SI = Y / X]	0.82	0.77	0
Average Success Index		(0.82+0.77/2) =0.79	

Average SI[(SI1 + SI2 + SI3) / 3]: 0.80

Assessment [15 * Average SI] : 11.92

Note: If 100% students clear without any backlog then also total marks scored will be 40 as both 4.2.1 & 4.2.2 will be applicable simultaneously.



4.3	4.3. Academic Performance in Third Year (15)	15

Academic Performance = 1.5 * Average API(Academic Performance Index)

API = ((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Third Year / 10)) x (number of successful students / number of students appeared in the examination)

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

Academic Performance	CAYm3 (2019-20)	LYG (2018- 19)	LYGm1 (2017- 18)
Mean of CGPA or Mean Percentage of all successful students (X)	9.00	9.87	7.90
Total no. of successful students (Y)	68.00	59.00	64.00
Total no. of students appeared in the examination (Z)	70.00	59.00	69.00
API = X* (Y/Z)	AP1= 8.74	API=9.87	AP2=7.32
Average $API = (AP1 + AP2 + AP3)/3$		8.65	

Table B.4.3

Academic Performance = 1.5 * Average API (Academic Performance Index) = 1.5 * 8.65 = 12.97 (12.97 /15 marks)

4.4	Academic Performance in Second Year(15)	15
-----	---	----

Academic Performance in Second Year(15)

Academic Performance Level = 1.5 * Average API (Academic Performance Index)

 $\mathbf{API} = ((\text{Mean of } 2^{\text{nd}} \text{ Year Grade Point Average of all successful Students on a 10 point scale})$ or (Mean of the percentage of marks of all successful students in Second Year/10)) x (number of successful students/number of students appeared in the examination).

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

Academic Performance	CAYm2 (2020-21)	CAYm3 (2019-20)	LYG (2018-19)
Mean of CGPA or Mean Percentage of all successful students (X)	8.34	8.88	8.88
Total no. of successful students (Y)	77	70	59



Total no. of students appeared in the examination (Z)	78	73	60
$API = X^* (Y/Z)$	AP1=8.23	AP2=8.52	AP3=8.73
Average $API = (AP1 + AP2 + AP3)/3$	(8.23+8.52+8.73/3) = 8.49		8.49

Table B .4.4

Average API = (AP1 + AP2 + AP3)/3 = 8.49

Academic Performance Level = 1.5 * Average API (Academic Performance Index) = 1.5 *8.49 = 12.74(12.74/15 marks)

4.5 Placement, Higher Studies and Entrepreneurship (40M)

Table 4.5.1 Placement, higher studies and entrepreneurship for past three years

Item	LYG (2018-19)	LYGm-1 (2017-18)	CAYm2 (2016-17)
Total No. of Final Year Students (N)	59	64	0
No. of students placed in companies or Government Sector (x)	53	58	0
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)	03	02	0
No. of students turned entrepreneur in engineering/technology (z)	00	00	0
x + y + z =	56	60	0
Placement Index : $(x + y + z)/N$	0.95	0.94	0
Average placement= (P1 + P2 + P3)/3		0.945	

Assessment = $40 \times \text{Average Placement} = 40 \times 0.94 = 37.80$



Provide the placement data in the below mentioned format with the name of the program and the assessment year:

Table .4.5.2

	Programs Name and Assessment Year						
	Electronics & Telecommunication – CAYm1:2021-22						
S. No.	Name of the student placed	Enrollment no.	Name of the Employer	Appointment letter reference no. with date			
1	ABHISHEK SHIVDUTT KHEDKAR	71904931J	Tata Consultancy Services (TCS)	TCSL/CT2021370517/Pune			
2	ADHAV KAUSTUBH DATTATRAY	71811551B	Cognizant	Candidate ID: 19938424			
3	AJUR ANIKET ASHOK	71904942D	Hexaware Technologies Ltd.	Email			
4	AKSHAT GUPTA	71904946G	Cognizant	Letter of Authrization (Date: 11.05.2022)			
5	AWALE ANMEY SANJAY	71904972F	AVENUE	Date: 05.07.2022			
6	BANDE ABHISHEK NANDKUMAR	72000977E	N V Industrial Services LLP	Job Offer Letter Dated: 15.05.2023			
7	BANDGE VISHAL RAMRAO	71904986F	Hexaware Technologies Ltd.	Letter of Intent (Date:17.03.2022)			
8	BHINGARDE DAIDEEP DAYANAND	71904998K	Zensar	Ref. No. 0081559_3/1639366			
9	BORLE PRATHMESH GOPAL	71905020M	Nagarro Software Pvt. Ltd	Date: 18.07.2022			
10	BURANGE MANJUSHA VITTHAL	72000978C	Tata Consultancy Services (TCS)	TCSL/CT20203545807/Pune			
11	CHORE DHANASHREE RAJENDRA	71905066K	Hexaware Technologies Ltd.	Letter of Intent (Date: 28.01.202)			
12	DAHALE TANMAY VINAY	71905044j	Cognizant	Date:18.01.2022 Emp. ID:2152962			
13	DAREKAR HARSHAVARDHAN KAMLAKAR	72000979M	iPRIMED Education Solutions Pvt. Ltd.	Date: 11.03.2022			
14	DHERE DIGVIJAY ADINATH	71905070H	MPC Cloud Consulting Pvt. Ltd. Hyderbad	Ref.:MPC/India/O0215 Dated:19.05.2023			
15	GAJARE TANMAYEE MAHESH	71905094E	Wipro Limited	Email: 21.09.202			
16	GUJARKAR VINIT ASHOKRAO	71905531J	Cognizant	Candidate ID: 19938319			
17	HASURKAR RASIKA BHARAT	71905124L	Cognizant	Superset ID: 2216876			
18	HIMANSHU ABHIRAJ	72000982M	Technosoft Engineering	Date:27.10.2022			
19	ISHAN GUPTA	71905138L	SIEMENS	298944/8045976			
20	JADHAV ANIKET RAMESH	71905139J	DATACAPTEN Technologies Pvt. Ltd	Date: 10.10.2022			
21	JAGTAP KRUTIKA SURENDRA	71905221B	Forbes Marshal	HR:BK:SN:SC:Offer:12			
22	JANGAM SAURABH SANDIP	72012549K	Capgemini	Offer Letter			
23	JOSHI ANUJA DHANANJAY	71905160G	Zensar	Ref:008155_3/1639340			
24	KADU AISHWARYA NITIN	72000983K	Tech Mahindra	Associate ID:958892			
25	KANADE NEHA SUNIL	72012550C	Forbs Marshal	Offer Letter			
26	KHAIR MIHEEKA VIJAYJEET	71905194M	RIA Advisory LLP	Date: 10.05.2022			
27	KHANDALE NEHA DILIP	71811932M	Sagitech solutions	Offer Letter			



			Pvt. Ltd.	
28	KHANDARE ROHIT RAJENDRA	72000984H	Voksedigital Consultancy Services LLP	EMP Code: 1035
29	KHOBRAGADE KHUSHBOO CHAKRADHAR	71905205L	PENTAGON SPACE	Offer Letter
30	KOTHARI RUTUJA PANKAJ	71905217D	Wipro Limited	Date: 23.01.2022
31	KULKARNI POOJA DILIP	71905371E	BRISTLECONE India Limited	Appointment Letter: 11.04.2022
32	KUMBHAR APURVA MALHARI	71908050K	iPRIMED Education Solutions Pvt. Ltd.	Date: 11.03.2022
33	LONDHE MONALI SANJAY	71811985B	Wipro Limited	Date: 28.01.2022
34	MANE ATHARVA TULSHIDAS	72000985F	Nihilent Limited	Date: 05.04.2022
35	MOHITE VAISHNAVI AANANDRAO	72000986D	Wipro Limited	Date: 21.01.2022
36	NAGDIVE MEGHANA KIRAN	71905286G	KPIT	Date: 12.07.2022 Emp. ID:151446
37	PATIL AISHWARYA SANJAY	72000987B	HCL Technologies Ltd.	Offer Release Date:27.09.2022
38	PATIL SATYAJEET SHANKARRAO	71905344H	Larsen and Toubro Infotech Ltd.	Ref.:LTI/EN9/Campus/2022
39	PATNI MAMTA MANOJ	71905350B	Ungrammary	Offer Letter
40	PAWAR KEDAR SURESH	71905354E	Johnson Controls (India) Private Limited	Date: 23 August 2022
41	PAWAR TANMAY SHRIKANT	71905506H	Volkswagen Group Technologies Solutions India	Date: 15.07.2022
42	POHANKAR VINAY ASHOK	71905368E	Cognizant	Candidate ID: 19938266
43	PREETI KUMARI	71905380D	Nihilent Limited	Whatsup Message
44	RAJGURU REKHA VITTHAL	72000988L	Allianz Technologiey SE	Date: 22.11.2022
45	RAUT OMKAR VITTHAL	72000989J	Renault Nissan Technologies Business Center India	HR/16890/Apr2022
46	RINKI	71905403G	Tata Consultancy Services (TCS)	TCSL/CT20203461829/Pune
47	SAKSHI SINGH	71812197L	Harman Connected Services Corporation India Ltd.	Date: 15.05.2022
48	SUBHEDAR SANA SADIQ	71905490H	Rudder Analytics Private Limited	Date:18.01.2022
49	SUYASH RAJPURE	71905499M	Jio Digital Life	Date: 05.07.2022
50	TADGE MEGHA SANTOSH	71905503C	Tata Consultancy Services (TCS)	TCSL/CT20203555126/Pune
51	UMBARKAR PAARTH MANISH	71905517C	Tata Consultancy Services (TCS)	TCSL/CT20203546027/Pune
52	VARADE KUNAL KIRAN	71905523H	Hexaware Technologies Ltd.	Letter of Intent (Date: 28.01.202)
53	YEWALE JALINDAR KAKASAHEB	71905555F	AccioJob (Web Development)	Offer Letter



	Programs Name and Assessment Year					
	Electr	onics & Telecon	munication - CAYm2: 2020	-21		
S. No.	Name of the student placed	Enrollment no.	Name of the Employer	Appointment letter reference no. with date		
1	ABHISHEK ANAND LAD	71811546F	Johnson Control	Date: 1 September, 2021		
2	AKSHATA KISHOR LOYA	71925858J	Infosys	1002664337		
3	BANSODE PRAMILA RAMESH	71925859G	Tata Consultancy Services (TCS)	Associate No. 2192355		
4	BASARGE ANKUSH BAJIRAO	71811606C	Accenture	C9674576		
5	BHAKRE SAGAR KANIFNATH	71925860L	Cognizant	16737914		
6	BHARAMBE YUKTA BHASKAR	71811625K	Tata Consultancy Services (TCS)	TCSL/CT20203389349		
7	BHONDAVE PRATHMESH SOMESH	71811638M	Tata Consultancy Services (TCS)	TCSL/CT20203407509		
8	BHOSKAR SHWETA KAILAS	71811644F	Infosys	HRD/3T/1002134373/21-22		
9	CHATLA PRAGNA RAJNARENDRA	71811673K	Digital India Corporation	3(42)2014-EG-II042 Dated:28.09.2021		
10	CHOUDHARI PRANJAL BALASAHEB	71925861J	Tech Mahindra	Offer Letter Date:03.11.2021		
11	DALVI ANIKET NAGOJIRAO	71811703E	Tata Consultancy Services (TCS)	TCSL/CT20203476898		
12	DARWATKAR RUSHIKESH VIJAY	71811709D	Accenture	C9674583		
13	DESHMUKH KOMAL KALYANRAO	71811717E	DSC Technology	HRD/3T/1002478816/21-22		
14	DESHMUKH SHIVAM RAMDAS	71811721C	Infosys	HRD/3T 1002132535/21-22		
15	GADDI SHWETA HANAMANT	71925862G	Infosys	HRD/3T/1002136828/21-22		
16	GARDADE SONALI SANJAY	71811787F	FUJITSU	HR/OL/32244076		
17	GORTE SHREYA ASHOK	71811810D	Accenture	Employee ID:13251031		
18	JAIN ROHIT DEEPAK	71811863E	Accenture	Ref. ID:13244803		
19	JHA PRATEEK ANIL	71811872D	Accenture	C9788692		
20	JOGDAND LAHU NAMDEV	71925863E	Bosch	E.N.C4872		
21	KADAM SHREYAS AMARDEEP	71811886D	Infosys	Candidate ID:1002137089		
22	KAMBLE AISHWARYA PARMATMA	71925864C	CSMIT	Offer Pending (20)		
23	KAMBLE VAISHNAVI SUHAS	71812320E	Fujitsu Consulting India Private Limited	Date: 20.06.2023 Emp. Code: 37361		
24	KASAT VEDANT SANDEEP	71811917H	Tata Consultancy Services (TCS)	TCSL/CT20203311944/Bangalore		
25	KASBE SATYAM SURYAKANT	71925865M	Magna Steyr India	Offet Letter Date: 16.06.2023		
26	KATKE SWAPNALI DEVANAND	71925866K	WIPRO	APPOINTMENT LETTER - 22679637		
27	KHATAVKAR PRAJAKTA SHIRISH	71925867Н	Cognizant	Candidate ID:17787226		
28	KILLEDAR NIKITA SURESH	71925868F	Accion Labs India Private Limited	AL21OL - 2125		
29	KOLI KATTEPPA BHAGANNA	71925869D	Infosys	HRD/3T/1002473196/21-22		
30	KOMAL RAJENDRA JADHAV	71811950K	Infosys	HRD/3T/1002137953/21-22		
31	LALWADIA PRANAV VIJAY	71811979H	L&T Infotech Ltd.	LTI//HR/EN1/T0030670		



32	MAHAJAN CHAITALI PRAMOD	71925870H	Systeck Solutions, Pune	Offer Letter: Date 01.02.2022, Employee Code: 0671
33	MALU SWAR NARESH	71812001K	BirlaSoft (KPIT) Ltd.	BSL/HR/APPT/2020-00148870 Date:18.08.2021
34	MANE SURYAKANT CHANDRAKANT	71925871F	Magna Steyr India	Offer Letter Dated: 13/12/2021
35	METHA SAMIKSHA SUDHIR	71812013C	Digital India Corporation	Date:28.09.2021
36	NIKAM RISHIKESH ARUN	71812059M	Tata Consultancy Services (TCS)	TCSL/DT20219443819/Lucknow
37	PARDESHI PRATHMESH CHANDRASHEKHAR	71812086J	Tata Consultancy Services (TCS)	TCSL/CT20203286476/Pune
38	PATIL POOJA SUDHIR	71925873B	Tata Consultancy Services (TCS)	TCSL/CT20203538387/Pune
39	PATIL RUTUJA RAJKUMAR	71925874L	Tech Mahindra	1846740/ELTP/2020
40	PAWAR SAAKSHI VINOD	71925877E	Capgemini	4926265/952811
41	PHALLE KASTURI SOMNATH	71925875J	Capgemini	Candidate ID:4808904/909280
42	PUJARI SHUBHAM SHANKAR	71925876G	Promt Personnel Pvt Ltd	6046249
43	RAKESH SAWANT	71812170J	Cognizant	16831968
44	RANE DIKSHA NITIN	71812172E	Accenture	C10475058
45	SAWANT PRIYANKA VITTHAL	71925878C	Capgemini	998696
46	SHARMA ASTHA SANJEEV	71812234J	Johnson Control	Date:01.09.2021
47	SHELAR NIKITA DEEPAK	71925879M	Infosys	HRD/3T/1002478828/21-22
48	SHINDE SAURABH SUDHIR	71925880E	Mphasis	2488492
49	SHIRODE MANSI SANJAY	71925882M	Accenture	Date:21.03.2022
50	SHIV KUMAR DANGE	71812245D	Amdocs Development Center India Pvt. Ltd	Offer ID:250111 Dated:11.10.2021
51	SHIVANI SINGH	71812250L	Accenture	C9683940
52	SUDE GEETA ANGAD	71925883K	Infosys	HRD/3T/1002944267/21-22
53	TAPSE PATIL RAM PRADIPRAO	71925884H	Honeywell Technology Solutions Lab Ltd.	Letter of Appointment Date:30.09.2021
54	TAUSHIF AHMED	71812291H	Hexaware	EMP No.: 63881
55	TIDKE ANUSHKA SANJAY	71812307H	Tata Consultancy Services (TCS)	TCSL/CT20203462523/Pune
56	USTURAGE SHREYA SIDRAMAPPA	71812318C	Tata Consultancy Services (TCS)	TCSL/CT2020343309/Chennai
57	WAGHMARE NEHA KISAN	71812346J	Infosys	HRD/3T/1002481737/21-22
58	YALLA RAJASHRI ANJANAYYA	71925885F	Johnson Control	Date:21.09.2021

4.6 Professional Activities (20M)

4.6.1 Professional Societies/ chapters and organizing Engineering events (5M)

The department conducts various academic activities such as "Silicon Fusion" under AISSMS Engineering Today, A Students' National Level Symposium and Technical Exposition, Expert/Guest lectures, Workshops, Training Programs and Seminars through Professional Societies/Chapters named as: The Institution of Engineers (India) Students' Chapter (IE(I)), Indian Society for Technical Education (ISTE), Institute of Electrical and Electronics Engineering (IEEE) and The Institution of Electronics and Telecommunication Engineers (IETE) Students Forum (ISF) for developing technical, interpersonal and leadership skills.



Table 4.6.1.1 a): List of Professional Societies/Chapters

Sr. No.	Name of the Professional Society	Year of Establishment	Chapter No./ Reference No.
1	IE(I) Students' Chapter	2006-07	411001/AISS/ET
2	ISTE Students' Chapter	2019-20	MH-284
3	IEEE Students' Branch	2020-21	STB-98723
4	IETE Students Forum (ISF)	2021-22	1017
5	TRIZ Students Chapter	2021-22	2021-22/12

Table 4.6.1.1 b): List of Students Clubs

Sr. No.	Name of the Students Club	Year of Establishment
1	Drone and Robotics Club (Aviot-O-Virtue)	2017-18
2	Data Analytics Club (DAEXUS)	2021-22
3	Electronics For You (EFY) Club	2020-21

We have Professional Societies Institutional Memberships as Follows:

Table 4.6.1.1 c): List of Professional Societies Institutional Membership

Sr. No.	Name of the Professional Society	Year of Establishment	Chapter No./ Reference No.
1	Indian Society for Technical Education (ISTE), New Delhi	1997-98	IM-709
2	The Institution of Engineers (India), IE(I), Kolkata	2006-07	IM000504-7
3	Solar Energy Society of India (SESI), New Delhi	2021-22	IM/2021/10
4	The Institution of Electronics and Telecommunication Engineers (IETE), New Delhi	2021-22	G00612
5	Theory of Inventive Problem Solving Techniques, (TRIZ)	2022-23	C-41227/2022
6	Indio Universal Collaboration for Engineering Education (IUCEE) Students' Chapter	2020-21	



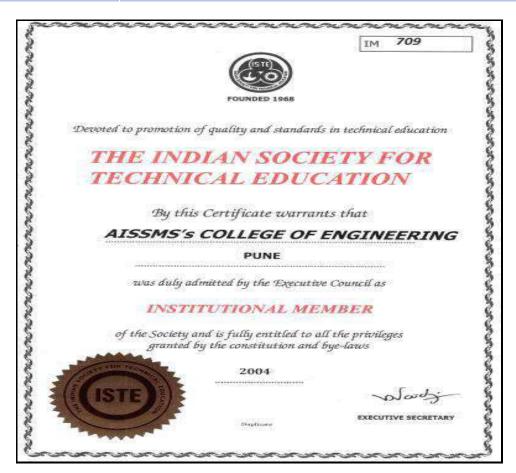


Figure. 4.6.1.1: ISTE Institutional Membership Certificate



Figure. 4.6.1.2: IE(I) Institutional Membership Certificate



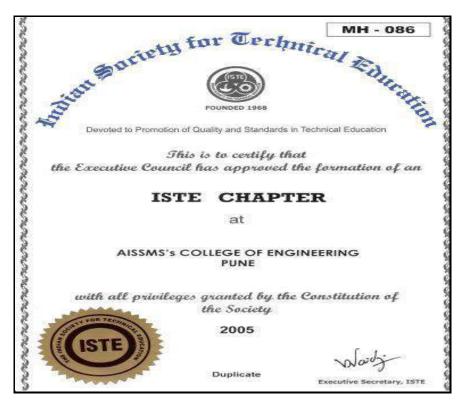


Figure. 4.6.3: ISTE Faculty Chapter Certificate

1. The Institution of Engineers (India) (IE(I)) Students' Chapter (E&TC Engineering)

The IE(I) Students' Chapter (Electronics and Telecommunication Engineering) is Professional Students' Chapter established in 2006 and till date is one of the most active, dynamic and vibrant Students' Chapter at National Level. IE(I) Students' Chapter (E&TC Engineering) has been selected for **National Level Best Engineering College Students' Chapter Award 8 Times** in **Last 9 Years.** The IE(I) Students' Chapter (E&TC Engineering) has been conducting various activities for students' overall development and enhancement of technical and leadership skills. Activities like Technical Seminars, Workshops, Hands on Trainings, Industrial Visits, Competitive and Leadership Programs are organized to develop and instill technological, competitive and leadership progress within students and events like AISSMS Engineering Today: A National level Students' Technical Symposium and Exposition for the holistic development of students. It provides platform to students to present and develop themselves. It also includes some non-technical events like Teacher's Day and Get together events Induction Program and Farewell Events for fun.

Every year, almost all Students coming in second year takes the membership of the Institution of Engineers (India) Students' Chapter. Every year Students Committee is formed with Student Convener Election to conduct several events. Faculty Adviser is appointed for smooth conduction of activities and events. Faculty Adviser helps committee to bridge the gap between Student's Chapter,



- IE(I) Pune Local Center, IE(I) Maharashtra State Center and IE(I) Head Quarter (HQ), Kolkata. Annual report is submitted to IE(I) HQ, Kolkata in the month of May every Year.
- IE(I) Students' Chapter (Electronics Engineering) has bagged National Level Best Engineering

E&TC Department Students' Chapter bags National Level Awards 8 Times in Last 9 Years. (Best:6 Times and Third Best:2 Times)

The list of Awards is as follows:

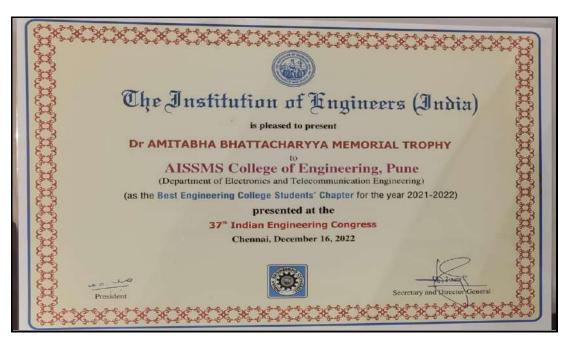
Table 4.6.1.2: List of IE(I) National Level Awards

Sr. No.	Name of Award	Academic Year	Level of Award	Award includes
01	Best Engineering College Students' Chapter Award	2021-2022	National	Rs. 20000/- , Trophy and Certificate
02	Best Engineering College Students' Chapter Award	2019-2020	National	Rs. 20000/- , Trophy and Certificate

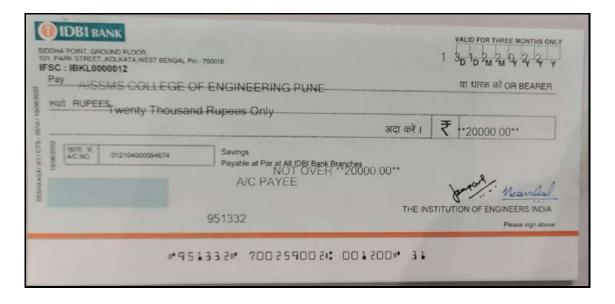


IE(I) Award Trophy for the Year 2021-2022





IE(I) Award Certificate for the Year 2021-2022



Prize Money Cheque: Rs.20000/- for the Year 2021-2022



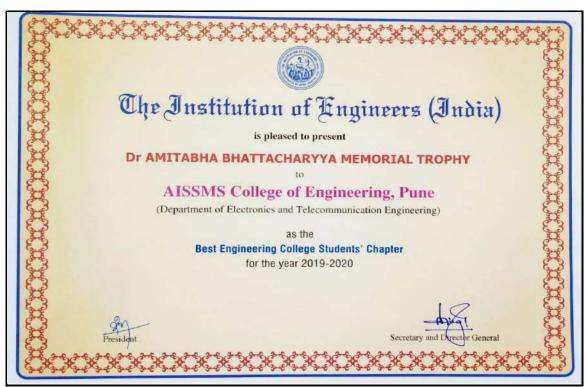


IE(I) Award Distribution Photo held at Chennai for the Year 2021-2022



IE(I) Award Trophy for the Year 2019-2020





IE(I) Award Certificate for the Year 2019-2020



IE(I) Award Ceremony held at Jaipur on 10.11.2019, Dr. D S Bormane, Principal AISSMS COE, Pune, Dr. D G Bhalke, HOD E&TC and Prof. N P Mawale, Faculty Adviser, IE(I) Students Chapter (E&TC Engineering) attended Award Ceremony





IE(I) Award Certificate for the Year 2018-2019

Our IE(I) Students' Chapter Faculty Adviser and Student Conveners are elected on National Level body of IE(I), All India Students Committee (AISC) several times.

The List is as follows:

Table 4.6.1.3: List of IE(I) All India Students Committee (AISC) Elected Engineering Faculty

Adviser Representative

Sr. No.	Name of Faculty Adviser/Student Convener	Academic Year	Level	Elected as
01	Prof. N P Mawale	2022-2023	National	Engineering Faculty Adviser Representative
02	Prof. N P Mawale	2021-2022	National	Engineering Faculty Adviser Representative





चेन्नई : ३७ व्या द इन्स्टिट्यूशन ऑफ इंजिनिअर्स (इंडिया) काँग्रेस दरम्यान 'अभियांत्रिकी शिक्षण उत्कृष्टता पुरस्कार - २०२२' स्वीकारताना पुण्यातील अभियांत्रिकी महाविद्यालयातील प्राध्यापक नितीन मावळे.

'एआयएसएसएमएस'ला राष्ट्रीय अभियांत्रिकी शिक्षणाचा पुरस्का

पुणे, ता. २३ : ऑल इंडिया शिवाजी मेमोरिअल सोसायटीच्या (एआयएसएसएमएस) पुण्यातील अभियांत्रिकी महाविद्यालयाला चेन्नई येथे झालेल्या ३७ व्या द इंजिनिअर्स इन्स्टिट्यूशनऑफ काँग्रेस (इंडिया) दरम्यान 'अभियांत्रिकी शिक्षण उत्कृष्टता पुरस्कार - २०२२' मिळाला. शैक्षणिक क्षेत्रातील उत्कृष्ट योगदानाबद्दल तमिळनाडूचे शिक्षण मंत्री डॉ. एच. ओ. ठाकरे यांच्या हस्ते या बाबतचे प्रमाणपत्रही मिळाले.

प्राध्यापक व सल्लागार नितीन मावळे यांनी हे प्रमाणपत्र स्वीकारले. द इन्स्टिट्यूशन ऑफ इंजिनियर्स (इंडिया) तर्फे एआयएसएसएमएस

अभियांत्रिकी महाविद्यालयाला २०२१-२२ या वर्षासाठी राष्ट्रीय स्तरावरील सर्वोत्कृष्ट अभियांत्रिकी महाविद्यालय 'स्टुडन्ट चॅप्टर अवॉर्ड' मिळाले. या पुरस्कारात २० हजार रुपये, चषक आणि प्रमाणपत्राचा समावेश आहे. या पुरस्कारासाठी संपूर्ण देशातून अभियांत्रिकीच्या ३०० हन अधिक महाविद्यालयांचे अर्ज आले होते. त्यातून 'एआयएसएसएमएस'ला हा पुरस्कार मिळाला. सोसायटीचे सचिव मालोजीराजे छत्रपती, सहसचिव सुरेश प्रताप शिंदे, खजिनदार अजय पाटील आणि प्राचार्य डॉ. डी. एस. बोरमणे यांनी महाविद्यालयातील प्राध्यापक, कर्मचारी आणि विद्यार्थ्यांचे पुरस्कारासाठी अभिनंदन केले.

Our 9 Students bags National Level Scholarship of The Institution of Engineers (India) for the Year 2021-2022.

Table 4.6.1.1 d): List of National Level Scholarship of IE(I) to our Students

Sr. No.	Name of the Students	Class	Scholarship Amount (Rs)
1	Ms. Likhita Pawan Bhujade	FE E&TC	14,000/-
2	Mr. Prajwal Rajendra Kakande	FE E&TC	14,000/-
3	Mr. Rushikesh Umesh Pawar	FE	14,000/-
4	Mr. Pawan Maruti Powar	FE	14,000/-
5	Ms. Janvi Sanjay Mahapadi	FE E&TC	6000/-
6	Ms. Prachi Rajendra Kshirsagar	ТЕ Е&ТС	6000/-
7	Mr. Vijay Dattatray Amble	ТЕ Е&ТС	14,000/-
8	Mr. Niraj Namdev Sabale	ТЕ Е&ТС	6000/-
9	Ms. Deepali Rajendra Dalvi	ТЕ Е&ТС	14,000/-
	Total Schol	arship Received	1,02,000/-





Figure.4.6.4: Recipients of National Level Scholarships of The Institution of Engineers (India)

2.ISTE: Indian Society for Technical Education Students' Chapter

Institute has formed ISTE Students' Chapter in the Academic Year 2019-20 to organize different activities and events in Institute and department. One faculty advisor at Institute Level and One Faculty coordinator at Department Level is appointed for the smooth conduction of activities. Every year a new student committee is formed. The main focus of ISTE Students' Chapter is to organize guest lectures, seminars, skill development workshops etc. Our ISTE Students Chapter received letter of Appreciation from Head Quarter ISTE, New Delhi for constant involvement and persistent hard work towards various students activities remains unaffected during pandemic period.



ISTE Students' Chapter Certificate (2020)





Sir,

Sub : Letter of Appreciation

Greetings! As we know we had a very tough time this year due to pandemic which has not only disturbed our life but also affected many routine activities including education and our students suffered a lot due to prevailing uncertainty and delayed academic session. I sincerely acknowledge that despite variety of tough circumstances, medical concerns, health issues etc. your constant involvement and persistent hard work towards various student activities remain unaffected which is really laudable.

We acknowledge with thanks the receipt of student membership from your student chapter for which student cards and receipt has already been sent to you separately. I realize that without your personal efforts, this quick enrolment of student membership soon after post COVID admissions would not have been achieved. This will certainly find new ways of achieving our goals and this kind of your personal involvement towards ESTE is really unparalleled.

Once again I on my personal behalf and on behalf of ISTE thank you for your dedication and diligent efforts towards enrolling Student membership of ISTE and we highly value the contribution of Faculty Advisor/Principal /Incharge of Student Chapter and all those involved with ISTE Student Chapter of your esteemed institution and sincerely appreciate their efforts and deserve huge applicates.

I look forward the same kind of cooperation from you in future.

Thanking you,

With Regards,

Yours faithfully,

(Prof. V D. Vaidya) Executive Secretary

To The Principal

Appreciation Letter: Ref. No. ISTE/HQ/SM-2020-21 Dated: 18.02.2021



3. IEEE: Institute of Electrical and Electronics Engineering

Department started IEEE Students Branch in the academic Year 2020-21. One Student Branch Counselor is appointed for the smoothconduction of activities. Every year a new student committee is formed. The main focus of IEEE Students Branch is to organize IEEE International and National Conference, guest lectures, seminars and skill development workshops etc.

AISSMSCOE IEEE Students branch received Award:

IEEE Pune Section Emerging Student Branch Award in the Year 2020-2021

The list of Awards is as follows:

Table 4.6.1.4: List of IEEE Awards

Sr. No.	Name of Award	Academic Year	Level of Award	Award includes
01	Student Member Volunteer of The Year-2022 (Mr. Neeraj Mahajan)	2022-2023	IEEE Pune Section	Trophy and Certificate
02	Outstanding Student Branch Counselor-2021 (Dr. D G Bhalke)	2021-2022	IEEE Pune Section	Trophy and Certificate
03	Student Branch Counselor 2021 Award (Dr. D G Bhalke)	2021-2022	IEEE Pune Section	Trophy and Certificate
04	Outstanding Student Branch Chair-2021 (Mr. Piyush Choudhari)	2021-2022	IEEE Pune Section	Trophy and Certificate
05	Student Member Volunteer of The Year-2021 (Mr. Piyush Choudhari)	2021-2022	IEEE Pune Section	Trophy and Certificate
06	Emerging Student Branch Award	2020-2021	IEEE Pune Section	Trophy and Certificate





Award Certificate for the Year 2020-2021

National Level Engineering Events organized by IE(I) Students' Chapter

(E & TC Engineering)

Table 4.6.1.2 a) National Level Engineering Events organized by IE(I) Students' Chapter in 2022-2023

Sr. No.	Date	Title of Activity	Торіс	Speaker/Organizer(s)	No. of Beneficiarie s/ Participant s	Event Outcome (PO)				
	AISSMSET 2022 (Silicon Fusion)									
01	18/10/2022 To 19/10/2022	Drone	Aero task	Dr. P P Vast	40	Project Design Skills				
02	18/10/2022 To 19/10/2022	Robotics	Robosoccer	Ms. Y P Lad	108	Project Design Skills				
03	18/10/2022 To 19/10/2022	Robotics	Robo Wrestling	Ms. P P Tayade	96	Project Design Skills				
04	18/10/2022	Quiz	Comic -Con	Ms. V V Deshmukh	120	Technical				



	To 19/10/2022					Quiz Skills
05	19/10/2022	Science Exhibition	Science Exhibition	Dr. K B Chaudhari	45	Model Design Skills and Public Speaking Skills

Table 4.6.1.2 b) National Level Engineering events organized by IE(I) Students' Chapter in 2021-2022

Sr. No.	Date	Title of Activity	Торіс	Speaker/Organizer (s)	No. of Beneficiaries / Participants	Event Outcome (PO)			
	AISSMSET 2021 (Silicon Fusion)								
01	29/09/2021 To 30/09/2021	Digimania Online Quiz Competition EC-1	Digimania	Ms. V V Deshmukh Ms. V D Nagrale	323	Technical Quiz Skills			
02	29/09/2021 To 30/09/2021	Poster Competition EC-2	IdeaThon	Mrs. R R Itkarkar	70	Project Design Skills			
03	29/09/2021 To 30/09/2021	Coding Competition EC-3	Code Chronicles	Mr. S B Dhekale Mr. V B Gawai	32	Coding Skills			
04	01/10/2021	Science Exhibition	Science Exhibition (SCITECH IDEATHON)	Dr. N N Shejwal	55	Model Design Skills and Public Speaking Skills			

Table 4.6.1.2 c) National Level Engineering events organized by IE(I) Students' Chapter in **2019-2020**

Sr. No.	Date	Title of Activity	Topic	Speaker/Organizer(s)	No. of Beneficiaries / Participants	Event Outcome (PO)
		I	AISSMSET 2019	(Silicon Fusion)		
01	18/09/2019 To 19/09/2019	Drone Competition EX-1	Air-O-Task (Drone)	Mr. N P Mawale Mrs. R R Itkarkar	77	Project Design Skills
02	18/09/2019 To 19/09/2019	Robo Competition EX-2	Robo Revolution 2.0 (Robo Soccer)	Mrs. K. B. Choudhari Mrs. V S Navale	189	Project Design Skills
03	18/09/2019 To 19/09/2019	Robo Competition EX-2	Robo Revolution 2.0 (Robo Reselling)	Mrs. K. B. Choudhari Mrs. V S Navale	189	Project Design Skills
04	14/09/2019 To 19/09/2019	Digimania EX-3 (Technical Quiz) (QC)	Digimania (Elex/E&TC)	Mr. N. P. Mawale Ms. V V Deshmukh Mrs. Y P Lad	472	Technical Quiz Skills

E & TC Engineering Department



05	14/09/2019 To 19/09/2019	Digimania EX-3 (Technical Quiz) (QC)	Digimania (Comp/IT)	Mr. N. P. Mawale Ms. V V Deshmukh Mrs. Y P Lad	472	Technical Quiz Skills
06	14/09/2019 To 19/09/2019	Digimania EX-3 (Technical Quiz) (QC)	Digimania (Electrical)	Mr. N. P. Mawale Ms. V V Deshmukh Mrs. Y P Lad	472	Technical Quiz Skills
07	18/09/2019 To 19/09/2019	Design Competition EX-4	Electro-Trade (Aptitude Test)	Mr. A Y Kazi Ms. V D Nagrale	29	Design Skills
08	18/09/2019 To 19/09/2019	Design Competition EX-4	Electro-Trade (Design)	Mr. A Y Kazi Ms. V D Nagrale	29	Design Skills
09	20/09/2019	Model/ Design Competition	Science Exhibition	Mr. S B Dhekale	300	Model Design Skills and Public Speaking Skills



Figure. 4.6.1.1: Poster: 18th AISSMS Engineering Today-2023



Figure. 4.6.1.2: Poster: 17th AISSMS Engineering Today-2022



Figure.4.6.1.3: Poster: 16th AISSMS Engineering Today-2021



Media Coverage for National Level Event AISSMS Engineering Today is as follows:



Figure. 4.6.1.4: Media Coverage: AISSMS Engineering Today



लक्षकेंद्रित ध्येय, चिकाटी ही यशाची गुरुकिल्ली

७ पुणे, (वा.) लक्षकेंद्रित ध्येय आणि चिकाटी ही यशाची गुरुकिल्ली असून सर्व आव्हानांवर मात करण्यासाठी जीवनात नेहमी नवनवीन गोष्टी, तंत्रज्ञान शिकत रहा असे मत फ्लीटगार्ड फिल्टर्स प्रायव्हेट लिमिटेडचे माजी कार्यकारी अध्यक्ष सदाशिव पंडित यांनी व्यक्त केले.ऑल इंडिया श्री शिवाजी मेमोरियल सोसायटीच्या अभियांत्रिकी महाविद्यालयाच्या 'एआयएसएसएमएस इंजिनियरिंग टुडे-२०२३' च्या (दि.१४) सप्टेंबर रोजी आयोजित केलेल्या उद्घाटन समारंभात ते



बोलत होते. या उदघाटनप्रसंगी सर्व विभागप्रमुख, शिक्षक व विद्यार्थी मोठ्या संख्येने उपस्थित होते.इंजिनियरिंग टुडे-२०२३ सारखे उपक्रम नावीन्य, संशोधन, ज्ञान आणि सर्जनशीलता एकत्रित ऐवुन जागतिक बदल घडवून आणण्यात महत्वपूर्ण योगदान देत असल्याचे सन्माननीय अतिथी ऋता बर्वे यांनी सांगितले. विद्यार्थ्यांनी शिक्षकांच्या मार्गदर्शनाखाली विद्यार्थ्यांसाठी आयोजित केलेला इंजिनियरिंग दुडे हा उपक्रम हा शैक्षणिक विकासासोबत, सर्वांगीण विकास करून, आयुष्यात यशस्वी होण्यात महत्वपूर्ण भूमिका बजावत असल्याचे प्राचार्य डॉ. दत्तात्रय बोरमणे यांनी सांगितले. सूत्रसंचालन कु. वैष्णवी पाटील यांनी केले.

Figure. 4.6.1.5: Inauguration Ceremony News: (Date: 20.09.2023)
18th AISSMS Engineering Today-2023



Figure.4.6.1.6: Advertisement in Navarashtra News Paper





Figure.4.6.1.8: Gold Certification for Energy Literacy Training to 1000+ Peoples

National Level Organization of Western Regional Conclave Of IEI Students' Chapters

S.N	Date	Activity	Topic	Speaker	No. of Participants							
	3 nd Quarter October 2021 to December 2021											
		First Western Re	gional Conclave of Students'	Chapter -2021								
	Role	0 0	s in Smart, Sustainable and I	Renewable Techno	ologies							
		D	Oates: 09-10 December 2021									
1	09/12/2021	Technical Quiz										
	to 10/12/2021											
2	09/12/2021	Project Competition]									
	to 10/12/2021		IEI Western Regional Conclave of Students'	Prof. Nitin P Mawale,	2500+							
3	09/12/2021	Paper Presentation	Chapters Chapters	Organizing	2300+							
	to 10/12/2021		Chapters	Secretary								
4	09/12/2021	Poster Competition										
	to 10/12/2021											



5	09/12/2021	Coding on MATLAB
	to	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	10/12/2021	
6	09/12/2021	Circuit Wizard
	to	
	10/12/2021	
7	09/12/2021	Drone Competition
	to	
	10/12/2021	
8	09/12/2021	Robotics
	to	Competition
	10/12/2021	
9	09/12/2021	Digimania
	to	
	10/12/2021	

Other Engineering Events: 2021-2022 (CAY m-1)

Table 4.6.1.2 d) Engineering Events organized by IE(I) Students' Chapter in 2021-2022

Sr. No.	Date	Title of Activity	Topic	Speaker/Organizer(s)	No. of Beneficiaries/ Participants	Event Outcome PO
01	07.07.2021	Webinar	Webinar on Entrepreneurship and Atmanirbhar Bharat for Start UP India	Dr. Enti Ranga Reddy,	200	Entrepreneu rship & Start-up Skills
02	23.08.2021	Webinar	Opportunities and Preparation for Campus Placement.	Mr. S P Raoborde, TPO, JSPM, Pune Mr. S B Dhekale	122	Campus Placement Skills
03	23.08.2021	Webinar	Being Interview Ready and Cultivating Emotional Intelligence for Work Ready	Ms. Monika Nehe, Assistant Manager,US West TCS Mrs. V S Navale Dr. P P Vast	137	Interview Skills
04	24.08.2021	Webinar	Panel Discussion:	BE E&TC 2020-21 Batch Students. Mr. S B Dhekale	100	Interview Skills
05	24.08.2021	Webinar	Key to Stress and Time Management.	Dr. R. Jalnekar, Director, VIT, Pune Mr. N P Mawale	171	Stress and Time Managemen t Skills
06	24.08.2021	Webinar	Outcome Based Learning	Dr. D G Bhalke, HOD E&TC	50	OBE Skills
07	25.08.2021	Webinar	Internship and Innovation as a Career Opportunity	Mr. Suryakant Dodmise,SIBIC Business Incubator,Founder and Chief Executive Officer Mrs. K B Chaudhari Ms. V D Nagrale	90	Internship and Innovation Skills



08	25.08.2021	Webinar	Problem Based	Dr. Gayatri M Phade,	112	PBL Skills
08	23.08.2021	Wedmar	Learning (PBL)	Professor, Sandip	112	PDL SKIIIS
			Learning (1 DL)	Foundation Nashik		
				Mrs. R R Itkarkar		
09	26.08.2021	Webinar	Students	Mr. Rajesh Vartak	100	InternshipSk
09	20.06.2021	vv comai	Internship	Ms. V V Deshmukh	100	ills
10	26.08.2021	Webinar	Counseling	Mr. Touheed Mujawar,	153	Professional
10	20.00.2021	WComai	Session for	CEO and Founder	133	Skills
			Personal and	Center of Carrier		Skills
			Professional	Development and		
			Growth.	Placement		
			Growth.	Mr. V B Gawai		
11	27.08.2021	Webinar	Career Scope in	Mr. Avinash Chavan,	73	Career
111	27.00.2021	VV Comui	IT Sector	Software Developer,FIS	, ,	Skills
			II Sector	Global		Skins
				Mr. V B Gawai		
12	27.08.2021	Webinar	Project Based	Dr. Shripad	78	PBL Skills
12	2710012021	,, c cinwi	Learning (PBL)	Bhatlawande, HoD	, 0	
			2001111118 (122)	E&TC VIT Pune		
				Mrs. R R Itkarkar		
13	31.08.2021	Webinar	Benefits of	Mr. N P Mawale	56	Leadership
			Student Chapter			Skills
14	31.08.2021	Webinar	Two Days hands	Mr. Arunjit Choudhary,	87	Technical
	&		on Workshop	CEO,EBTS		Skills
	01.09.2021		"Machine	,		
			Learning"	Keynote address by Mr.		
				Bharat Patel		
				Mr. V B Gawai		
				Mr. N P Mawale		
15	05.09.2021	Webinar	Teachers Day	Dr. D S Bormane	67	Event
			Celebration	Dr. D G Bhalke		Managemen
				Mr. N P Mawale		t Skills
16	06.09.2021	Online	1 Week	Speakers from RGB	64	Drone
	to	Student	Drone Operations	Buds Group		Developmen
	10.09.2021	Development	Development			t Skills
		Program		Mr. N P Mawale		
17	04.10.2021	Webinar	Career	Mr. Akhilesh Deo,	80	Career
			Opportunities in	Director, Automate		Skills
			Artificial	Engineering Pvt. Ltd.		
			Intelligence and	Pune Ms. Shweta		
			Machine	Chaudhari, Senior		
			Learning	Software Developer,		
				Harbinger Systems		
1.0	00.10.2021	*** 1 '	YY 6 1	Ms. S A Takalkar		
18	08.10.2021	Webinar	How Graduates	Ms. Khushboo Varma,	66	Career
			can manage their	Soft Skills Trainer at		Skills
			career amid	ITM Business		
			CORONAVIRU	School, Mumbai		
10	00.10.2021	XX7 - 1. *	S Leave in a section	Mr. N P Mawale	00	τ
19	09.10.2021	Webinar	Learning and	Ms. Manisha Sachdev,	88	Learning
1			Upskilling during	Head Student,		and
			Global Crisis	learning Vertical, ITM		Upskilling
20	12 10 2021	Wahinan	Evanvillia a V	Group Mumbai	00	Skills
20	13.10.2021	Webinar	Everything You	Mr. Jagdish A Patel	88	Incubation
			Should Know	(Incubator Manager,		and Startup
	1		About Incubation	SANDIP TM Incubator		Skills



			1	A:-4:>	<u> </u>	
				Association)		
				Mr. V B Gawai		
21	18.11.2021	Seminar	Career path in		73	Career
			RED HAT			Skills
			LINUX	Ms. V D Nagrale		
22	09.12.2021	Hybrid mode	Digimania	Ms. V V Deshmukh	92	Technical
	to	Western				Skills
	10.12.2021	Regional				
		Conclave of				
		Students'				
		Chapters of				
		The Institution				
		of Engineers				
		(India)				
23	09.12.2021	Hybrid mode	Drone	Dr. P P Vast	32 Teams	Design
	to	Western	Competition			Skills
	10.12.2021	Regional	1			
		Conclave of				
		Students'				
		Chapters of				
		The Institution				
		of Engineers				
		(India)				
24	09.12.2021	Hybrid mode	Robotics	Mr. V B Gawai	63 Teams	Design
27	to	Western	Competition	Mi. V D Gawai	05 Teams	Skills
	10.12.2021	Regional	Compension			SKIIIS
	10.12.2021	Conclave of				
		Students'				
		Chapters of				
		The Institution				
		of Engineers				
		(India)				

Other Engineering Events: 2020-2021 (CAYm2)

Table 4.6.1.2 e) Engineering events organized by IE(I) Students' Chapter in 2020-2021

Sr. No.	Date	Title of Activity	Topic	Speaker/Organizer(s)	No. of Beneficiaries/ Participants	Event Outcome PO
01	08.05.2020	Webinar	Enhancing Human Skills	Dr Pravin Paritkar, CEO	90	Human Skills
02	14.05.2020	National Webinar	Robotics Process Automation	Mr. Krishna Raju Mr. Mr. ArjunMeda Mr. Lovneet Sharma Automation Anywhere, Bangalore	1511	RPA Skills
03	15/05/2020	Webinar	Career Options and Opportunities for E &TC Graduates	Mr. Renjith C. V. ,Product Designer, Philips India Ltd. , Pune	111	Career Selection Skills
04	16/05/2020	Webinar	Approach to Goal Based Financial Investment &	Mr. Siddharth Shah, Senior Investment Counselor, Wealth	102	Financial Planning Skills



			Importance of Planning	Managers India Pvt. Ltd., Pune		
05	16/05/2020	Webinar	"IEEE Conference Quality, Writing Methodology about research paper and publication platform	Dr. Lance Fung, Professor, Murdoch University, Western Australia, Dr. Chankya Kumar Jha, Vice Chair HAC IEEE India Council and Dr. Saurabh Mehta, Chief Academic Officer, VIT	251	Technical Paper Writing, Publications Skills
06	23/05/2020	Webinar	Data Engineering, Data Analysis and Business Intelligence	Mr. ShubhamGhodake, Junior Decision Scientist at MU Sigma Inc., Bengaluru and Former Head and Founder member of Aviot -O- Virtue (AISSMS COE Drone & Robotics Club)	103	Data Science Skills
07	23/05/2020	Alumni Interaction	Alumni Interaction and Panel Discussion	Mr. SujayBodhani, Tata Motors Ltd., Mr. Akshay Misal, John Deere	57	Career Guidance Skills
08	24/05/2020	Webinar	Career Opportunities in Indian Army	Major Anand S. Patharkar, Sena Medal	521	Career Guidance Skills
09	24/05/2020	Webinar	Intellectual Property Rights	Dr. B. K. Sarkar, Director, GEH-Research Lab	511	IPR Skills
10	25/05/2020	Webinar	Usage of UAV's in COVID 19	Mr. Akash P. Malas, R & D Engineer, Symtronics Automation Associate, Pune	104	Drone Design Skills
11	26.05.2020	National Webinar	Genius Code: Performance of Science	Mr. Tejas Toro	1315	Mental Skills
12	30.05.2020	International Webinar	Leadership Development at Women Professional Entrants	Mrs. Priti Munshi Principal Global Services, Pune	1507	Leadership Skills
13	30/05/2020	Webinar	MATLAB Tools for Deep Learning	Mr. Suraj Gawande, Sr. Application Engineer, Designtech Systems Ltd.	150	Modern Tools Skills
14	30/05/2020	Webinar	IOT Applications	Mr. AbhigyanamGiri, Training Head, IndEyesInfotech Pvt. Ltd.	1504	IOT Skills
15	31.05.2020	International Webinar	Advanced Digital Content Creation Tools for Education	Mr. Rajendra Khope IO Care, Pune	1021	Digital Tools Skills
16	03.06.2020	International Webinar	"Study Opportunities in USA post Covid-	Mr. K P Singh, CEO, And Founder IMFS & Ms. Sara Nutsch,	753	Career Selection Skills



	Ī	1	100		T	I
			19"	Marketing and		
				Recruitment Manager,		
				Oregon State University, USA		
17	07.06.2020	International	Do Engineering		1503	Committee
1 /	07.06.2020	Webinar	Re - Engineering The Supply	Maj. Gen. Dr. Souresh Bhattacharya,	1303	Supply Chain Skills
		vv Comai	Chain:	VSM (Retired), SDG,		Chain Skins
			Imperatives for	Institution of Engineers		
			Post Pandemic	(India), Kolkata		
			Scenario."	(,,		
19	12.06.2020	Online	NCIET-2020	Dr. Munir Sayyyed	501	Paper
		National		General Manager,		Writing and
		Conference		JIO, Mumbai		Presentation
20	14.06.2020	T. 4 4' 1	6 E 1 1 . 114	M. C.	1507	Skills
20	14.06.2020	International Webinar	"Employability Skills 2020- Post	Mr. Swaaruup Gandewar,	1507	Employabili
		Webiliai	Covid-19"	Founder GTGP, Nagpur		ty Skills
21	18.06.2020	International	"Employability	Mr. Akshai Seshadri	1003	Career
21	10.00.2020	Webinar	in Current	Wiff. 7 Reside Sestiden	1003	Skills
			Situation"			
22	June 2020	National Level	Quiz on Drone	Mr. N P Mawale	503	Drone Skills
		Online Quiz		Mr. V B Gawai		
23	June 2020	National Level	Quiz on Robotics	Mr. N P Mawale	507	Robotics
24	1 2020	Online Quiz	I D	Mr. V B Gawai	65 00	Skills
24	June 2020	Certification	Learn to Design Solar for Homes	In Association with	6508	Solar
	Onwards	Course	Solar for Homes	AICTE and Energy Swaraj Foundation		Design Skills
25	21.06.2020	International	International	Heartfulness Experts	2501	Yoga Skills
23	21.00.2020	Level	Yoga Day-2020	Treattrainess Experts	2501	1 oga okms
26	22/06/2020	Webinar	Webinar on	Mr. Zeeshan Ahmed	1307	Publications
			Typeset Studio			Skills
27	26.06.2020	National Level	Tribute	Mr. N P Mawale	2306	Historical
	to	Quiz	Chhatrapati			Skills
28	15.07.2020	T. 4 4' 1	Shahu Maharaj	D. D.C.DlII	1305	Tr1-1
28	05.07.2020	International Webinar	"Enhancing Quality of	Dr. D G Bhalke	(28 Countries,	Teaching Skills
		Webillar	Education of		90	Skills
			Online Teaching		International	
			Through		Participants)	
			Outcome Based		,	
			Education"			
29	06.07.2020	Inauguration		Dr. D G Bhalke	306	Career
		Ceremony of	1.Welcome			Skills
		Induction	Address			
		Program	2.Department Introduction			
			3. Why E &TC?			
30	06.07.2020	Webinar	Health &	Mr. Arvind Goel	306	Art of
	00.07.2020		Happiness	Youth Leader & Mentor,		Living
			Workshop	International		Skills
				Association for Human		
				Values		
31	06.07.2020	Webinar	Virtual Internship	Mr. Swaarrup	307	Internship



	1	T	1	C 1		01.11
				Gandewar, Founder and CEO,		Skills
				GTGP, Nagpur		
32	06.07.2020	Webinar	Physical fitness:	Dr.M.M.Kondhare,	309	Extra
32	00.07.2020	Wedman	promotion to	(Physical Director),	307	Curricular
			Sports and	Ms.K.N Kulkarni		Skills
			Cultural activities	(Cultural Coordinator)		Skiiis
				(Canara Coordinator)		
33	06.07.2020	Webinar	CITP Support for	Dr. A.V.Waghamre	309	Career
			the Students	(Head, CITP)		Skills
				Ms.V.D.Nagrale		
				(Dept. CITP		
				Coordinator)		
34	07.07.2020	Webinar	Importance of	Mr. Rjesh Vartak,	507	Project and
			Project from	Director and Chief		Placement
			Placement point	Mentor,		Skills
25	07.07.2020	Webinar	of view Role of	Texceed Technologies	1504	Professional
35	07.07.2020	wedinar	Role of Professional	Dr. S M Ali, Director, Membership,	1504	Societies
				IE(I), Kolkata		Students'
			Students' Chapter in Enhancing	112(1), IXUINATA		Chapter
			Engineering			Skills
			Students Career			Skiiis
			Growth and			
			increasing			
			Opportunities			
36	07.07.2020	Webinar	Opportunities and	Dr. Nilanjan Sengupta,	1504	Research
			Challenges for	Director, Technical,		Funding
			Research and	IE(I),		Skills
			Development	Kolkata		
			&IE(I) Initiative			
			for Research			
37	08.07.2020	Webinar	Funding	Mr.Akshai Sheshadri	78	LifeLong
37	08.07.2020	Wedmar	Life Long Learning Skills:	Member, Heartfullness	78	Life Long Learning,
			Meditation, Yoga	Wember, Heartrumess		meditation
			and Physical			and Yoga
			Fitness			Skills
38	08.07.2020	Webinar	Being Interview	Ms. Monika Nehe,	85	Interview
			Ready-The do's	Lead -business Group		Skills
			and don'ts in any	HR, BFSI-US West,		
			Interview!	TCS		
39	08.07.2020	Webinar	Stress	Dr. C A Halingale,	406	Stress
			Management	Nirmal Hospital		Managemen
				Vesanmukti Kendra		t Skills
40	00.07.2020	Wahina	II alsotle	Miraj	107	II o ala - (1 /
40	08.07.2020	Webinar	Hackathon	Mr.Shubham Badhe, Alumni of AISSMSCOE	107	Hachathon/
			Competition Preparation	and student		Design Skills
			1 1cparation	IIM,Ahmadabad		SKIIIS
41	08.07.2020	Webinar	Financial	Mr Siddharth Shah,	503	Financial
-4.1	00.07.2020	11 Comai	Management to	Senior Investment	505	Planning
				~		1 1011111115
				Counselor.		Skills
			life long learning Skill	Counselor, Wealth Managers India		Skills



42	09.07.2020	Webinar	Opportunities and Preparation for Campus Placement	Prof. S. P. RaoBorde, Secretary, MahaTPO & TPO, JSPM RSCOE, Pune	503	Career Selection Skills
43	09.07.2020	Webinar	How to kick start your campus Preparation	Dr. Madhav Raul, Joint Secretary, MahaTPO	503	Campus Preparation Skills
44	09.07.2020	Webinar	Resume Building	Mr. Kedar Chaudhari, Staff Engineer, NSX Division, VMware	503	Resume Writing Skills
45	09.07.2020	Webinar	Online Certification	Mr Lalit Bhalerao, Senior Consultant, Price Water House Coopers Pvt Ltd	307	Online Certification s Skills
46	09.07.2020	Webinar	Entrepreneurship Quality	Mr. Ishan K, Founder, CMO & Lead Strategist, Embedgallery Electronics Pvt Ltd	501	Entrepreneu rship Skills
47	10.07.2020	Webinar	Opportunities and Challenges for Industry 4.0: What Industry Looks in Students	Dr. Enty Rangga Reddy, Chairman and Managing Director,Legend Technologies (India) Pvt. Ltd.Bangalore& AISC Chairman, IE(I), Kolkata	1509	Industry 4.0 Skills
48	10.07.2020	Webinar	Higher Educational Opportunities and Carrier prospects in Germany	Ms. Nikita Gaikwad, Consultant, Berlin (Germany), Masters in Logistic, Berlin (Germany) Supply Chain Integration in Wayfair	1509	Higher Study Skills
49	10.07.2020	Webinar	Alumni panel Discussion: Industry expectations from the students	Mr Nadeem Athani, Team Leader, Sasken Technologies Ltd, Gaurav Powar, Vice President, Diligence Tech& Gunjan Naik, Data Scientist, Deep Tek Pvt. Ltd.	509	Career Selection Skills
50	10.07.2020	Webinar	Opportunities in RPA	Mr. Sagar Kothe, Associate Director, PWC India	1004	RPA Skills
51	02.09.2020	Webinar	Embedded Systems and RTOS	Mr. Dnyanesh P Joshi Senior Software Engineer, Magic Leap San Jose, California Dr. P P Vast	98	Embedded Skills
52	05.09.2020	Webinar	Teachers Day Celebration	Dr. D S Bormane, Principal, AISSMSCOE, Pune Dr. D G Bhalke, HOD,	106	Event Managemen t Skills



				E&TC Mr. N P Mawale		
53	15.09.2020	Webinar	"Career Opportunities in Civil Services for Engineers"	Mr. Prateek V Thube Indian Police Service (IPS) Superintendent of Police (SP) Assam and Meghalaya Cadres Mr. N P Mawale	132	Career Skills
54	15.09.2020	Webinar	Opportunities & Challenges for Electronics Engineering Students	Dr. D G Bhalke HOD &Professor E&TC Engineers Mr. N P Mawale	132	Career Skills
55	16.09.2020 to 27.09.2020	Aarambh TechnoThon	Drones Quiz Competition	Mr. N P Mawale Mr. V B Gawai	305	Drone Skills
56	16.09.2020 to 27.09.2020	Aarambh TechnoThon	Robotics Quiz Competition	Mr. N P Mawale Mr. V B Gawai	206	Robotics Skills
57	24.09.2020	Webinar	Virtual DELDSIM Simulator for Digital Circuits	Mr. Akshay Kudale Founder, DELDSIM, Pune Mr. N P Mawale	60	Simulation Skills
58	25.09.2020	Webinar	Create Your Success Story with Growth Mindset	Dr. Rupali Pawar, Founder and CEO TechieMindz Mrs. R R Itkarkar	101	Motivationa 1 Skills

Table 4.6.1.3 a) List of Engineering Events organized by IEEE Student Branch in 2021-22

Sr. No.	Date	Title of Activity	Торіс	Speaker/Organizer(s)	No. of Beneficiaries/ Participants	Event Outcomes PO
01	05.10.2021	International Webinar	Smart, Clean and Green Electrical Energy for the Sustainable Future' on the occasion of IEEE Day 2021 Celebration	Dr. Deepak Waikar, Chair, IEEE Education Society, Singapore Chapter	103	Sustainability Skills
02	23.10.2021	Programming Competition	IEEE Xtreme 15.0 Programming Competition	Proctor – Dr. M.H.Dhend, IEEE Senior Member (No. 93243765), AISSMS COE Pune	15	Programming Skills
03	29.10.2021 to 30.10.2021	International Conference	Smart Gen Computing, Communication and Networking SMARTGENCON-	Keynote Speakers: Dr. Deepak Waikar, Chair, IEEE Education Society, Singapore Chapter	157	Presentation Skills



			2021 Technically Co- Sponsored by IEEE Pune Section	Dr. Alexandros- Apostolos A. Boulogeorgos, Research Assistant/Project Engineer, University of Piraeus, Greece Raneen Kango, Software Engineer, Amaan, Jordan Dr. Gwo Giun Chris Lee, Professor, National Cheng Kung University, Taiwan		
04	13.11.2021	Webinar	Expert Talk on Battery Management and Designing – A Practical Approach	Mr. Rushab Shingi, Design Engineer, AX Design Pune	100	Design Skills
05	15.11.2021 to 18.11.2021 & 22.11.2021 to 23.11.2021	Webinar Series	Webinar Series on Research Methodology	Dr. Mausmi Munot (PICT Pune) Dr. Nilesh Uke (Principal, Trinity Academy of Engineering, Pune) Dr. S M Gulhane (Principal, Pravara Rural COE, Pune) Dr. Parikshit N Mahalle (VIIT, Pune) Dr. Piyush Kumar (Professor at East West COE, Bengaluru) Dr. D G Bhalke (AISSMSCOE, Pune)	91	Research
06	10.02.2022	Membership Drive	AISSMS COE IEEE membership drive for SE in offline	Mrs. R R Itkarkar &Mr. Piyush Chaudhari	75	Leadership Skills
07	28.02.2022	Science Exhibition	Science Exhibition at Kalyan Goan under AISSMS COE IEEE student Branch and donated science projects to Madhyamik Vidyalay, Kalyan, Pune	Mrs. R R Itkarkar, AISSMS COE IEEE EXICOM Team and IEEE student Members	35	Technical Skills
08	06.04.2022	Expert Lecture	GSM Technology and 4G LTE Technology	Mr. Nilesh Wankhede BSNL, Pune	67	Technical Skills



Table 4.6.1.3 b) List of Engineering Events organized by IEEE Student Branch in 2020-21

Sr. No.	Date	Title of Activity	Торіс	Speaker/Organizer(s)	No. of Beneficiaries/ Participants	Event Outcomes PO
01	25.09.2020	Webinar on 'Create Your Success Story with Growth Mind set'	Create Success Story with Growth Mind set	Dr. Rupali Pawar, Founder & CEO, TechieMindz	104	1) Practice Growth Mindset for Academics, Professional and Personal Success and 2) Develop Skills Set for Job Interviews & Aptitude Tests.
02	03.10.2020	Inauguration of AISSMSCOE IEEE Student Branch	Inauguration of AISSMSCOE IEEE Student Branch (STB- 98723)	Mr. Girish Khilari, Chair-IEEE Pune Section, Dr. Chanakya Kumar Zha, Vice- Chair, Humanitarian Activity, IEEE India Council, Mr. Jagdish Choudhary, Vice-Chair, IEEE Pune Section, Dr. Amar Buchade, Secretary, IEEE Pune Section, Dr. Rajashree Jain, Treasurer, IEEE Pune Section, Dr. P.B.Mane, Principal, AISSMS IOIT & Chair- SAC IEEE Pune Section	115	1) Members must know about Benefits of IEEE Membership, Women in Engineering (WIE), IEEE Student Activities. 2) Learn about IEEE Student Branch Planning



03	03.10.2020	Webinar on- 'Engineering Graduate- A Road Map'	Engineering Graduate- A Road Map	Dr.Shankar Nawale, Principal, N.B.Navale Sinhgad College of Engineering, Solapur	109	1) Students must know about required Graduate Skills Set, Aspects of Project and Problem based learning, Opportunities for E&TC Engineers in various sectors.2) Develop Integrated Engineering Approach
04	06.10.2020	IEEE Day 2020 Celebration & Webinar On 'Evolution of Telecom Network – Landline to 5G'	Evolution of Telecom Network – Landline to 5G	Mr. Avnish Kumar, Head, RNOP, MAN / PLG, Etisalat (Emirates Telecom), Dubai	205	1) Know about Evolution of Telecom Network 2) Gain information about 5G and its practices done in worldwide
05	28.10.2020	Webinar on 'Resume Preparation'	Resume Preparation	Dr. Madhav Raul, Head-T&P SVPM's COE Malegaon,Baramati	166	 Students must know about Essentials of resume. Get tips for writing great resume.
06	31.10.2020	National Webinar on 'My Journey to Brain'	Journey to Brain	Hon. Prof. Prabhat Ranjan, Vice- Chancellor, D.Y.Patil International University, Akurdi, Pune. (Former Executive Director, TIFAC, New Delhi).	294	1) Participants get to know about Prof. Ranjan Prabhat's research & inventions in field of Nuclear Physics, Space Research & Brain Computer Interface. 2) Speaker motivated participants to contribute for



						research work in their respective fields.
07	06.11.2020	Webinar on 'Introduction to Industrial IoT and Its Prospects'	Introduction to Industrial IoT and Its Prospects	Mr. Sandeep Shroff, Founder & CEO Autointell Services	103	Study in brief about IIoT and its evolution with a brief timeline of Industrialization and Internet & typical 3 tier IIoT Architecture & Coorelations among M2M, WSNs, IOT.
08	11.11.2020	Webinar on 'How to write Research Papers'	How to write Research Papers	Dr. Parikshit N. Mahalle, HOD Computer Engineering, S.K.N COE, Vadgaon, Pune	152	Guidance about Terminologies related to a research paper, Elements of a research paper (content, style, format) & Tools that can be used when writing a research paper.
09	13.11.2020 to 18.11.2020	Awareness campaign to celebrate Diwali Safe & Eco- Friendly and Promote 'Vocal for Local' mission	Awareness campaign to celebrate Diwali Safe & Eco- Friendly and Promote 'Vocal for Local' mission	AISSMSCOE, IEEE Student Branch, NSS Unit AISSMSCOE, Rotaract Club Kalyaninagar &Jagruti Group Pune	508	1) Create awareness about Environment. 2) Take pledge to Celebrate Diwali Safe & Eco-Friendly and Promote 'Vocal for Local' mission.
10	26.12.2020	Webinar on 'Benefits of IEEE Membership'	Benefits of IEEE Membership	Dr. P.B.Mane, Chair-SAC, Principal, AISSMS IOIT Dr. Amar Buchade, Secretary, IEEE Pune Section Mr. Siddharth Saoji, Co-SSR, IEEE Pune Section Ms. Vaishnavi Nair, Co-SSR, IEEE Pune Section	86	Student got information about benefits of IEEE Membership, IEEE Student Activities, Research Paper Publication with IEE, Competitions organized by IEEE, Awards, etc.



		1	1			
11	27.12.2020 to 31.12.2020	IEEE Membership Drive -2021	IEEE Membership Drive -2021	AISSMSCOE IEEE Student Branch (STB-98723)	33	Students got a platform to enrol themselves for IEEE Membership with attractive discounts in membership fees.
12	08.02.2021	Webinar on 'UI Development'	UI Development	Mr Umesh Patil, Project Manager, Infosys	147	1) Students got knowledge about building blocks of UI using HTML, CSS3 & JavaScript. 2) Students got a practical Session of UI Development for Web.
13	10.02.2021	Webinar on 'Importance of AMCAT & Job Prospects in Current Scenario'	Importance of AMCAT & Job Prospects in Current Scenario	Mr. Ankur Srivastava, Senior Manager, AMCAT	126	1) Information about AMCAT & Assessment Techniques of AMCAT 2) Information about Job Prospects& Placements in the current situation
14	17.02.2021	Induction Function of AISSMSCOE IEEE Student Branch Members - 2021	Induction Function of AISSMSCOE IEEE Student Branch Members - 2021	Dr D.S.Bormane, Principal, AISSMSCOE Pune Dr D.G.Bhalke, HOD- E&TC & IEEE Branch Counsellor	49	1) Members of the AISSMSCOE IEEE Student Branch got insights & information about IEEE and how Student Branch planned & execute different activities. 2) Discussion on Annual Plan of AISSMSCOE IEEE Student Branch
15	01.03.2021 to	National Level Workshop on	Technologies for Enabling	Mr. Satheeshkumar, Sr. Embedded Engineer,	703	1) Practical



	02.03.2021	'Technologies for Enabling Wireless Communication'	Communication	Pantech		Session on Arduino Circuits using Arduino IDE & Proteus and Bluetooth Technology using Proteus 2) Practical Demonstration of NodeMCU, ThingSpeak& Message protocols.
16	09.03.2021	Webinar on 'Recruitment Guidance'	Recruitment Guidance	Mrs. Priti Munshi, Senior Delivery Manager, Principal Global Services	104	1) Students got information about How to face Technical/ Non-Technical interviews? 2) Guidance about Resume/CV.
17	10.03.2021	Motivational Talk on 'Journey to NASA'	Journey to NASA	Ms. Leena Bokil, NASA-Honeywell Educator, Science Communicator	137	1) Participants got information about NASA's Educational & Research Programs 2) Speaker hared her research experience with NASA on space mission projects.



Sample Glimpses of Events Organised:





4.6.2 Publication of Technical Magazines, Newsletters, etc. (5M)

4.6.2.1 Publication of Newsletter

Department of electronics and telecommunication engineering publishes bi – annual newsletter to convey department activities and achievements. It contains technical news, technical blogs by students, department activities, awards and achievements (academic, co-curricular and extracurricular) by students and faculty and research paper publications. The copy of newsletter is available at department office in hard form and circulated among all faculty and students in soft form. It is also available on college website.

Table 4.6.2.1.1 Newsletter published by department

Sr. No	Academic Year	Name of The Newsletter	Name of Publisher / Editor	Month and Year of Publication	Students Editors
1		Department Newsletter	Dr S B Dhonde Mrs. V S Navale	June 2023	Ms. Shruti Gadhave Ms. Rajwee Wable
2	2022-23	Department Newsletter	Dr S B Dhonde Mrs. V S Navale	Dec 2022	
3	2021-22	Department Newsletter	Dr D G Bhalke Mrs. V S Navale	June 2022	Ms. Suvidhan Mane Mr. Ashutosh Pardeshi
4		Department Newsletter	Dr D G Bhalke Mrs. V S Navale	Dec 2021	
5	2020-21	Department Newsletter	Dr D G Bhalke Mrs. V S Navale	June 2021	Mr. Swapnil Pawar Ms. Sana Subhedar
6	AVAV A1	Department Newsletter	Dr D G Bhalke Mrs. V S Navale	Dec 2020	



4.6.2.2 Publication of Magazines

Department of Electronics and Telecommunication Engineering also publishes Technical Magazine "ELECTRONICS EXPLORER" to present technical, Communication and artistic skills.

Table 4.6.2.2.1 Technical Magazine published by department

Sr. No	Academic Year	Name of Publisher / Editor	Month and Year of Publication	Students Participation
1	2020-21	Dr. D S Bormane Dr. D G. Bhalke Mr. N P Mawale	July 2020	Ms. Malu Swar (Student Editor) Ms. Tidke Anushka Ms. Rane Diksha Ms Shirode Manashi Ms. Shrishti Mishra Ms. Rajas Soman Ms. Akshata Loya Ms. Pragna Chatla Mr. Rohit Jain Ms. Diksha Ingale Ms. Metha Samiksha Ms. Sana Subhedar Ms. Aishwarya Kadu Ms. Mihika Khair Mr. Arindam Pal Mr. Vignesh Iyer Ms. Saumya Thakur Ms. Sidhhi Nasare (Student Members)



Fig. No. 4.6.2.2.: Department Technical Magazine "ELETRONICS EXPLORER"

4.6.2.3 Magazine published by institute

College magazine "Shivdarpan" offers an opportunity to the students to explore their creativity of Communication Skills through Writing. It has a great educative value and encourages students to think and write. So it develops their Communication/Writing skills. Some of the best paintings and drawing are also published in it.

Table 4.6.2.3.1 Magazine published by Institute

Sr. No	Academic Year	Name of Publisher / Editor	Month and Year of Publication
1	2022-23	Dr. D. S. Bormane/ Mrs. S.J Pachouly	April 2023
2	2021-22	Dr. D. S. Bormane/ Mrs. S.J Pachouly	April 2022
3	2019-20	Dr. D. S. Bormane/ Mrs. S.J Pachouly	April 2020

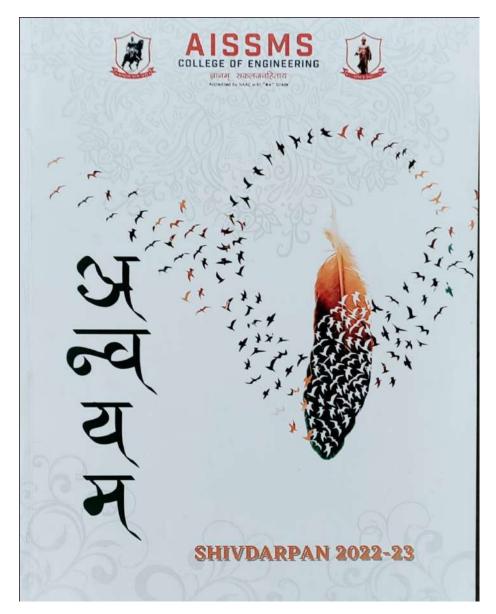


Fig. No. 4.6.2.3.1: Magazine 2022-23

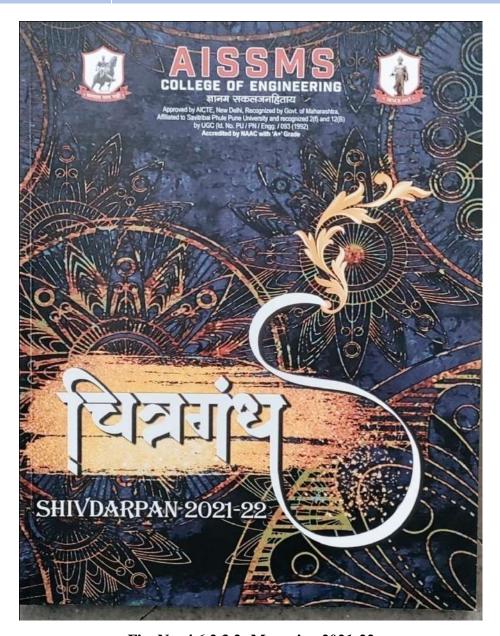


Fig. No. 4.6.2.3.2: Magazine 2021-22



4.6.3 Participation in inter-institute events by students of the program of study (10 M)

- In addition to academics, our students are also motivated to participate in various technical intercollege, State, National and International level competitions like Drone, Robotics, Paper
 Presentation, Workshops, and Project Competitions etc. College provides funding for
 participation in various competitions.
- Many co-curricular events and programs are conducted with a view to attain these attributes in our students. Various activities are organized in association with industries and the expertise available with the Institute is publicized in these events.
- College web site is regularly updated with the latest events taking place in the college.

The detailed list of students participated in inter-institute, State and National events are as follows:

(A) Participation of Students in various events

Table 4.6.3.1 Participation of Students in 2022-23

Sr. No	Name	Date	Event	Conducted by	Rank/Pri ze	Event Outcome
		Co-curr	icular: Particij	pation		
1	Ruthvik Kamble	08.02.2023 to 09.03.2023	30 Days Master class on EV Design using MATLAB	Pantech e- Learning	Participat ion	EV-Design Skills
2	Omkar Mahajan	08.02.2023 to 09.03.2023	30 Days Master class on EV Design using MATLAB	Pantech e- Learning	Participat ion	EV-Design Skills
3 4	Pranav Birade Shirish Nandkar	2022-23	Innovation Idea Competition EUREKA- 22-23	Ashoka Education Foundation's Ashoka Center for Business and Computer Studies (ACBCS),	Participat ion	Innovation Skills



				Nashik		
10	Zeeshan Shaikh					
11	Athary Hapse					
12	Mubin Inamdar	16.12.2022	atics		Doutini 4	
13	Shirish Nandakar	to	st	IIT Bombay	Participat .	Robo Design
14	Dewanshi Agarkar	18.12.2022			ion	Skills
15	Shriyog Shindkar	1				
16	Shashiraj Sahani	1				
17	Prathamesh Vishwas	1				
18	Nikita Patil	1				
19	Pranav Birade	1				
20	Vaishnavi Sawle	1				
21		-				
22	Ashutosh Pardeshi	4				
23	Niraj Sable	-				
	Abhishek Jangam	4				
24	Satyam Walekar	-				
25	Ketaki Nanaware	-				
26	Rajwee Wable					
27	Anand Maratha					
28	Deepali Dalvi					
29	Atif Shikalgar					
30	Deepak Pathak					
31	Prachi Kshirsagar					
32	Samruddhi Jadhav	1.5.10.0000				
33	Zeeshan Shaikh	16.12.2022	atics	HTC D 1	Participat	Robo Design
34	Rajwee Wable	to	chfest	IIT Bombay	ion	Skills
35	Atif Shikalgar	18.12.2022	<u>F</u>			
		Extra-cui	ricular: Partic	ination		
36	Srushti Petkar	22.05.2023	Project	JSPM Pune	Participat	Project Based
37	Kajal Kumbhar	1	Based		ion	Learning
38	Vaishnavi Sawale	1	Learning			C
39	Pranav Birade	1	Contest			
40	Anand Maratha	1	2023			
41	Yash Honkalse	27.04.2023	Project	BVPCOE	Participat	Project Based
42	Palash Ravindra	to	Competition	for Women	ion	Learning
	Dhande	28.04.2023	,National	Pune		
43	Deepak Pathak		Level			
			Technical			
	G1 : ** 1	21.07.2022	Festival	1700750	D · ·	
44	Shivam Kalane	31.05.2023	National	AISSMS	Participat	Innovation
45	Ganesh Kadam	4	Level	COE	ion	Skills
46	Aditya Konkan		Conference			
			on Innovation			
			in			
			Engineering			
			and			
			Technology(
			NCIET			
			2023)			
47	Yash Honkalse	27.04.2023	National	BVPCOE	Participat	Project Based
48	Palash Ravindra		Level	for Women,	ion	Learning
	•	•	•	•		



	Dhande		Project	Pune		
49	Deepak Pathak		Competition			
	•		2023			
50	Shivam Kalane	24.04.2023	Intercollegia	MES	Participat	Project Based
51	Aditya Konkan		te Project	College of	ion	Learning
52	Ganesh Kadam		Competition	Engineering		
			2023	, Pune		
53	Atif Shikalgar	17.02.2023	Robosoccer	IIT	Participat	Robo Design
54	Shashiraj Sahani	to	2023	Hyderabad	ion	Skills
55	Zeeshan Shaikh	19.02.2023				

Table 4.6.3.2 Participation of Students in **2021-22**

Sr. No	Name	Date	Event	Conducted by	Rank/Pri ze	Event Outcome
		Co-curr	icular: Particij	pation		
1	Mr. Parth Umbarkar	25.11.2021	National Level Poster Presentation	JSPM's JSCOE, Pune	Participat ion	Poster Presentation Skills
2	Ms. Deepali Dalvi	18.01.2022	Regional Level	VIIT, Pune	Participat ion	Project Design Skills
3	Mr. Neeraj Mahajan		Project Competition		1011	
4	Mr. Vishal Bandage	18.01.2022	Regional Level	VIIT, Pune	Participat ion	Project Design Skills
5	Mr. Aniket Ajur		Project Competition		1011	
6	Mr. Abhishek Bande					
7	Mr. Arindam Pal	18.01.2022	Regional Level	VIIT, Pune	Participat ion	Project Design Skills
8	Mr. Prathmesh Borle		Project Competition			
9	Ms. Pooja Kulkarni					
10	Mr. Ashutosh Pardeshi	March 2022	Robo Soccer	Parul University,	Participat ion	Robotics Design Skills
11	Mr. Kiran Zure	1		Gujarat	1011	Design Skins
12	Mr. Satyam Walekar					
13	Mr. Ruturaj Patil					
14	Ms. Ashwini Balla	1				
15	Mr. Yash Ravangave	1				
16	Mr. Rishi Gandhi	1				
17	Mr.Yashraj Patil					
18	Mr. Ruturaj Patil	04.03. 2022	Technokick	Faculty of	Participat	Robotics
19	Mr. Ashutosh	to	(FOOTPRIN	Technology	ion	Design Skills
	Pardeshi	06.03.2022	TS'22)	& .		
20	Mr. Kiran Zure	1		Engineering		
21	Mr. Satyam Walekar			The		



22	M A 41			M -1		
22	Mr. Atharva			Maharaja		
22	Vyawhare			Sayajirao		
23	Ms. Ashwini Ballal			University of Baroda		
24	Ms. Aishwarya Patil	02.05.2022	Regional	AISSMS's	Participat	Project
25	Mr. Saurabh Jangam	02.03.2022	Level	IOIT, Pune	ion	Design Skills
26	Mr. Himanshu		Project	1011, 1 une	1011	Design Skins
20	Abhiraj		Competition			
27	Mr. Suyash Rajpure	20.05.2022	_	AISSMS	Participat	Donor
28	, , ,	20.03.2022	Paper Presentation	COE, Pune	ion	Paper Presentation
	Ms. Megha Tadge		Fresentation	COE, Fulle	1011	Skills
29	Ms. Monali Londhe	20.05.2022	D	AIGGNAG	D (: : /	
30	Mr. Daideep	20.05.2022	Paper	AISSMS	Participat	Paper
21	Bhingarde		Presentation	COE, Pune	ion	Presentation Skills
31	Ms. Siddhi Deshmukh					SKIIIS
32	Mr. Digvijay Dhere	20.05.2022		A TGG3 TG	D	ъ
33	Ms. Sana Subhedar	20.05.2022	Paper	AISSMS	Participat	Paper
34	Ms. Miheeka Khair		Presentation	COE, Pune	ion	Presentation
35	Ms. Mamta Patni					Skills
36	Ms. Aishwarya Kadu	2022	Toyathon,	Ministry of	Participat	Toycathon
			Physical	Education	ion	Design Skills
			Edition	Innovation		
				Cell &		
				Galgotias		
		E-4		University		
		Extra-cur	ricular: Partici	ipauon		
37	Mr. Piyush Chaudhari	25.11.2021	Career and	IEEE	Participat	Leadership
37	wir. Tryusii Chadanari	25.11.2021	Leadership	Region 10	ion	Skills
			Aid Program	Young	1011	OKIIIS
			(CLAP)	Professiona		
			,	ls		
38	Ms. Shaista Mujawar	25.12.2021	Mazi	Govt. of	Certified	Environment
	v		Wasundhara	Maharashtr	Mazi	and Climate
			Mitra	a	Vasundh	Change Skills
				Enviornme	ara Mitra	-
				mnt and		
				Climate		
				Change		
				Department		
		E-4 •	olom Correct P			
		£xtra-curricu	ılar: Sports Pa	rucipation		
39	Mr. Rohit There	22.12.2021	Table Tennis	MIT-WPU	Participat	Table Tennis
	1.11. ROINT THEIC	22.12.2021	Table Tellins	Summit	ion	Skills
				2021	1011	SKIIIS
40	Ms. Siddhi Nasare	13.03.2022	Table Tennis	ZEST'22	Participat	Table Tennis
70	1415. Diddin Iyasaic	13.03.2022	Table Tellills	COEP	ion	Skills
41	Mr. Aniket Jadhav	13.03.2022	Football	ZEST'22	Participat	Football
71	1411. I MIIKOL JAUHAY	13.03.2022	1 0010411	COEP	ion	Skills
				COLI	1011	SILING



Table 4.6.3.3 Participation of Students in 2020-21

Sr. No.	Name	Date	Event	Conducted by	Rank/Pri ze/	Event Outcome
					Participa tion	
		Co-cu	rricular: Partic	ipation		
1	Mr. Akshay Jadhav	08.06.2020	Webinar:	JSPMs	Participati	Robotics and
	Tari. Tikonay yadnav	00.00.2020	Industry 4.0-Robotics & IOT	Imperial COE & Research, Pune	on	IOT Skills
2	Mr. Piyush Chaudhari	2020-21	Dare to Dream Innovation Contest 2.0 organized by DRDO		Participati on	Innovation Skills
3	Mr. Piyush Chaudhari	2020-21	Internet of things using Arduino through Tinkercad		Participati on	Technical Skills
4	Mr. Satyam Walekar	2020-21	Swayamsidd ha Hackathon		Participati on	Innovation Skills
5	Prachi Kshirsagar	2020-21	Toyotathon 2021		Participati on	Innovation Skills
6	Deepali Dalvi	2020-21	Toyotathon 2021		Participati on	Innovation Skills
7	Ms. Saumya	2020-21	Maharashtra Health Hackathon		Participati on	Social & Innovation Skills
8	Ms. Deepali Dalvi	2020-21	Maharashtra Health Hackathon		Participati on	Social & Innovation Skills
9	Ms. Shruti Gadave	2020-21	Maharashtra Health Hackathon		Participati on	Social & Innovation Skills
10	Mr. Amol Rathod	2020-21	Maharashtra Health Hackathon		Participati on	Social & Innovation Skills
11	Ms. Saumya	2020-21	Efficycle 2020 back team member		Participati on	Design & Innovation Skills



12	Ms. Sapna	2020-21	Efficycle 2020 back team member		Participati on	Design & Innovation Skills						
13	Ms. Siddhi Nasare	2020-21	Efficycle 2020 back team member		Participati on	Design & Innovation Skills						
Extra-curricular: Participation												

(B) Events within the State

The detailed list of students Prizes/Awards in Inter-Institute events are as follows:

Table 4.6.3.4 Prizes/awards received in Inter-Institute Events within State by Students in 2022-23

Sr.	Name	Date	Event	Conducted by	Rank/ Prize	Event Outcome								
No				by		(PO)								
	Co-Curricular: Awards													
1	1 Pranav Birade 19.02.2023 Alacrity-2023 AISSMS's IOIT, Pune Design Skills													
2	Shashiraj Sahani	19.02.2023	Alacrity-2023	AISSMS's IOIT, Pune	1 st	Design Skills								
3	Atharv Hapse	19.02.2023	Alacrity-2023	AISSMS's IOIT, Pune	2 nd	Design Skills								
4	Zeeshan Shaikh	19.02.2023	Alacrity-2023	AISSMS's IOIT, Pune	2 nd	Design Skills								
		E	xtra-curricular: A	wards	•									
			(Sports)											
5	Ms. Siddhi Nasare		Table Tennis	MIT-WPU Summit 2022	2 nd	Table Tennis Skills								
6	Ms. Siddhi Nasare		Table Tennis	ZEST'23 COEP	2 nd	Table Tennis Skills								
7	Ms. Devanshi Agarkar		Table Tennis	ZEST'23 COEP	2 nd	Table Tennis Skills								



(B) Events within the state

Table 4.6.3.5 Prizes/awards received in Inter-Institute Events within State by Students in 2021-22

Sr. No	Name	Date	Event	Conducted by	Rank/ Prize	Event Outcome (PO)			
		E	L Extra-curricular: A	wards					
			(Cultural)						
1	Ms.Meghana Nagdive	17.12.2021 to 19.12.2021	So DUET Dance (Impressions 2021)	COEP	1 st	Dance Skills			
2	Ms.Meghana Nagdive	2022	Group Performance	HCL Foundation	1 st	Dance Skills			
3	Ms.Meghana Nagdive	HCL Foundation	1 st	Dance Skills					
4	Ms.Meghana Nagdive					Dance Skills			
5	Ms.Meghana Nagdive	2022	Direction	HCL Foundation	1 st	Direction Skills			
6	Ms.Meghana Nagdive	2022	Fight Sequence	HCL Foundation	1 st	Dance Skills			
7	Ms.Meghana Nagdive	2022	Group Dance	HCL Foundation	3 rd	Dance Skills			
8	Ms.Meghana Nagdive	2022	Best Choreography	HCL Foundation	3 rd	Choreography Skills			
9	Mr. Shyamkrushnan Nair	2022	Bass Guitar	HCL Foundation	1 st	Guitar Skills			
10	Ms.Meghana Nagdive	24.03.2022	Firodiya Karandak-2022	HCL Foundation	1 st	Playback Skills			
11	Ms. Sanjot Dhole								
12	Mr. Shyamkrushnan Nair								
13	Ms. Nupur Chandane								
14	Ms. Siddhi More								
15	Mr. Siddhant Chaugule								
			ı-curricular: Awar	,					
16	Ms. Siddhi Nasare	22.12.2021	Table Tennis	MIT-WPU Summit 2021	2 nd	Table Tennis Skills			
17	Ms. Siddhi Nasare	13.03.2022	Table Tennis	ZEST'22 COEP	2 nd	Table Tennis Skills			
18	Mr. Mihir Hambir	21.04.2022	Flame Football Cup-2022	Flame University,	2 nd	Football Skills			



				Pune		
19	Mr. Aniket Jadhav	21.04.2022	Flame Football	Flame	2 nd	Football Skills
			Cup-2022	University,		
				Pune		
20	Mr. Rohit There	21.04.2022	Flame Football	Flame	2 nd	Football Skills
			Cup-2022	University,		
			_	Pune		
21	Ms. Suvidhan Mane	2021-2022	Javelin Throw	SPPU, Pune	$3^{\rm rd}$	Javelin Skills

Table 4.6.3.6 Prizes/awards received in Inter-Institute Events within State by Students in 2020-21

Sr. No	Name	Date	Event	Conducted by	Rank/ Prize									
	Co-curricular: Awards													
1	Mr. Arindam Pal	2020-21	O-21 Programming Language Quiz Affinity Group Computer Society		Progra mming Skills									
2	Ms. Sana Subhedar	2020-21	Blogathon Competition	IEEE Pune Section	2 nd	Comm unicati on Skills								
3	Mr. Daideep Bhingarde	14.01.2021	Top 1000 scores in NPTEL Embedded Systems Course	Texas Instruments	Received Rs.5000/- e-commerce voucher	Techni cal Skills								
4	Mr. Parth Umbarkar	21.04.2021 To 25.04.2021	Resonance Racing BAJA Event :BAJA SAE India 2021	SAE India	Over all Rank: 4th All Terrain Performance: 3rd Suspension nd Traction: 4th Maneuvaribility: 8th Gradability: 10th Overall Dynamics: 8th Overall Statics:14th	Dance Skills								

(C) Events Outside the State

Table 4.6.3.7 Prizes/awards received in Inter-Institute Events Outside the State by Students in 2022-23

Sr.	Name	Date	Event	Conducted	Rank/	Event
No				by	Prize	Outcome
110						(PO)



			Co-Curricular: Av	vards					
1	Pranav Birade	17.02.2023 to 19.02.2023	elan & nVision 2023	IIT, Hyderabad	1 st	Design Skills			
2	Ashutosh Waghavkar	17.02.2023 to 19.02.2023	elan & nVision 2023	IIT, Hyderabad	1 st	Design Skills			
3	Rajwee Wable								
		E	xtra-curricular: A	wards					
			(Sports)						
4	Ms. Siddhi Nasare	2022-23	Table Tennis	MIT-WPU Summit 2022	$2^{\rm nd}$	Table Tennis Skills			
5	Ms. Siddhi Nasare	2022-23	Table Tennis	ZEST'23 COEP	$2^{\rm nd}$	Table Tennis Skills			
6	Ms. Devanshi Agarkar	2022-23	Table Tennis	ZEST'23 COEP	2 nd	Table Tennis Skills			







COLLEGE OF ENGINEERING

ज्ञानम सकलजनहिताय



Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION V

Faculty Information & Contribution



	CRI	TER	ION V			I	aculty	Inform	ation &	Contrib	ution			20	00
S No.	Name of the Faculty Member		Qualifica	tion	Association with the Institution	Designati on	Date on which Designat	Date of Joining the Institutio	Departm ent	Specializat ion				ly Associat A	of Associat
		Degre e (highe st degree)	Universi ty	Year of attaining higher qualificati on			ed as Professo r/ Associat e Professo r	r/ ociat e fesso			Research Paper Publicatio ns(number)	Ph.D. Guidan ce	Faculty Receiving Ph.D. during the Assessme nt Years	ed (Y/N) Date of Leaving (In case Current ly Associat ed is ("No")	act)
1	Dr D S Bormane	PhD	SRTMU Nanded	2003	2017	Principal, Professor	1/2/2017	1/2/1017	E&TC	Signal Processing, Speech Processing, Microwave, Data Science, Machine Learning	Conferences: IC:41 NC:16 Jpurnals:6	18	03	Y	Regular
1.	Dr S B Dhonde	PhD	Dr BAMU		Aug 2022	Professor	5/8/2022	5/8/2022	E&TC	Signal Processing Computer Networking Sensor Networks	Conferenc es: IC: NC: Journals:	04		Y	Regular
2	Dr D G Bhalke	Ph.D	NIT Warang al	2016	June 2017	Professor	1/6/2017	1/6/2017	E&TC	Signal Processing, Speech Processing, Microwave, Data Science, Machine Learning	Conferenc es:18 Journal:39	01		Y	Regular



_									T	1			
3	Dr K B Chaudhari	PhD	SPPU	2021	July 2005	Assistant Professor	 29/7/2005	E&TC	Audio Processing,	Conferenc e: 08	 	Y	Regular
									Data Analytics,	Lournal, 07			
									IOT,	Journal: 07			
									Signal Processing				
4	Mr S B Dhekale	ME	Pune Universi	2016	Since October	Assistant Professor	 6/10/2010	E&TC	C, C++, Java,	Conferenc e: IC:01	 	Y	Regular
			ty		2010				Advanced Java, Data Structures	NC:01			
										Journal:			
										05			
5	Mr N P Mawale	MTec h	Pune Universi	2012	Since August 2006	Assistant Professor	 22/8/2006	E&TC	Digital Systems,	Conferenc e:10	 	Y	Regular
			ty						VLSI,	Journal :03			
									Power Electronics				
6	Dr P P Vast	PhD	SPPU	2018	Since July	Assistant	 21/7/2007	E&TC	Antenna	Conferenc e:02	 	Y	Regular
					2007	Professor			Microcontr ollers	Journal:04			
									Embedded Systems				
									Bystems				
7	Ms V D	ME	BAMU	2012	Since	Assistant	 1/9/2005	E&TC	VLSI,	Conferenc	 	Y	Regular
	Nagrale				September 2005	Professor	27,7, 2000		Database	e: 02			
									managemen t,	Journal:U/			
									CMOS Design,				
									Microcontr ollers				
8	Ms V V	ME	Shivaji	2009	Since	Assistant	 18/8/2006	E&TC	Computer	Conferenc	 	Y	Regular
	Deshmukh				August 2006	Professor			Network, Signal	e: 02 Journal:19			
									Processing,				



				1		1	ı			ı	1		1	1
9	Ms V S Navale	ME	Pune Universi ty	2007	Since December 2007	Assistant Professorr		19/12/200 7	E&TC	Communic ation, Integrated Circuits, Power	Conferenc e:03 Journal:6	 	Y	Regular
										Electronics				
10	Ms Y P Lad	ME	Pune Universi ty	2016	Since January 2009	Assistant Professor			E&TC	Communiv ation,	Conferenc e: NC-01 Journal:01	 	Y	Regular
								2/1/2009		Fiber Optics				
11	Mr V B Gawai	ME	BAMU	2011	Since June 2013	Assistant Professor		6/6/2013	E&TC	PLC Automation , Embedded Systems,	Conferenc e: NC-01 Journal:01	 	Y	Regular
										Design, Control System				
12	Ms R R Itkarkar	ME	Shivaji	2007	Since July 2017	Assistant Professor		3/7/2017	E&TC	Mobile communica tion, Broadband Communic ation,	Conferenc e: NC-06 Journal:13	 	Y	Regular
										Image Processing, Electromag netics Engineerin g				
13	Ms S A Takalkar	ME	SPPU	2016	Since June 2017	Assistant Professor		9/6/2017	E&TC	Network Security, Data Science	Conferenc es: Journal:	 	Y	Regular
14	Ms P P Tayade	ME	SGBAU	2012	Since August 2021	Assistant Professor		30/8/2021	E&TC	Communic ation, Networking	Conferenc e: NC-03 Journal:8	 	Y	Regular



5.1	Student Faculty Ratio	20	
-----	-----------------------	----	--

	CAY	CAY	CAYm1	CAYm2
Year	(2022-23)	(2021-22)	(2020-21)	(2019-20)
U1.1- II Year (E&TC Engg)	69 (60+9)	69(60+9)	78(60+18)	77 (60+17)
U1.2- III Year(E&TC Engg)	60	60	60	60
U1.3 -Final Year(E&TC Engg)	60	60	60	60
UG 1(E&TC Engg)	189	189	198	197
(2019-20_2020_21_ME E&Tc_ VLSI & Embedded Systems) MEI (2021-22_IOT & Sensor Systems)				
P1.1	18	18	18	18
P1.2	18	18	18	18
PG1	36	36	36	36
Total No. of Students in	\mathbf{S}	S1	S2	S3
the Department (S)	225	225	234	233
No. of Faculty in the Department (F)	14	14	13	13
Student Faculty Ratio (SFR)	SFR=16.07	SFR1=16.07	SFR2=18.00	SFR3= 17.92
Average SFR		SFR=(SFR1+S	SFR2+SFR3)/3	16.71

5.1.1	Information about the regular and contractual faculty:	
-------	--	--

Year	Total number of regular faculty in the department	Total number of contractual faculty in the department	Total Number of Faculty
AY 2022-23	14	0	14
AY2021-22	14	0	14
AY2020-21	13	0	13
AY2019-20	13	0	13



5.2 Faculty Cadre Proportion: (Program wise)	25
--	----

The	Profe	essors	Associate	Professors	Assistant Professors		
reference Faculty cadre proportion is 1(F1): 2(F2): 6(F3) Year	Required F1	Available	Required F2	Available	Required F3	Available	
AY 2022-23	1	2	2	0	6	12	
AY2021-22	1	2	2	0	6	12	
AY2020-21	1	2	2	0	6	11	
Average RF		1	2	0	6	12	

Cadre Ratio Marks =
$$\left(\left(\frac{AF1}{RF1} \right) + \left(\frac{AF2}{RF2} \times 0.6 \right) + \left(\frac{AF3}{RF3} \times 0.4 \right) \right) \times 12.5$$

5.3	Faculty Qualification: (Program wise)	25
	Tuestify Qualifications (1 Togram (1250)	

Year	No. of Regular Faculty with PhD (X)	No. of Regular Faculty with ME/ M. Tech (Y)	No. of Regular Faculty required to comply 20:1 SFR	FQ = 2.5 x [(10X+4Y)/F)]
AY 2022-23	4	10	11	18.18
AY2021-22	4	10	11	18.18
AY2020-21	3	10	11	15.91
17.42				

Faculty Qualification: 17.42 marks



No. of retained faculty member in the year CAY_2021_22:	13 (100%)
No. of retained faculty members in the year CAY_2022_23	12 (92%)
Percentage of faculty retained during the period of assessment :	96%

5.5 Innovations by the Faculty in Teaching and Learning:	20
--	----

GOALS:

In order to improve students' learning experience aside from traditional classroom teaching, the department uses novel concepts and their subsequent execution by means of quantifiable programs. The department is continuously striving to:

- Enrich student learning by innovative practices.
- Develop students' comprehension and expertise of creative methods and strategies.
- Broaden students' perspective of emerging technologies and tools in academics, contemporary and

social issues by innovative strategies.

• Motivate students to innovatively think, formulate and perform through different club activities

The innovative practices are made available on the Institute website for reference and review, the link for which is as below:

https://aissmscoe.com/electronics-engineering/innovative-practices-for-teaching-and-learning/



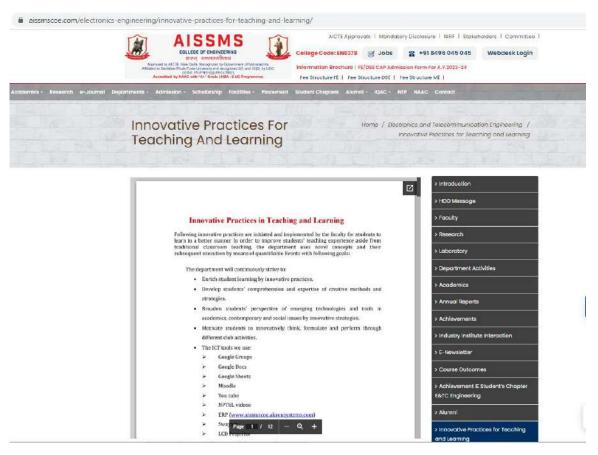


Figure 5.5.1: Innovative Practices floated on website

Table 5.5.1 Reflects various teaching learning methods implemented in the department.

Table 5.5.1 Teaching Learning Methods

Sr.No	Teaching Learning Methods	Activities Carried out
1	ICT based teaching learning	YouTube and NPTEL links
2	Digital social learning platform, Blended Learning	Google Groups, Google class rooms, blogs, WhatsApp
3	Physical social learning platform	IE students chapter - Workshop, Expert Lecture
4	Technical social program	Technical Social Program conducted by different department
5	Exposure of faculty to industry	Interaction of faculty with company guide, Faculty Industry Visit
6	Proactive teaching learning	Role Plays/ Educational Game/ Quiz
7	Projects	Sponsored projects, and Mini projects, Avishkar
8	Industry institute interaction	Industry Institute meets, MOUs, Industrial visits
9	New product design	Aviot-virtue, ET, certifications from RPA, Circuit Wizard etc



10	Competitions	Engineering Today, Participation in different technical events
11	Talks	Expert lectures
12	Membership of professional bodies	IE(I), IETE, IEEE, ISTE
13	Visit / participation	Seminars, Workshops, Conferences

1. ICT Based Teaching Learning:

- The ICT tools we use:
- Google Groups/Docs/ Sheets/ Classroom
- NPTEL videos / Swayam ii.
- iii. Moodle
- iv. You tube
- v. ERP (www.aissmscoe.akronsystems.com)
- vi. ICT enabled Classroom
- vii. Microsoft Teams
- viii. Podium with inbuilt PA system
- ix. Kahoot
- x. Vlab

The work is available for peer review and critique on You Tube. The various innovative practices used in teaching and learning by faculty are listed below.

E contents on YouTube:

Faculty has also created their own YouTube Channels and Google drives wherein they upload study material relevant to their own subjects and also student activity related programs are uploaded on the channel. The links are shared with the students and the contents are openly accessed by all students.



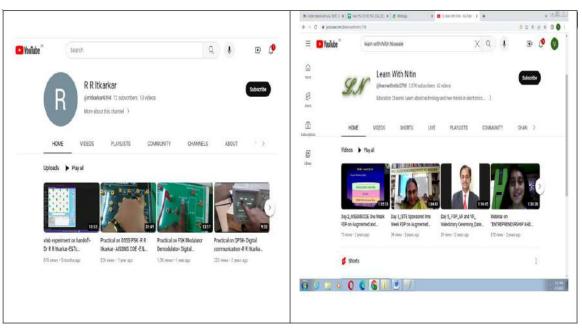


Figure 5.5.2: You tube Channel of Ms R R Itkarkar and Mr N P Mawale

Some sample video lectures can be accessed by using following links:

Links:

https://www.youtube.com/@learnwithnitin2798

https://www.youtube.com/channel/UCjEUwKuJ2MXU-0BL7-ZOSMw

https://www.youtube.com/channel/UCR4kTGWwnboFxFHIze0suYA

Outcome:

- This has helped students to learn and understand the course in a better and effective way.
- The students can learn at their own pace and at own convenience apart from classroom learning. This provides students, the opportunity for self-study.

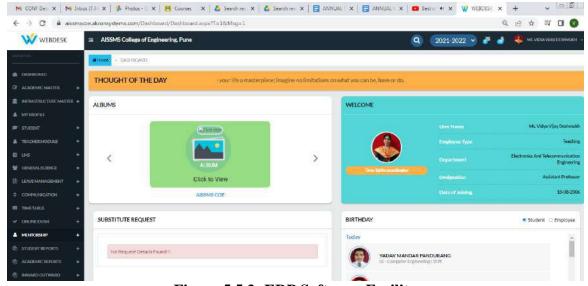


Figure 5.5.3: ERP Software Facility



Online teaching and learning resources on Microsoft Teams/ Google Classrooms:

COVID 19 pandemic did not stop teaching Learning process at AISSMS COE Pune. Systematic efforts were put for initiating and implementation of teaching with online mode. In the initial phase of the lockdown, ZOOM platform were used for conduction of webinars, and different teaching learning activities. Other platforms like Google classroom, whats app, telegram were also used.

From academic year 2020-21, institute started Microsoft Team platform for online teaching. For individual faculty and student, MS team login credentials were generated. Individual faculty created team and channel for their assigned subject (Both theory and practical's) as per the class timetable. Unit wise tests and assignments were also conducted through MS team platform. Assessment of tests and assignments also was carried out through MS teams. Study material like subject notes, PPTs, e books, previous question papers were shared by faculty on MS team. Recorded videos on MS teams are also shared with students to compensate the academic loss of students because of power failure and internet connectivity failure. Overall, every effort was put by institute for smooth conduction of academics during this lockdown period.

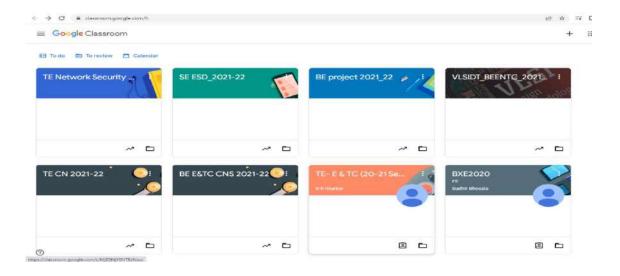


Figure 5.5.4: Google classrooms created by faculty members



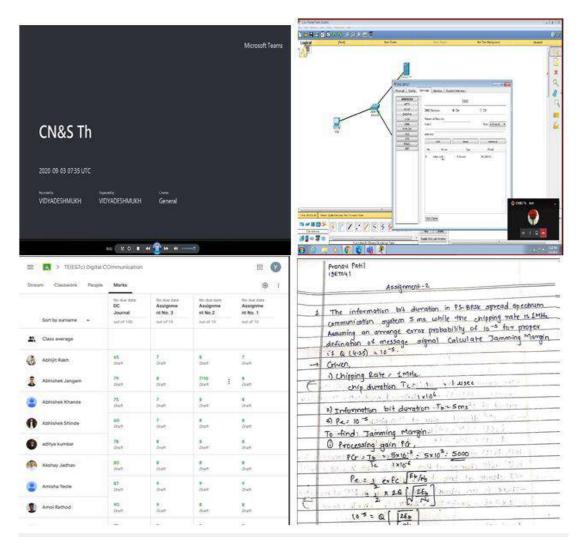


Figure 5.5.5: Use of Microsoft Team and google classroom Platform during Pandemic

Outcome:

- During the pandemic period, this methodology has helped students to interact and learn the subjects effectively.
- The platforms helped the students to get the study material, interact with the faculty, solve and submit assignments and enhance their thinking ability through the tests as well as quiz sessions conducted by almost every faculty member.

2. Virtual labs:

Vlab for various courses are conducted online on web browsers with the help of simulators. Such online facilities are called as virtual labs (http://www.vlab.co.in/), and are a part of an excellent innovative initiative taken by the MHRD of India.



Figure 5.5.6: Usage of Virtual lab by AISSMS COE nodal center

Outcome:

- Remote-access to simulation-based Labs in various disciplines of Science and Engineering.
- Use of virtual labs inspires students to conduct experiments with their curiosity. This helps them in learning basic and advanced concepts through remote experimentation.
- It provides a complete Learning Management System around the Virtual Labs where the students/ teachers can avail the various tools for learning, including additional web-resources, videolectures, animated demonstrations and self-evaluation.

3. Industry Visits:

Students are exposed to latest developments through regular visits to industry. Faculties organize industrial visits under One Faculty One Industry Programme.





Figure 5.5.7: Industrial Visit

Outcome: It contributes to students' knowledge and opportunity for self-study

4. Student Chapter/Club Activities:

The department has four professional chapters, as listed below, which provide a good platform for the students to take active part in the various competitions, seminars and lectures arranged by the society. The activities help the students to showcase their talents in terms for team building, communications skills, team work, target work and overall development in professional activities. One faculty advisor is associated with each student chapter for mentoring, guidance and overall governance

Table 5.5.1: List of Students chapter and Club

Sr.	Name of Students' Chapter	Number of
No		Student Members
1	Daexus Data Science Club	35
2	IETE Students Forum	47
3	The Institution of Engineers (India), Students' Chapter	121



4	IEEE Student Branch	35
5	ISTE Student Branch	52
6	Electronics for You Skill Center	30
7	Drone and Robo Club	40

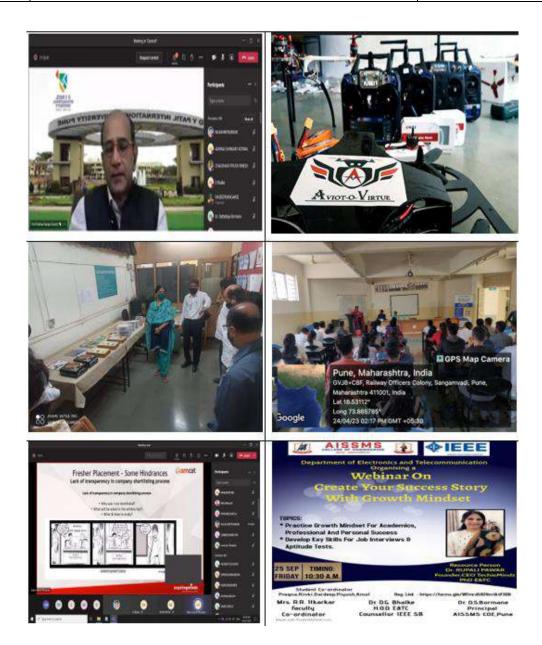


Figure 5.5.8: Activities for students under student chapter and student club

Outcome:

- Enrich students learning skills like communication, presentation, leadership etc.
- Dr. Amitabh Bhattacharyya Memorial Trophy to AISSMSCOE, E&TC Department (IEI Chapter) as Best Student Chapter Award Eight times
- IEEE Pune section best emerging branch award, student volunteer of the year awards, best student chairman award
- Avit-o-virtue club team won the prizes at IIT Hydrabad, Bits Pilani and may more



5. Students Symposium:

The department conducts **Engineering Today** (**Silicon Fusion**), an annual national level student symposium, in the month of September every year to encourage the students organizing and participating in various events to enhance their skills. The institute also conducts **science exhibition** where the projects of SE, TE and BE students are exhibited. The students invited from nearby schools to visit the science exhibition.

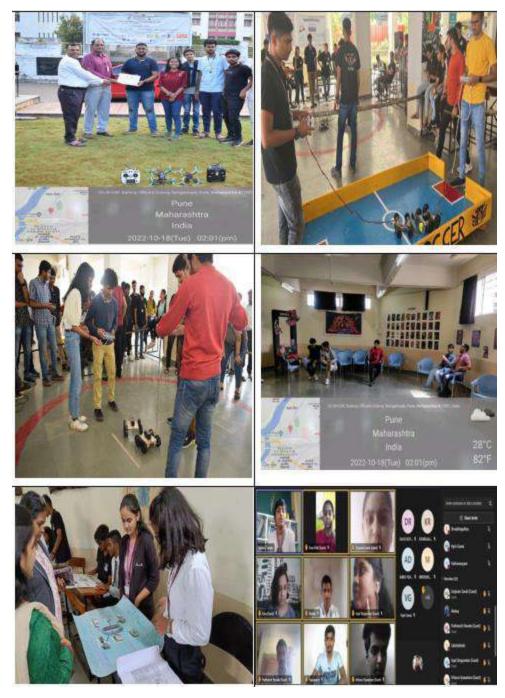


Figure 5.5.9: Engineering Today (Slicon Fusion) Event glimpses



Outcome: Improving skills so that they can participate in more events

The work can be reproducible and developed further by other scholars using following innovative techniques

6. Project-Based Learning

PBL has been introduced for SE students with the goal of motivating students to learn by working cooperatively in groups to solve a problem. PBL is a student-centered pedagogy that employs a dynamic classroom approach in which students are believed to gain a deeper understanding through active exploration of real-world challenges and problems. Students gain knowledge about a subject by investigating and responding to a complex question, challenge, or problem over time. It is an inquiry-based and active learning style. Problem- based learning will also alter the role of the teacher as a mentor in the learning process.

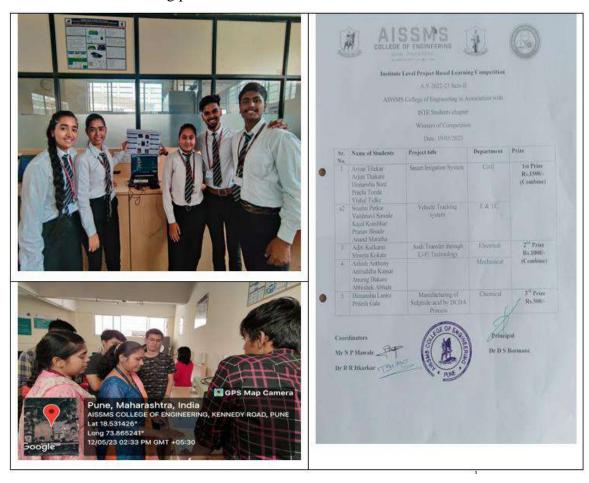


Figure 5.5.10: PBL Exhibition of SE Class AY: 2022-23

Outcome:

• PBL encourages students to develop a balanced, diverse approach to solving real-world problems, both on their own and in a team.



- Institute level PBL competition help students to provide interdisciplinary approach and solution to real world problems.
- 7. Cutting-edge initiative: Today's education system is rapidly evolving in order to introduce new teaching techniques and strategies that promote a culture of diversity and inclusion. Similarly, each teacher has a distinct teaching style. However, all teachers have the same goal: to instill a love of learning in their students. Department have a few Cutting- edge initiatives as given below that use modern technology.
 - Avishkar a.
 - Hackathon b.
 - c. Unnat Bharat Abhiyan





Figure 5.5.11: Smart India Hackathon participation and Avishkar State Level project completion Winner under guidance of Dr R R itkarkar



8. Conference:

International and national level conferences provide the platform to the researchers to publish their work and get suggestions form the experts.

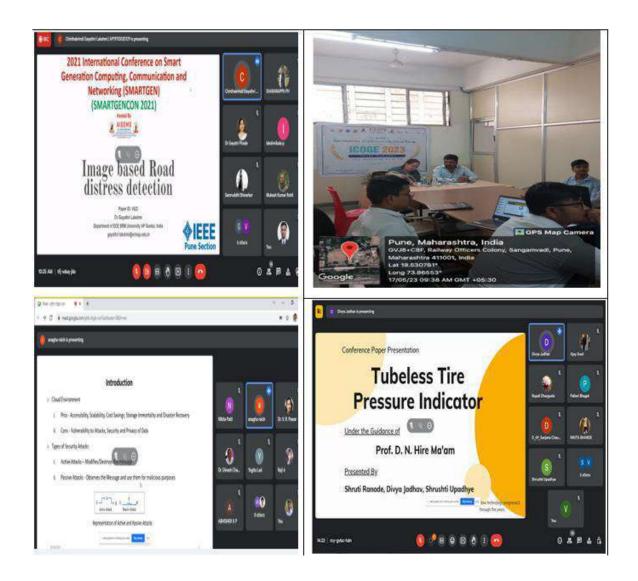


Figure 5.5.12: National & International Conferences conducted by E&TC Department.

• Outcomes of Innovative Practices used by Faculty in Teaching and Learning:

There are several potential outcomes of innovative practices used by teachers in teaching and learning:

- 1. **Increased student engagement**: Innovative practices often involve interactive and hands-on activities that capture students interest and make learning more enjoyable. This result in increased engagement and participation in the classroom.
- 2. Improved critical thinking skills: Innovative teaching methods encourage students to think critically, solve problems, and analyze information. This lead to the development of higherorder thinking skills and a deeper understanding of the subject matter.



- 3. Enhanced creativity: Innovative practices often provide opportunities for students to express their creativity and explore different perspectives. This helps foster a sense of curiosity, imagination, and originality among students.
- 4. **Personalized learning experiences:** Innovative practices tailored to meet the individual needs and learning styles of students. This result in personalized learning experiences that cater to each students strengths, interests, and motivations.
- 5. Increased collaboration and communication skills: Many innovative teaching practices emphasize collaboration and teamwork. These help students to develop effective communication skills, as well as the ability to work well with others and contribute to group discussions.
- 6. Long-lasting knowledge retention: Innovative practices that involve active learning and realworld applications help students to retain knowledge for a longer period of time. By connecting new information to practical experiences, students are more likely to remember and understand the concepts being taught.
- 7. Preparation for the future: Innovative practices often incorporate the use of technology, which is becoming increasingly important in todays society. By integrating technology into the classroom, teachers can help prepare students for the future workforce and equip them with the necessary skills for success in the digital age.
- 8. Learning Outcomes: Innovative teaching practices have the potential to enhance learning outcomes for students. By incorporating new and diverse instructional strategies, such as problem-based learning, flipped classrooms, or project-based assessments, educators can facilitate deeper understanding, critical thinking, and the development of practical skills in
- 9. Motivation and Interest: Innovative practices often help to stimulate students motivation and interest in the subject matter. By embracing new technologies, or real-life applications, faculty create a more vibrant and captivating learning environment. This increased interest lead to improved academic performance and a passion for lifelong learning.
- 10. Faculty Development: Implementing innovative teaching practices requires faculty to continuously update their knowledge and skills. It promotes professional growth and development, encouraging faculty members to explore new teaching methods, experiment with different instructional tools, and collaborate with colleagues. This ongoing professional development contributes to a positive academic culture in institution.
- 11. Institutional Reputation: By adopting innovative practices in teaching and learning, educational institutions enhance their reputation and attract students, faculty, and funding. Institute is seen as leaders in the education field and benefited from increased enrollment, improved rankings, and positive perception among stakeholders.
- 12. Student Success and Well-being: Innovative practices also have a positive impact on student success and well-being. By incorporating strategies that address different learning styles, assist diverse student populations, and promote inclusivity, faculty creates a supportive and inclusive learning environment. This contributes to improved student retention rates, satisfaction, and mental health.
- 13. **Research and Innovation:** Innovative teaching practices often go hand in hand with research and innovation in education. Faculty who embrace innovative practices are more likely to engage in educational research, explores new methodologies, and contributes to the advancement of knowledge in their field.



5.6	Faculty as participants in Faculty Development/ Training	15
5.0	activities/ STTP: (Programwise)	15

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

			Max 5 per faculty				
Sr No	Name of the Faculty	2022-23	(2021-22)	(2020-21)	(2019-20)		
1	Dr D S Bormane	5	5	5	5		
2	Dr S B Dhonde	5	5	5	5		
3	Dr D G Bhalke	5	5	5	5		
4	Ms K B Chaudhari	5	5	5	5		
5	Mr A Y Kazi	5	5	5	5		
6	Mr S B Dhekale	5	5	5	5		
7	Dr P P Vast	5	5	5	5		
8	Mr N P Mawale	5	5	5	5		
9	Ms V D Nagrale	5	5	5	5		
10	Ms V V Deshmukh	5	5	5	5		
11	Ms V S Navale	5	5	5	5		
12	Ms Y P Lad	5	5	5	5		
13	Mr V B Gawai	5	5	5	5		
14	Ms R R Itkarkar	5	5	5	5		
15	Ms S A Takalkar	5	5	5	5		
16	Ms P P Tayade	5	0	-	-		
	Sum	80	80	80	80		
	RF= Number of Faculty required to comply with 20:1 Student- Faculty	11.25	11.25	11.25	11.70		
	ratio						
	Assessment = $3 \times (Sum/0.5RF)$	42.67	42.67	42.67	41.03		
		Average asse	Average assessment over three years = 42.12 Marks				



5.7 Research & Development: 30

5.7.1	Academic Research:	10	١
-------	--------------------	----	---

Number of quality publications in refereed/SCI Journals, citations, Books/Book Chapters etc. (6)

PhD guided /PhD awarded during the assessment period while working in the institute (4)

Research papers in referred/ SCI indexed journals:

Sr. No.	Name of the Staff	(2022-23)	(2021-22)	(2020-21)	(2019-20)
1	Dr D S Bormane	3	2	6	8
2	Dr S B Dhonde	2	0	0	0
3	Dr D G Bhalke	0	0	3	9
4	Ms K B Chaudhari	1	0	1	0
5	Mr S B Dhekale	1	0	1	0
6	Dr P P Vast	2	0	1	1
7	Mr N P Mawale	0	0	1	0
8	Ms V D Nagrale	2	0	0	0
9	Ms V V Deshmukh	0	1	3	1
	Ms V S Navale	0	0	0	0
11	Ms Y P Lad	0	0	0	0
12		2	0	1	0
	Mr V B Gawai	2	1	2	2
	Ms R R Itkarkar	0	0		
14	Ms Smita Takalkar (FE transfer 2nd Sem)			0	1
	Ms P Tayade	0	0	0	0

E & TC **Engineering Department**



15					
		0	0	0	1
16	Mr A Y Kazi				
	Total	15	4	19	22

List of Publications: (Academic Year 2022-23) (No:)

List of Publications: (Academic Year 2022-23) (No:)						
Title of paper	Name of the author/s	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal	
Obstructive Airway Disease Using EMG Technique. sms	Magar PK, Bairagi VK,	Physical Sciences,	2022	ISSN(P): 2229-7111 ISSN(O): 2454-5767 Vol:14, Spl :3 Pages:372- 378	https://smsjournals.co m/index.php/SAMRI DDHI/article/view/30 33	
	Kakkeri ,	Proceedings of the 3rd International Conference on Advanced Technologies for Societal Applications—Volume 1 (pp.51-61)	2022	ISSN: 0992-499X (print); 1958-5748 (online) Vol. 36, No. 3, June, 2022, pp. 503-508	http://iieta.org/journal s/ria DOI:10.1007/978-3- 030-69921-5_6	
3.SAR Analysis Using a Dipole Antenna in a Non-layered and Multilayered Human Head Model,	Sonawane, D S	International Journal on Recent and Innovation Trends in Computing and Communication: Vol. 10 No. 1s (2022): Special Issue on Enhancement and Innovations in Exploring Engineering	2022	ISSN: 2321-8169 (Online) 10(1s), 225–231.	https://ijritcc.org/inde x.php/ijritcc/article/vi ew/5829	
4.Rapid Manufacturing Ventilator	Dr S B Dhonde	IRJIET	2022	ISSN: 2581-3048	https://www.proquest. com/openview/d9fb7 c19f8dc17c441133f4 4485b491f/1?pq- origsite=gscholar&cb	



			T	T	1 521 40 40
					<u>l=5314840</u>
Detection Using Hybrid Stacked Ensemble	Nandanwar1* and Dr.	International Journal of Electrical and Electronics Research (IJEER)	2023		https://ijeer.forexjour nal.co.in/papers- pdf/ijeer-110246.pdf
6.Network Security in Cloud and Big Data Computing using AI	Aniruddhe	Computer Integrated Manufacturing Systems	2022	1303-5150 Vol:28 , No: 12	http://cims- journal.com/index.ph p/CN/article/view/41 1
7.Observation of an Uncertainty Estimation in Deep Learning	Dr. Prachi Vast	Neuro Quantology	2022		https://www.neuroqua ntology.com/ doi:10.48047/NQ.202 2.20.16.NQ880571
8.Survey Paper on Extraction of 3D image Data for Detecting Chest Diseases	Mr.V.B.Gawai	JOURNAL OF OPTOELECTR ONICS LASER	2022	0086	http://gdzjg.org/index .php/JOL/article/view /905
9.Evaluation of Success Factors in Professional Business Incubation	Mr.V.B.Gawai	JOURNAL OF OPTOELECTR ONICS LASER	2022	ISSN: 1005-0086 Volume 41 Issue 8, 2022	http://gdzjg.org/index .php/JOL/article/view /899
10Early Diagnosis of Obstructive Airway Disease Using EMG Technique. sms [Internet]. 23Jan.2023 [cited 16Jul.2023];14(Spl-3):372-8.	Dr R R Itkarkar	SAMRIDDHI A Journal of Physical Sciences, Engineering & Technology	2022	ISSN(P): 2229-7111 ISSN(O): 2454-5767 Vol:14, Spl :3 Pages:372- 378	https://smsjournals.co m/index.php/SAMRI DDHI/article/view/30 33
11.Recognition of Emotions Based on Facial Expressions Using Bidirectional Long-Short-Term Memory and Machine Learning Techniques	Mr S B Dhekale	2023 International Conference on Communication System, Computing and IT Applications (CSCITA)		Electronic ISBN: 978-1- 6654-5987- 7	https://ieeexplore.ieee .org/document/10105 040/authors#authors DOI: 10.1109/CSCIT A55725.2023.101050 40



10 D	D D D I/I I	CAMBIDDIA	2022	D ' 4 IGGN	1 // • 1
	Dr R R Itkarkar	SAMRIDDHI	2023		https://smsjournals.co
Diagnosis Of Covid-19		A Journal of		2229-7111	m/index.php/SAMRI
Using Pneumonia		Physical		Online	DDHI/article/view/30
		Sciences,		ISSN :	<u>36</u>
		Engineering &		2454-5767	
		Technology			
				Volume 14,	
				Special	
				Issue 3,	
				2022	
				2022	
13.Wireless EV	Ms V D Nagrale	International	2023	ISSN	https://doi.org/10.470
Charging Robot		Research Journal		(online):	01/IRJIET/2023.7050
		of Innovations in		2581-3048	47
		Engineering and		Volume 7,	
		Technology		Issue 5, pp	
		(IRJIET)		325-329,	
				May-2023	
14Ensemble of Learner	Ms V D Nagrale	Journal of	2023	e-ISSN:	https://doi.org/10.466
for Network Intrusion		Network		2581-639X	10/JONSCN.2023.v0
Detection System		Security		Volume-9,	<u>9i01.004</u>
		Computer		Issue-1	
		Networks		(January-	
				April, 2023)	
15. Remote Sensing	Dr K B	2022 IEEE	2022	https://doi.o	https://ieeexplore.iee
Based Crop Monitoring	Chaudhari	Region 10		rg/10.1109/	e.org/document/986
System		Symposium		TENSYMP	4416
		(TENSYMP)		54529.2022	
				<u>.9864416</u>	

List of Publications: (Academic Year 2021-22) (No:1)

Title of paper	Name of the author/s	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal
1."Investigational	Vidya	International	June -2022	ISSN 2250-	https://ijetae.com/files
Outcomes of Normal and	Deshmukh,	Journal of		2459	/Volume12Issue6/IJE
Diabetic Human	Suvarna	Emerging		Vol:12	TAE_0622_22.pdf
Volunteers using	Chorage	Technology and		Issue:6	
Microwave based Non-		Advanced			
invasive Blood		Engineering			
Glucometer"		(Scopus indexed)			
2."Detection of Breast	Dr.S.M.Kulkarn	Science and	2021	ISSN:	http://scitechpub.org/i
Cancer Using Hybrid	,	Technology		2632-1017	ndex.php/vol-5-issue-
Feature Selection And	Dr.D.S.Borman	Publishing (SCI		Vol. 5 Issue	7-july-2021/
Bayesian Optimization",	e,	& TECH)		7, July –	
	Dr.S.L.Nalbalw			2021.	
	ar,				
3. "Design and Analysis	Dr. D. S.	Journal of	2021	ISSN Print -	https://www.jcdronlin
of Half Wave Dipole	Bormane, Amol	Cardiovascular		0975-3583,	e.org/paper.php?slug
Antenna for SAR	D Sonawane	Disease Research		Online -	=design-and-analysis-

E & TC **Engineering Department**



		T			
Measurement",,				0976-2833,	of-half-wave-dipole-
					antenna-for-sar-
				Volume 12,	measurement
				Issue 3,	
				Page 844-	
				853, July	
				11, 2021,	DOI: 10.31838/jcdr.2
					021.12.03.112
4." Detection And	Ms R R Itkarkar	SAMRIDDHI	2021	ISSN:2229-	https://smsjournals.co
Diagnosis Of Covid-19				7111	m/index.php/SAMRI
Using Pnuemonia"					DDHI/article/view/30
					<u>36</u>

List of Publications: (Academic Year 2020-21) (No:19)

		ions: (Acadenne			T • 1 · · ·
Title of paper	Name of the author/s	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal
3 6 1 3	Mrs. Roopa Kakerri, Dr. D S Bormane	International Journal of Advances in Science Engineering and Technology	Jan2020	2321 –9009	https://doi.org/10.101 6/j.matpr.2021.07.375
Implementation On Reconfigurable	C. Patil,D. S. Bormane, Sushma Wadar		May-20	2454-7190	https://www.journali mcms.org/special iss ue/square-operation- implementation-on- reconfigurable- hardware-logic-to- attain-high-speed- area-optimization- and-low-power- consumption/
3.Surface electromyography for the detection of Temporomandibular joint Disorder: A review		Elsevier's HELIYON- Manuscript No.D-20-05385	July18, 2020		https://www.sciencedirect.com/science/article/pii/S221478532105
4.Acceleration Techniques using Reconfigurable Hardware for Implementation of Floating Point Multiplier	Avinash Patil	Scientific Explorer	31st Oct. 2020	EISSN 231 9-5592, PISSN 227 7-3495	www.helixscientific.p ub/index.php/home/ar ticle/view/175 https://doi.org/10.290 42/2020-10-5-08-14 Helix (2020) 10 (5): 08-14
5.Temporomandibular Joint Disorder with Electromyographic Evaluation in Different	Bormane, Roopa B	Annals of the Romanian Society for Cell Biology	2021	1583-6258,	www.annalsofrscb.ro/ index.php/journal/arti cle/view/4986



A C					
Age Groups					
6. A Novel Architecture For Multi-Bit Shift And Rotate Operation	D S Bormane , S C Patil, Avinash Patil	Mechanics Of Continua And Mathematical Sciences	May (2020)	0973-8975	https://www.journalimcms.org/wp-content/uploads/wccest-20191005-3-1.pdf
7. Real-time Electrocardiogram monitoring for heart diseases with secured Internet of Thing Protocol	Daulappa Bhalke	International journal of Medical Engineering and Informatics	2021	1755-0653	https://doi.org/10.177 62/turcomat.v12i5.21 55
8.Monophonic Musical Instrument Sound Classification Using Impulse Response	Bhalke, A Adeshpande	Turkish Journal of Computer and Mathematics Education		1667-1672	https://doi.org/10.177 62/turcomat.v12i5.21 55
9. Accident Detection and Monitoring using Black Box	•	SAMRIDDHI	2020	2454–5767	https://smsjournals.co m/index.php/SAMRI DDHI/article/view/19 73
10. Non-invasive determination of blood glucose level using narrowband microwave sensor	Deshmukh, Suvarna	Journal of Ambient Intelligence and Humanized Computing	2020	Electronic ISSN 1868-5145	https://link.springer.c om/article/10.1007/s1 2652-021-03105-z
11. Voice Conversion System for Indian Sign Language using Raspberry Pi	Itkarkar, Omkar H. Darekar, Sahil U. Vora, Prachi K. Gorate, Nividita V. Ketkar, Dattataray Bormane, Anilkumar Nandi		2020	- 7111	https://smsjournals.co m/index.php/SAMRI DDHI/article/view/19 67
Synthesis in Celebrity's Voice	Gaddime, Dhananjay P. Mane, Ruchita K. Vehale, Vaishnavi S. Khawale, D. G. Bhalke, R. R. Itkarkar	SAMRIDDHI	2020	- 7111	https://smsjournals.co m/index.php/SAMRI DDHI/article/view/19 59
based on Long Range Module (LoRa)"	Chaudhari, Prafulla Ingale, Prathamesh Aswale, Prajyot Aksapure	SAMRIDDHI	2020	- 7112	https://smsjournals.co m/index.php/SAMRI DDHI/article/view/19 63
14.Internet of Things-	Vinay S.	SAMRIDDHI	2020	ISSN : 2229	https://smsjournals.co

E & TC Engineering **Department**



D 1 0 :	Q: 1 11			7110	// 1 1 /GARTS
	Sidawadkar,			- 7112	m/index.php/SAMRI
Preservation System	Rohini Ahire,				DDHI/article/view/19
	Shankaranand				<u>74</u>
	Lohare, Dipak				
	Gavhale, Prachi				
	P. Vast				
15. Internet of Things-		SAMRIDDHI	2020		https://smsjournals.co
Based Monitoring and				- 7112	m/index.php/SAMRI
Mapping of Absentee					DDHI/article/view/19
	Pranali N.R.				<u>64</u>
ShopFloor	Jadhav, Santosh				
	B. Dhekale				
	Pranita S. Patil,	SAMRIDDHI	2020		https://smsjournals.co
Monitoring and Leakage				- 7112	m/index.php/SAMRI
Detection System using	Kapgate,				DDHI/article/view/19
Long Range Module					<u>65</u>
(LoRa)	Rathour, Nitin				
	P. Mawale,				
	Rajendra G.				
	Khope				
17.Online Food Ordering	Rupali B. Kale,	SAMRIDDHI	2020		https://smsjournals.co
	Ruchika K.			- 7112	m/index.php/SAMRI
Canteen	Balwade, Vipin				DDHI/article/view/19
	B. Gawai				<u>68</u>
18. Student Placement		SAMRIDDHI	2020		https://smsjournals.co
Prediction System using				- 7112	m/index.php/SAMRI
Machine Learning	Bhalke				DDHI/article/view/19
					<u>72</u>
19. Microstrip Antennas		\mathcal{L}	2020	Electronic	https://ieeexplore.ieee
used for Noninvasive		the International		ISBN:978-	.org/document/91208
Determination of Blood	S.S.	Conference on		1-7281-	<u>73</u>
Glucose Level		Intelligent		4876-2	
		Computing and			
		Control Systems,		pp. 720–	
		ICICCS 2020		725,	DOI: <u>10.1109/ICICC</u>
				9120873	<u>\$48265.2020.912087</u>
					<u>3</u>

(b) Number of books/book chapter published:

	AY 2022-23							
SN	Title of Book	Author	Name of Publisher	ISBN /ISSN				
1	Digital Circuits	Dr Somnath B Dhonde	Technical Publications	978-93-332- 2211-2				
AY 20	AY 2021-22							
SN	Title of Book	Author	Name of Publisher	ISBN /ISSN				



1	Signals & Systems	Dr D G Bhalke	Technical Publications	978-93-332- 1173-4				
2	Fundamentals of Java Programming	Mr Santosh B Dhekale	Technical Publications	978-93- 91567-91-0				
3	Advanced Java Programming	Mr Santosh B Dhekale	Technical Publications	978-93- 5585-013-3				
	AY 2020-21							
SN	Title of Book	Author	Name of Publisher	ISBN /ISSN				
SN 1.	Title of Book Data Structures SE (2019 Course)	Author S B Dhekale	Name of Publisher Technical Publications					

(c) Patents Published:

	1	(0) - (atents I ubiisi	1		
Sr No	Title of the patent	Indian/ Other	Investiagtor details	Date of filing of patent	Application No	Present status
1	Method, apparatus and system for finding a square root of a perfect square number		Dr D S Bormane	08/04/2019	201921014084 Patent no 365936	Published on 10/05/2019 Granted on 03/05/2021
2	Method, Apparatus and System for Shift and Rotate		Dr D S Bormane	5/05/2019.	No: 201921014067,	ublished, amination
3	Prototype development for acquisition of Maternal and Fetal ECG along with development of algorithm for extraction of Fetal from Maternal ECG on benchmark database		Dr D S Bormane	6-05-2020	202021020732	ublished, amination awaited
4	Method, Apparatus and System for Finding Square of a n Bit Number		Dr D S Bormane)8/04/2019	201921014067 A	ublished, amination awaited
5	Method and Apparatus for Squaring operation",	Indian	Dr D S Bormane	21/05/2021	202121022673	ublished, amination awaited
6	Method and Apparatus for cube operation of any radix N-bit number",		Dr D S Bormane	26/05/2021	202121023453	ublished, amination awaited



7	Gesture based Vocalizer	Indian	Dr D S Bormane	25/06/21	202121022504 A 20/05/21	ublished, amination awaited
8	Microwave Sensor for Non invasive Determination of Blood Glucose Level		Ms V V Deshmukh,	9/04/2019	20192104247A	ublished, amination Awaited
9	Development Of A Screening Tool For Sleep Apnea For Experts In Clinical Setups		Ms R R Itkarkar	Filled on 17/05/21 and published on 11/06/21	202141022036 A	ublished, amination awaited
10	Gesture Based Smart Vocalizer	Indian	Ms R R Itkarkar	Filled on 20/05/21 Published on 25/06/21	202121022504 A	ublished, amination awaited
11	Design of Writing board with arrangement of Projector and Camera		Ms R R Itkarkar	Filled on 04/10/21 Granted on 24/11/2021	Design No. 350663-001	Granted
12	Regular Equal Water distribution system	Indian	Ms R R Itkarkar	Filled on 04/01/2022 published on 21/01/2022	202221000370 A	ublished, amination awaited
13	Development of a Screening tool for Sleep Apnea for experts in clinical setups: setups		Dr R R Itkarkar	2021103840 & 14/04/2022	2021103840	Granted
14	Design Patent e "IOT BASED SOLAR POWERED AGRICULTURE ROBOT		Mr V B Gawai	381449-001 14/3/2023	381449-001	ublished
15	Feature Extraction & Machine learning for evaluation of students communication skills		Mr S B Dhekale	202141028830 Filled on 27/6/2021 Published on 9/7/2021	202141028830	ublished

(d) Copyrights:

S. N	Name of the Faculty	Diary Number	Work Title	Class of Work	Registration Date	Status
1.	Ms R R Itkarkar	Diary Number 6203/2020-CO/L	CNN based hand gesture recognition for Indian Sign Language	Literary	19/10/2020	Published
		19/10/2020				



(e) (i) Number of PhDs in the department: 06

Name of the Faculty	Year in which PhD completed
Dr D S Bormane	2003
Dr D G Bhalke	2016
Dr S B Dhonde	2017
Dr P P Vast	2018
Dr K B Chaudhari	2021
Dr R R Itkarkar	2022
Dr V V Deshmukh	2023

(ii) Number of PhD awarded in assessment years: 03

Name of the Faculty	Year in which PhD awarded
Dr K B Chaudhari	2021
Dr R R Itkarkar	2022
Dr V V Deshmukh	2023

(iii) Number of PhD pursuing: 02

Name of the Faculty	Name of the institute and University
Mr S B Dhekele	AISSMS IOIT , Pune (SPPU)
Mr N P Mawale	AISSMS IOIT , Pune (SPPU)

A. PhD guided /PhD awarded during the assessment period while working in the institute (4)

Sr. No	Name of the PhD Guide	Name of Research	Title of Research	Name of University	Year of
NO	FIID Guide	Scholar		University	Passing
1	Dr D S	Mrs. Archana	"Electrocardiogram	SPPU	14/07/
	Bormane	Dikshit	segmentation and classification for		2020
			Arrhythmia detection using		
			detection using rough set theory"		
2	Dr D S	Mr. S. M.	"Video Stabilization	SPPU	16/03 2020
	Bormane	Kulkarni	using feature point matching"		
3	Dr D S	Wadar	Hardware	SPPU	June 2021
	Bormane	Sushma Raju	accelerators for		
			RISC in multimedia		
			applications		



Ph. d Ongoing Candidate list of Dr D S Bormane and Dr S B Dhonde

Sr No	Name of the PhD Guide	Candidate Name	Thesis Title	Date of Registration	Universit
1	Dr D S	Amol	4G based SAR	12/02/18	SPPU,
1	Bormane	Sonawane	analysis for an	12/02/10	Pune
	Domane	Soliawalie	anatomically based		1 une
			human head		
2	Dr D S	Rupa Kakkeri	Detection of	09/02/18	SPPU,
	Bormane	Kupa Kakken	Temporomandibula	09/02/10	Pune
	Domanc		r joint disorder using		1 unc
			surface		
			electromyography		
			of masticatory		
			muscles		
3	Dr D S	Vidya V	Develop an	05/05/2022	SPPU,
	Bormane	Waykule	algorithm for	03/03/2022	Pune
	Bornane	vv u y Kuic	identification and		1 dile
			classification of		
			plant diseases for		
			tomato crop.		
4	Dr D S	Shikha Jalaj	Predictive Analytics	09/05/2022	SPPU,
'	Bormane	Pachouly	Algorithm for	037 007 2022	Pune
			Performance		
			Prediction of		
			students using		
			Explainable		
			Artificial		
			Intelligence and		
			Educational Data		
			Mining		
5	Dr D S	Prashant S	Development of an	06/05/2022	SPPU,
	Bormane	Sadaphule	Ensemble model for		Pune
			detection of		
			respiratory disease		
			using deep learning		
			in healthcare		
6	Dr D S	Jayashree	Trust management	20/10/2022	SPPU,
	Bormane	Pasalkar	platform for internet		Pune
			of everything using		
			deep neural		
	D G B	D (11.1	network	17/11/2022	CDDII
7	Dr S B	Pratiksha	A Novel approach	17/11/2022	SPPU,
	Dhonde	Nandanwar	Cervical cancer		Pune
			detection using		
			hybrid stacked		
			ensemble models		
0	D _m C D	Nomita V	and feature selection	4/5/2022	CDDII
8	Dr S B	Namita Kure	An Automatic	4/5/2022	SPPU,
	Dhonde		artificial		Pune
			intelligence based		



			Dysarthric speech recognition		
9	Dr S B Dhonde	Shashikant Thite	Detection and classification of grapes leaf diseases using image processing	4/5/2022	SPPU, Pune
10	Dr S B Dhonde	Supriya Lohar	To develop hybrid digital – Analog beam forming algorithm and channel estimation technique for massive MIMO	4/5/2022	SPPU, Pune

Marks: 9

5.7.2 Sponsored Research:	05
---------------------------	----

SN	Title of the Project	Principal Investigator	Funding Agency	Duration	Amount Received (INR)
1	AIML integrated IOT Laboratory	Dr D G Bhalke	AICTE, New Delhi	2021-22	@ 1474730/-
	Total Funding F	14,74,730/-			

Marks: 3

5.7. 3	Development Activities:	10
---------------	-------------------------	----

Development activities play an important role in the enhancement of quality of the program. Detailed instructional material such as CO-POs, academic calendar, course material, assignments, lesson plan, lab instruction material, etc. help the student to understand the course and to plan their activities accordingly. Use of working models, charts, etc.; during the teaching learning process help students to clearly understand complicated construction, working, etc.

- A. Product Development
- B. Research laboratories
- C. Instructional materials



- D. Working models/charts/monograms etc.
- **Product Development:** A separate project lab displaying/exhibiting projects done by faculty A. as well as students.



Figure 5.7.3.1: Smart Chef Robot made by students under guidance of Dr V V Deshmukh



Figure 5.7.3.2: The wheel chair operated through the tongue touch



Figure 5.7.3.3: Medical Assistive Robot







Figure 5.7.3.4: Drones Developed by students

B. **Research laboratories:**

Research Computer Laboratory:

The department has computer laboratory equipped with high performance computers and high end software like MATLAB that can be utilized for research purpose. Communication laboratory also includes costly and major equipment like Vector Network Analyzer (VNA with 10 Kz to 8 GHz frequency range) and antenna trainer kit that can be specially used for microwave research purpose. Recently in AY: 2021-22 Department has received grant from AICTE, New Delhi to established an Artificial Intelligence and IOT laboratory. Following are the main objectives of the laboratory:

Objective:

- To develop state of the art facility in emerging trends.
- To provide hands-on exposure in the field of IoT.
- To enable students explore and innovate in the field of Artificial Intelligence.

Lab Name	Room No	Hardware	Software
Artificial Intelligence and Machine Learning (AIML) Laboratory	431	Lenovo Thinkcentre Neo 50t (11SES0B100) i7, 8+8 GB, 256GB, 1 TB HDD (Total Qty. 25) Petal AI & ML Research Kit Petal MYO AI & ML IoT, Automation Suit	Petal AI & ML Software Suit



Instructional materials: C.

1. Faculty members have created Lab Manuals for each course which helps students to perform practical during Laboratory hours.

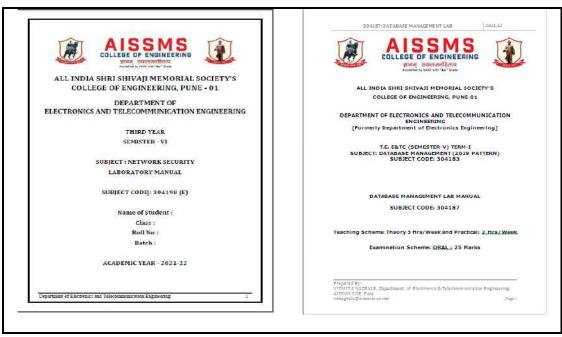


Figure 5.7.3.5: Samples of Lab Manuals available in the Laboratories

2. Charts showing the safety measures (Dos and don'ts and use of fire extinguisher) are also displayed in all laboratories

D. Working models & charts:

- 1. The department has working models available for lab. Also relevant projects done by final year students are kept in the respective labs.
- 2. Charts prepared by faculty members are displayed in the respective laboratory.
- 3. Knowledge wall flex boards are displayed outside each laboratory.
- 4. All other laboratories are provided with the information charts



Figure 5.7.3.6: Samples of charts prepared by Faculty members available in the laboratories



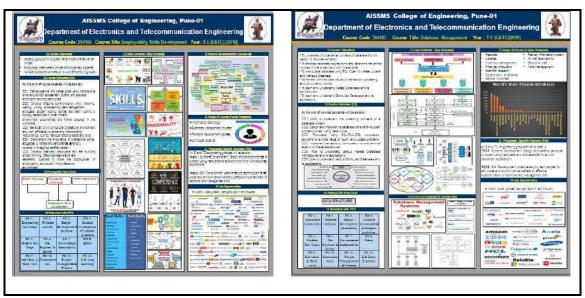


Figure 5.7.3.7: Samples of Knowledge Walls of courses prepared by faculties displayed in laboratories



Figure 5.7.3.8: Working Drone Models



Figure 5.7.3.9: Working and Sponsored Project Models



5.7. 4	Consultancy From Industry:	05
	S S	i

Academic Year 2021_22

SN	Title of the Project	Principal Investigator	Funding Agency	Duration	Amount Received (INR)
1	PARAMA RSH	Dr D S Bormane	UGC	1 Year	1162778.00
2	Quality Enhanceme nt	Dr D S Bormane	UGC	1Year	50000.00
		1212778.00			

Academic Year 2020_21

SN	Title of the Project	Principal Investigator	Funding Agency	Duration	Amount Received (INR)	
1	Quality Enhanceme nt	Dr D S Bormane	UGC	1Year	50000.00	
	Total Amount					



5.8	Faculty Performance Appraisal and Development System (FPADS)	30

- A. A well-defined performance appraisal and development system instituted for all the assessment years (10)
- B. Its implementation and effectiveness (20)

The college has following appraisal and development schemes for faculty:

(1) Performance based appraisal scheme (PBAS):

Performance based appraisal scheme (PBAS): The college has a well-defined faculty appraisal system. The PBAS details are submitted by each faculty at the end of each semester. The performance is assessed by the Head of department as well as Head of the institution. The faculty feedback is also collected from the students at mid and end of the semester. The feedback is assessed by the Head of the department and appropriate feedback/suggestions are given to the faculty for the improvement.

The PBA form consists of various categories like teaching learning process, quality of tests and assignments, student feedback, results of previous three year, participation in professional body activities, staff and student development programs, academic achievements during that year, presentation and publication of papers in the national and international journals, participation of organization in co/extra-curricular activities, help extended to college administration, recognition, rewards received, research and consultation activity, interpersonal skills, mentor activity, loyalty and discipline etc.

Key points for faculty appraisal are:

- 1. Professional Society Membership
- 2. Professional Society Chapter (Student Branch) and the activities
- 3. Result Analysis and Actions on that to improve higher grades.
- 4. Remedial Coaching
- 5. Question papers of other Universities and Question bank generation
- 6. Books with the latest Editions, well known publishers and internationally valid authors to be followed
- 7. Workshops to be organized
- 8. Professional Networking
- 9. Experiment list to be revised and to be prepared and circulated in group to avoid duplication



- 10. Additional Content to be covered other than regular curriculum
- 11. Research work and activities and projects/consultancy to be carried out
- 12. Other initiatives for the department, College and Campus
- 14. Industry Interactions and Visits
- 15. Placements related efforts (One Faculty One Industry)
- 16. Improvements in T-L Process and Pedagogical Innovations
- 17. More publications
- 18. Exposure on Magazines, Journals, Articles to be increased

Implementation:

- PBA forms are submitted by each faculty member at the end of each semester.
- The PBA forms are assessed by Head of the department and Principal as per the guidelines given by

IQAC.

- The faculty member discusses with head of the department as well as principal in case of any discrepancy before finalization of PBA score.
- IQAC identifies the faculty member with highest PBA score after verification of all documents and

nominates the faculty member for best teacher award at society level.

Effectiveness:

The PBAS as resulted in following outcomes:

- Improved use of ICT and innovative practices in teaching and learning
- Improved research publications/copyrights and patents
- Increased industrial visits as well as expert talks.
- Improved participation in FDP/STTP/Swayam/MOOC Courses.
- Improved industry institute interactions and MoU.
- Improved consultancy work.





Figure 5.8.1: Appreciation of faculty by HOD in case of appreciable Feedback

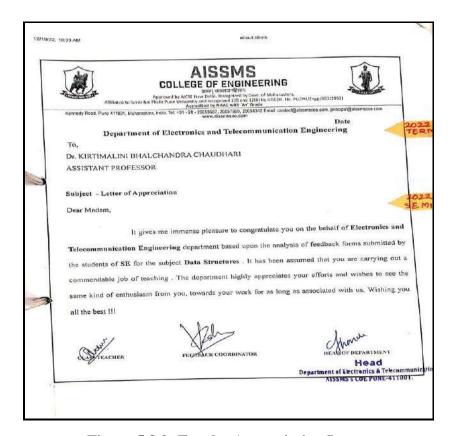


Figure 5.8.2: Faculty Appreciation Letter



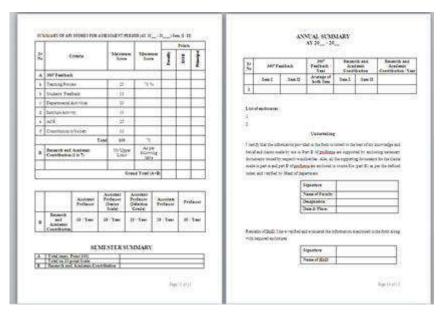


Figure 5.8.3 Performance Appraisal Sample Form

(2) **Best Teacher award:** The applications are invited from the faculty members are invited at the institute every year. The applications are scrutinized and assessed by the panel of experts/committee on the basis of academic performance, research activities and contribution at institute level. The top scoring faculty is awarded as best teacher with a Cash prize of Rs.50000/- and certificate.



Figure 5.8.4 Dr D G Bhalke receiving Best Teacher Award

3) Recognition of Excellence award: The faculty members completing PhD and significant contribution in academics are awarded by the AISSMS Society every year conferring Recognition of excellence award with memento and certificate on the day of Shahu Jayanti.





Figure 5.8.5 PhD Award Appreciation of Dr Prachi P Vast

(4) Module coordinators: The department has module coordinator system for improvement in academics. Seniors faculty members are assigned as module coordinators. The module coordinator assesses the course file of every faculty members in the module and gives suggestions for the improvement. Following are the modules and module coordinators at department level:

Table 5.8.1: List of Module Coordinator

Module	Name of the Module coordinator
Module Coordinator	Mr V B Gawai
Electronics Devices & Circuits	
Module Coordinator	Mr S B Dhekale
Software Modeling	
Module Coordinator	Ms V D Nagrale
VLSI and Embedded	
Module Coordinator	Ms Y P Lad
Communication & Signal Processing	
Module Coordinator	Dr V V Deshmukh
Network & Security	
Module Coordinator	Mr N P Mawale
Humanities, Employability and Skill	
Development	

(5) **Research Promotion Scheme**: The institute has a research promotion scheme which encourages the faculty to undertake research projects, consultancy work and training programs. The faculty involved is awarded with an appropriate amount as per the policy decided at the institution level.



(6) Support for Higher Studies: The faculty members pursuing higher studies are awarded with financial assistance of Rs.1 lakh or One-month study leave as per the choice of the faculty. The faculty member is permitted to carry out research studies by adjusting the teaching load in the morning slot and rest of the time can be utilized for study.

(7) Financial assistance for attending FDP/QIP/STTP/International Conferences:

The faculty member is permitted on duty leave to attend the respective quality improvement program. The financial assistance is provided for payment of registration fees, travel fare and accommodation.

(8) Financial assistance for NPTEL certification and Patent Grant:

The faculty receives the NPTEL registration fees if she/he scores more than 75% in the course certification examination and for patent grant Institute contribute financial expenditure.



5 0	Visiting/Adjunct/Emeritus Faculty etc.	10
5.9		10

- Provision of Visiting /Adjunct/Emeritus faculty etc.(1)
- Minimum 50 hours per year interaction (per year to obtain three marks : $3 \times 3 = 9$)

The department has provision for visiting faculty for the Audit course at UG level. Following are the details of the faculty:

Institute has a policy to invite / appoint visiting faculty, adjunct faculty and Emeritus Professor as and when demanded by the Program for particular academic needs of the program. Such type of appointment is apart from regular faculty members' needs and expert lecture faculty. Following table indicates details of the adjunct faculty appointed by the program

Year	Name of the visiting	No of Contact hours
	Faculty	
2022-23	Mr Makarand Thombare	18 hours per class* 3 classes = 54
		Hours
2021-22	Mr Makarand Thombare	18 hours per class* 3 classes = 54
		Hours
2020-21	Dr. Mrs Rakhi Khedkar	4 months 80 Hours in a year





AISSMS

COLLEGE OF ENGINEERING



ज्ञानम् सकलजनहिताय

Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION VI

FACILITIES AND TECHNICAL SUPPORT



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

6.1	Adequate and well equipped laboratories, and technical	30
0.1	manpower	30

		No. of		Weekly	Tech	nical Manpov	ver support
Sr. No.	Name of the Laborator y	students per setup (Batc h Size)	Name of the Important equipment	utilization status (all the courses for which the lab is utilized)	Name of the technical staff	Designation	Qualification
	Basic Electronics Engineering	3-4 (20)	Test Lab , Function generator , Power supply	Basic Electronics Engineering	Mrs Shraddha S Bodke	Laboratory Assistant	BE (E&Tc)
2.	Circuit and Simulation Lab	3-4 (20)	DSO,DPO, Function Generator, 61/2 Digital Multimeter		Mr. Shashibhush an M. Dhiwar	Laboratory Assistant	МЕ (Е&Тс)
3	Power Electronics and Digital Circuit Lab	3-4 (20)	Power oscilloscope, Digital Trainer boards/kits	Electronics, Power	Paygude	Assistant Laboratory	BE (E&Tc) sun certification BE (E&Tc)
4	Communicati on Engineering Lab	3-4 (20)	Microwave bench,DSO, TV, RADAR trainer kit, Spectrum Analyzer, VNA	Digital Communicati on,	Shashibhush an M. Dhiwar	Laboratory Assistant	МЕ (Е&Тс)
5	VLSI Lab	1 (20)	Spartan III/II	VLSI, Data Structure &Algorithms Objectoriente d programming system	Mr. Sandeep T. Gajar	Laboratory Assistant	BCA Appearing, Diploma in Hardware and Networking, Microsoft Cirtified



6	Signal processing and Embedded system	1 (20)	Microcontroller 8051,Ardinuo kit, ARM boards, CortexM kits	Microcontroll er, Internet Of Things, Signal & System	Mrs K M Zambre	Laboratory Assistant	BE(E&Tc)
7	Data Analytics Lab	1 (20)	MATLAB,	Lab practice	Mrs Shraddha S Bodke	Laboratory Assistant	BE(E&Tc)
8	Project & Skill Development Lab	3-4 (20)	DSO,DPO, Fun. Generators, Soldering gun , Drill M/c (Small), Electronic Test Bench	Mini Project, Project stage I &II		Laboratory Assistant	BE(E&Tc)
9	AI& IOT Lab	1 (20)	Iot Kits and Boards	AIML, IOT	Mr. Sandeep T. Gajar	Laboratory Assistant	BCA Appearing, Diploma in Hardware and Networking, Microsoft Cirtified

25



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

Sr.	Facility	Details	Reason(s) for	Utilization	Areas in which	Relevance to
No.	Name		creating		students' are	POs/PSOs
			facility		expected to have	
					enhanced	
					learning	
1.	Aviot-o- virtues (Robo and Drone)	conducting workshops,	Practical skill development, Enhancement in teamwork and leadership qualities, improvement in presentation skills	All Branches	Mechatronics, Automation, Robotics	PO7, PO8, PO9, PO10, PO11, PO12
		Making drone and workshop	Enhance knowledge	All Branches	Communication, Automation	PO8, PO9
2	Deaxus Coding Club	Programming Skills	Improvement in software development	E & TC	Projects related to software,C, C++,Java	PO5, PO7, PO8, PO9, PO10, PO11, PO12
		Data Analysis skills	Improvement in data analytics and visualization skills	E&TC	Python Programming, R Programming	
3	Centre of Excellence (Automation Anywhere)	Designing and Automation	Enhance knowledge	All branches	Automation and Controls, Python Programming	PO8, PO9
4	Electronics for you	Learning of different Projects	Advanced learning, self learning	E&TC	Hardware Design	PO4, PO9
5	Virtual Lab	IIT Bombay	For simulation	E&TC	Design, circuit simulation	PO1, PO5

Table B.6.2



6.3 Laboratories: Maintenance and overall ambiance 10

Laboratory Maintenance:

- All the laboratories are well equipped and Periodic maintenance is done for the experimental setup and laboratory equipment.
- Maintenance of the instruments are carried out on a regular basis and also when necessary
- A dead stock register is maintained for all the laboratories.
- History cards of equipment are maintained and are kept intact.
- The old and outdated equipment get write-off by the standard procedure.
- The care of the repairs and maintenance of all computers is taken by the system administrator of the institute.

Overall Ambiance:

- Every laboratory is properly ventilated.
- Windows are provided for excellent air circulation, which is supported by several ceiling fans.
- All laboratories offer proper seating arrangements for students.
- Ambient lighting assisted by fluorescent tubes is provided. Curtains are provided for windows to ensure good visibility.
- The laboratories are always kept neat and clean.
- A housekeeping time table is provided to the attendant and is maintained.
- Conventional black boards, soft boards and white board in laboratory





Communication Engineering Lab

AI and IOT Lab





Data Analytics Lab

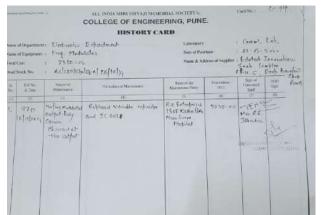
Signal processing and Embedded system



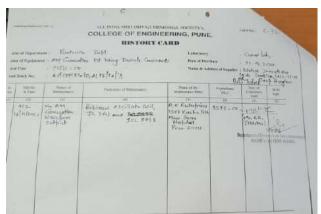
Seminar Hall



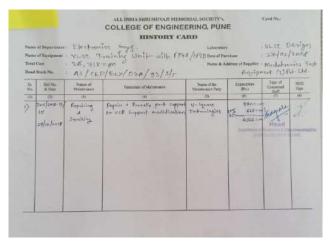
History cards:



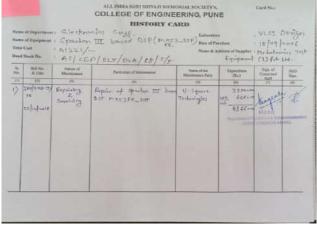
Frequency Modulator History card



AM Generator Kit History card



VLSI Training kit History card



VLSI Training kit Spartan-III History card



6.4	Project laboratory	05

Facilities & Utilization

- The Project Lab is an open lab where all students have ready access to basic electronic test equipment and instrumentation.
- The primary purpose of the lab is to provide the space and resources needed by students to complete their Design and general Projects.
- The lab is also available for students who need to complete projects and assignments from their other E&tc courses and laboratories or for E&tc graduate students working on projects related to their thesis research.
- The lab also serves as a meeting location for groups of students working on team projects.
- Many students also use this lab to work on supplemental learning projects to enhance their understanding of class and lab assignments.
- The Project Lab is open Monday through Friday and is monitored by student & lab assistant. Presently one large study desk for student use in this lab.
- In addition to the array of test equipment provided at the work benches in the Project Lab, additional instrumentation, cabling, and prototyping materials are also available for student laboratory and project use from a check-out window in this Lab.







6.5 Safety measures in laboratories 10

Sr. No.	Name of the Laboratory	Safety measures
1.	Basic Electronics Engineering. Lab.	All power supply lines are properly insulated and covered. Circuit breaker is available. First-aid kit is available. Fire extinguisher is available. Lab assistant maintain equipment and keep them in safe operating condition. Equipments are provided with fuses to safeguard the equipments from power fluctuations. COVID SAFETY: Mask were mandatory for all. Hand sanitizer before entering the Laboratory spitting could be dangerous
2.	Circuit and Simulation Lab	All power supply lines are properly insulated and covered. Circuit breaker is available. First-aid kit is available. Fire extinguisher is available. Lab assistant maintain equipment and keep them in safe operating condition. Equipments are provided with fuses to safeguard the equipments from power fluctuations. COVID SAFETY: Mask were mandatory for all. Hand sanitizer before entering the Laboratory spitting could be dangerous
3.	Power Electronics and Digital Circuit Lab	All power supply lines are properly insulated and covered. Circuit breaker is available. First-aid kit is available. Fire extinguisher is available. Lab assistant maintain equipment and keep them in safe operating condition. Equipments are provided with fuses to safeguard the equipments from power fluctuations. COVID SAFETY: Mask were mandatory for all. Hand sanitizer before entering the Laboratory spitting could be dangerous
4	Communication Engineering Lab	All power supply lines are properly insulated and covered. Circuit breaker is available. First-aid kit is available. Fire extinguisher is available. Lab assistant maintain equipment and keep them in safe operating condition. Equipments are provided with fuses to safeguard the equipments from power fluctuations.



		GOVED GARRING A CO
		COVID SAFETY: Mask were mandatory for all.
		Hand sanitizer before entering the Laboratory
		spitting could be dangerous
		All power supply lines are properly insulated and covered. Circuit
		breaker is available.
		First-aid kit is available.
		Fire extinguisher is available.
	VLSI Lab	Lab assistant maintain equipment and keep them in safe operating
5		condition.
3		Equipments are provided with fuses to safeguard the equipments from
		power fluctuations.
		COVID SAFETY: Mask were mandatory for all.
		Hand sanitizer before entering the Laboratory
		spitting could be dangerous
		All power supply lines are properly insulated and covered. Circuit breaker is available.
		First-aid kit is available.
	G. 1D .	Fire extinguisher is available.
	Signal Processing	Lab assistant maintain equipment and keep them in safe operating
6	and Embedded	condition.
	System	Equipments are provided with fuses to safeguard the equipments from
		power fluctuations.
		COVID SAFETY: Mask were mandatory for all.
		Hand sanitizer before entering the Laboratory
		spitting could be dangerous
		All power supply lines are properly insulated and covered. Circuit
		breaker is available.
		First-aid kit is available.
		Fire extinguisher is available.
	Data Analytics Lab	Lab assistant maintain equipment and keep them in safe operating
7		condition.
'		Equipments are provided with fuses to safeguard the equipments from
		power fluctuations.
		COVID SAFETY: Mask were mandatory for all.
		Hand sanitizer before entering the Laboratory
		spitting could be dangerous
		All power supply lines are properly insulated and covered. Circuit
		breaker is available.
		First-aid kit is available.
		Fire extinguisher is available.
	Project & Skill	S .
	Development Lab	Lab assistant maintain equipment and keep them in safe operating
	•	condition.
		Equipments are provided with fuses to safeguard the equipments from
		power fluctuations.
		COVID SAFETY: Mask were mandatory for all.
		Hand sanitizer before entering the Laboratory
		spitting could be dangerous
	AI & IOT Lab	All power supply lines are properly insulated and covered. Circuit
	maior Lau	breaker is available.
		First-aid kit is available.



	Fire extinguisher is available. Lab assistantmaintain equipment and keep them in safe operating condition. Equipmentare provided with fuses to safeguard the equipmentfrom power fluctuations. COVID SAFETY: Mask were mandatory for all. Hand sanitizer before entering the Laboratory spitting could be dangerous
--	---

Table B.6.3





AISSMS

COLLEGE OF ENGINEERING



ज्ञानम् सकलजनहिताय

Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION VII

Continuous Improvement



CRITERIO VII	Continuous Improvement		
7.1	Actions taken based on the results of evaluation of each of the POs &PSOs	20]

Identify the areas of weaknesses in the program based on the analysis of evaluation of POs & PSOs attainment levels. Measures identified and implemented to improve POs & PSOs attaithe assessment years.

Actions to be written as per table in 3.3.2.

Examples of analysis and proposed action

Sample 1-Course outcomes for a laboratory course did not measure up, as some of the lab equipment did not have the capability to do the needful (e.g., single trace oscilloscopes availtrace would have been better, or, non-availability of some important support software etc.). Action taken-Equipment up-gradation was carried out (with details of up-gradation)

Sample 2-In a course on EM theory student performance has been consistently low with respect to some COs. Analysis of answer scripts and discussions with the students revealed thattributed to a weaker course on vector calculus.

Action taken-revision of the course syllabus was carried out (instructor/text book changed too has been changed, when deemed appropriate).

Sample 3-In a course that had group projects it was determined that the expectations from this course about PO3 (like: "to meet the specifications with consideration for the public heaand the cultural, societal, and environmental considerations") were not realized as there were no discussions about these aspects while planning and execution of the project. Action takeplanning, monitoring and evaluation included in rubrics related to these aspects.



POs & PSOs Attainment Levels and Actions for improvement – CAYm1

POs Attainment Levels and Actions for Improvement- (2021-22)

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	2	1.8	The PO1 attainment has shown an improvement compared to the previous value. However, due to lack of understanding of fundamental concepts, students' performance is low in courses like Signals & Systems, Digital Signal Processing, Electromagnetics, Electrical Circuits, and Electronic Circuits etc.		

Action 1: Understanding the needs of the students, faculty members need to conduct different activities such as tutorial, numerical problem solving, showing videos etc.

Action 2: Extra theory and practical sessions need to be conducted for DSE students.

Action 3: More practice to solve unsolved problems from books and previous university question papers need to be exercised.

PO2: Problem Analysis: Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO2	2.1	1.77	There is an improvement in the attainment of PO2 compared to the previous attainment. It is observed that students lack in applying fundamental concepts to practical aspects of problem analysis. The problem solving and analyzing skills are to be gained through core fundamental subjects.
-----	-----	------	---

Action 1: Identifying the fact that some of the core courses do not have tutorial sessions assigned in the formal curriculum, special tutorial sessions need to be conducted in order to enhance problem solving skills of the students.

Action 2: Course wise and topic wise question banks need to be prepared and supplied to the students.

Action 3: Assignment need to have more numerical problems, wherever possible.

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



PO3	2.1	1.49	The attainment of PO3 is around 71%. This is due to the fact that complex design problems demand designing a system by integrating knowledge gained in various courses.
-----	-----	------	---

Action 1: Faculty need to be encouraged to undergo professional training.

Action 2: More number of engineering problems need to be identified and solved with a design thinking approach.

Action 3: Students need to be encouraged to form heterogeneous groups to identify societal problem and attempt solution towards it.

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	2.2	1.63	The gap in PO3 is percolated in PO4. This may be because of lack in the holistic approach in system analysis and evaluation.
-----	-----	------	--

Action 1: Industry relations need to be enhanced and students will be encouraged to take hard core projects demanding investigations of complex systems.

Action 2: To involve experts for orientation towards investigating complex engineering problems.

Action 3: More number of students will be encouraged for industry sponsored projects and internships.

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	2.2	1.71	The PO5 attainment has shown an improvement compared to the previous year's attainment. The curriculum has less emphasis on modern tools.
-----	-----	------	---

Action 1: More hands-on experience through the projects and workshops need to be provided.

Action 2: Students need to be encouraged to use various advanced software and 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	2.4	1.53	There is an improvement in the attainment of PO6 compared to the previous attainment. Innovations and recent trends are helping to address pressing global issues such as climate change, pollution, resource scarcity, and healthcare.
-----	-----	------	---

Action 1: Active participation in different social activities like National Service Scheme camps and techno-social visits will be increased by motivating students.

Action 2: Students need to be motivated to take active part in professional student chapters' activities.

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.)

PO	7 2.4	1.58	As the current curriculum places less emphasis on environmental awareness and sustainability more efforts are required to meet this PO.
----	-------	------	---

Action 1: Students need to be encouraged to do their project work which will be beneficial for society and also helpful in environmental context.

Action 2: Students need to be motivated to participate in activities.

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

Action 1: Ethics need to be given significant attention in all aspects of course delivery, particularly in report writing.

Action 2: Students need to make aware of concept of plagiarism through project.

Action 3: Seminars/ webinars such as Intellectual property rights need to be planned for students.

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

Action 1: More number of co-curricular and extra-curricular activities need to be organized.

Action 2: Group assignments need to be given and group discussions, debates will be organized.

Action 3: Students will be encouraged to participate in project exhibitions, Poster presentations.



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	2.0	1.41	There has been an improvement in the attainment of PO10 as compared to the previous year attainment. It is observed that there is still scope of improvement in documentation and presentation.
------	-----	------	---

Action 1: More focus on developing presentation skills.

Action 2: More focus on soft skill training need to be given.

Action 3: Effective research paper writing guidelines will be given through seminars/webinars.

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	2.7	2.28	The PO11 attainment has shown improvement compared to the previous year attainment. Still more focus needs to be given on engineering economics and financial aspects.
------	-----	------	--

Action 1: To organize and manage the group activities to strengthen managerial skills, time and finance management.

Action 2: Students need to be given more opportunities to participate in various technical events like Hackathon, Drone and Robo Competitions.

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.)

PO12	2.5	1.75	There has been an improvement in the attainment of PO12 as compared to the previous value. Still more focus needs to be given on importance of independent and life-long learning.
------	-----	------	--

Action 1: Awareness on latest technologies and trends need to be created through expert lectures, workshops and Industrial visits.

Action 2: More number of students to be encouraged to enrol for training / certification courses/ practical on virtual labs.

PSO1: Analyze Design and test Analog and Digital circuits and systems for given application.

PSO1	2.1	1.65	The PSO1 attainment has shown improvement compared to the previous year attainment value. Students lack in applying fundamental concepts to practical aspects.
------	-----	------	--



Action 1: Hands on Workshops need to be organized.

Action 2: Students will be encouraged to participate in events like project competition, Hackathon, Unnat Bharat Abhiyan etc

 $PSO2: \ Implements \ technical \ blocks \ of \ hardware-software \ co-design \ for \ Embedded \ \& \ Robotics \ automation \ application.$

PSO2	2.2	1.54	There is an improvement in PSO2 attainment as compared to the previous year attainment. Still students failed to integrate knowledge gained through various courses for system building and its implementation.
------	-----	------	---

Action 1: Students need to undertake more projects in the domain of robotics and embedded systems.

Action 2: Students need to be encouraged to participate actively in events like project competition, Hackathon, Unnat Bharat Abhiyan

PSO3: Apply knowledge of E & TC system for social and environmental problems as a individual member or leader of diverse team in multidisciplinary settings

PSO3	2.3	1.63	There has been an improvement in the attainment of PSO3 as compared to the previous year attainment. As curriculum directly do not contribute to this PSO, more efforts through co-curricular and extra-curricular activities are required.
------	-----	------	---

Action 1: More activities to be organized through student clubs (Drone, Robo, etc.) and more participation in events at National level.

Action 2: Students need be encouraged to participate in events like project competition, Hackathon, NSS, Unnat Bharat Abhiyan, etc.

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

10

AISSMS COE has established a well-defined Internal Quality Assurance System and every effort has been taken to address all the quality attributes of technical education for the overall professional and holistic development of students. Avariety of academic, administrative, co-curricular and extra-curricular activities are carried out at Institute and department level, which helps in improving the quality of education imparted.

For the sustenance and continuous improvement in quality for achieving academic excellence, the Institute has adopted certain quality management strategies and has developed a methodology for auditing different academic and administrative quality aspects.

For effective monitoring of academic activities, the Program Assessment Committee (PAC) was formed at department level. Later on, it was revised as Program Assessment and Quality Improvement committee (PAQIC). PAQIC committee consists of Head of Department as Chairman, Module Coordinators, Industry Institute Coordinator and Exam Coordinator.

PAQIC oversees academic audits at the department level on syllabus coverage, laboratory work completed, student's performance in internal and external exams, and activity planning based on feedback, such as course end surveys and exit surveys. External audits are conducted by an external audit committee in addition to internal audits.

PAQIC verifies course coordinators course files as well as other outcome-oriented documents for each course, such as test papers and assignments to ensure that questions satisfy the desired learning level as per Blooms taxonomy. PAQIC committee also monitors conduction of supporting activities like Industrial Visits, Expert Lectures, Workshops, Projects, and Internships etc.

PAQIC meeting is conducted twice in semester, one at the beginning and the other in the mid semester, in which the requisite suggestions may be given. The compliance required is brought to the notice of the concerned person or team and corrective action is suggested and monitored again at a predetermined interval.



AISSMS COLLEGE OF ENGINEERING SITEM HADDENING



Department of Electronics and Telecommunication

Circular regarding Programme Assessment Committee

Date: 17 June 2019

The Program Assessment Committee (PAC) is formed for effective monitoring of academic activities of E & TC Engineering department. The following are the members of PAC w.e.f. Academic year 2019-20.

Program Assessment Committee:

Sr No	Name of the staff member	Portfolio
1	Dr D G Bhalke	Chairman
2	Mrs K B Chaudhari	Coordinator
3	Mr. S B Dhekale	Module coordinator (Hardware and Software Design)
4	Mr. A Y Kazi	Module coordinator (Instrumentation, Power, and Control)
5	Mr. N P Mavale	Module coordinator (Skill Development and HSS)
6	Ms. V D Nagrale	Module coordinator (VLSI and Embedded Systems)
7	Mrs Y P Lad	Module coordinator (Communication)
8	Ms V V Deshmukh	Module coordinator (Signal Processing)
9	Mrs R R Itkarkar	Module coordinator (Project)

Roles and Responsibilities of PAC Committee are as follows.

- · Create an annual schedule of assessment activities, plans, and inspection period.
- · Review program annual assessment plans and reports and provide recommendations.
- Oversee implementation of learning outcomes (CO, PO, PSO) assessment plans by department and programs.
- Track the results of Course Outcomes, Program Outcomes (POs), Program Specific Outcomes (PSOs) and Program Instructional Goals (PEOs), and plan the steps required to achieve POs, PSOs and PEOs.
- · Check quality of Question Papers, and learning levels.
- Scheduling of inspection period to ensure assessment of POs and PSOs in a valid time period.
- Preparing periodic program activity reports, progress reports, status reports or other special management reports.

Figure 7.2.1: Circular regarding PAC (page1)



बातम यकलजनदिताय

Accredited by NAAC with "A+" Grade



- Provide support, workshops and consultation with faculty and program leaders regarding learning outcomes assessment
- Motivate the faculty and students to attend conferences, create programs, job models, publish papers and participate in research activities.
- Interact with stakeholders and DAB to facilitate the achievement of POs, PSOs, and PEOs, maintain track record and current status.

The committee's analysis of results should be centered around following objectives:

- Opportunities provided by current program structure and elective courses for student learning
- Fulfillment of learning objectives
- Sufficiency of current means of assessment to accurately measure student learning on the defined outcomes
- Attainment of expected student performance
- · Specific action required in order to address the expectation gap

(changes in teaching strategies, concept emphasis, assignments, etc. vs. substantive program changes.)

Dr.D.C. Bhanke d

Depart HOD(P&TC) = 5 Telecommunication

CC: Principal, AISSMSCOE Pune

Central NBA Coordinator

Office File

Dept NBA Coordinator

Mrs K B Chaudhari Mr. S B Dhekale

Mr. A Y Kazi Mr. N P Mavale

Ms. V D Nagrale

Mrs Y P Lad

Ms V V Deshmukh

Mrs R R Itkarkar

Figure 7.2.2: Circular regarding PAC (page2)

2/18/22, 1:04 PM AISSMS College of Engineering Mail - List of module coordinators and formats Gmail Kirtimalani Chaudhari <kbchaudhari@aissmscoe.com> List of module coordinators and formats Fri, Sep 17, 2021 at 8:51 AM To: Daulappa Bhalke ≪gbhalke@aissmscoe.com>, Kirtimalani Chaudhari≪kbchaudhari@aissmscoe.com>, Aslam Kazi aslam Kazi <a href="mailto:syst <satakalkar@aissmscoe.com> Good morning all. The list of module coordinators and the subjects allotted to each module is already sent to all by the DAC of our department. I am attaching the same herewith for your ready reference. Also, find the formats for course file checking herewith. All module coordinators are requested to complete the course file checking for the academic year 2020-21 before 22nd September 2021. Maintain a record of the same in the attached formats. With regards, Mrs K B Chaudhari, Department of E & TC, AISSMS College of Engineering Mob: 7774009804 3 attachments Module Coordinators.docx 21K Course File (Part A) for Academic Audit.docx 120K Course File (Part B) for Academic Audit.docx https://mail.google.com/mail/w/0/7ik=b93d4ae207&view=pt&search=all&permmsgid=msg-a%3Ar467926367240251214&simpl=msg-a%3Ar467926367... 1/1

Figure 7.2.3: Mail regarding list of Module Coordinators and Course file checking



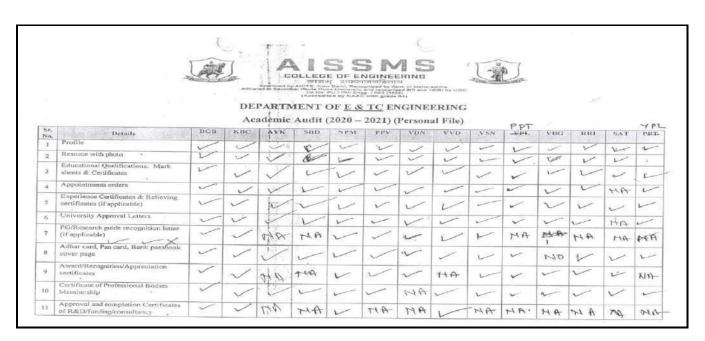


Figure 7.2.4: Sample Course File Checking Report (Page 1)



Figure 7.2.5: Sample Course File Checking Report (Page 2)



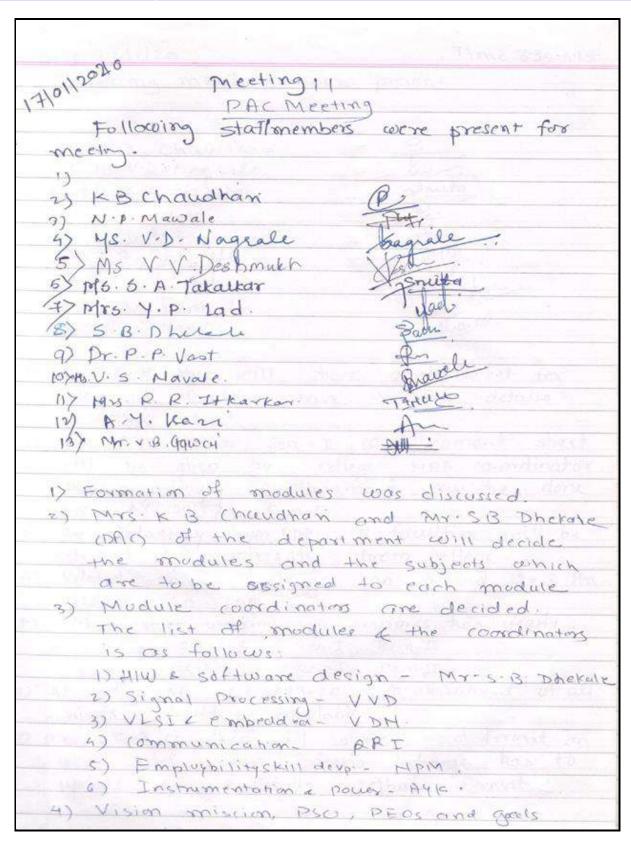


Figure 7.2.6: PAC Minutes of Meeting



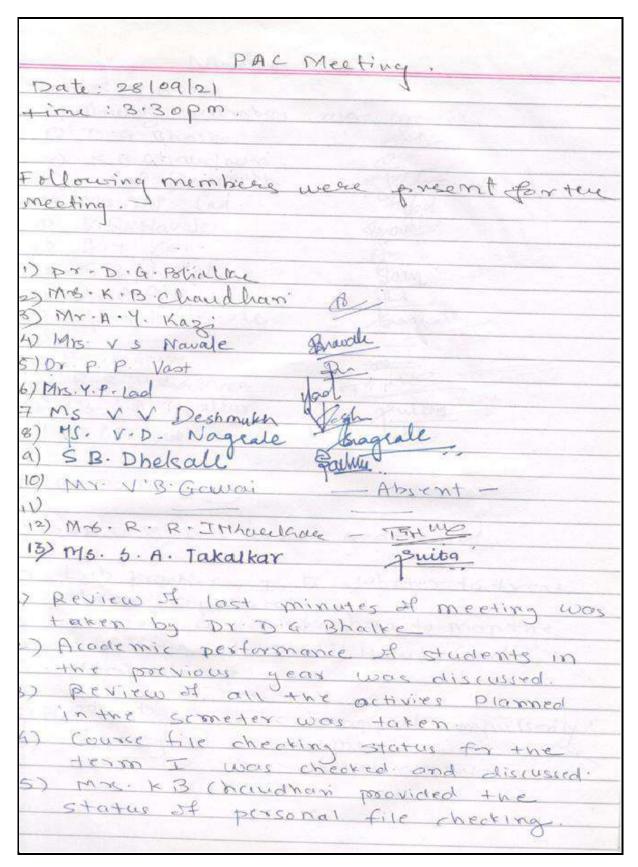


Figure 7.2.7: PAC Minutes of Meeting







Figure 7.2.8: PAQIC Meeting Photographs

Figure 7.2.9: PO-PSO attainment discussion in PAQIC



7.3

Improvement in Placement, Higher Studies and Entrepreneurship

10

Assessment is based on improvement in:

- Placement: number, quality placement, core industry, pay packages etc.
- Higher studies: performance in GATE, GRE, GMAT, CAT etc., and admissions in premier institutions
- Entrepreneurs

Placement, Higher Studies and Entrepreneurship for past Three years

Table 7.3.1: Placement, Higher Studies and Entrepreneurship for past Three years details

Item	CAY 2022-23	CAYm1 2021-22	CAYm2 2020-21	CAYm3 2019-20
Total No. of Final Year Students	78	59	64	
No. of students placed in companies or Government Sector	16 (In Process)	54	54	
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.)	03	02	00	
No. of students turned entrepreneur in engineering/technology	00	00	00	



Placement: number, quality placement, core industry, pay packages etc.

1. Number

The number of placements is increasing year after year. Because of the pandemic, there was a revolution in digitization, which provided computer engineering students with several opportunities to work in the IT industry for a fair wage. Still, a significant number of students are guided and assisted in achieving their desired career path, which includes placements in government and corporate sectors, higher education, and entrepreneurship.

2. Quality placement

Placements are improving year after year as the maximum income offered in the software industry rises. Industries of all levels are recruiting students, and students have a variety of options. Many students are getting opportunities to join startups in order to get a feel and experience before starting their own startups.

3. Core industry

Placements at core companies are improving, and students are being recruited by core industries with a good reputation in the community. This gives students experience working with known multinational corporation while also allowing good Small and medium-sized enterprises to recruit students on a regular basis. This fosters trust between the industry and students. Internships are available in several industries for students. This is forming a solid link, and mutual benefits are being reaped. Students can design their career path in an organized manner and select relevant electives offered by the University. Their choices are now more informed, guided, and experienced.

4. Pay packages

Pay packages are an essential factor in company selection, but students are also searching for interesting employment and a good reputation in the community. As a result, many talented students pursue advanced degrees or start their own businesses. Packages and incentives are increasing day by day, and as the pandemic situation improves, recruiters with big wage packages are showing increased interest.



AVERAGE PACKAGE:

Table 7.3.2: Average Package for past Three years details

Academic Year	Number of students placed	Average Package (LPA)
2022-2023	16(In Process)	6.36
2021-2022	54	4.5
2020-2021	54	4.5
2019-2020	NA	NA

Table 7.3.3: Name of Company and Packages for Academic Year-2020-21

	Academic Year 2020-21			
Sr No	Name of the Company	Packages (LPA)		
1	Johnson & Control	4.0		
2	Accenture	4.5		
3	Cognizant	4.1		
4	Tata Consultancy Services	3.6		
5	Infosys	4.0		
6	Tech Mahindra	3.25		
7	Thirdware Solution, Digital India	4.56		
	Corporation			
8	DSC Technology	3.6		
9	FUJITSU	3.5		
10	WIPRO	3.5		
11	Accion Labs India Private Limited	4.5		
12	Nihilent Technologies	3.5		
13	L&T Infotech Ltd.	3.5		
14	BirlaSoft Ltd.	3.25		
15	Jio Platforms Limited & Digital India Corporation	4.5		
16	Capgemini	3.8		
17	Hexaware	3.5		
18	Honeywell	6.0		



Table 7.3.4: Name of Company and Packages for Academic Year-2021-22

	Academic Year 2021-2022			
Sr No	Name of the Company	Packages (LPA)		
1	Tata Consultancy Services	3.36		
2	Hexaware	6.0		
3	Cognizant	4.5		
4	Zensor	4.0		
5	Nagarro Software	4.5		
6	Harman Connected Services	5.5		
7	KPIT	4.0		
8	Siemens	5.0		
9	Wipro	3.6		
10	Bristlecon	4.25		
11	Volkswagan	5.0		
12	Capgemini	3.8		
13	Infosys	4.0		
14	Datacapten Technologies PVT. Ltd.	3.0		
15	L&T Infotech	4.0		
16	Ruddar Analytics	4.2		
17	Nihilant Technologies	4.0		
18	Forbes Marshall	6.0		
19	Vodafone	3.6		



Table 7.3.5: Name of Company and Packages for Academic Year-2022-23

	Academic Year 2022-23			
Sr No	Name of the Company	Packages (LPA)		
1	Hewlett Packard	5.5		
2	L&T Infotech	5.00		
3	Johnson Controls	4.5		
4	Cognizant	4.0		
5	Tech Mahindra	3.8		
6	Tata Consultancy Services	7.6		
7	Tata Communication	7.7		
8	Bristlecone	4.75		
9	Bobble AI	7.92		

Higher studies: performance in GATE, GRE, GMAT, CAT etc., and admissions in premierinstitutions

Table 7.3.6: Number of students taken admission for higher studies

Academic	Number of students taken	
Year	admission for higher studies	
2021-2022	03	
2020-2021	02	
2019-2020	NA	



7.4

Improvement in the quality of students admitted to theprogram

10

Table 7.4.1: National Level Entrance Examination, State/University Level entrance Test, Lateral Entrydetails

Item		CAY 2022-23	CAYm1 (2021-22)
National Level Entrance	No. of Students admitted	09	09
Examination(JEE)	Opening Score/Rank	88	83
	Closing Score/Rank	86	83
State/University Level entrance	No. of Students admitted	57	59
Test(MHT-CET)	Opening Score/Rank	96	95
	Closing Score/Rank	91	77
Lateral Entry details	No. of Students admitted	09	09
Diploma- Direct Second Year Admission	Opening Score/Rank	88	96
Auillission	Closing Score/Rank	83	91
Average CBSE/Any other Board Result of admitted students (Physics, Chemistry & Maths)			





AISSMS





ज्ञानम् सकलजनहिताय

Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF

ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION VIII

First Year Academics



CRITERION 8	First Year Academics	50
-------------	----------------------	----

8.1	First Year Student-Faculty Ratio (FYSFR)	5
-----	--	---

Data for first year courses to calculate the FYSFR:

Year	Number of Students (Approved Intake Strength)	Number of Faculty Members (Considering Fractional Load)	FYSFR	*Assessment = (5 ×20)/ FYSFR (Limited to Max. 5)
2022-23	660	30	22	4.54
2021-22	660	28	23.57	4.24
2020-21	660	30	22	4.54
	Ass	4.44		

Table 8.1

*Note: If FYSFR is greater than 25, then assessment equal to zero.



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, Faculty definition as defined in 5.1

Year	x	Y	RF	Assessment of faculty qualification $(5x + 3y)/RF$
2022-23	8	20	33	3.03
2021-22	8	18	33	2.84
2020- 21	7	16	33	2.51
			Averag e Assess ment	2.78

Table 8.2

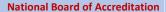


8.3	First Year Academic Performance	10
-----	---------------------------------	----

Academic Performance = ((Mean of 1^{st} 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)) x (number of successful students/number of students appeared in the examination) = Successful students are those who are permitted to proceed to the second year.

A.Y.	Total No. of Appeared Students	Clear Pass	Total No. of students in ATKT	Total No. of Fail Students	Total No. of successful Students	Mean SGPA	API
2021-22	68	36	32	0	68	7.44	7.44
2020-21	67	63	4	0	67	8.54	8.54
2019-20	57	50	5	2	55	7.38	7.12
			Average AI	PI:			7.7

Table 8.3: Average SGPA of all students clear passed and passed with ATKT student







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.

Assessment Process Details

Process Details: Assessment of Course Outcome

Assessing Course Outcomes (COs) is an important part of evaluating the effectiveness of a course and determining whether it has achieved its intended goals. This process is carried out using following steps:

- 1. Define the Course Outcome statements: The first step is to clearly define the CO statements of the course using Bloom's Taxonomy. Domains of COs such as cognitive, psychomotor or affective are identified while framing the CO statements. This includes identifying the specific knowledge, skills, and abilities that students are expected to gain by the end of the course. For each course 4-6 measurable CO statements are defined.
- **2.** Identify and Implement: Once the CO statements have been defined, the next step is to identify and implement assessment tools that measure the extent to which outcomes are achieved.
- **3.** Collect data: Collect data from students' performance on the assessment tools. This is done by grading exams, projects and through surveys.
- **4.** Analyze data: Once data has been collected, it is analyzed to determine how well students have achieved the course outcomes.
- 5. Use data to identify areas of improvement for the course.

Assessment Tools

Assessing CO is an iterative process that involves continuous refinement and improvement.



Assessment tools are designed to evaluate the attainment of the COs. It is important to select assessment tools that align with the specific COs of the course and to use multiple assessment tools to provide a comprehensive evaluation of student learning. The assessment tools are chosen based on the specific COs being assessed and the teaching methodologies being used in the course.

The evaluation of the COs involves the use of both direct and indirect assessment tools, with greater weightage assigned to the former. Specifically, 80% weightage is given to direct assessment tools, which include both internal assessments (20%) and external assessments (80%), whereas indirect assessment tools are assigned a weightage of 20%. The performance of students in both internal and external assessments is taken into account, with appropriate weightage assigned to each.

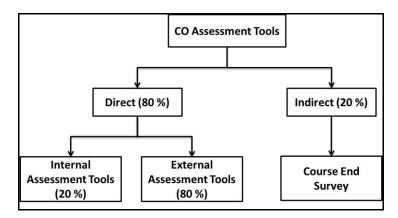


Figure 8.4.1.1: Assessment tools and its weightage

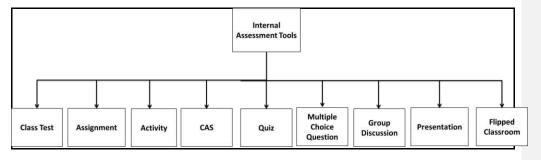


Figure 8.4.1.2: Internal Assessment tools



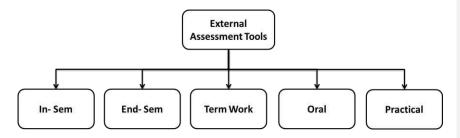


Figure 8.4.1.3: External Assessment tools

Direct Assessment Tools:

Internal Assessment:

In order to ensure that students are keeping up with the course content, primarily class tests and assignments are used as effective measures of their progress. The course is divided into six units, each of which is evaluated through appropriate assessment tools. Based on domain of COs such as cognitive, psychomotor or affective the assessment tool is selected and is mapped to the specific CO of the course. The direct internal assessment tools are class tests, quiz, multiple choice questions, group discussion, assignments, presentation, flipped classroom etc.

Practical sessions offer students a valuable opportunity to gain hands-on experience in applying the concepts they learn in class and to develop the skills necessary for success in their field of study. To assess students' performance in these practical aspects of the course, a Continuous Assessment Sheet (CAS) is used. This sheet evaluates several parameters, including regularity, quality of experiment write-ups, understanding and overall performance during each experiment.

The project work of the student is assessed through periodic project reviews. These reviews are conducted by the departmental project progress monitoring committee. Through reviews, teachers are able to track students' progress and provide constructive feedback to help them improve their skills and understanding of the project work.

External Assessment:

University Examination: The university conducts both in-semester and end-semester examinations



to evaluate students understanding of the course contents. In-semester and end-semester examination covers the entire syllabus and evaluates all COs. These examinations are designed to test students knowledge and comprehension of the course contents, as well as their ability to apply that knowledge to real-world situations.

Practical and tutorial sessions conclude in an end-semester examination, which may take the form of a term work, oral examination, or practical examination. This evaluation is conducted by both an external and internal examiner. This ensures impartial and objective assessment. Through this examination, students are tested on their ability to apply the knowledge and skills they have acquired throughout the course to practical scenarios.

Indirect Assessment Tool:

A Course end survey is used as indirect assessment tool which is a feedback tool used to gather information from students at the conclusion of a course. Its purpose is to assess the effectiveness of the course. Typically administered in the final week of the course, the survey covers course content in the form of CO statements.

8.4.2 Record the attainment of Course Outcome of all courses with respect to set attainment levels

Program shall have set Course Outcome attainment levels for all 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 to the Course Outcomes of a course in addition to the performance in the University examination)

Evaluation of CO Attainment by Direct Assessment Tool

The evaluation of CO attainment by assessment tool involves a systematic process of collecting and analysing data to determine the extent to which the course outcomes have been met. The following steps are taken for this evaluation:

a) Choose an appropriate assessment tool: There are various internal and external assessment tools that are used. The choice of tool is aligned with domain of the COs.

> E & TC Engineering Department



- b) Determine assessment criteria: The assessment criteria are clearly defined and communicated to students. This will help to ensure that students understand what is expected from them and how their performance will be evaluated.
- c) Analyse results: The results of the assessment is analysed to determine the extent to which the course outcomes have been met. This analysis can be incorporated in future instructional strategies.

Attainment Levels

Attainment levels for COs are a measure of students achievement in meeting the course objectives. These levels are assessed using a variety of tools, and the attainment level may be stated as a percentage of students expected to achieve a certain threshold of marks. The attainment level is then measured as the actual percentage of students who meet or exceed the set threshold.

The defined attainment levels are:

Attainment Level 1(A1): 40% to less than 60% students scoring more than 60% marks out of the relevant maximum marks.

Attainment Level 2(A2): 60% to less than 70% students scoring more than 60% marks out of the relevant maximum marks.

Attainment Level 3(A3): 70% and more than 70% students scoring more than 60% marks out of the relevant maximum marks.

Though 40% to 60% students are considered for attainment level 1, the percentage may vary from course to course. The course teacher decides this level from previous university examination results and the difficulty level of the course. Percentage of students for level 2 and 3 is changed subsequently

Mapping of COs with Assessment Tools

Mapping COs with assessment tools is an important part of the assessment process and can help to ensure that student performance is evaluated consistently and effectively.

Weighted average method

E & TC Engineering Department

Vision: Society Growth and Welfare through Competent Electronics and Communication Engineering Graduates



The steps involved in calculation of CO attainment are as follows:

- Decide the assessment tools to be employed in calculating CO attainment. These tools are based on the domain of course outcome.
- ii. Establish the level of attainment for each tool used in the process, which will be measured on a scale of 1 to 3.
- iii. Assign weights to each tool based on its maximum marks. The weight for each tool will be calculated as the ratio of its maximum marks to the total marks assigned for all selected tools.
- iv. Multiply each tools level of attainment by its corresponding weight.
- v. Sum up the weighted attainment values for all the tools to get CO attainment.

For example, if three tools are used with maximum marks assigned as 20, 30, 40 (Total Maximum Marks = 90), and the CO attainment levels for the tools are 2, 1, and 3 then weights assigned are as (20/90), (30/90) and (40/90), respectively, based on the maximum marks for each tool in measuring the CO attainment.

To calculate the weighted average CO attainment, following formula is used:

Σ weightage*CO attainment

Weighted average CO attainment = (Tool 1 attainment * Weight 1) + (Tool 2 attainment * Weight 2) + (Tool 3 attainment * Weight 3) + ...

In the example above, the weighted average CO attainment would be:

Weighted average CO attainment = (2 * 20/90) + (1 * 30/90) + (3 * 40/90) = 2.11

Therefore, the weighted average CO attainment for the three tools is 2.11.

Table 8.4.2.1: Mapping of Cos with Assessment Tools

Assessment Tool	Class Test 1	Assignment 1	CAS	In-Sem	Termwork	Practical
COs Mapped	CO1	CO1	CO1	CO1, CO2	All COs	All COs
Maximum Marks	M1	M2	M3	M4	M5	M6
CO Attainment Level	A1	A2	A3	A1	A3	A2



Since different assessment tools are used to evaluate each CO, the average attainment of each CO will depend on the attainment level obtained from each tool. For instance, the average attainment level of CO1 will depend on the attainment levels obtained through various internal assessment tools, such as class test 1 or assignment 1 or CAS or other activity, as well as external assessment tools, such as In-Sem, End Sem, Practical/Oral examination, and Term work. If an assessment tool is used for multiple COs, the maximum marks can be distributed equally among those COs.

Table 8.4.2.2: CO Attainment calculations for Internal Assessment Tools

Assessment Tool	Class Test 1	Assignment 1	CAS	
Marks for CO1	M1	M2	M3	Mint=M1+M2+M3
Weightage	WT1=M1/Mint	WAs1=M2/Mint	WCAS=M3/Mint	
CO Attainment	A1	A2	A3	
Average CO Attainment (Aint)		Aint =WT1*A1+WAs	'	

Table 8.4.2.3: CO Attainment calculations for External Assessment Tools

Assessment	In-Sem	Termwork	Practical				
Tool							
Marks for	M4/2	M5/6	M6/6	Mext=			
CO1				(M4/2)+(M5/6)+(M6/6)			
Weightage	WIn=(M4/2)/Mext	WTw=(M5/6)/Mext	WPr=(M6/6)/Mext				
СО							
Attainment	A1	A3	A2				
level							
Average CO attainment (Aext)		Aext =WIn*A1+WTw*A3+WPr*A2					

The CO attainment level by direct tools is calculated by giving 20% weightage to the average CO attainment level obtained from internal assessment tools and 80% weightage to the average CO attainment level obtained from external assessment tools.

E & TC Engineering Department

Vision: Society Growth and Welfare through Competent Electronics and Communication Engineering Graduates



Direct CO attainment for CO1 = 0.2 * Aint + 0.8 * Aext

CO Attainment Level by Indirect Assessment Tool

At the end of each course, a course end survey form is created with questions directly linked to the COs. Responses to these questions are collected through forms that typically use a 1-3 scale (with low to high ratings). Average of all the responses to respective CO is considered as CO attainment. The data is then used to compute the indirect CO attainment, which is given a weightage of 20% in the overall CO attainment assessment.

Overall CO Attainment Level for Course

Thus, overall CO attainment for the course using all the tools is

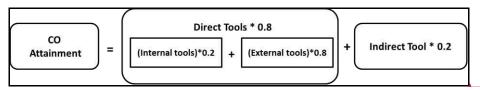


Figure 8.4.2.1: External Assessment tools

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

Describe the assessment tools and processes used together the data upon which the evaluation of each of the Program Outcomes and Program Specific Outcomes is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

To ensure alignment of CO with Program Outcomes (PO) and Program Specific Outcomes (PSO), a bottom to top process is employed, where outcomes are cascaded from CO to PO-PSO.

Assessing PO and PSO typically involves gathering evidence of student learning, analysing that evidence, and using it to improve teaching and learning. The key steps involved in the assessment process:

Vision: Society Growth and Welfare through Competent

Electronics and Communication Engineering Graduates

Formatted: Centered
Formatted: Font:



- Develop assessment criteria: Develop criteria for assessing POs and PSOs. The criteria are measurable, observable, and achievable. Develop rubrics for assessment tools.
- Collect data: Collect data on student performance related to POs and PSOs. This includes assessment of student work and surveys from students.
- Analyse data: Analyse the data to assess how well the program is meeting its outcomes and PSOs. This includes comparing student performance to the established criteria and identifying areas of strength and weakness.
- 4. Use results for improvement: Use the results of the assessment to identify areas where improvement is needed and develop strategies to address these areas.

POs and PSOs Assessment tools

POs and PSOs assessment tools are used to evaluate the overall effectiveness of a program and to ensure that it meets the required standards. The evaluation of the POs and PSOs involves the use of both direct and indirect assessment tools:

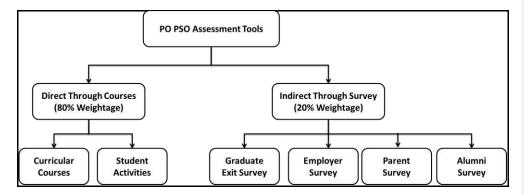


Figure 8.5.1.1: POs and PSOs Assessment tools

Direct Assessment tools:

The CO directly contributes to the assessment of POs and PSOs.



Indirect Assessment Tools:

The department conducts various activities for multidimensional growth of students. The students actively participate in social activities organised by the department and NSS cell. Students participate in various technical and cultural competitions. Department has many clubs and student chapters of professional bodies. These clubs provide a vibrant platform for students to hone their abilities.

In addition, various surveys, such as exit surveys, parent feedback, employer's feedback and student satisfaction surveys are conducted. Exit surveys are conducted with graduating students to evaluate the overall effectiveness of the program.

Attainment of POs and PSOs

Direct assessment of POs and PSOs is based on the attainment levels of COs and the degree of correlation between them.

Sample calculation for POs and PSOs attainment is described in following three steps:

Step – 1

CO Attainment and CO – POs and PSOs mapping is defined for course by correlation level low to high (1 to 3).

Table 8.5.1.1: CO- POs and PSOs Mapping

Course Outcomes	CO Attainment	PO1	PO2	PO3	PSO1
CO1	2.5	3	1		
CO2	2.8	3	2	1	1
CO3	2.3	2	2		2
CO4	1.5	2	1	1	1
CO5	2.0	1	1		
CO6	3.0	3	3		



Step – 2

Direct POs and PSOs attainment is calculated using following formula:

POs and PSOs attainment = (Level of Mapping of CO with PO/PSO * CO attainment Level) / 3

Table 8.5.1.2: POs and PSOs Attainment Calculations

Course Outcomes	CO Attainment	PO1	PO2	PO3	PSO1
CO1	2.5	=2.5*3/3	=2.5*1/3		
CO2	2.8	=2.8*3/3	=2.8*2/3	=2.8*1/3	=2.8*1/3
CO3	2.3	=2.3*2/3	=2.3*2/3		=2.3*2/3
CO4	1.5	=1.5*2/3	=1.5*1/3	1.5*1/3	=1.5*1/3
CO5	2.0	=2.0*1/3	=2.0*1/3		
CO6	3.0	=3.0*3/3	=3.0*3/3		

Step – 3

POs and PSOs attainment is calculated by taking the average of POs and PSOs attainment by each CO attainment.

Table 8.5.1.3: Average POs and PSOs Attainment by Course

Course Outcomes	CO Attainment	PO1	PO2	PO3	PSO1	
CO1	2.5	2.5	0.83			
CO2 2.8		2.8	1.87	0.93	0.93	
CO3	CO3 2.3		1.53		1.53	
CO4	1.5	1.00	0.50	0.50	0.50	
CO5 2.0		0.67	0.67			
CO6 3.0		3.00	3.00			
Average POs and PSOs Attainment		1.92	1.40	0.72	0.99	



Attainment of POs and PSOs through Indirect Tools

By combining direct and indirect tools, department gain a more comprehensive understanding of the programs effectiveness in achieving its intended learning outcomes. Graduate Exit Survey, Employer Survey and Parents Feedback are conducted at the end of the program. The department conducts surveys using a relevant questionnaire in order to assess the attainment of POs and PSOs. The questionnaire provides 5 response options, namely Excellent, Very Good, Good, Average, and Poor, which are assigned scores of 5, 4, 3, 2, and 1, respectively. The survey results are then tabulated, and the average scores for each PO and PSO are calculated. To determine the attainment level for each PO and PSO, the average score is converted to a scale of 0 to 3.

For indirect POs and PSOs attainment 20% weightage is given.

Total PO/PSO attainment = Direct Attainment by all courses * 0.8 + Indirect Attainment * 0.2



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)

ACADEMIC YEAR 2021-22

Course Code	Course	CO 1	CO 2	CO 3	CO 4	CO 5	CO 6
107001	Engineering Mathematics-I	2.66	2.66	2.26	2.42	2.1	2.26
107002	Engineering Physics	1.24	1.48	1.32	1.30	1.32	1.3
102003	Systems in Mechanical Engineering	2.94	2.94	2.94	2.94	2.94	2.94
103004	Basic Electrical Engineering	0.94	1.3	1.29	1.41	1.17	1.17
110005	Programming and Problem Solving	2.45	2.45	1.93	1.79	1.93	1.91
111006	Workshop Practice	2.94	2.94	2.94	2.94		
107008	Engineering Mathematics-II	1.08	1.4	1.2	0.86	1.02	1.04
107009	Engineering Chemistry	2.9	2.9	2.9	2.9	2.9	2.9
104010	Basic Electronics Engineering	2.85	2.79	2.97	2.96	2.93	2.95
101011	Engineering Mechanics	2.95	2.95	2.95	2.95	2.95	2.95
102012	Engineering Graphics	1.81	1.74	1.81	1.81	1.52	1.49
110013	Project Based Learning	2.98	2.98	2.98	2.98	2.98	2.98



8.5 Attainment of Program Outcomes from first year courses 20	8.5	s 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)

				A	CADE	MIC YI	EAR 20:	21-22 P	О Марг	oing Ma	ıtrix						
Sr. No.	Course	Course Title	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
1	107001	Engineering Mathematics I	3.00	2.00	1.00										1.00		
2	107002	Engineering. Physics	3.00	1.00		1.00	1.00		1.00			1.00			1.00	1.00	
3	102003	Systems in Mechanical Engineering	2.00	1.00					1.00			1.00					
4	103004	Basic Electrical Engineering	1.50	1.50	1.00		1.00								1.50	1.00	
5	110005	Programming and Problem Solving	2.00	2.00	1.60		2.00			1.00	1.00	1.00		1.00	1.67	1.33	
6	111006	Workshop	2.00	1.00	1.00			1.00									
7	107008	Engineering Mathematics II	3.00	2.00	1.00										1.00		
8	107009	Engineering Chemistry	3.00	2.00	1.00				1.00		1.00	1.00					
9	104010	Basic Electronics Engineering	2.00	1.00	1.00		1.00								2.00	1.83	1.00
10	101011	Engineering Mechanics	2.00	2.00			1.00					1.00					
11	102012	Engineering Graphics	2.00	1.00	1.00		1.00					1.00					
12	110013	Project Based Learning	2.33	1.33	1.00		2.50	1.00	1.00		2.00	1.00	1.00		1.67	1.33	1.50
Direc	t Attainment Ta	rget*	2.32	1.49	1.07	1.00	1.36	1.00	1.00	1.00	1.33	1.00	1.00	1.00	1.41	1.30	1.25
Contr	ributing Subjects		12	12	9	1	7	2	4	1	3	7	1	1	7	5	2

Table 8.5.1



PO Attainment Matrix

				A	CADE	MIC YE	EAR 202	21-22 P	О Марр	ing Ma	trix						
Sr. No.	Course	Course Title	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
1	107001	Engineering Mathematics I	2.39	1.60	0.80										0.80		
2	107002	Engineering. Physics	1.32	0.45		0.43	0.45		0.43			0.45			0.44	0.44	
3	Systems in Mechanical Engineering		1.96	0.98					0.98			0.98					
4	Basic Electrical Engineering		0.62	0.62	0.43		0.41								0.61	0.42	
5	110005	Programming and Problem Solving		1.64	1.17		1.37			0.69	0.82	0.69		0.69	1.14	0.94	
6	111006	Workshop	1.96	0.98	0.98			0.98									
7	107008	Engineering Mathematics II	1.10	0.73	0.37										0.37		
8	107009	Engineering Chemistry	2.90	1.93	0.97				0.97		0.97	0.97					
9	104010	Basic Electronics Engineering	1.94	0.96	0.98		0.93								0.96	0.96	0.98
10	101011	Engineering Mechanics	1.97	1.97			0.98					0.98					
11	102012	Engineering Graphics	1.13	0.57	0.54		0.56					0.57					
12	110013	Project Based Learning	2.31	1.32	0.99		2.48	0.99	0.99		1.98	0.99	0.99		1.65	1.32	1.49
Direct Attainment Target*				1.15	0.80	0.43	1.03	0.99	0.84	0.69	1.26	0.80	0.99	0.69	0.85	0.82	1.24
Contributing Subjects				12	9	1	7	2	4	1	3	7	1	1	7	5	2

Table 8.5.1 (b)

^{*} Direct attainment level of a PO is determined by taking average across all courses addressing that PO. Fractional numbers may be used for example 1.55.

Note: Add PSOs; if applicable



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)

PO Attainment Levels and Actions for improvement - CAY – Mention for relevant PO's

PO'S I	0	Attainment						
		Level	Observations					
			y the knowledge of mathematics, science, engineering pecialization to the solution of complex engineering problems.					
Tundamenta	ais, and	1.75						
PO1 2	2.32		Attainment is 75.43% of the target value. -Clearly identify the specific concepts that need to be addressed and the desired learning outcomes.					
	To enhance students' understanding and application of engineering concepts by incorporating an expert lecture.							
Action 2	To facilitate access of comprehensive study materials for all FE Engineering subjects through FE Website, thereby supporting students' learning.							
			rmulate, review research literature, and analyze complex					
		ms reaching subs eering sciences.	stantiated conclusions using first principles of mathematics, natural					
sciclices, an	iu chgiii	cering sciences.	Au					
PO2	1.49	1.15	Attainment is 77.18% of the target value. It is essential to identify the key Engineering Physics, Basic electronics Engineering principles that require reinforcement through numerical problem-solving assignments.					
	To reinforce students' comprehension and application of Engineering Physics principles by incorporating assignments focused on numerical problem-solving.							
Action 2	To assess and reinforce students' comprehension of Basic Electronics Engineering concepts through MCQ (Multiple-Choice Question) quizzes.							
PO3: Design	n/develo ponents	pment of solution or processes that	ons: Design solutions for complex engineering problems and design at meet the specified needs with appropriate consideration for the ltural, societal, and environmental considerations.					
PO3	1.07	0.80	Attainment is 74.76 % of the target value. specific topics or concepts in Basic Electrical Engineering that students find challenging when it comes to numerical problem-solving need to identify.					
	To improve students' numerical problem-solving skills and understanding of Basic Electrical Engineering concepts by organizing an extra lecture focused on numerical practice.							
methods inc	cluding	design of experir	omplex problems: Use research-based knowledge and research ments, analysis and interpretation of data, and synthesis of the					
information to provide valid conclusions.								
-	1	0.43	Attainment is 43.00% of the target value. To gain knowledge through practical's.					
PO4 1	l		To gain knowledge through practical's.					



engineeri	ng and IT	,	elect, and apply appropriate techniques, resources, and modern prediction and modeling to complex engineering activities with an							
PO5	1.36	1.03	Attainment is 78.1% of the target value. Specific programming skills and problem-solving abilities that students should develop through algorithmic thinking, debugging skills, and the ability to develop efficient solutions using modern tools.							
Action 1	Effective utilization of modern tools like Vlab, Google Quiz, PPT, YouTube Videos, google website, NPTEL video lectures, MS Teams									
Action 2	Encourage students to use modern online softwares ,Simulation software									
societal, h	ealth, saf		ply reasoning informed by the contextual knowledge to assess ltural issues and the consequent responsibilities relevant to the							
			Attainment is 98.5 % of the target value.							
PO6	1	During the planning phase, identify relevant techno-social issues align with the learning objectives of the Project-Based Learning subj Consider topics that combine technology and social impact, such sustainability, accessibility, digital divide, healthcare, education community development.								
Action 1	To promote techno-social innovation and experiential learning by engaging students in Techno-Social Projects as part of the Project-Based Learning subject.									
	and env		ity: Understand the impact of the professional engineering solutions exts, and demonstrate the knowledge of, and need for sustainable							
	1	0.84	Attainment is 84.00% of the target value.							
PO7			To understand the role of engineers for providing solutions to environmental problems.							
Action 1	Students are encouraged to participate in activities, expert lectures related to Environmental problems for sustainable development.									
			es and commit to professional ethics and responsibilities and norms							
of the eng	1	0.69	Attainment is 69% of the target value. Identify the key ethical topics and considerations that are relevant to programming and problem-solving.							
Action 1	To enhance students' understanding of ethical considerations and responsible practices in programming through an expert lecture on ethics in the context of Programming and Problem Solving subject.									
		nd team work: Fu in multidisciplin	unction effectively as an individual, and as a member or leader in							
PO9	1.33	1.26	Attainment is 94.25% of the target value							

E & TC Engineering Department



			communication, and shared responsibility.							
	To engage students in hands-on, collaborative learning experiences by implementing Project-									
Action 1	Based Learning (PBL) projects as part of the "Project Based Learning" course.									
Action 2	Evaluation of student performance during Group presentations and project exhibition of Project Based Learning(PBL)									
PO10: Co			cate effectively on complex engineering activities with the							
engineeri	ng comm	unity and with so	ociety at large, such as, being able to comprehend and write							
		nd design docum	entation, make effective presentations, and give and receive clear							
instructio	ns.	•								
PO10	1	0.80	Attainment is 80.00% of the target value. Provide opportunities for students to reflect on their learning journey and the outcomes							
	To provi	de students with	opportunities to demonstrate their learning outcomes, showcase their							
Action 1	PBL projects, and foster knowledge sharing through group presentations and an exhibition of									
	PBL posters as part of the "Project Based Learning" course.									
			firsthand experience and industry insights by conducting actual							
Action 2	showroom visits for the collection and comparison of vehicle specifications as part of the Systems									
		anical Engineerin								
			nance: Demonstrate knowledge and understanding of the							
			ciples and apply these to one's own work, as a member and leader in							
a team, to	manage	projects and in i	multidisciplinary environments.							
DO11	1	0.99	Attainment Level is 99.00% target level.							
PO11			Guide students on how to estimate each cost element and aggregate							
	T		them to create a comprehensive project budget.							
Action 1	To equip students with the skills to effectively estimate the costs associated with Project-Based Learning (PBL) projects in the "PBL" course, fostering financial acumen and project management capabilities.									
	fe-long lea	arning: Recogniz	ze the need for, and have the preparation and ability to engage in							
independe	ent and li	fe-long learning	in the broadest context of technological change.							
		1.24	Attainment Level is 69.00% target level.							
1			-Provide information about opportunities for students to actively							
			engage in rural development projects, such as internships,							
PO12	1		volunteering, or research collaborations. Highlight existing initiatives							
			or organizations working in rural areas that students can connect with.							
			To devial an much law solving a annuage that through much management in a							
			-To develop problem solving approach through programming (Programming and Problem Solving)							
-	To famil	iariza vouna anai								
1	To familiarize young engineering graduates with the significant role they can play in rural development and enhance their understanding of the challenges and opportunities associated with									
Action 1	engineering projects in rural areas, a session of NSS coordinator is planned under the induction									
	program.									
	The second state for independent bounds of a second									
Action 2		To engage students for independent learning to solve engineering problems through programming (Programming and Problem Solving).								
			Table R & 5 2							

Table B.8.5.2

Note: PSOs, if applicable to be added appropriately.

E & TC Engineering Department

Vision: Society Growth and Welfare through Competent Electronics and Communication Engineering Graduates



Similar Tables should be presented for CAYm1 and CAYm2

PSO Attainment Levels and Actions for improvement - CAY – Mention for relevant PSO's

ACADEMIC YEAR 2021-22								
PSO's Target Attainment Level Level			Observations					
PSO1: Analyze Design and Test Analog and Digital circuits and systems for given application.								
PO1	1.41	0.85	Attainment Level is 60.28 % of the target value. Electronics Engineering is a core Engineering branch which requi knowledge of basic science, mathematics and fundamentals Electrical Engineering. But students lacks in applications fundamental knowledge and correlation between theoretical conceand practical applications.					
Action 1 Students are encouraged to participate in events like project competition, Hackathon, Unnat Bharat Abhiyan.								
PSO2: In automatic	-		s of hardware – software design foe Embedded & Robotics					
PSO2	1.30	0.82	Attainment Level is 63.08 % of the target value. The problem solving and analyzing skills to be developed.					
Action 1	Students are encouraged to participate in events like project competitions, Hackathon, Unnat Bharat Abhiyan							
Action 2	Students are encouraged for Virtual and physical Internships.							
PSO3: Apply knowledge of E &TC system for social and environmental problems as a individual member or leader of diverse team in multidisciplinary settings.								
PSO3	1.25	1.24	Attainment Level is 99.20 % of the target value.					
Action 1	Students are encouraged to participate in events like project competitions, Hackathon, Unnat Bharat Abhiyan							
Action 2	Students are encouraged to participate in different technical and non-technical events and competitions							



ANNEXURE I:

PROGRAM OUTCOMES (POs) Engineering Graduates will be able to:

- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 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.
- 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.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.



- 11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

E & TC Engineering Department





AISSMS







Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION IX

Student Support Systems



CRITERION 9	Student Support Systems	50	
9.1	Mentoring System to help at Individual Level	05	

A. Details of the mentoring system:

05)

Details of the mentoring system:

Preamble: Counselling and Mentoring encompasses a broad set of skills, approaches and techniques that are essentially aimed at helping students with problem solving, problem management, resolving past issues, working towards developmental aims and goals for the future, which include improving performance and meeting career and personal aspirations.

Goal: To promote self-understanding and self-acceptance of a student.

Objectives:

- To help students to overcome emotional challenges.
- To assist a student to know him/herself better through SWOC analysis.
- To work out a plan for solving his/her difficulties.
- To assist students in planning for their career choices.

Functioning:

- Each faculty acts as a mentor in the counselling and mentoring process.
- A mentor is responsible for guiding about 20 students of a class.
- The mentor listens to the problems of mentee, both academic and personal which hinder their learning abilities.
- In the mentoring sessions, students raise their difficulties/problems regarding academics/general facilities/hostel facilities with their respective mentors.
- If the mentor/course coordinator/GFM/HOD observes or finds a student who needs Professional Counselling, his/her case is forwarded to the Professional Counselling agency through the Counselling and Mentoring Coordinator.

Post Counselling

- Feedback and Behavioral improvements are observed from the student seeking professional counselling.
- Record of a case study report is asked from the mentor mentioning the positive changes and improvement observed for the student.



Operating Procedure:

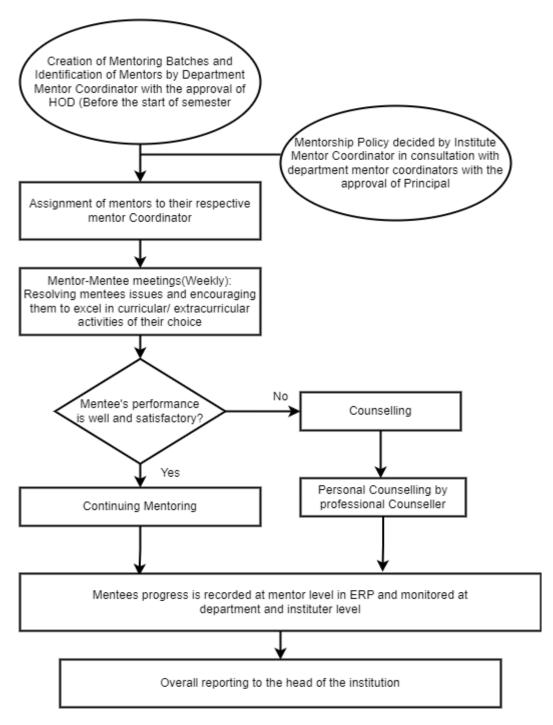


Figure 9.1.1: Mentoring process

Role of Department Mentor Coordinator:

- a) To distribute the hard copy of required formats to the department mentors.
- b) To maintain the list of the students and respective mentors.
- c) To review the records of the entire department in a semester.
- d) To collect the records from all the mentors at the end of every semester.
- e) To handover the mentor records of earlier semester to next mentors at the beginning of semester through HOD



Roles and Responsibilities of Mentors:

- i. To collect the student Information from the respective GFM/Students section.
- ii. To establish the contact with the parents through telephonic discussion, inform them about the development of their ward.
- iii. Conduct meeting with students once in two weeks.
- iv. To act as a Counsellor and Guide of the student.
- v. To encourage the student to have open dialogue.
- vi. To record the observations about the student viz. achievements, doubts, fears, grievances, etc.
- vii. To evaluate the students' ability, strengths and weaknesses.
- viii. To help the students to overcome their weaknesses and strengthen the abilities to excel in his/her defined objectives.
- ix. If a special assistance is required, forward the case to the Students Counselling Cell through proper channel.
- x. HOD/Department coordinator of First year engineering shall handover the Mentor record to respective department HOD at the end of every academic Year.
- xi. To maintain utmost secrecy about the matters disclosed by the student during counseling.
- xii. To maintain the following records:
- xiii. Student Information
- xiv. Mentoring Record of each student comprising of academic, Psychological, financial and overall performance.
- xv. Attendance of mentees.

Mentor-Mentee Allotment

Academic Year 2022-23, Sem-I

Mentor-Mentee ratio: 1:21

Frequency of Meeting: Fortnightly

Following Faculty are appointed as mentors for SE/TE/BE (E and TC).

Table 9.1.1: Mentor-Mentee Allotment for Academic Year 2022-23, Sem-I

Sr.	Class	Batch	Name of	Number of
No.			Teacher	Students
1		A	Mrs. V. S.	21
		Α	Navale	
2	~	В	Mr. V B Gawai	22
	SE		D W D	22
3	(E and TC)	C	Dr. K B	22
			Chaudhari	
4		D	Mrs. S. A.	13
		D	Takalkar	
5		Α.	Ms. V. D.	20
	TE	A	Nagrale	
6	(E and TC)	В	Dr. P. P. Vast	20
7			Dr. V. V.	19
/		С	D1. V. V.	17



			Deshmukh	
8		D	Mrs. Y. P. Lad	19
9		A	Dr. R. R. Itkarkar	23
10		В	Mr. N. P.	22
	BE (E and		Mawale	
11	TC)	С	Mr. S. B.	17
		C	Dhekale	
12		D	Mrs. P. T.	16
		ע	Tayade	
13	BE(ELEX)	۸	Mrs. P. T.	3
		A	Tayade	

Academic Year 2022-23, Sem-II

Mentor-Mentee ratio: 1:21

Frequency of Meeting: Fortnightly

Following Faculty are appointed as mentors for SE/TE/BE (E and TC)

Table 9.1.2: Mentor-Mentee Allotment for Academic Year 2022-23, Sem-II

Sr.	Class	Batch	Name of	Number of
No.			Teacher	Students
1		A	Mrs. V. S.	19
		A	Navale	
2	SE	В	Mrs. V. V.	19
	(E and TC)		Deshmukh	
3		С	Mrs. S. A.	20
			Takalkar	
4		D	Mrs. S. B.	20
			Dhekale	
5		A	Dr. P. P. Vast	23
6	TE	В	Mrs. P. T.	22
	(E and		Tayade.	
7	TC)	C	Mrs. V. D.	16
	10)		Nagrale	
8		D	Mrs. N. P.	17
		<i>D</i>	Mawale	
9		A	Dr. R. R. Itkarkar	20
10	BE	В	Dr. K. B.	20
	(E and TC)	D	Chaudhari	
11		С	Mrs. Y. P. Lad	19
12		D	Mrs. V. B. Gawai	19
13	BE(ELEX)	A	Dr. R. R. Itkarkar	03



Academic Year 2021-22, Sem-I

Mentor-Mentee ratio: 1:21

Frequency of Meeting: Fortnightly

Following Faculty are appointed as mentors for SE/TE/BE (E and TC).

Table 9.1.3: Mentor-Mentee Allotment for Academic Year 2021-22, Sem-I

Sr.	Class	Bach	Name of Teacher	Number of
No.				Students
1		A	Mrs. V. S. Navale	19
2	SE	В	Mr. N. P. Mawale	20
3	(E and TC)	С	Mr. V. B. Gawai	19
4		D	Mr. S. B. Dhekale	20
5		A	Dr. P. P. Vast	20
6	TE	В	Mrs. Y. P. Lad	20
7	(E and TC)	С	Mrs. R. R. Itkarkar	21
8		D	Ms. V. D. Nagrale	20
9		A	Mrs. V. V. Deshmukh	20
10	BE (E and TC)	В	Dr. K B Chaudhari	21
11		С	Mrs. S. A. Takalkar	21
13	BE(ELEX)	A	Mrs. S. A. Takalkar	4

Academic Year 2021-22, Sem-II

Mentor-Mentee ratio: 1:21

Frequency of Meeting: Fortnightly

Following Faculty are appointed as mentors for SE/TE/BE (E and TC).

Table 9.1.4: Mentor-Mentee Allotment for Academic Year 2021-22, Sem-II

Sr.	Class	Batch	Name of	Number of
No.			Teacher	Students
1	GE.	A	Mrs. V. S. Navale	19
2	SE (E and TC)	В	Ms. V. D. Nagrale	20
3		С	Mr. V B Gawai	19



4		D	Mr. S. B. Dhekale	20
5		A	Dr. P. P. Vast	20
6	TE	В	Mrs. P. T. Tayade.	20 + 3 (TE Elex)
7	(E and TC)	С	Dr. V. V. Deshmukh	20
8		D	Mr. N. P. Mawale	19
9	DE	A	Mrs. R. R. Itkarkar	20
10	BE (E and TC)	В	Mrs. K. B. Chaudhari	21
11		С	Mrs. Y. P. Lad	21
12	BE(ELEX)	A	Mrs. Y. P. Lad	5

Academic Year 2020-21, Sem-I

Mentor-Mentee ratio: 1:18

Frequency of Meeting: Fortnightly

Following Faculty are appointed as mentors for SE/TE/BE (E and TC).

Table 9.1.5: Mentor-Mentee Allotment for Academic Year 2020-21, Sem-I

Table 9.1.5. Mentor-Mentee Anothert for Academic Tear 2020-21, Seni-1					
Sr.	Class	Batch	Name of Teacher	Number of	
No				Students	
1	SE	A	Mrs. V. S. Navale	27	
2	(E and TC)	В	Mr. N. P. Mawale	28	
3		С	Mr. V B Gawai	27	
5	TE	A	Mrs. R. R. Itkarkar	15	
6	(E and TC)	В	Mrs. Y P Lad	15	
7		С	Dr. P P Vast	15	
8		D	Mr. A Y Kazi	15	
9		A	Mrs. V. V. Deshmukh	16	
10	BE	В	Mr. S. B. Dhekale	16	
11	(E and TC)	С	Ms. V. D. Nagrale	16	
12		D	Dr. K. B. Chaudhari	17	
13	BE(ELEX)	A	Dr. S. A. Takalkar	28	



Academic Year 2020-21, Sem-II

Mentor-Mentee ratio: 1:21

Frequency of Meeting: Fortnightly

Following Faculty are appointed as mentors for SE/TE/BE (E and TC).

Table 9.1.6: Mentor-Mentee Allotment for Academic Year 2020-21, Sem-II

Sr.	Class	Batch	Name of Teacher	Number of
No.				Students
1	SE	A	Mrs. V. S. Navale	26
2	(E and TC)	В	Mr. N. P. Mawale	26
3		С	Mr. V B Gawai	25
4		A	Mrs. R. R. Itkarkar	15
5	TE (F and TC)	В	Mrs. Y P Lad	15
6	(E and TC)	С	Dr. P P Vast	15
7		D	Mr. A Y Kazi	15
8	DE	A	Mr. S. B. Dhekale	21
9	BE (E and TC)	В	Ms. V. D. Nagrale	22
10		С	Dr. K B Chaudhari	21
11	BE(ELEX)	A	Mrs. S. A. Takalkar	27

Teachers are appointed as Mentor



Figure 9.1.2: Teachers are appointed as Mentor

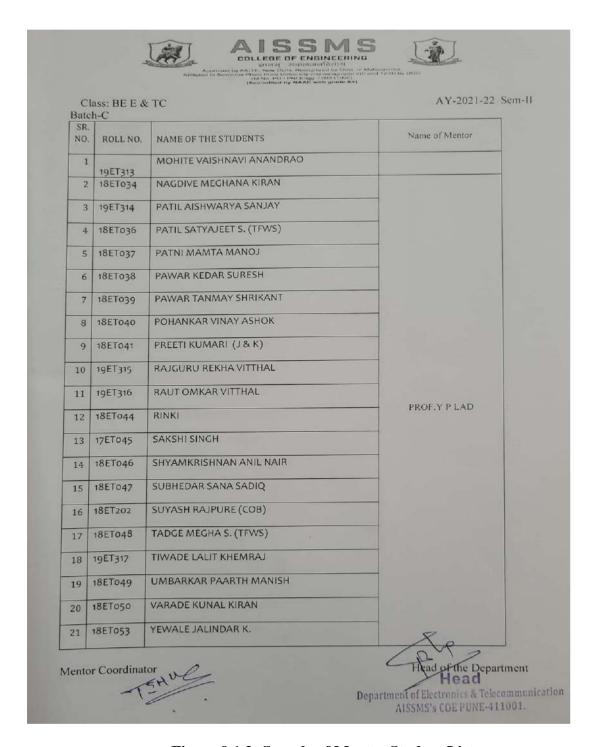


Figure 9.1.3: Sample of Mentor Student List



Teachers are appointed as Mentor

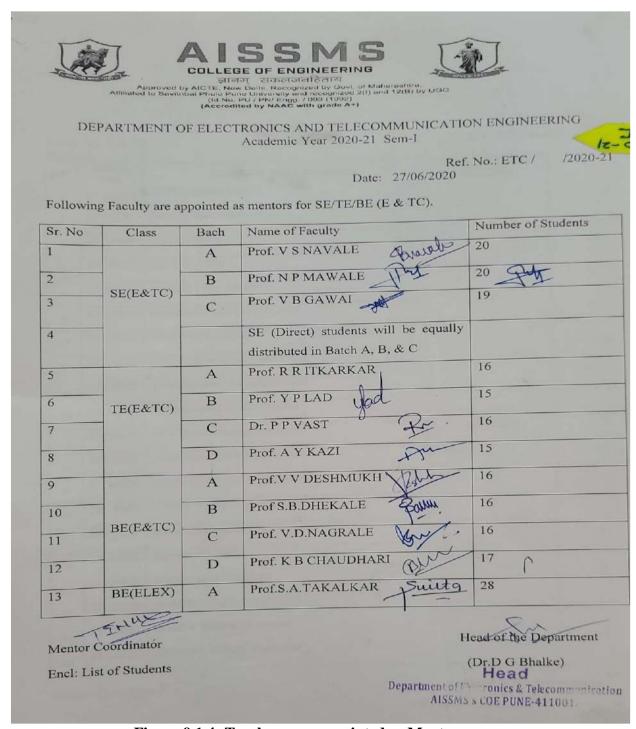


Figure 9.1.4: Teachers are appointed as Mentor



Attendance of Mentoring Batch



Figure 9.1.5: Attendance of Mentoring Batch



Various Mentoring formats

Affilia	College of Engineering, Approved by AICTE, sted to Savitribai Phule Pu	New Delhi ne University, Punc	
Name of Department:	Mentoring Rec	ord	
Name of Student			
Year/Class Division			
Name of Mentor	-		
		DANAC.	
	intain record for every forti	night)	
Academic Issue/Class Attendance	Action Taken	Remark	Sign student
		iz-	-
		2	-
Psychological Mentoring	(As per need)		
Psychological Mentoring Psychological Issue / Description of Mentorin	Autor Tales	Remark	Sign Studen
Psychological Issue /	Autor Tales	Remark	Sign Student
Psychological Issue / Description of Mentorin	Action Taken	Remark	Sign Scuden
Psychological Issue / Description of Mentorin Financial Mentoring (As Financial Issue / Description	Action Taken	3555570	
Psychological Issue / Description of Mentorin	Action Taken	Remark Remark	Sign Student
Psychological Issue / Description of Mentorin Financial Mentoring (Ax Financial Issue / Description of Mentoring	Action Taken per need) Action Taken	Remark	Sign Student
Psychological Issue / Description of Mentoring Case Financial Mentoring (As Financial Issue / Description of Mentoring (Encouragement for co-cur considering personality ski Overall Stone / Description of Overall Stone / Description of Overall Stone / Description of Mentoring (Encouragement for co-cur considering personality ski Overall Stone / Description of Mentoring (Encouragement for co-cur considering personality ski Overall Stone / Description of Mentoring (Encouragement for co-cur considering personality ski overall Stone / Description of Mentoring (Encouragement for co-cur considering personality ski overall Stone / Description of Mentoring (As Financial Mentorin	Action Taken Der need) Action Taken Action Taken Action Taken	Remark	Sign Student
Psychological Issue / Description of Mentoring Financial Mentoring (As Financial Issue / Description of Mentoring Overall Mentoring (Encouragement for co-cur considering personality ski	Action Taken Der need) Action Taken Action Taken ricular & extracarricular activ	Remark sties, Overall developm	Sign Scudent
Psychological Issue / Description of Mentoring (As Financial Mentoring (As Financial Issue / Description Mentoring (Encouragement for co-cur considering personality skill Overall Issue / Description Mentoring	Action Taken Action Taken Action Taken Action Taken Action Taken Action Taken	Remark sties, Overall developm bilities, refer annexure- Remark	Sign Scudent
Phychological Issue / Description of Mentoring Financial Mentoring (As Financial Issue / Description of Mentoring (Encouragement for co- considering personality ski Overall Issue / Description Mentoring Communication with Par	Action Taken	Remark sties, Overall developm bilities, refer annexure- Remark	Sign Student sent of student A) Sign Student
Phychological Issue / Description of Mentoring Financial Mentoring (As Financial Issue / Description of Mentoring (Encouragement for country ski Considering personality ski Overall Issue / Description Mentoring	Action Taken	Remark sties, Overall developm bilities, refer annexure- Remark	Sign Scudent
Psychological Issue / Description of Mentoring Case Financial Mentoring (As Financial Issue / Description Mentoring (Encouragement for co-cur considering personality skill Overall Issue / Description Mentoring	Action Taken	Remark sties, Overall developm bilities, refer annexure- Remark	Sign Student sent of student A) Sign Student
Psychological Issue / Description of Mentoring Case Financial Mentoring (As Financial Issue / Description of Mentoring (Encouragement for co-curconsidering personality, st.) Overall Sease / Description Mentoring Communication with Par St. Mother / 1	Action Taken	Remark Sties, Overall developm Billities, refer annexure- Remark Basue D	Sign Scudent sent of student A) Sign Student
Psychological Issue / Description of Mentoring Case Financial Mentoring (As Financial Issue / Description of Mentoring (Encouragement for co-curconsidering personality, st.) Overall Sease / Description Mentoring Communication with Par St. Mother / 1	Action Taken Date	Remark Sties, Overall developm Billities, refer annexure- Remark Basue D	Sign Scudent sent of student A) Sign Student
Psychological Issue / Description of Mentoring Case Financial Mentoring (As Financial Issue / Description of Mentoring (Encouragement for co-curconsidering personality, st.) Overall Sease / Description Mentoring Communication with Par St. Mother / 1	Action Taken Date	Remark Sties, Overall developm Billities, refer annexure- Remark Basue D	Sign Student ent of student A) Sign Student

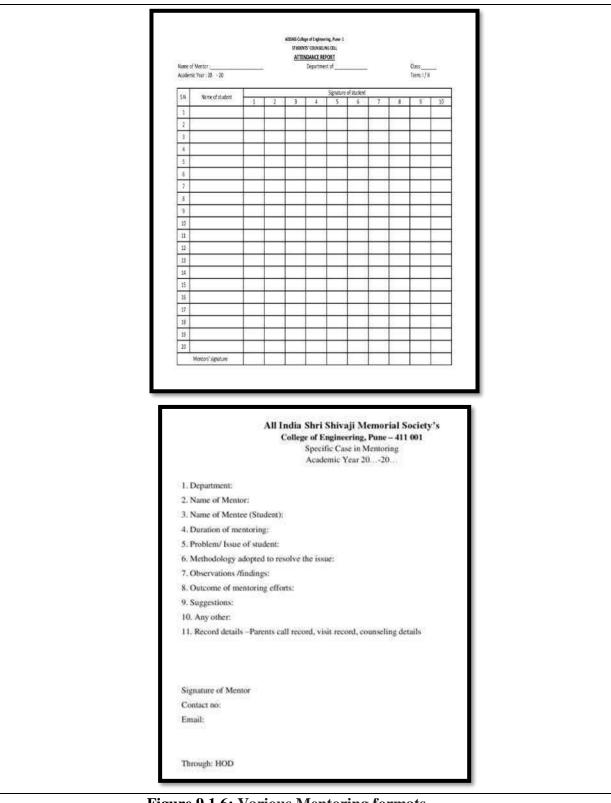


Figure 9.1.6: Various Mentoring formats

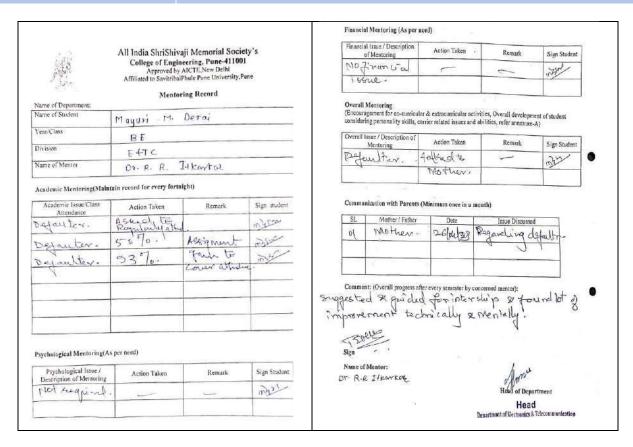


Figure 9.1.7: Sample of Filled Mentoring form

Efficacy of mentoring system:

Mentoring system supports to get feedback of students regarding facilities such as internet, classroom/lab cleanliness, drinking water, canteen etc. through mentor-mentee interactions. Mentor monitors students (mentees) regularity in the classes. This monitoring supports to teaching learning system. Monitoring is done through SMS, calling to parents and by the way of ERP



Figure 9.1.8: Counselling Session Report 1



Figure 9.1.9: Counselling Session Report 2



9.2 Feedback analysis and reward /corrective measures taken, if any 10	
--	--

A. Methodology being followed

(5)

Methodology being followed:

Students' feedback about all teaching courses is taken twice a semester through the ERP system. Turn-1 feedback is taken after the first 30 to 40 days of teaching. Corrective actions are taken after this feedback. Turn-2 feedback is taken at the end of the semester.

Following Performance Parameters are set for feedback.

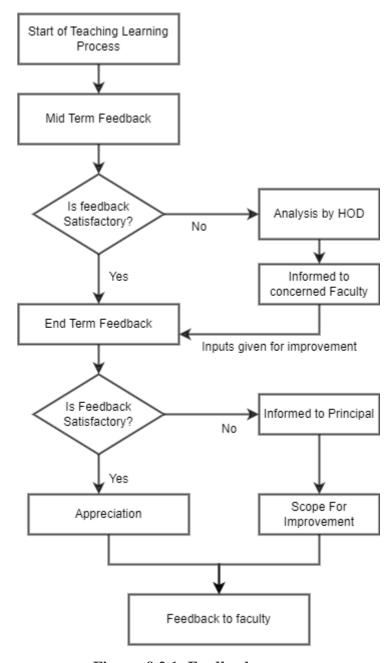


Figure. 9.2.1: Feedback process



Sr. No.	Performance Parameter
1	Planning and Organization Subject Organization in Logical Sequence; Syllabus Coverage; Subject is Clearly Prepared
2	Presentation/Communication Use of Simple Language Interest generated Solved conceptual problems to illustrate theory Questions to test knowledge, Clarity of Speech
3	Students Involvement Questions to promote interaction Encouragement to ask questions Discuss practical applications
4	Use of Media/Methods Use of a variety of teaching techniques (e.g., ICT, quiz, MCQ, etc.) Use of Textbooks/ reference books Clarity of writing on Black Board
5	Class Management Punctuality, Class Control
6	Assignment Provide assignments Timely return of assignment Availability to resolve problems of students after class
7	Learning Resources NPTEL, MOOC, Models, Videos

Figure 9.2.2: Performance Parameters for feedback.

Following questionnaire are set for feedback.

- 1. Has the teacher covered the entire syllabus as prescribed by university, college, board?
- 2. Has the teacher covered relevant topics beyond syllabus?
- 3. Effectiveness of teacher in terms of technical content /course content, communication skills and use of teaching aids
- 4. Pace on which contents covered
- 5. Motivation and inspiration for students to learn
- 6. Support for the development of student's skill practical demonstration, hands on training
- 7. Clarity of expectations of students
- 8. Feedback provided on students' progress
- 9. Willingness to offer help and advice to students

The Rubrics are followed to access the syllabus covered by the faculty, pace of teaching, topic



covered etc.is shared with students through ERP for evaluation of the faculty. Each question is assessed on a 5 to 1 scale. (5- Excellent, 4- Very Good, 3- Good, 2- Satisfactory and 1- Non-satisfactory). At the end of the feedback collection process, reports are generated in ERP showing a performance index. The method of obtaining feedback performance index is as follows.

Let total N students in a class participate in the feedback process and n_1 , n_2 , n_3 , n_4 and n_5 be the number of students giving feedback as Excellent, Very Good, Good, Satisfactory and Nonsatisfactory, respectively. Each question in the questionnaire is assessed on a 5 to 1 scale (5-Excellent, 4- Very Good, 3- Good, 2- Satisfactory and 1- Non-satisfactory). The method of obtaining feedback performance index is as follows.

 $N=n_1+n_2+n_3+n_4+n_5$

Total marks obtained for a question = $5 \times n_1 + 4 \times n_2 + 3 \times n_3 + 2 \times n_4 + 1 \times n_5$

Maximum marks = $5 \times N$

Feedback obtained = (Total marks obtained for a question/ Maximum marks) *100%

The procedure is repeated to get feedback obtained for all questions in the questionnaire. The performance index is simply an average of the percentage feedbacks thus obtained. This index is mentioned in the feedback report.

Following chart explains the feedback analysis process:

Step 1

- Guardian Faculty Member (GFM) sets the dates and threshold of attendance(%) for eligibility of students who can submit the feedback.
- GFM notifies students to submit the feedback.
- · Students submit feedback online through ERP.

Step 2

- Faculty performance index (FPI) of each faculty member is calculated on scale of 100 on the basis of levels he /she has obtained for the different feedback items.
- It is calculated online and reports are generated.

Step 3

- Summary sheet of FPI (%) of all faculty members is prepared by GFM and submitted to HOD.
- HOD analyzes the FPI (%) and takes actions accordingly.

Step 4

- HOD issues letter of appreciation or corrective actions to the faculty members based on their FPI.
- HOD ensures that the faculty members given corrective actions in mid. sem. feedback have improved their FPI in end sem. feedback.



Summary of the index values for all courses/ teachers:

AY 2022-23 SEM I

Table 9.2.1: Faculty feedback AY 2022-23 (Sem- I)

Sr.	Name of Faculty	Class/No. of	Subject	Fee	dback
No.		Students		Theor y	Practical
1	Dr. S. B. Dhonde	BE	RMT	82.5	83.5
2	Mrs. K. B. Chaudhari	SE	DS	75.5	83.5
		BE	DL	91.5	-
3	Mr. S. B. Dhekale	TE	FJP	90.5	91.5
		BE	AJP	87.0	89.0
4	Mr. N. P. Mawale	TE	SD	-	78.5
		BE	VLSI	85.5	87.0
5	Dr. P. P.Vast	TE	MC	87.0	87.5
		TE	SD	-	86.5
6	Ms. V. D. Nagrale	SE	ESD	-	67.5
		TE	DBMS	91.0	-
7		SE	DC	68.0	73.0
	Mrs. V.V. Deshmukh	TE	CN	96.0	95.0
8	Mrs. V. S. Navale	SE	ELC	71.0	73.0
9		TE	DC	89.0	88.5
	Mrs. Y. P. Lad	BE	EPD	90.0	-
10		SE	EC	77.5	77.5
	Mrs. V. B. Gawai	TE	ESD	-	78.5
11	M. D. D. W.	TE	EWP	90.5	91.0
	Mrs. R. R. Itkarkar	BE	MIOT	88.0	84.0
12	N D D T :	SE	DS	-	71.0
	Mrs. P. P. Tayade	BE	CC	92.0	91.0



AY 2022-23 SEM II

Table 9.2.2: Faculty feedback AY 2022-23 (Sem- II)

Sr.	Name of Faculty	Class/No. of	Subject	Fee	edback
No.		Students		Theor y	Practical
1	Dr. S. B. Dhonde	TE	NS	80.0	82.0
2	Dr. K. B. Chaudhari	SE	DAL	92.5	75.0
		BE	DM	-	-
3	Mr. S. B. Dhekale	SE	OOP	71.5	71.5
4	Mr. N. P. Mawale	TE	PDC	83.0	82.5
	Mi. N. F. Mawaie	BE	IE	-	84.5 (Tut)
5	Dr. P. P. Vast	TE	CN	85.5	85.0
6	Ma V D Naggala	SE	ESD	77.0	76.5
	Ms. V. D. Nagrale	TE	PM	88.5	-
7	Dr. V. V. Deshmukh	SE	S and S	86.0	85.5
8	Mrs. V. S. Navale	SE	PCS	71.0	73.0
9	Mrs. Y. P. Lad	BE	FO	91.0	90.0
10	Mr. V. B. Gawai	SE	CS	87.5	86.0
	Mr. v. b. Gawai	BE	IE	-	92.5 (Tut)
11	Mrs. R. R. Itkarkar	BE	MC	89.5	88.5
	IVIIS. K. K. IIKAFKAF	BE	IE	-	90.0 (Tut)
12	Mrs D D Toyoda	TE	AJP	85.0	85.0
12	Mrs. P. P. Tayade	BE	DBM	-	91.5 (Tut)



AY 2021-22 SEM I

Table 9.2.3: Faculty feedback AY 2021-22 (Sem- I)

Sr.	Name of Faculty	Class/No. of	Subject	Feedback		
No.		Students		Theory	Practical	
1	Dr. D.S. Bormane	SE	PBL		86	
2	Dr. D. G. Bhalke	BE	RMT	82	79	
3	Dr. K. B. Chaudhari	SE	ESD		79	
		BE	IOT	84	82	
3	Mr. Sudhir Surase	SE	EM III	83		
4	Mr. S. B. Dhekale	SE	DS	84		
		BE	VLSI DT	80		
6	Dr. P. P. Vast	TE	MC	89		
		BE	ESRTOS	87	87	
7	7 Ms. V. D. Nagrale	TE	DM	91		
		BE	VLSI	78	82	
8	Ms. V. V. Deshmukh	SE	ESD	73		
		BE	CNS	82	80	
9	Mrs. V. S. Navale	SE	EC	85	86	
10	Mrs. Y. P. Lad	TE	DC	93	92	
11	Mr. V. B. Gawai	SE	EC	83	83	
		TE	FJP	95	96	
12	Mrs. R. R. Itkarkar	TE	ET	92	-	
		BE	AI	82	-	
13	Ms. S. A. Takalkar	SE	DC	72	-	
		BE	EPD	-	79	



AY 2021-22 SEM II

Table 9.2.4: Faculty feedback AY 2021-22 (Sem-II)

Sr. No.	Name of Faculty	Class/No.	Class/No. Subject of Students		Feedback		
1101		of Students		Theory	Practical		
1	Dr. D. S. Bormane	SE	PBL		86		
2	Dr. D. G. Bhalke	SE	SS	86	87		
			PBL		79		
3	Dr. K. B.	SE	DA Lab		89		
	Chaudhari		OOP's		90		
		BE	ML	83	83		
4	Mr. A. Y. Kazi	TE	Mechatronics	79	80		
5	Mr. S. B. Dhekale	SE	OOPS	89	89		
		SE	DA		87		
		SE	PBL		96		
6	Mr. N. P. Mawale	TE	PDC	91	89		
		TE	MP		84		
		SE	PCS	87			
		SE	PBL		72		
7	Mrs. P. P. Vast	TE	CN	88	89		
		TE	MP		92		
		SE	PBL		99		
8	Ms. V. D. Nagrale	TE	PM	92			
		SE	ESD	87	88		
			PBL		98		
9	Ms. V. V.	TE	NS	93	93		
	Deshmukh		MP		97		
		SE	PBL		86		
10	Mrs. V. S. Navale	SE	PCS	87	88		
		SE	PBL		94		



		BE	RES	78	
	Mrs. Y. P. Lad	TE	DC	78	81
11		BE	BCS	81	80
		SE	PBL		99
12	Mr. V. B. Gawai	SE	CS	90	
		SE	SS		92
		SE	DA Lab		88
		SE	PBL		100
		BE	RES	86	87
.3	Mrs. R. R. Itkarkar	SE	PBL		100
		BE	MC	82	80
	Ms. P. P. Tayade	TE	AJP	95	93
14			MP		92



AY 2020-21 SEM I

Table 9.2.5: Faculty feedback AY 2020-21 (Sem-I)

Sr.	Name of Faculty	Class/No.	Subject		Feedback
No.		ofStudents		Theory	Practical
1	Dr. D. G. Bhalke	SE	SS	88	-
2	Dr. K. B. Chaudhari	BE	ML	83	-
3	Mr. A. Y. Kazi	TE	Mechatronics	79	80
4	Mr. S. B. Dhekale	SE	OOPS	85	
		TE	SPOS	82	78
5	Mr. N. P. Mawale	TE	MP	87	86
		TE	PE	79	77
6	Mrs. P. P. Vast	TE	ESD		67
		TE	MC	76	77
7	Ms. V. D. Nagrale	SE	ESD	86	
8	Ms. V. V. Deshmukh	TE	DSP	72	76
9	Mrs. V. S. Navale	SE	EC	90	90
		TE	DSP		80
		SE	PCS	85	
10	Mrs. Y. P. Lad	TE	DC	78	81
10		BE	BCS	86	
11	Mr. V. B. Gawai	TE	ESD	81	
		TE	DSP		86
		SE	CS	86	
		BE	RES	86	87
12	Mrs. R. R. Itkarkar	TE	ET	80	
		BE	AVE	92	
13	Mrs. S. A. Takalkar	TE	ESD		74
4	Ms. Rakhi Khedkar	BE	MC	83	



AY 2020-21 SEM II

Table 9.2.6: Faculty feedback AY 2020-21 (Sem-II)

Sr.N	Name of Faculty	ulty Class/No. ofStudents		Feedback		
0.		orstudents		Theory	Practical	
1	Dr. D. S. Bormane	SE	PBL		86	
2	Dr. D. G. Bhalke	SE	SS	88		
3	Mrs. K. B. Chaudhari	BE	ML	84		
4	Mr. A. Y. Kazi	TE	Mechatr onics	79	80	
	Mr. S. B. Dhekale	SE	OOPS	85		
5		TE	SPOS	74		
6	Mr. N. P. Mawale	TE	PE	75		
	Mrs. P. P. Vast	TE	AP	79		
7		TE	ESMP	78		
8	Ms. V. D. Nagrale	SE	ESD	86		
9	Ms. Rakhi Khedkar	BE	MC	83		
10	Mrs. V. S. Navale	SE	PCS	85		
		BE	RES	78		
	Mr. V. B. Gawai	SE	CS	86		
11		BE	RES	87		
12	Mrs. R. R. Itkarkar	TE	ITCCN	80		
		BE	AVE	92		
13	Ms. S. A. Takalkar	TE	BM	70		



B. Record of corrective measures taken

(5)

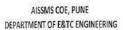
Reward of Corrective measures taken:

- 1. Faculty members with more than 75% feedback were motivated to continue their hard work and explore the scope of further improvement.
- 2. Faculty members with less than 75% feedback were asked to discuss any kind of problem or issue being faced by them in subject content, preparation and delivery of lecture. They were motivated to attend faculty development programs in order to improve modes of teaching. They were also advised to go through video lectures available online on platforms like NPTEL.

Table 9.2.7 Summary of Corrective Actions

		2022-	-23			2021-	-22			2020	-21	
Descripti	SEM	[-I	SEM	-II	SEM	[-I	SEM	-II	SEM-	-I	SEM-	-II
on	T	P	Т	P	Т	P	Т	P	T	P	T	P
	h	r	h	r	h	r	h	r	h	r	h	r
Number of faculty members receiving correctiv e measures	2	4	2	1	2	0	0	1	1	2	2	0





FACULTY FEEDBACK SUMMARY ACADEMIC YEAR: 2022-23 , SEMESTER: I

r No	Name Of The Faculty	Class	Subject	Th/PR	Mid Sem	End Sem	Remarks	Signature
	1 Dr D G Bhalke	BE (E&TC)	RMT	TH	85		gwel	
		BE (E&TC)	RMT	PR	88		y .	
	2 Dr S B Dhonde	TE(E&TC)	CN	TH	84		4	7
		TE(E&TC)	CN	PR	81		gurd	ylima
	2	BE (E&TC)	RMT	TH	80	85		
		BE(E&TC)	RMT	PR	82	85		
	2 Ms K B Chaudhari	SE (E&TC)	DS	TH	75	76	Satisfactory	N
		SE (E&TC)	DS	PR	76	77		alles
		BE(E&TC)	DL	TH	92	91		Or
	3 Mr S B Dhekale	TE(E&TC)	Java	TH	89	93	feed back Improved as compared with prict term	011
	A	TE(E&TC)	Java"	PR	88	94	Im House with	Samo
		BE(E&TC)	Ajava	TH	87	87	CONTROL	X
		BE(E&TC)	Ajava	PR	88	90	marc great	
	4 Mr N P Mawale	TE(E&TC)	Skill Development	PR	77	25.0	0	July:
		BE (E&TC)	VLSI	TH	86	85	Gar	
		BE (E&TC)	VLSI	PR	87	87	7	4
	5 Dr P P VAST	TE(E&TC)	Microcontroller	TH	86	88	Charles	0
	No person a respecto	TE(E&TC)	Microcontroller	PR	87	88	3	the s
		TE(E&TC)	Skill Development	PR	85	88		1
	6 Ms V D Nagrale	SE (E&TC)	Skill Development	PR	67	68	skill development need to Improve	1
		TE(E&TC)	Database Management	TH	90	9:	DEILI GENERALIA	VN

	TE(E&TC)	Database Management	PR	92	92	very good
7 MS V V DESHMUKH	SE (E&TC)	Digital Circuits	TH	61	75 N	ed to emproce the
, ins v v sesimoni	SE (E&TC)	Digital Circuits	PR	67	79	e computed Netu
	TE(E&TC)	Computer Networks	TH	92	100 V-	en gurl
	TE(E&TC)	Computer Networks	PR	91	99	0
8 Ms V S Navale	SE(E&TC)	Electrical Machines	TH	72	70 N	iecd to Improv
	SE(E&TC)	Electrical Machines	PR	75	71	
	SE (E&TC)	Skill Development	PR	76		
9 Ms Y P LAD	TE(E&TC)	Digital Communication	тн	87	91 V	ery good
- 100 m	TE(E&TC)	Digital Communication	PR	87	90	
	BE(E&TC)	EPD	тн	90		
10 Mr V B GAWAI	SE(E&TC)	Electronic Circuits	TH	79	77 /	need to Impro
	SE(E&TC)	Electronic Circuits	PR	79	76	
	SE(E&TC)	Skill Development	PR	79	78	
11 MS R R ITKARKAR	SE(E&TC)	Skill Development	PR	60	1	leny good
	TE(E&TC)	Electromagnetics	тн	91	91	
	TE(E&TC)	Electromagnetics	TUT	90	91	
	BE(E&TC)	MIOT	тн	88		
	BE(E&TC)	MIOT	PR	84		
12 Ms P P Tayade	SE (E&TC)	Digital Circuits	PR	69	75	uced to IMP
	SE (E&TC)	Data Structures	PR	24		B DC.
	BE(E&TC)	Cloud computing	TH	92	88	
	BE(E&TC)	Cloud computing	PR	91	90	
V						

Figure 9.2.2: Teachers' Feedback Summary



Letter of Improvement for Mid Term Feedback

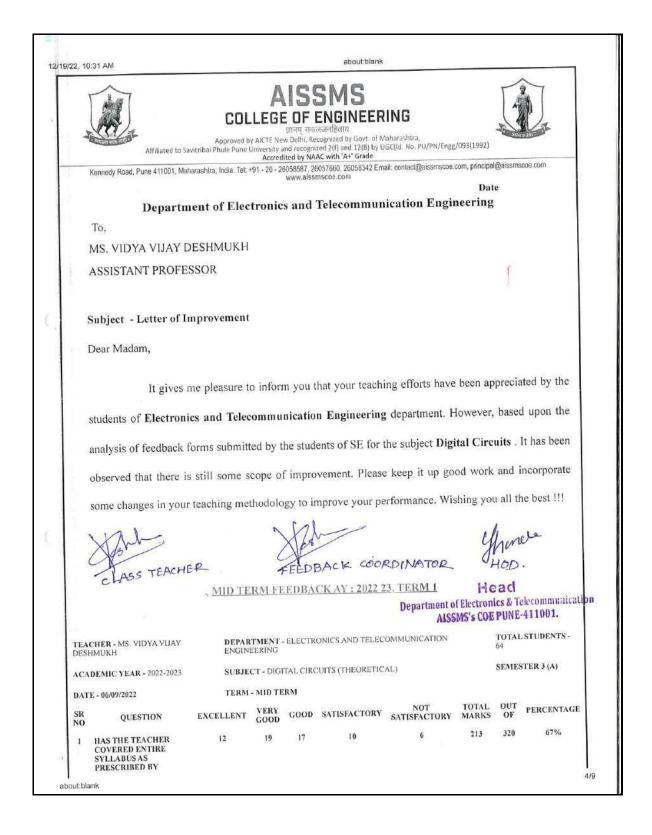


Figure 9.2.4: Letter of Improvement for Mid Term Feedback



Letter of Appreciation for End Term Feedback

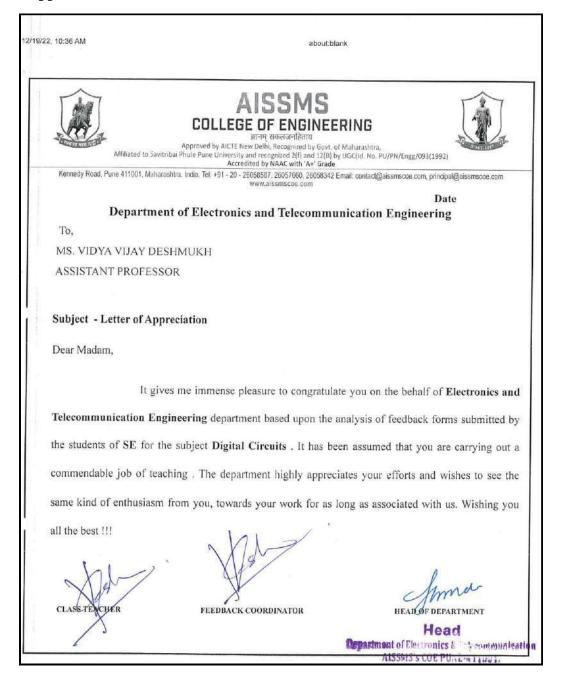


Figure 9.2.5: Letter of Appreciation for End Term Feedback



ERP Feedback Calculation Sheet:

EAR - 2022-2021 EAR - 2022-2021 E022 EVESTION E TEACHER ED ENTIRE US AS HEED BY SITY, COLLEGE, E TEACHER ED RELEVANT BEYOND US EVENESS OF R IN TERMS OF CAL CONTENT, NICATION AND USE OF NICATION AND USE OF NICATION NICAT	DEPAI ENGIN SURJE	RIMENT	- ELECTR	ONICS AND TELECONICS AND TELECONICS AND TELECONICS (THEORETICS SATISFACTORY) 5	OMMUNICATION	TOTAL MARKS 234	62	LSTUDENTS - STER J (A) PERCENTAGE 75%
EAR - 2022-2023 EUESTION E TEACHER ED ENTIRE US AS SITY, COLLEGE, E TEACHER ED RELEVANT BEYOND US IVENESS OF R IN TERMS OF CAL CONTENT E CONTENT, NICATION AND USE OF NG AIDS	ENGIN SUBJE TERM ENCELLENT 22	CT - DIGI - END TE VERY GOOD	GOOD	SATISFACTORY 5	NOT SATISFACTORY	MARKS 234	SEME:	STER 3 (A) PERCENTAGE
EAR - 2022-2023 EUESTION E TEACHER ED ENTIRE US AS SITY, COLLEGE, E TEACHER ED RELEVANT BEYOND US IVENESS OF R IN TERMS OF CAL CONTENT E CONTENT, NICATION AND USE OF NG AIDS	ENGIN SUBJE TERM ENCELLENT 22	CT - DIGI - END TE VERY GOOD	GOOD	SATISFACTORY 5	NOT SATISFACTORY	MARKS 234	SEME:	STER 3 (A) PERCENTAGE
ETEACHER ED ENTIRE US AS BED BY SITY, COLLEGE, ETEACHER ED RELEVANT BEYOND US IVENESS OF IR IN TERMS OF CAL CONTENT, NICATION AND USE OF NG AIDS	TERM ENCELLENT 22 23	- END TE VERY GOOD	GOOD 17	SATISFACTORY 5	NOT SATISFACTORY 3	MARKS 234	OUT OF	PERCENTAGE
E TEACHER ED ENTIRE US AS THE US AS	EXCELLENT 22 23	VERY GOOD	GOOD 17	5	3 J	MARKS 234	OF 310	
E TEACHER ED ENTIRE US AS IMEE D BY SITY, COLLEGE, E TEACHER ED RELEVANT BEYOND US INVENESS OF IR IN TERMS OF CAL CONTENT E CONTENT, NICATION AND USE OF NG AIDS	22	15	1.7	5	3 J	MARKS 234	OF 310	
E TEACHER D RELEVANT BEYOND US NVENESS OF R IN TERMS OF CAL CONTENT E CONTENT, NICATION AND USE OF NG AIDS	23	15			3	234	310	75%
IN RELEVANT BEYOND US IVENESS OF R IN TERMS OF CAL CONTENT CONTENT, NICATION AND USE OF NG AIDS		12	20	4	3	234	310	
CAL CONTENT CAL CONTENT CONTENT, NICATION AND USE OF NG AIDS	21						310	75%
ANTHRON		13	18	8	2	229	310	74%
TS WERE	24	11	20	4	3	235	310	76%
TION AND TION FOR IS TO LEARN	24	9	18	9	2	230	310	74%
FOR THE PMENT OF IS SKILL AL TRATION	23	13	20	3	3	236	310	76%
OF ATIONS OF	23	11	20	7	1	234	310	75%
K PROVIDED ENTS	2.3	12	19	6	2	234	310	75%
ENESS TO ELPAND TO STUDENTS	24	10	19	7	2	233	310	75%
TAL	207	106	171	53	21	2099	2790	75%
AL(%)	37%	19%	31%	9%	4%			
	TON FOR IS TO LEARN IF FOR THE PMENT OF IS SKILL AL ITRATION, IN TRAINNING OF ITROOP IS EK PROVIDED ENTS S NESS TO ELPAND TO STUDENTS	TON FOR 24	TON FOR 24 9	TON FOR	TON FOR 24 9 18 9 18 9 18 18 9 18 18	TON FOR 24 9 18 9 2	TON FOR 24 9 18 9 2 230	TION FOR 24 9 18 9 2 230 310 FOR THE PMENT OF 18 8 9 2 230 310 FOR THE PMENT OF 18 8 13 20 3 3 236 310 TRATION,

Figure 9.2.6: ERP Feedback Calculation Sheet



9.3 Feedback on facilities 05

A. Feedback collection, analysis and corrective action

(5)

Feedback collection, analysis and corrective action

Different facilities are provided to the students to enhance their overall development. A few of them are cultural, sports, and technical events consisting of workshops, seminars, etc. Very good infrastructure facilities are also provided to the students. Every year at the end of the second semester, i.e. in the months of March and April, one feedback form is delivered to the students by ERP, and the students fill it out. The feedback form questions are structured in such a way that the institute can receive clear feedback on how to enhance the facilities. Corrective actions are being made to ensure that students have adequate facilities for the coming academic year.

Questions are as follows:

- 1. Class room infrastructure (boards, internet, LCD projector, etc.) and overall ambience
- 2. Laboratory facilities (boards, internet, computer, equipment, etc.)
- 3. Cleanliness and ambience of campus
- 4. Library, reading room and other library facilities
- 5. Sports, Cultural and Extra-curricular activities facilities (NSS, Annual functions, etc.)
- 6. Parking, security and proctorial services in the campus
- 7. Mentoring, Counselling, Redressal of grievances and support to students for admissions, examinations, etc.)
- 8. Support to training, placements and internships
- 9. Overall impression about infrastructure and facilities provided in the institute
- 10. Canteen facility and availability of drinking water



Following is a sample of Infrastructure and Facility feedback taken through ERP:

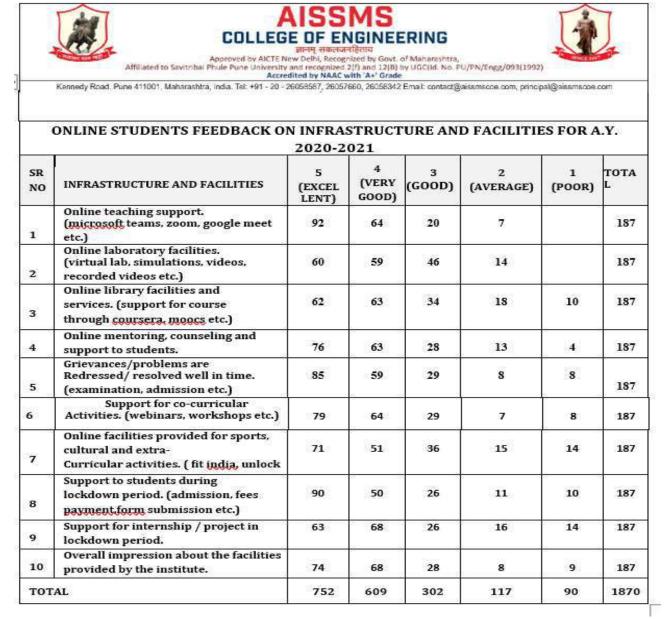


Figure 9.3.1: Sample Infrastructure and Facility feedback taken through ERP

Feedback corrective action:

Based on the feedback, various corrective actions have been taken such as improvement in canteen facility, purified water supply, internet bandwidth, and cleanliness, and stationary availability, facility for co-curricular and extra-curricular facilities.

Details about Feedback and corrective actions is available on the college website

https://aissmscoe.com/wp-content/uploads/2023/05/27774 105 250.pdf



9.4 Self- Learning 05

A. Scope for self-learning

(2)

A. Scope for self-learning:

Institute has provided a large scope to students to learn on their own as per their interest. This is in the form of online and offline, on campus and off campus. AICTE's NPTEL platform has attracted students a lot at par with regular courses. Students can register online and learn at their pace. Online platforms such as Coursera, edX, IIRS are made available to students. Subscribed E-resources are IEEE, ASCE, ASME, J-GATE, McGraw Hill and Science Direct. Digital Library/Remote Access is Available.

Table 9.4.1: Details of Digital Library/Remote Access



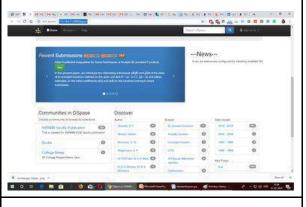
Knimbus Digital Library and Remote Access

https://aissms.new.knimbus.com/user#/ho me

The AISSMS COE Library has subscribed to Digital Library. Remote Access to E resources facility is available under the platform.

Faculty Publications Repository -- http://172.16.0.71:8080/jspui/

Faculty Publications are archived under Dspace Repository. Department wise faculty publications can be accessed through this link in College LAN



Calibre Digital Library http://172.16.2.101:8080/

The Calibre Digital Library has been set up for E books and previous year question papers students.

Link for DELNET Service - http://www.delnet.in/#http://164.100.247.26/



Following is the list of websites provided to all students for self-learning

Table 9.4.2: Details of websites

Sr.	Website	Description
No.		= 1211-pv-01
1	WWW OCC	Coursera is an education platform that partners with top universities and
1	www.cou	
	rsera.org	organizations worldwide, to offer courses online for anyone to take.
2	www.kha	Khan Academy is a non-profit educational organization created in 2006
	<u>nacadem</u>	by educator Salman Khan with the aim of providing a free, world-class
	<u>y.org</u>	education for anyone, anywhere. The organization produces short
		lectures in the form of YouTube videos.
3	ocw.mit.	MIT (Massachusetts Institute of Technology) Open Course Ware
	edu/inde	(OCW) is a web-based publication of virtually all MIT course content.
	<u>x.htm</u>	OCW is open and available to the world and is a permanent MIT
		activity.
4	oli.cmu.e	The Open Learning Initiative (OLI) is a grant-funded group at Carnegie
	<u>du/learn-</u>	Mellon University, offering innovative online courses to anyone who
	witholi/s	wants to learn or teach.
	<u>ee-our-</u>	
	<u>free-</u>	
	<u>opencour</u>	
	<u>ses/</u>	
5	www.ude	Udemy.com is a platform or marketplace for online learning. It provides
	<u>my.com</u>	a platform for experts of any kind to create courses which can be offered
		to the public, either at no charge or for a tuition fee. Udemy provides
		tools which enable users to create a course, promote it and earn money
		from student tuition charges.
6	www.cod	Codecademy is an online interactive platform that offers free coding
	ecademy.	classes in 9 different programming languages including Python, Java,
	com	PHP, JavaScript (jQuery, AngularJS), and Ruby, as well as markup
		languages HTML and CSS. The platform also provides courses for
7		learning command line and Git.
7	www.uda	Learn for free with Udacity. Advance your career with courses built by
0	city.com	industry leaders like Google, MongoDB, and Facebook.
8	www.cod	CodeChef is a platform to help programmers make it big in the world of
	echef.co	algorithms, computer programming and programming contests.
9	<u>m</u>	Geeksforgeeks provides a variety of services for you to learn, thrive and
9	www.gee	also have fun. Free Tutorials, Millions of Articles, Live, Online and
	ksforgee ks org	Classroom Courses ,Frequent Coding Competitions ,Webinars by
	<u>ks.org</u>	
10	www.int	Industry Experts, Internship opportunities and Job Opportunities.
10	www.int	InterviewBit is a platform to learn skills that you need for technology
	erviewbit	jobs. We help you polish your skills and get ready for the job, whether you are a fresh college graduate or a working professional.
	<u>.com</u>	you are a fresh conege graduate of a working professional.



11	www.spo	The SPOJ platform is centred around an online judge system, which
	j.com	serves for the automatic assessment of user-submitted programs.
12	www.hac	Hacker Rank is a technology hiring platform that is the standard for
	kerrank.c	assessing developer skills for over 2,000+ companies around the world.
	<u>om</u>	
13	www.sca	Scaler Academy is an online accelerator program that effectively
	<u>ler.com</u>	enhances the coding skills of software professionals.
14	www.ups	Upskill is a free online boot camp that'll take you from beginner to
	<u>killcours</u>	advanced developer. The main focus of the course is teaching you web
	es.com	development, and it's a great place to start, even if you have no
		experience.
15	www.cod	Codeforces is a website that hosts competitive programming contests. It
	eforces.c	is maintained by a group of competitive programmers from ITMO
	<u>om</u>	University led by Mikhail Mirzayanov.
16	www.onl	An online judge is an online system to test programs in programming
	inejudge.	contests. They are also used to practice for such contests. Many of these
	org	systems organize their own contests.
17	www.edx	edX is a massive open online course (MOOC) provider. It hosts online
	.org	university-level courses in a wide range of disciplines to a worldwide
		student body, including some courses at no charge. It also conducts
		research into learning based on how people use its platform.
18	www.w3	W3Schools is a web developers site, with tutorials and references on
	schools.c	web development languages such as HTML, CSS, JavaScript, PHP,
	om	SQL, and JQuery, covering most aspects of web programming. The site
		derives its name from the World Wide Web (W3), but is not affiliated
		with the W3C. W3Schools was originally created in 1998, by Refsnes
		Data, a Norwegian software development and consulting company.
19	www.spo	The Spoken Tutorial project is the initiative of the 'Talk to a Teacher'
	ken-	activity of the National Mission on Education through Information and
	tutorial.c	Communication Technology (ICT), launched by the Ministry of Human
	om	Resources and Development, Government of India.
20	www.vla	To provide remote-access to Labs in various disciplines of Science and
	b.co.in	Engineering. These Virtual Labs would cater to students at the
		undergraduate level, post graduate level as well as to research scholars.
		To provide a complete Learning Management System around the Virtual
		Labs where the students can avail the various tools for learning,
		including additional web- resources, video-lectures, animated
		demonstrations and self-evaluation.
21	Google	Google has created a number of resources to help computer science
	Code	students, including courses on programming, web security, algorithms,
	Universit	and much more.
	У	
L		



22	MIT	MIT has one of the largest collections of open courseware out there,
	<u>OpenCou</u>	including numerous offerings in computer science from some of the
	<u>rseWare</u>	leading minds in the field.
23	Swayam	The National Programme on Technology Enhanced Learning, a project
	- NPTEL	funded by the Ministry of Human Resource Development, provides
		elearning through online Web and Video courses in Engineering,
		Sciences, Technology
24	https://le	Since 2008, the focus of the foundation has been its Free Education
	arn.saylo	Initiative which has led to the creation of 241 courses representing 10 of
	<u>r.org/</u>	the highest enrolment majors[clarification needed] in the US
25	https://w	Simplilearn offers a wide range of online courses and certification
	ww.simp	programs in disciplines such as Cyber Security, Cloud Computing,
	<u>lilearn.co</u>	Project Management, Digital Marketing, and Data Science, among
	<u>m</u>	others.

B. Facilities, materials for learning beyond syllabus, Webinars, Podcast, MOOCs etc. and its effective utilization (3)

Facilities available:

- 1. Inter Library Loan Required books /Articles can be borrowed from member Library
- 2. Free access to digital resources ebooks
- 3. Remote access is available

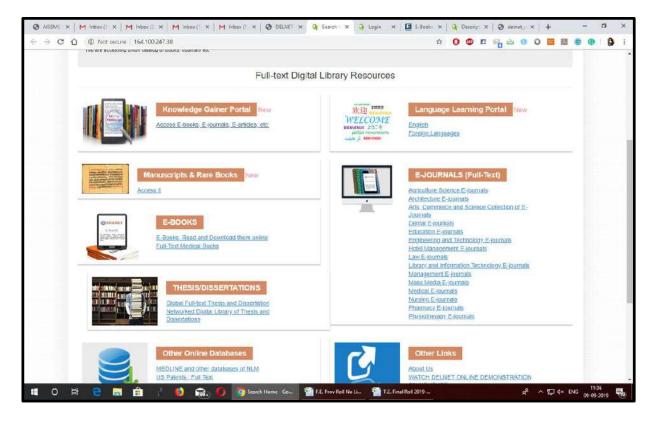


Figure 9.4.1: Full-text digital library resources



Table 9.4.3: Activity Registration and completion

Sr. No.	Type of Activity	No. of Students Registered	Successfully completed								
	AY 2022-23										
1	NPTEL Courses	125	1								
2	IIRS	113									
3	Webinar/Seminar	348	348								
4	Industry Internship	78	78								
		AY 2021-22									
1	NPTEL Courses	325	9								
2	IIRS	127									
3	Coursera Courses (Students & Staff)	2937	168								
4	EDX	995	236								
5	Webinar/Seminar	1015	1015								
6	Industry Internship	72	72								
		AY 2020-21									
1	NPTEL Courses	1043	26								
2	Webinar/Seminar	420	420								
3	Industry Internship	62	62								



NPTEL Summery

2022-23 July to December 2022

Table 9.4.4: NPTEL Summary 22-23 Sem-I

	Name of	No. of	Number	Number	Number	Course
Engineering	Course	Student	of	of	of	Brief
Discipline	and Date	Enrolled	Student	faculty	faculty	
•			Qualified	Enrolled	qualified	
Chemical	July to	63	1	5	1	Swayam
Engineering	December					Mooc
	2022					Courses
Civil Engineering	July to	93	18	30	0	Swayam
	December					Mooc
	2022					Courses
Computer	July to	52	2	16	1	Swayam
Engineering	December					Mooc
	2022					Courses
Electrical	July to	248	38	9	1	Swayam
Engineering	December					Mooc
	2022					Courses
Electronics and	July to	51	1	21	0	Swayam
Telecommunication	December					Mooc
Engineering	2022					Courses
Mechanical	July to	254	4	34	3	Swayam
Engineering	December					Mooc
	2022					Courses
Prod Engineering	July to	126	1	21	1	Swayam
	December					Mooc
	2022					Courses
Other	July to	10	0	0	0	Swayam
	December					Mooc
	2022					Courses
Mathematics	July to	2	0	12	0	Swayam
	December					Mooc
	2022					Courses
Total		899	65	148	7	



Year 2023_ Jan to Apr 2023 Table 9.4.5: NPTEL Summary 22-23 Sem-II

Engineering Discipline	Year	No. of Student Enrolled	Number of Student Qualified	Number of faculty Enrolled	Number of faculty qualified	Course Brief
Chemical Engineering	Jan to Apr 2023	69	1	3	1	Swayam Mooc Courses
Civil Engineering	Jan to Apr 2023	20	0	19	1	Swayam Mooc Courses
Computer Engineering	Jan to Apr 2023	45	0	5	0	Swayam Mooc Courses
Electrical Engineering	Jan to Apr 2023	103	6	12	2	Swayam Mooc Courses
Electronics and Telecommunication Engineering	Jan to Apr 2023	74	0	12	1	Swayam Mooc Courses
Mechanical Engineering	Jan to Apr 2023	845	5	41	6	Swayam Mooc Courses
Prod Engineering	Jan to Apr 2023	11	0	10	1	Swayam Mooc Courses
Other	Jan to Apr 2023	4	0	0	0	Swayam Mooc Courses
FE	Jan to Apr 2023	4	0	4	0	Swayam Mooc Courses
Total	•	1175	12	106	11	•



2021-22 July to December 2021 Table 9.4.6: NPTEL Summary 21-22 Sem-I

Engineering	Year	No. of	Number	Number	Number	Course
Discipline		Student	of Student Qualified	of	of faculty qualified	Brief
		Enrolled		faculty Enrolled		
	Jul-					Swayam
Business	Dec					Mooc
Administration	2021	1	0	0	0	Courses
	Jul-					Swayam
	Dec					Mooc
Chemical	2021	103	10	0	1	Courses
	Jul-					Swayam
	Dec					Mooc
Civil	2021	179	12	17	1	Courses
	Jul-					Swayam
	Dec					Mooc
Computer	2021	60	1	11	3	Courses
	Jul-					Swayam
	Dec					Mooc
Electrical	2021	48	1	12	3	Courses
Electronics and	Jul-					Swayam
Telecommunication	Dec					Mooc
Engineering	2021	122	2	6	0	Courses
<u> </u>	Jul-					Swayam
Industrial	Dec					Mooc
Engineering	2021	2	0	0	0	Courses
8 11 8	Jul-		-			Swayam
Instrumentation	Dec					Mooc
Engineering	2021	1	0	0	0	Courses
<u> </u>	Jul-					Swayam
	Dec					Mooc
Mechanical	2021	485	6	10	1	Courses
	Jul-		-	-		Swayam
	Dec					Mooc
Other Courses	2021	10	0	1	1	Courses
	Jul-					Swayam
	Dec					Mooc
Production	2021	85	0	29	3	Courses
11044011011	Jul-	0.5			3	Swayam
Mathematics/	Dec					Mooc
physics	2021	0	0	6	0	Courses
Piritores	2021			U	J	Courses



	Jul-					Swayam
	Dec					Mooc
Statistics	2021	0	0	3	1	Courses
	Jul-					Swayam
	Dec					Mooc
	2021	0	0	0	0	Courses
Total	Total	1006	32	95	14	

Jan to Apr 2022
Table 9.4.7: NPTEL Summary 21-22 Sem-II

Engineering Discipline	Year	No. of Student	Number of	Number of	Number of	Course Brief
Discipinic		Enrolled	Student Qualified	faculty Enrolled	faculty qualified	Biki
Chemical	Jan	280	15	4	0	Swayam
Engineering	to					Mooc
	Apr					Courses
	2022					
Civil Engineering	Jan	197	107	4	0	Swayam
	to					Mooc
	Apr 2022					Courses
Computer	Jan	76	1	13	1	Swayam
Engineering	to					Mooc
	Apr					Courses
	2022					
Electrical	Jan	57	0	8	0	Swayam
Engineering	to					Mooc
	Apr					Courses
	2022					
Electronics and	Jan	213	7	10	0	Swayam
Telecommunication	to					Mooc
Engineering	Apr					Courses
	2022					
Mechanical	Jan	609	7	16	1	Swayam
Engineering	to					Mooc
	Apr					Courses
	2022					
Prod Engineering	Jan	18	0	17	0	Swayam
	to					Mooc
	Apr					Courses
	2022					
Other	Jan	14	0	0	0	Swayam



	to					Mooc
	Apr 2022					Courses
Mathematics	Jan	0	0	4	0	Swayam
	to					Mooc
	Apr					Courses
	2022					
Total		1464	137	76	2	

2020-21 Jul-Dec 2020 Table 9.4.8: NPTEL Summary 20-21 Sem-I

Engineering Discipline	Year	No. of Student Enrolled	Number of Student Qualified	Number of faculty Enrolled	Number of faculty qualified	Course Brief
	Jul-					Swayam
Chemical Engineering	Dec 2020	180	0	21	1	Mooc Courses
Civil Engineering	Jul- Dec 2020	509	6	43	7	Swayam Mooc Courses
Computer Engineering	Jul- Dec 2020	134	6	13	1	Swayam Mooc Courses
Electrical Engineering	Jul- Dec 2020	172	1	31	7	Swayam Mooc Courses
Electronics Engineering	Jul- Dec 2020	257	10	22	1	Swayam Mooc Courses
Electronics and Telecommunication Engineering	Jul- Dec 2020	520	16	60	14	Swayam Mooc Courses
Mechanical Engineering	Jul- Dec 2020	3				
Prod Engineering	Jul- Dec 2020	189	16	25	6	Swayam Mooc Courses
Other	Jul- Dec 2020	31	16	3	20	Swayam Mooc Courses
Mathematics	Jul- Dec 2020	0	0	8	0	Swayam Mooc Courses



	Jul-					Swayam
	Dec					Mooc
Physics	2020	1	0	4	0	Courses
	Jul-					Swayam
	Dec					Mooc
Statistics	2020	0	0	4	0	Courses
Total	·	2036	71	269	57	

Jan to Apr 2021 Table 9.4.9: NPTEL Summary 20-21 Sem-II

Engineering	Year	No. of	Number	Number	Number	Course
Discipline		Student	of	of	of	Brief
		Enrolled	Student	faculty	faculty	
			Qualified	Enrolled	qualified	
	Jan to					Swayam
Chemical	Apr	57	1	9	0	Mooc
Engineering	2021					Courses
	Jan to					Swayam
	Apr	106	2	28	6	Mooc
Civil Engineering	2021					Courses
	Jan to					Swayam
Computer	Apr					Mooc
Engineering	2021	198	1	11	1	Courses
	Jan to					Swayam
Electrical	Apr					Mooc
Engineering	2021	57	3	11	0	Courses
	Jan to					Swayam
Electronics	Apr					Mooc
Engineering	2021	359	5	14	0	Courses
Electronics and	Jan to					Swayam
Telecommunication	Apr					Mooc
Engineering	2021	523	10	37	4	Courses
Mechanical	Jan to					Swayam
Engineering	Apr					Mooc
	2021	28	0	32	2	Courses
Total		1328	22	142	13	



Table 9.4.10: Companies collaborated for internship

Sr. No.	Table 9.4.10: Companies collaborated for internship
Sr. No.	Name of Collaborating Institute/ Collaboration Body
	2022-23
1	Tata Sons Ltd
2	Bubble AI
3	Healthcare Dignostic Ltd
4	eMomey solution
5	CSM Digital Technologies
6	Kalpataru
7	Automate Engineer's Ltd
8	Linkcode
9	Sunshine Power Electronics
10	Automic Engineers Pvt Ltd
11	ENCON
12	Dankel Tech
13	FirstEigen
14	BoLTs IOT
15	Schnell Technologies
16	Diligence Tech
17	neptune Enterprises
18	Teknik Engineers
19	Kalika Steel Private Ltd., Jalna
20	Chaitanya
21	Aviator Automation India
22	DRDO Pune
23	Society for Space Education Research and Development
24	Microcon
25	Elon
26	NETTOYER AUTOMOTIVE
27	Shiksha
28	Data Tech Labs
29	Picshort Private Limited
	2021-22
1	Tata Sons Ltd
2	Bubble AI
3	Healthcare Dignostic Ltd
4	eMomey solution
5	CSM Digital Technologies
6	Kalpataru
7	Automate Engineer's Ltd
8	Linkcode
9	Sunshine Power Electronics
10	ENCON
11	Dankel Tech



12	First Eigen
13	BoLTs IOT
14	Schnell Technologies
15	Diligence Tech
16	eptune Enterprises
17	Teknik Engineers
18	Kalika Steel Private Ltd., Jalna
19	Shiksha
20	Chaitanya
21	Aviator Automation India
22	DRDO Pune
23	Society for Space Education Research and Development
24	Microcon
25	ELON
26	NETTOYER AUTOMOTIVE
27	Picshort Private Limited
	2020-21
1	IndEyes



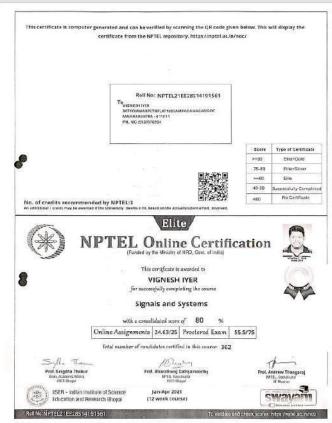


Figure 9.4.2: NPTEL Certificate: Sample



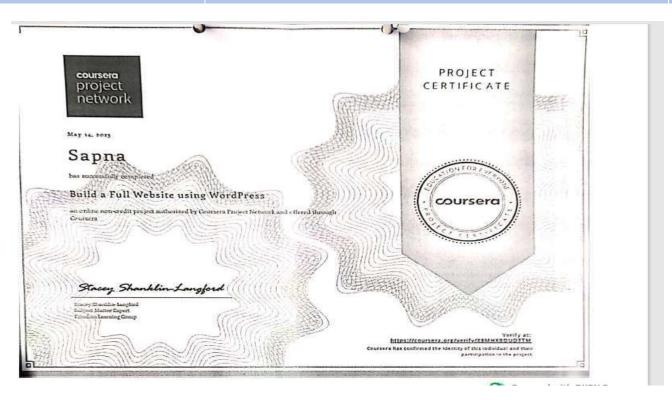


Figure 9.4.3: Coursera Certificate: Sample



9.5	Career Guidance, Training, Placement	10	
			i

A. Availability of career guidance facilities

(2)

Availability of career guidance facilities:

Centre for Information Training and Placement (CITP), a common section has been formed to cater Trainings, Placements and for Career guidance to students by taking help of Alumni strength and interaction with industry. The CITP has a well-established infrastructure to cater the said services. The career guidance to students is done at well-structured one to one mentoring and through professional counselling. Pre-placement and industry specific training are done at every stage of their undergraduate studies. Student's inclination towards career is identified at first year level. In their second year studies, communication and soft skills are honed. Aptitude required for employment in general is prepared at third year level. Company specific training with contemporary knowledge is enhanced in the final year of their study. The CITP respects "One student one job policy".

The policy is elaborated as follows:

- 1. The companies visiting the campus are divided into IT/Software companies (product, service based) and Core Companies (Non IT/Software) (Manufacturing, service providers).
- 2. Companies are invited and scheduled on the basis of following parameters:
 - a. Eligibility criteria, opportunities for all.
 - b. Job profile and growth prospects.
 - c. The package being offered by the company.
 - d. Past record of recruitment at AISSMS COE.
 - e. Feedback from the students regarding the company.
- 3. If a company prefers to have a common selection process for our institute students along with nearby Engineering institutes, the selection drive is conducted either by our institute or by the other institute after discussion with participating institutes.
- 4. If the market situation and job scenario necessitate a revision in the Placement Policy, it will be done in a manner so as to maximize the benefit to the student community as a whole.

A. Eligibility and Registration

- 1. UG, PG and PhD scholars' placement will happen round the year.
- 2. All students who expect to graduate from the Institute by the end of the academic year and are seeking employment, may register for campus placements.
- 3. Registration for all programmes will be done before the start of the academic year.
- 4. Campus placement is a facility provided for the students. Registration is not compulsory. Students not interested in placement are advised not to register for placement.
- 5. Each registered student will be given access to the placement notices, company announcements and to upload resumes.

B. Resume

1. Students are advised to read the announcements made, go through the company website and apply only if interested.



- 2. Students are expected to follow the institute resume template available in the placement website for preparing the resumes.
- 3. The details given in the resume have to be genuine and any student found violating this rule will be disallowed from the placement for the rest of the academic year.
- 4. Students have to upload and submit their resumes on the website to individual companies well before the deadline. Resume once submitted cannot be modified.
- 5. Students are advised to avoid last minute uploading, as it may lead to delays and some may even be left out.

C. Pre-Placement Talks (PPT)

- 1. Notices of the PPT will be published in the placement website well in advance. Students should be available 15 minutes before the scheduled start of the PPT.
- 2. Students interested in a particular company can attend its PPT.
- 3. Students must go through the complete selection process of a particular company.
- 4. Any clarification regarding salary break-up, job profile, place of work, bond details, etc. must be sought from the companies during PPT or interview.
- 5. **Dress Code:** Students must be formally dressed whenever they participate in any interaction with a company. CITP reserves the right to refuse permission to a student to attend the selection process/PPT, if they do not dress up formally.

D. Placement Process

- 1. It is the responsibility of the student to check announcements / notices / updated information / shortlisted names, etc. on the Placement Website. Students are expected to be punctual.
- 2. Attendance and punctuality:
- a) A student who applies and gets shortlisted is bound to go through the entire selection process unless rejected midway by the company. Any student who withdraws deliberately in the middle of a selection process will be disallowed from placement for the rest of the academic year.
- b) Latecomers for aptitude test / GD / interview will not be allowed to appear for the selection process.
- 3. Discipline:
- a) Students should maintain discipline and show ethical behaviour in every action they take during the placement process. Any student found violating the discipline rules set by the company or defaming the Institute's name will be disallowed from the placements.
- b) Students found cheating or misbehaving in the selection process (Test / GD / Interview) will be disallowed from the placements for the rest of the academic year.
- c) Dress code should be maintained.

E. Job offers

- 1. **Pre-Placement Offers**: The following rules are applicable to companies that make PPO through the CITP Office.
 - a. The offer of PPO (by the company) and its acceptance (by the student) shall be through CITP office only.
 - b. Once a student accepts a PPO, he / she shall be de-registered from the placement process.
- 2. **Multiple Offers**: Each student is eligible for one CORE and one NON-CORE job offer only.



- a. If a student receives more than one offer in a session/day and if there is a delay in the announcement of results by some companies, the student is bound to accept/reject the job offers of the company whose results are declared in time.
- b. If the results are declared on the same session / day, the student may choose from the offers in hand and inform the CITP office of his/her choice, within 24 hrs of announcement of results.
- 3. Every student who is selected by a company is out of placement thereafter i.e. deregistered from the placement website.
- 4. Release of offer: All companies are requested to release the Offer and hand it over to the CITP office after the completion of the recruitment session.
- 5. Offer Acceptance: The students should inform the acceptance/rejection of an offer within 24 hours (on the day following the release of offer letter/mail). The company shall be intimated of the offer acceptance/rejection within three days of release of offer.
- 6. Waitlist: In case of those students who are placed and waitlisted by other companies, they will be given 2 days to accept the offer on hand.
 - i. The Placement Office in the meantime will inform the company where he/she is waitlisted about his present offer.
 - ii. The company that has waitlisted the students is required to release the offer within 24 hours, failing which the name of the student will be removed from the waitlist.
- 7. Offer of Job: Announcement on the website will be considered as firm offer. Offers received from companies must be collected as per timings in circular / notice. The responsibility of going through the offer letter and taking actions therein such as submission of documents lies entirely with the student. All offers (made by the companies) shall be through this office only. This office will not be in a position to resolve problems, if any, that may arise with respect to offers made directly to the student by the company.
- 8. Second option is given to selected students if the forthcoming offer is doubled the existing package or more than 8 LPA.

F. Miscellaneous

- 1. Medical Test: The CITP office assumes that every selected student will pass the medical test. If there is a rejection at this stage, the student registration will be renewed and the student becomes eligible again to seek placement through this office. Students should go through and understand instructions related to medical test carefully. The same should also be adequately clarified during PPT/interview.
- 2. Identity Cards: Students must bring their identity cards with them whenever they go through a placement process.
- 3. For all matters not covered by the above regulations, the CITP Office will use its discretion to take appropriate decisions. The decision taken by this office shall be binding on all students/scholars.

Innovative TRIZ-based training enables students to improve their performance in terms of understanding the technical concepts (basic as well as advanced) in a deeper and appropriate way. at a higher cognitive level. This prepares them to perform more effectively in interviews (HR and Technical rounds).



B. Counselling for higher studies (GATE/GRE, GMAT, etc.) (2)

Counselling for higher studies:

Role of Department in Career Guidance to Students

Apart from the efforts taken by CITP, the department also works on its level to provide career guidance to students. Classes for GATE are organized by the department from mid-December to January. This is a sample time table of GATE classes conducted during the academic year 2021-22 for TE and BE students. Revision of important concepts had been carried out subject-wise. Problems that appeared in previous years' question papers were also discussed and solved.

The institute is observing its alumni pursuing higher studies from renowned national and international universities for which the students require to qualify and meet desired criteria.

Soft Skill and Aptitude Training: Soft skill and Aptitude trainings are conducted on regular basis. Pre-placement and industry specific trainings are carried out at every stage of their undergraduate studies. Student's inclination towards a career is identified at first year level. In their second year studies, communication and soft skills are honed. Aptitude required for employment in general is prepared at third year level. Company specific training with contemporary knowledge is enhanced in the final year of their study.

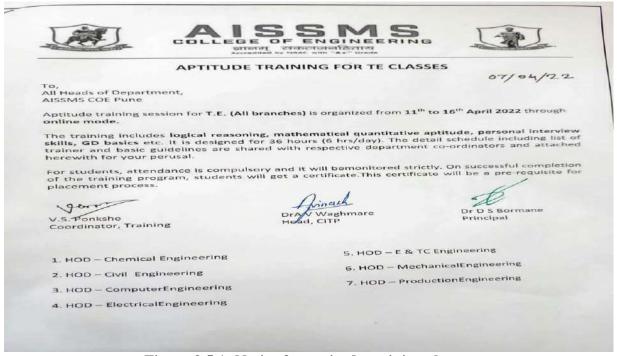


Figure 9.5.1: Notice for aptitude training classes



AISSMS COLLEGE OF ENGINEERING



हानम् सकलजनहताय Accredited by NAAC with "A+" Grade

Soft Skill Training Sessions - Online A.Y. 2021-22 (Term - II) From - 11/04/22 to 16/04/22

Class: T.E.

	Department	Division	Faculty Co-ordinator (with mobile no)	Name of GFM (with mobile no)	Name of Trainer	Contact No	Email
1	Chemical		Prof P.M. Warke (9823103089)	G 0350 SR	Pranav Thorat	7977889404	pr.thorat91@gmail.com
2	Civil	A	Prof V.S. Chavan	5 A Chavhan (9960430643)	Pratiksha Tilekar	9604433127	pratikshatilekar85@gmail.com
3	CIVII	В	(9767193755)	Dr D V Wadkar(9730020695)	Chetan Manurkar	7773984154	chetanmanurkar92@gmail.com
4	Committee	А	Prof Monali Deshmukh	Mr. A. P. Kadam (94210 89450)	Shruti Purandare	9422616758	shrutip41@gmail.com
5	Computer	В	(7030990816)	Mrs. Shikha Phachouly (77688 64108)	Jay Prakash	9542956419	vakatijayaprakash@gmail.com
6	Electrical		Prof V.S. Ponkshe (9284519408)	Prof V.S. Ponkshe (9284519408)	Musharraf	8793327574	mushimh@gmail.com
7	E & TC		Prof S. B. Dhekle (9049996452)		Mangesh Rethrekar	9112880561	mangeshretharekar@gmail.com
8	Mechanical	A	Deef Ameri (000215222)	DSM (9921618501)	Mohit Mundra	9571091011	mail4mohitmundra@gmail.com
9	iviecnanicai	В	Prof Ansari (8983153332)	RAM (9822190513)	Anwar Rashid	7385180479	anwar.rashid0102@gmail.com
10	Mech S/W		Prof M.P. Bauskar (9730923304)			completed	*
11	nood one		Prof S.S. Kallurkar	Prof S.S. Kallurkar	Sandip Bhoyar	9923106220	sandip bhoyar@yahoo.co.in

Figure 9.5.2: Soft skills training schedule







DATE: 8" Nov 2020

[DEPARTMENT OF MECHANICAL ENGINEERING]

NOTICE: FOR GATE 2021 ASPIRANTS

T.E & B.E (MECHANICAL) & (MECHANICAL SANDWICH) STUDENTS FOR ACADEMIC YEAR 2020-21

Qualifying in GATE is a mandatory requirement for seeking admission and financial assistance to Postgraduate Programs (Master's and Doctoral) with the Ministry of Education (MoE) and other Government Scholarships Assistantships, subjected to the admission criteria of the admitting institute. The valid GATE score is also used by Public Sector Undertakings (PSUs) for their recruitment and by several other universities in India and abroad for the admissions.

In view of above subject Department of Mechanical engineering is organizing GATE 2021 exam preparation course. Interested Third year & Final year (Mechanical) & (Mechanical Sandwich) students are hereby informed to participate in GATE 2021 exsions which will be held from month of December-January by the subject expertise. Each session will be of minimum 2 hours in the concerned domain. The course will have pure emphasis on success enrichment in GATE 2021 exam over the said period.

Kindly furnish your information with the following G-form attached.

Link for enrollment: (Paste the link in browser)

https://forms.gle/yGVGzvHrBaLRVjJp6

Best of luck!

GATE 2021 Coordinator

N. N. Gotkhindikar

HOD Mechanical

Dr. B.D.Bachchhav

Figure 9.5.3 Notice for GATE aspirants' classes



Sr. No	Subject	Faculty Name	Date	Remark
1	General Aptitude(Numerical Ability)	7.		Self-study
2	Manufacturing engineering			S 35
	I] Engineering Materials	NNG & MSS	21.12.2020 & 22.12.2020	
	II] Casting, Forming & joining processes	BDB	23.12.2020	
	III] M/C ing & M/C tool operations	SSP & DSM	24.12.2020 & 26.12.2020	1.5
	IV]Metrology & Inspection	MPB	27.12.2020	
	V] CIM	MPS	28.12.2020	
3	Applied Mechanics & Design	35		
	[] Mechanics of materials (SOM)	PSG	29.12.2020	
	II) Theory of machines	ATT & SRP	30.12.2020 & 02.01.2021	
_	mil Factor anti-a Manakanta-	MMS	CARTES TABLES	2
_	III] Engineering Mechanics	RAM & DYD	03.01.2021	6
	IV] Machine Design	KAIVI & DYD	04.01.2021 & 05.01.2021	
	V] Vibration	CSD	06.01.2021	2
4	Engineering Mathematics	MKN	07.01.2021 & 16.01.2021, 17.01.2021	
5	Fluid Mechanics & Thermal Sciences	* '	17.01.2021	55
_	I] Fluid Mechanics	MUG	08.01.2021	
	II] Heat Transfer	MRD & SJN	09.01.2021 & 10.01.2020	
	III] Thermodynamics	GPL	11.01.2021	
	IV] RAC	CSC & MSD	12.01.2021 &	
	14110	coc a moo	13.01.2021	
6	Industrial Engineering	(3)		8
	I] Production Planning & control	SVC	14.01.2021	
	II] Operational Research	MRP	15.01.2021	

Figure 9.5.4: GATE aspirants' teaching plan



Figure 9.5.5: Glimpses of GATE awareness sessions



C. Pre-placement training

(3)

Pre-placement training: Aptitude Test

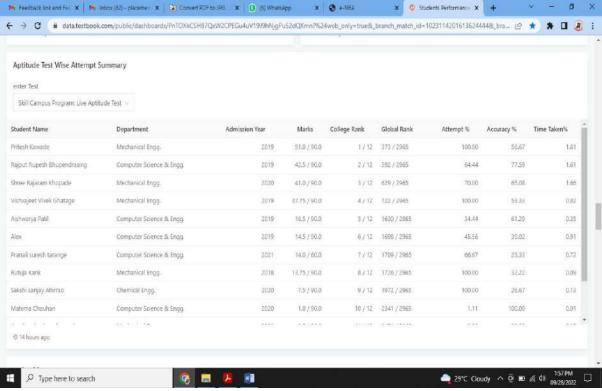


Figure 9.5.6: Aptitude testwise summary by Skill Campus Program

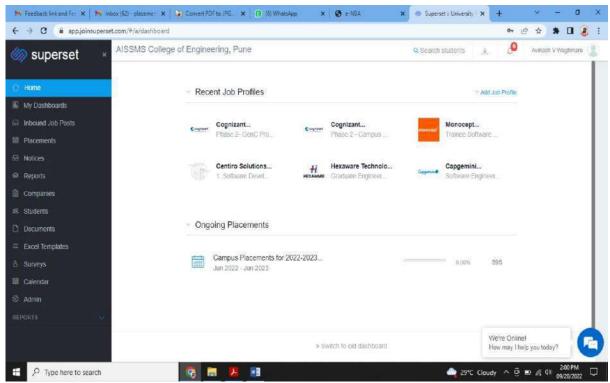


Figure 9.5.7: Dashboard of superset

(3)



D. Placement process and support

Placement process and support:

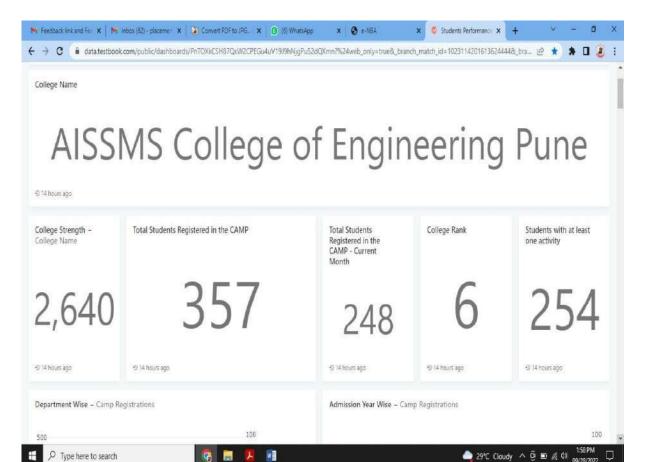


Figure 9.5.8: Placement drive registration on testbook

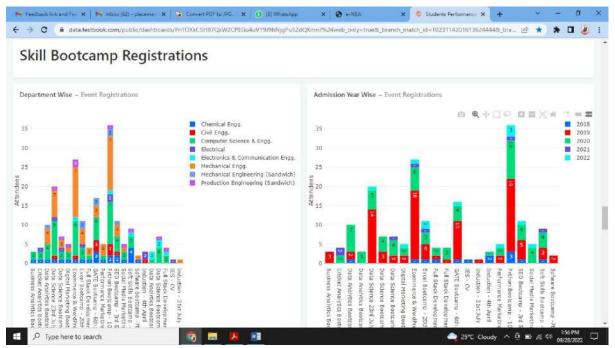


Figure 9.5.9: Skill Bootcamp registrations by Skill Academy



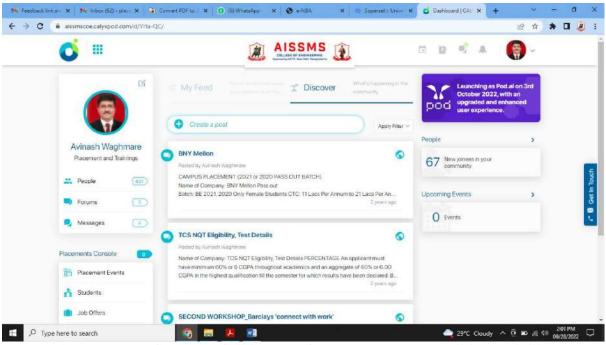


Figure 9.5.10: Calyxpod facility used for placement and training activities

Summary of placements:

Table 9.5.1: Placement Summary of all Department

Sr. No.	Academic Year	Number of Students Placed with single offer	Number of Students Placed with multiple offers	Number of companies visited
1	2022-23	289	426	112
2	2021-22	359	589	220
3	2020-21	343	520	250

Placement of E and TC Department:

Table 9.5.2: Placement Summary of E & TC Department

Sr. No.	Academic Year	Number of Students Placed with single offer	Number of Students Placed with multiple offers
1	2022-23	18	34
2	2021-22	58	78
3	2020-21	57	85



9.6	Entrepreneurship Cell	05

A. Entrepreneurship initiatives

(1)

A. Entrepreneurship initiatives:

The Entrepreneurship and Skill Development Cell at AISSMS College of Engineering has been formed to focus on preparing successful entrepreneurs especially techno-preneurs for the society. The objective is to inculcate Indian cultural values amongst prospective entrepreneurs. The activities are carried out to enhance the eternal spirit of entrepreneurship amongst the students in addition to the basic necessity of academics. The entrepreneurial activities aren't new for the Institute. Many Alumni have established their enterprises and have shown sustainability in business and entrepreneurship. The academic departments have carried out entrepreneurial activities for educating and motivating students in respective areas in techno-entrepreneurship. A dedicated cell was formed as a requirement to inculcate current trends in Entrepreneurship Development in the prospective techno-preneurs. The E and SD Cell has been continually taking efforts to motivate the students to start with entrepreneurial thinking.

Table 9.6.1: Entrepreneurship and Skill Development Activities

Sr. No.	Details of Activity conducted	Name of Chief guest/ Coordinator	Date and duration	Total Number of Students & Teachers involved
		2022-23		
1	Organized IIT-Bombay Entrepreneurship Pune Summit and AISSMS E&SD-cell	IIT-Bombay E-Cell & S. N. Chiwande, M. S. Swami Dr. A.V. Waghmare	26/11/2022	200
2	ESD-cell Seminar on Entrepreneurship Awareness, along with ENTC & Civil Engineering Department on	Mrs. Juhi Bose	04/11/2022	43
3	AISSMS CoE, ESD-cell organized a two-day training on the "Entrepreneur Awareness Program" in collaboration with BYST, Pune	Experts From BYST, Pune	29/08/2022 to 30/08/2022	37
4	"Entrepreneurship Awareness" for First Year Engineering Induction Programme	S. N. Chiwande & M. S. Swami	21/11/2022 to 24/11/2022	All FE Students
5	Organized and Coordinated Entrepreneurship Awareness Generation program sponsored by BYST, Pune in	S. N. Chiwande & M. S. Swami	27/04/2023 to 28/04/2023	29



	association with AISSMS COE, E&SD Cell, Pune			
		2021-22		
1	Organised Webinar on "Unfolding the Journey of a Successful Start-Up" under the head of ESD-cell	Claro Agro Solutions Private Limited on Microsoft Team AISSMS ESD Cell	24/06/2021	178
2	Organised Webinar on 'Career Opportunities for the R&D, Innovation, Start-up and Entrepreneurship' under the head of ESD-cell	Dr. Vijay Kumar Salvia, Presidential Advisor (Director General), International R&D Creativity Organization USA, INDIA on Microsoft Team	25/06/2021	83
3	Organised & Coordinated FE Induction Programme on Entrepreneurship Awareness	Activity coordinated with PMA, Pune	27/12/2021 to 30/12/2021	All FE Students
4	Organized webinar on 'Key to Start-Up" Mr Shrirang Gokhale; Mr Biman Gandhi, Mentor and Guide from BYST & PMA Pune	BYST & PMA Pune & Department of Production	12/10/2021	92
5	Organized offline Seminar on "Entrepreneurial thinking skills for Start-up & innovation" under ESD-cell	Dr. Madhulika Sonawane, Prajakta Joshi	24/03/2022	77
6	Organized webinar on "Career Options: Opportunities & Challenges" under ESD-Cell	Paras Doshi	02/05/2022	53
7	Organized Workshop on "Awareness Generation Program"	BYST Members	06/05/2022	71
8	Organized Seminar on Overseas Higher education Info & Awareness Session	Kanchane Kadage & Bijayeeta Dash	11/05/2022	39
9	Coordinate and attended Entrepreneurship Awareness Programme in CITP	BARTI & MCED, Pune	20/05/2022	53
	•	2020-21	•	•
1	Mystery behind successful entrepreneur	Mr. Sachin Patil	24/10/2020	65
2	Webinar on Design Thinking for Entrepreneurs	Ms. Garima Gurjar	26/10/2020	90
3	Webinar on "Presentation Skills"	Dr. Pragya Bajpai	03/11/2020	100
4	Interaction with Entrepreneur	Mr. Sharad Tandle	4/11/2020	20



5	MoU with BYST	Mr Biman Gandhi	5/12/2020	08
6	Webinar on "Communication Skills	Dr. Pragya Bajpai	05/11/2020	100
7	Webinar on "E-tendering"	Mr. Kiran Ghorpade	06/11/2020	150
8	Idea Generation and Evaluation	Mr. Biman Gandhi	31/12/2021	56
9	Entrepreneur Online Learning (EOL) Program -BYST	BYST Mentors	27/01/2021 to 28/01/2021	14
10	FE Induction – Introduction to Entrepreneur	Mr. S. N. Chiwande & Mr. M. S. Swami	04/02/2021 to 05/02/2021	556
11	Awareness Generation Program BYST	Mrs Ujwala Gosavi	24/2/2021	50
12	Interaction with our own young startup Entrepreneurs	Mr. O Dahiwal Mr. S. Mangrulkar, Mr. Sumit Ghodke	25/02/2021	83
13	Expert Talk	Mrs. Sujata Chandra	04/03/2021	70
14	Webinar on "Preparation for being industry ready"	Mr. G. Zadge & Mr. C. Bhutada	20/03/2021	80
15	Webinar on "Soft Skill: A must have asset for Engineers"	Dr. Utpal Ganatra	20/03/2021	120
16	Awareness Generation Programmes (AGP) and Counselling Session	BYST, Pune Mentors	26/03/2021 to 27/03/2021	05
17	Webinar on Career Success Mantra	Mr. Rajesh D. Kamath	01/05/2021	100
18	One-week STTP on "2D & 3D Modelling in STAAD Pro"	Mr. R. Udhyasankar	10/05/2021 to 14/05/2021	300

An Entrepreneurship Awareness Camp sponsored by DST.

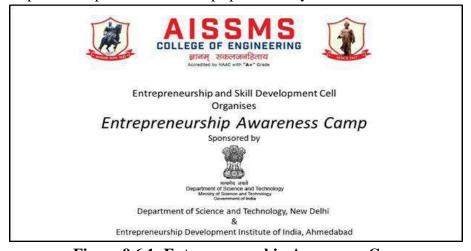


Figure 9.6.1: Entrepreneurship Awareness Camp



MoU with Bharatiya Yuva Shakti Trust

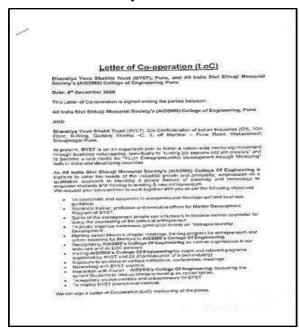
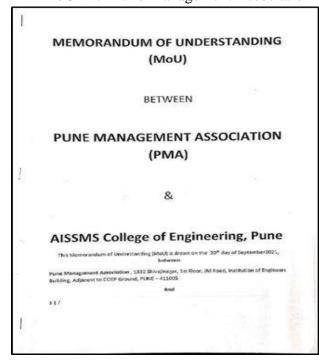




Figure 9.6.2: MoU with Bharatiya Yuva Shakti Trust

• MoU with Pune Management Association



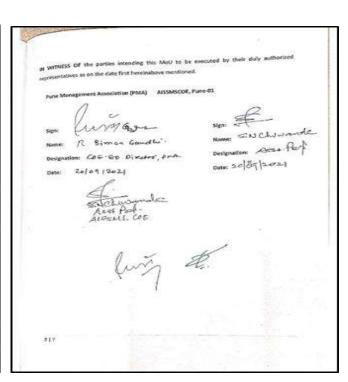


Figure 9.6.3: MoU with Pune Management Association



• Activities organized by Cell

	E nizep ren	eurship and Skill Devel	opment Cell	
		Activities Cara	ied Out With T	lsc Cell
-		First Half (01 July 202	0 to 31 Decemb	er 2020)
Sr. No.	Details of Activity conducted	Name of Chief guest/ Coord inster	Date and duration	Total Number of Students participated
1	Mystery behind successful entreprensur	Mr Sachin Patil	24/10/2020	65
2	Webinar on Design Thinking for Entrepreneurs	MsGarima Gurjar	26/10/2020	90
3	Webinar on "Presentation Skills"	Dr. Fragya Bajpai	03/11/2020	100
4	Interaction with Entrepreneur	Mr. Sharad Tandle	4/11/2020	0 20 (Faculty)
5	MoU with BYST	Mr Binian Gandhi	5/12/2020	D D3 (Faculty)
6	Webinar on "Communication Skills	Dr. Pragya Bajpai	05/11/2020	100
7	Webiner on "E- tendering"	Mr. Kiran Ghospada	06/11/2020	150
8	Idea Generation and Evaluation	Mr. Birnan Gandhi	31/12/2021	16

		Activities Carried Out With The Cell					
S	Details of Activity conducted	Name of Chief guest/ Coordinator	Date and duration	Total Number of Students participated			
1	Entrepreneur Online Learning (EOL) Program - BYST	BYST Mentors	27/01/2021 to 28/01/2021 Two Days	14			
2	FE Induction — Introduction to Entrepreneur	Mr S N Chiwande & Mr M S Swami	04/02/2021 to 05/02/2021 Two Hours each	55 6			
3	Awareness Generation Program BYST	Mrs Ujwala Gosavi	24/2/2021 2 Hour	50			
4	Interaction with our own young startup Entrepreneurs	Mr. O Dahiwal Mr. S Mangrulkar , Mr. Surnit Ghodke	25/02/2021 Half Day	83 and 07(Paculty			
5	Expert Talk Mrs. Stjata 04/03/2021 Chandra Half Day			70 and 10 (Faculty			
Ó	Webinar on "Preparation for being industry ready"	Mr G Zadge & Mr C Bhutada	20/03/2021	80			
7	Webinar on "Soft Skill: A must have asset for Engineers"	Dr. Utpal Ganatra	20/03/2021	120			
В	Awareness Generation Programmes (AGP) and Counselling Session	BYST, Pune Menters	26/03/2021& 27/03/2021 Two days	85			
ŋ	Webinar on Career Success Mantra	Mr Rajesh D Kamath	01/05/2021	100			
10	One week STTP on "2D & 3D Modelling in STAAD Pro"	Mr R. Udhyasankar	10/05/2021 to 14/05/2021 05 days	360			

Figure 9.6.4: (a) and (b) Activities organized by Entrepreneurship Cell



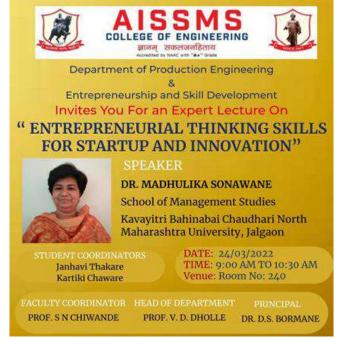


Figure 9.6.5: Glimpses of events by Entrepreneurship cell



5/7/22, 12:55 PM

AISSMS College of Engineering Mail - BA-BYST, Pune : About Awareness Generation Program



Sumedh Chiwande <snchiwande@aissmscoe.com>

BA-BYST, Pune: About Awareness Generation Program

2 messages

Byst Pune AGP

byst.pune@cii.in>

Wed, May 4, 2022 at 6:11 PM

To: "snchiwande@aissmscoe.com" <snchiwande@aissmscoe.com>

Cc: Byst Pune CH

Syst.wrcluster@cii.in>, Sachin Joshi

Syst.baprojecthead@cii.in>, Byst Pune AGP

Syst.pune@cii.in>

Dear Sir,

As per our discussion in the meeting on 2nd May 2022, Bharatiya Yuva Shakti Trust, is willing to conduct Awareness Generation Program with AISSMS College of Engineering, Pune on 6th May 2022 along with enlightening sessions from our expert mentors Mr Virendra Ingle (Founder, Velocity Xcelerator Pvt. Ltd.) and Mrs. Ujwala Gosavi (CEO, Climber Systems).

We request you to kindly ensure students' time and venue availability.

Please find attached profiles of both the mentors for your reference.

Thanks & Regards, Soham Dhapte

Figure 9.6.6: Notice of BYST awareness generation program





Figure 9.6.7: Glimpses of BYST awareness generation program



B. Data on students benefitted (4)

How AISSMS helped him/her while academics:

Regular Teaching, Guardian Faculty Member, Batch Mentoring are pillars of students' skills development. This gives students an opportunity to develop interest and build career orientation with regular learning. Our college decided to increase the number of Entrepreneurs from college day's itself. Students Participate in various activities like Engineering Today (Technical Event's), Shivanjali (Social Gathering), and Ashwamegh (Sports Competition). These events increase students' communication and team building skills. Also, AICTE events help students to showcase their talent at State and national events. Interaction with alumni, experts and entrepreneurs allows students to explore ideas with support..

Following is the list of entrepreneurs reflecting the success stories.

Table 9.6.2: No. of student entrepreneurship in AY 2021-22

Sr.	Department	Number of Student	
No.		Entrepreneurship	
01	Patel Faiz Ahmed Anis	LUSSO The Luxary	
	Ahmud	Automaker, Pune	

Table 9.6.3: No. of student entrepreneurship in AY 2020-21

Sr. No.	Department	Number of Student Entrepreneurship
01	Omkar Lande	Pratima Developers
02	Chinmay Deshpande	Steradix Solutions

Table 9.6.4: No. of student entrepreneurship in AY 2019-20

Sr.	Department	Number of Student
No.		Entrepreneurship
01	Hrishikesh Bangar	Heilsa Technologies
02	Ajil Saji	Ajil Fibertech
03	Saurabh Bedre	Dynamic Hydrotek
04	Saurabh Kodlangare	S K Classes
05	Yadnesh Kulkarni	Speed Cut CNC
		solutions

Table 9.6.5: No. of student entrepreneurship in AY 2018-19

Sr. Department		Number of Student
No.		Entrepreneurship
01	Dhumal Vishal	Vaishnavi Enterprises
	Chandrakant	
02	Apte Pradyumna Subhash	Proprietary Trader



Success stories Success Story 1.

Name of Company: Ajil Fibreteck

Founder / Founders Name: Mr. Saji Ajil Saji Varkey

Sector - Service / Product: Industrial Machinery Manufacturing

Brief about company:

Ajil Fibretech is a foremost name betrothed in the business of Manufacturing, Service Providing and Supplying a broad range of Ambulance manufacturing as per AIS-125, FRP Cabins, FRP Toilet Cabin, MS Portable Cabins, Special purpose vehicle monocoque and chassis, customized caravans on monocoque and chassis, FRP Mudguard, FRP Bus Stop Shelters, FRP Swimming Pool, FRP Dustbin, FRP Chamber Cover, FRP Bench, FRP Biogas Tank, FRP Sheet, FRP Street Light, FRP Urinal, FRP Dome and Vehicle Fabrication Service. Using supreme quality raw material and contemporary tools and machinery in their manufacturing process, the entire assortment of products provided by us are well tested to uphold their sturdiness and perfection.





Figure 9.6.8: Details of a student entrepreneur

Success Story 2.

Name of Company: Heilsa Technologies

Founder / Founders Name: Mr. Hrishikesh Bangar Sector - Service / Product: Hospitals and Health Care

Brief about the company:

Heilsa Technologies Private Limited is a Private incorporated on 28 June 2020. It is classified as Non-govt company and is registered at Registrar of Companies, Pune. Its authorized share capital is Rs. 1,000,000 and its paid up capital is Rs. 100,000. It is involved in Manufacture of optical instruments and photographic equipment. Heilsa Technologies Private Limited's Annual General Meeting (AGM) was last held on N/A and as per records from Ministry of Corporate Affairs (MCA), its balance sheet was last filed on N/A. Heilsa Technologies Private Limited's Corporate Identification Number is (CIN) U33208PN2020PTC191557 and its registration number is 191557. Its Email address is akshay.jagtap21@gmail.com and its registered address is Sector No.7, Plot No. 247 PCNTDA, Bhosari Pune. MH 411026 IN. Current status of Heilsa Technologies Private Limited is - Active.





Figure 9.6.9 Details of a student entrepreneur



9.7 Co-curricular and Extra-curricular Activities 10

A. Availability of sports and cultural facilities (3)

Availability of sports and cultural facilities:

The All India Shri Shivaji Memorial Society (AISSMS) has always encouraged and supported the co/curricular and extracurricular activities in its institutes. The institutes have also carried forward the legacy of society by promoting the co/curricular and extracurricular activities at their level. As part of this endeavor, the institute has a well/established Gymkhana Department and Art circle for effective and better coordination of various **sports and cultural activities** which are headed by Physical Director, Cultural In/charge and supported by the students' sports and cultural committees respectively. The society and institute fully support and encourage various sports and cultural activities with the motto that every student should not only be academically fit but also physically fit to face the challenges of life.

Institute supports students in co-curricular and extra-curricular activities. Institute runs various clubs such as drone club, robotics club, motorsports club, coding club, aero design club and so on. These students are supported financially and non-financially by the institute. Peer to peer learning, learning from alumni, result oriented activities, modern tool and software usages are the outcomes of these activities.

Students Symposium 'AISSMS Engineering Today': Every Year, the institute organizes technical competitions and symposia. These events provide students an opportunity to prepare technical papers, Quiz, Model Making, Robo-race, Science exhibition. Students also participate as volunteers in the organization of such events.

Cultural Activities: AISSMS COE conducts a state-level cultural and sports event "Ashwamedh", "Shahu Trophy" every year. The Students of various colleges throughout the state participate in the event. Annual social gathering "Shivanjali" is the most awaited event for students.

AISSMS COE students actively participate at various levels and win prizes continuously in cultural and literary events organized by other organizations. Events are Firodiya Karandak, Purushottam Karandak, Dnyanottam Karandak, Kaware Trophy etc.

Objectives:

- 1. To inculcate conducive atmosphere among students to portray talent in various extracurricular activities.
- 2. To encourage maximum participation in various events and competitions to help in developing qualities like team building, leadership and displaying talents.
- 3. To aim for excellence by winning maximum awards and recognition through various inter college, state and national level competitions.



Functions:

- 1. Creating awareness about planned annual events to encourage maximum participation from First Year Engineering
- 2. Planning of various events and forming various teams to participate in the events taking place simultaneously, and will work out programs semester wise.
- 3. Events like "Ashwamedh" and "Shivanjali" to be planned in an innovative style each year with some specific theme every year, which mark an important part of AISSMS'COE culture.

Games and Sports, facilities and qualified sports instructor.

Table 9.7.1: Qualified sports instructor's Details

Sr.	Name of	Date	Qualifica	tion	Sports Achie	evement	No of Research
N0.	the	of	At Joining	Now	Inter-	Inter-	Publication in
	Faculty	Jointi			Zonal/	Univers	Journal and
		ng			State	ity	Conference since
					Level		Joining
1	D.r Mrs	01/08	B A, B Com,	M Phil	Handball	Handball	Conference : 05
	Manisha	/2007	M A	(Phy. Edu.)			nos.
	Manoj		B Ed		Football	Football	No of Research
	Kondhare		(Phy.Edu.),	Phd	Half		Publication in
			M Ed	(Phy.Edu)	Marathon		Journal: 06 nos
			(Phy.Edu.),		10,000 m run]
			SET (Phy.				Symposium: 01 no
			Edu.)		5,000 m run		
					walking		

Table 9.7.2: Games and Sports, facilities

F	Table 9.7.2. Games and Sports, facilities							
Sr.	Particulars	Indoor	Outdo	oor				
No.								
1	Sports facilities: 1. Ground	Table Tables - 01 NosGymnasium - 01 NosChess - 04 Nos.	available for sports A] Play Grounds:	No of Grounds				
	2 54	• Carom - 02 Nos.	Cricket groundCricket Net	01 02				
	allowance are students for to	a are paid and special e granted to the selected ournament and for cultural	PracticeFootball GroundKabaddi ground	02 01 01				
	University tou	Inter-Zonal and Inter rnament. Medals, trophies and	Kho-Kho ground	01				
		appreciation are given to	B] Court :Volley ball courtBasketball court	01				
	4. Track suits and deserving spor	d sports kits are given to the tsman.	C] Horse riding	01				
	5. Consumable purchased ever	<u> </u>	track					



2.	Cultural	Musical instrument	
	facilities	room	

Table 9.7.3: Total No of Players/ Students Participated in Sports:

Sr. No.	Name of the Events	No of Players participate in Sports activities
	2022-23	
1	Cricket	20
2	Shooting	01
3	Volleyball	12
4	Athletics	03
5	Chess	05
6	Table Tennis (B + G)	06+03= 09
7	Football	21
8	Basketball (B + G)	12 + 09 = 21
9	Kabaddi	12
10	Swimming	01
11	GSA and JGSA	24
12	Inter Department	448
13	Total No of Students:	557
	2021-22	
1	Cricket	17
2	Basketball	13
3	Volleyball	12
4	Badminton (B/andG)	08
5	Cross country	01
6	Athletics	02
7	Chess	05
8	Table Tennis (B + G)	06+05=11
9	Football	20
10	Handball (B + G)	12 + 10 = 22
11	Basketball (B + G)	14 + 11 = 25
12	Boxing $(B + G)$	06+01=07
13	Kabaddi	13
14	Hockey (B and G)	10+ 10= 20
15	GSA and JGSA	18
16	Inter Department	820
17	Total No of Students:	1014
	2020-21	
1	FIT INDIA FREEDOM RUN	144
2	Biomechanics of Suryanamaskar Posture	70
3	'YOGA WEEK-2021'	The events were conducted on the online Zoom platform. The events were also going on You-tube Live. For the day 1 number of participants for Zoom was 314 and for You-tube



Total	al No of Students:	241
		those were 89.
		were 403 and for You-tube live
		number of participants for Zoom
		live those were 67, for the day 2 the

Table 9.7.4: Awards /achievements: INTER NATIONAL

Year	Name of the award/ medal	National/ International	Sports	AADHAR / Student ID number	Name of the student
2020- 2021	Browns Medal	Wako India Open International Kickboxing tournament organized by WAKO India Kickboxing Federation held at Talatora Indoor Stadium, Presidents Estate, New Delhi from 9 th February 2020 to 13 th February 2020	Kickboxing	18ME026	Viraj Deshpande

Table 9.7.5: Awards /achievements: State Level Competition organized by Maharashtra Association

Year	Name of the award/ medal	National/ International	Sports	AADHAR / Student ID number	Name of the student
2022- 2023	Silver	34 th Maharashtra State Senior Mens and Womens Kyorugi Taekwondo Championship 2022-2023 under 58 kg weight catefory held at Divisional Sports Complex, Nashik from 1 st October to 3 rd October 2022	Kyorugi Taekwon do	Electronics and Telecommu nication	Shri Ashutosh Sujit Waghjavkar

Table 9.7.6: Student participation in Co-curricular activities

Sr. No.	Name of Student	Name of the event	Date	Organized by	Award/Rank if any				
AY 2022-23									
National Level									
1	Karan Khalate	BAJA SAEINDIA 2023	5 th -8 th April, 2023	SAEINDIA at Chitkara University	Participation				
2	Arjun Taur	BAJA SAEINDIA 2023	5 th -8 th April, 2023	SAEINDIA at Chitkara University	Participation				



	ı		T	ı	1					
3	Ashish Anthony and team	Technochill 2023	14 th February 2023	ISHRAE Pune	2 nd position					
4	Aniket Kinkar	BAJA SAEINDIA 2023	5 th -8 th April, 2023	SAEINDIA at Chitkara University	Participation					
5	Kunal Mor	BAJA SAEINDIA 2023	5 th -8 th April, 2023	SAEINDIA at Chitkara University	Participation					
6	Ghanshyam Naik and team	SAEISS Aero Design Challenge 2022 (Regula)	01-03 September, 2022	SRM IST, Chennai	Participation					
	AY 2021-22									
International Level										
1	Omkar Khot	Hack for earth	Mar26	Hack for earth	10000 USD prize					
2 3 4 5	Ashish Karande Sudip Dongare Saurabh Jaurat Titiksha Jagtap	Techo-Genesis 2022 (International Level Project Exhibition Cum Competition")	18-23 April 2022	MIT ADT University	Participation					
6	Omkar Khot	UNLEASH Hack 2021	July 17 2021	United Nations Sustainable Development Goals	SELECTED IN GRAND FINALE					
7	Team Garudashwa	International Aerodesign competition	04-11 April, 2022	SAE International	4th Rank in Technical Presentations Globally Advanced design: score 42.2180 Technical presentation: score 41.8833					
8	Team Garudashwa	International Aerodesign competition	04-11 April, 2022	SAE International	stood first in Technical Presentation					
	Team Garudashwa	m-Baja Static event	04-11 April, 2022	SAE International	2nd runner up - Manufacturing Award					



	National Level						
10	Team Resonance Racing	REEV Virtuals 2022	09-04-22	SAE India	1st runner up		
11	Shubham Landage	REEV Virtuals 2022	09-04-22	SAE India	Distinguished Student Presenter		
12	Team Resonance Racing	REEV 2021-22	09-04-22	SAE India	Group 4 Winners		
13	Ameya Gandhi						
14	Monali Patil						
15	Aashutoshsingh Pardeshi	University Thesis Program	30-Nov-21	Konecranes	Selected for next phase		
16	Ashish Karande						
17	Sudip Dongre		_				
18	Vinaya Gholap						
19	Pratik Kenche	tcs sustainathon	Oct 30	TCS	Consolation		
20	Divya Dhamal	tes sustamathon			award		
21	Tejas Lot						
22	Monali Patil	NES Innovation		Natarajan			
23	Omkar Khot	2021	26/11/2021	Education Society			
24	Omkar Khot	STAR Hackathon	22/01/2021	VI	Participation		
25	Omkar Khot	Vista 2021	03/08/2021	IIM Bangalore	Participation		
26	Omkar Khot	Ingenious'21	16/09/2021	G.B.Pant University of Agriculture and Technology, Pantnagar	Participation		
27	Pratik Patil	BAJA SAEINDIA 2022	6 th -10 th April 2022	NATRAX, Pithampur	3 rd prize- mBAJA category VDE suspension		
28	Pratik Patil	BAJA SAEINDIA 2022	6 th -10 th April 2022	NATRAX, Pithampur	3 rd prize- mBAJA category suspension		
29	Srushti Shinde	Effi-cycle 2021	13 th -21 st Nov- 2021	SAEINDIA	Participation		
30	Rohan Mane and Team	Effi-cycle Season 12	5 th Dec 2021	SAEINDIA	Award: Best project plan		



AY 2020-21

			Y 2020-21		
		Intern	ational Level	T-	
1	Swapnil Tole And Team	Team Garudashwa	8-Apr-2021	SAEINDI A 2021	First standing in Advanced Class Design and Fourth standing in Technical presentation
	1	Nati	onal Level		
1	Arihant Wardhamane	TIFAN 2020	Jan-Feb 2021	SAE India	Selected in final round
2	Rohit Garud	TIFAN 2020	Jan-Feb 2021	SAE India	Selected in final round
3	Bajirao Mahadev Pandare	TIFAN 2020	Jan-Feb 2021	SAE India	Selected in final round
4	Omkar Khot	BETIC eMedha Hackathon	8-16 May, 2021	BETIC	Winner of Impact to Reality award- Team 14
5	Omkar Khot			Ministry	
6	Yash Anecha		Jan-21	of Educatio n, Gov of India	Selected in grand
7	Sanket Nartwadekar	Toycathon 2021			finale
8	Omkar Khot			MIT	
9	Atharva Joshi	Maharashtra Hackathon 2021	Apr-21	USA hacking medicine 2021	Winner: Team NIDAAN
10	Team Resonance Racing	Endurance	- Apr-21	SAEIND	All terrain performance award 3rd rank
11	Team Resonance Racing	BAJA SAEINDIA 2021	-	IA 2021	Overall award winner 4th rank
12	Dhananjay Kudche	Ace the Case	15-20 Aug 2020	IIM Calcutta	Participation
13	Lomesh Joshi	BAJA SAEINDIA 2021	25-Apr-21	Chitkara Univarcit y	Participation
14	Aditya Jagtap	BAJA SAEINDIA 2021	25-Apr-21	Chitkara Univarcit y	Participation
15	Rohit Garud	Smart India Hackathon	1-3 Aug 2021	Smart India	Participation



				Hackatho n	
16	Chinmay Hoonur	Effi-cycle (Virtual event)	1-3 Aug 2021	Smart India Hackatho n	Participation
17	Prathamesh Choudhary And Team		15 Oct 2020	Lovely Professio nal Universit y, Jalandhar	Prize: Best project plan Category: Advanced Electric
18	Rohan Mane	Formula Bharat 2021	Jan 23-Feb 2021	Mathwor ks	Participation
19	Abhishek Manjarekar	Formula Bharat 2021	Jan 23-Feb 2021,	Mathwor ks	Participation
20	Yash Gulhane	Formula Bharat 2021	Jan 23-Feb 2021,	Mathwor ks	Participation







Cultural Activities Achievements Year 2022-23

- 1. Most Disciplined Team "Aata Kay": Dajikaka Gadgil Karandak
- 2. Vishwajeet Kale "Aata Kay": Consolation prize acting "Bharat Karandak"
- 3. Yogada Shinde "Aata Kay": Consolation prize acting "Bharat Karandak"
- 4. Ganesh Nikumbh "Aata Kay": Consolation prize acting "Bharat Karandak"
- 5. Atharva Palange, Ganesh Nikumbh and team "Aata Kay": Best Set "Bharat Karandak"
- 6. Firodia Karandak "Yaardhan Kandaro": Won Karandak, Won first Prize

7.

Table 9.7.8: Glimpses of Cultural Activity Award 2022-23



Team "Aata Kay" receiving at the hands of Pradeep Vaidya Writer Director Actor, for "Dajikaka Gadgil Karandak"



Team "Aata Kay" Receiving Award for Best Set at the hands of Chairman Bharat Natya Mandal for "Bharat Karandak"

Cultural Activities Achievements Year 2021-22

AISSMS'COE won Firodia Karandak 2022. Final round took place at "Lokshahir Annabhau Sathe Sabhagruha" on 19.03.2022. followed by result declaration on the same day. Our college received total 14 prizes, including the coveted trophy for the first time in the history of college. We have been participating in the same competition for past 25 years. Following are the details of the prizes



won by our team. For the play titled "Bhoot Maarichya" under category of One Act play. The entire team comprised of 35 students from all the departments and years. Contribution by our alumni also played a vital role in motivating our team. With expert guidance from them.

The Prize distribution Ceremony took place on 24.03.2022 at the hands of renowned filmmaker, director, screenplay writer and actor, Mr. Anurag Kashyap at the same location, "Lokshahir Annabhau Sathe Sabhagruha". Following are the details of the prizes won:

- 1. Firodia Karandak 2022
- 2. Best Director: Shubham Vaidya & Meghna Nagdive
- 3. Actor male 2nd: Shubham Vaidya & Vishwjeet Kale
- 4. Best Music Team
- 5. Best Bass Guitar: Shyamkrisnan Nair
- 6. Singing Runnerup: Yogda Shinde
- 7. Best Backstage (Nepathya): Onkar Gavli, Malhar Pimple, Pooja Ghatge
- 8. Best Miniature Chroma: Atharva Adrakatti, Yash Tadas
- 9. Best Thread Art: Sanjyot Dhole, Kunal Kakde
- 10. Best Radium Art: Arya Polas, Ganesh Nikumbha
- 11. Best fight sequence: Meghna Nagdive, Arshad Ali Pathan
- 12. Choreography 3rd: Meghna Nagdive, Arshad Ali Pathan
- 13. Best contemporary Group: Meghna Nagdive, Arshad Ali Pathan, Sanjyot dhole, Ajit Sawre, Nupur Chandane, Sidhhi More
- 14. Best Prop Dance: Meghna Nagdive, Arshad Ali Pathan, Sanjyot dhole, Ajit Sawre, Nupur Chandane, Sidhhi More, Kunal Kakde, Anjali Pujari
- 15. Special award for technical skills

Table 9.7.9: Glimpses of Cultural Activity Award 2021-22



Firodiya karandakt: Own First Prize, 24/03/2022



1. Maharashtra Times:





B. NCC, NSS and other clubs (3)

A strong unit of **National Service Scheme (NSS)** organises various activities leading toward energy saving, environmental protection, rural development, sanitation, flood relief, conservation of natural resources, women's health, rural irrigation, youth development etc. The NSS team also works on state/central government schemes. Institution has also adopted a few villages where the NSS team is instrumental.

Different Clubs are:

- 1. Aero Design
- 2. All-Terrain vehicles (BAJA)
- 3. Aviot-o-Virtue
- 4. Chem-e-car
- 5. Codigo-Madrid
- 6. Formula Car (SUPRA)
- 7. Go Cart
- 8. Hybrid Car (Effi-Cycle)
- 9. Motor Sports Teams



Aviot-o-Virtue, the AISSMS COE Drone and Robotics Club is a platform provided to students of the Institution to enhance their technical and non-technica

l skills in the field of robotics and drone. Members of the club get exposure towards new technology and upcoming projects.

The club was established on 29th July,2017. The idea of foundation was lead by BE 2017 batch under the guidance of faculties of E&TC department and with the support of Hon. Principal of the institution.

Students are the core members of the team who lead the foundation.

Objectives of the club-

- To enhance technical skills of the students.
- To enhance entrepreneurial kills of the students.
- To represent institution at various national and international drone and robotics event.

Club organizes Drone and robotics competition as well as workshops for the students of various engineering and non-engineering institutes during the AISSMS COE's annual technical symposium named 'Engineering Today'. Moreover, members conduct workshops in other engineering and non-engineering institutes which helps in enhancement of presentation and communication skills of the members.

About all clubs Information is Provided on Website:

https://aissmscoe.com/students-club/aero-design/



Figure 9.7.1: Different Clubs Website Screenshot





Figure: 9.7.2: Aviot-o-virtue club Achievement



Figure 9.7.3: EDU-CLOUD Program Certificate

Table 9.7.10: Aero-Design Club Achievement





Aero design challenge 2021 Certificate of Achievement

Second rank in Aero Design competition

Table 9.7.11: Activities conducted under NSS

Sr.	Activity	Chief Guest	
No.	•		
01	Global Level Poster Making	Dr. Savita Kulkarni	
<u> </u>	Competition	Di. Suvita Ramaini	
02	World Environment	Dr. Shivaji Pancharne	
02	Day(Webinar)	Di. Sinvaji i ancharic	
03	Tree Plantation	Hon.Chandrakant Jiwade	
04	QUIZ- Ek Bharat Shreshta	Dr. Arun Bhamre	
04	Bharat	Di. Addit Bhattife	
05	Spitting Kills Campaign	Hon. Shivaji Pacharne	
06	Kargil Vijay Divas (Webinar)	Maj.Gen. Shashikant Pitre	
07	Raksha Bandhan	Hon. Bhaskar Kumbharde	
08	Swayamsiddha Hackathon 2020	Dr. Virendra Kumar Vijay	
09	Independence Day	Hon. Gopal Malvi	
10	National Education Policy 2020	Hon. Prabhakar Desai	
10	(Webinar)	Holl. Habilakai Desai	
11	Mahatma Gandhi Jayanti	Dr. Kumar Saptarshi	
12	World Food Day(Webinar)	Hon. Vineet Jadhav	
13	QUIZ- World Food Day	Hon. Santosh Chavan	
14	Food Distribution Drive	Hon. Sheshraj Patil	
15	Be Your Own Lakshmi	Hon. Shikha Mittal.	
13	(Webinar)	Hon. Shikha Wittai.	
16	Be Vocal Buy Local	Hon. Jayashri Kumbharde	
17	QUIZ -Constitution Day	Hon. Sujata Bhamre	
18	World AIDS Day (Awareness	Hon, Vrushali Gadhave	
10	Drive)	11011. VIUSIIAII Gauliave	
19	We the Change- Aamhi	Dr. Sunjay Awte	
17	Bharatache Lok (Webinar)	Dr. Sunjay Awte	



20	QUIZ- Armed Force Flag Day	Hon. Uma Patil	
21	Human Rights Day	Hon. Dilip Ghorpade	
22			
	Tree Plantation (Kalyan)	Sarpanch- Shri Rajesh Dimble	
23	Cleanliness Drive (Kalyan)	Sarpanch- Shri Rajesh Dimble	
24	Survey regarding Science and	Sarpanch- Shri Rajesh Dimble	
	Technology Lab (Kalyan)		
25	Site Visit for Water Reservoir	Sarpanch- Shri Rajesh Dimble	
20	(Kalyan)	Surpanen Sini Rajesh Billiote	
26	Awareness- Tobbaco	Sarpanch- Shri Rajesh Dimble	
20	Deaddiction	Sarpanen-Sini Rajesh Dinible	
27	Pledge- Majhi Vasundhara	Sarpanch- Shri Rajesh Dimble	
28	Health Check-up Camp- Kalyan	Sarpanch- Shri Rajesh Dimble	
29	Women Literacy- Kalyan	Sarpanch- Shri Rajesh Dimble	
30	Mask Distribution- Kalyan	Sarpanch- Shri Rajesh Dimble	
	Resperiometer Distribution-		
31	Kalyan	Sarpanch- Shri Rajesh Dimble	
32	Tree Plantation- Kalyan	Sarpanch- Shri Rajesh Dimble	
33	Cleanliness Drive- Kalyan	Sarpanch- Shri Rajesh Dimble	
34	Corona Awareness- Kalyan	Sarpanch- Shri Rajesh Dimble	
31	Survey of Water Reservoir-	Surpanen Sini Rajesh Elinete	
35	Kalyan	Sarpanch- Shri Rajesh Dimble	
	Survey for Town planning-		
36		Sarpanch- Shri Rajesh Dimble	
	Kalyan Rest out of Wests Commetition		
37	Best out of Waste Competition-	Hon. Manisha Patil	
	Paste reduction.		
38	Debate - The changing mind-set	Hon. Mangala Malvi	
	if youth.		
39	Webinar- Role of youth in Adult	Hon. Sunita Katam	
	Education.		
40	Student Literacy- Kalyan	Sarpanch- Shri Rajesh Dimble	
41	Tobacco Deaddiction	Sarpanch- Shri Rajesh Dimble	
	Awareness- Kalyan		
42	Road Safety Program	Hon. Dr. D. S. Bormane	
43	Polio Vaccination Drive	Hon.Usha (Mai) Dhore, Mayor	
73	Tono vaccination Drive	(PCMC)	
45	SPPU Foundation Day	Hon.Padmasghri Ravindra Kolhe	
46	Student Activity	Hon. Sunil Dimble	
47	Explanation of Science	Han Comit Direkt	
47	Experiments	Hon. Sunil Dimble	
48	Health Check-up Camp	Principal, Dr.D.S. Bormane	
4.6		Hon. Chandrakant Patil, Hon. Mdan	
49	Aazadi ka amrut mahotsav	Mohan Goyal.	
50	SPPU Blood Donation Camp	Hon. Nana Patekar	
51	Symbol of Knowledge	Padmashree Dr. Milind Kamble	
V 1	~ Jimosi of Imovileage	2 worldon vo 21. Triming Runnoit	



52	Tree Plantaion Drive	Hon. Swati Jiwade	
53	Natural wellness & freedom	Hon. Siddharth Apte	
	from poison	Holl. Siddharth Apte	
54	Tobbaco: A threat to progress	Hon. Sanjay Seth	
55	Tobbaco Addiction: Poetry	Dr. D. S. Bormane	
33	Compitition	DI. D. S. Bormane	
56	Shivswarajya Din	Hon. Dr. Ganesh Raut	
57	Symbol of Knowledge - 02	Hon. Dr. Rajendra Singh	

Table 9.7.12: List of activities AY 2022-23

Sr.N Activity Date Guest No Of N					
0.	Activity	Date	Guest	Participa nt	No.Of Hours
1	Budhha Pournima	16/05/2022	Dr. D S Bormane	70	1
2	Swantryacha Amrit Mahostav	28/05/2022	Shri Anurag Thakur	700	2
3	Voters Workshop SPPU	05/06/2022	Ajit Pawar	2000	3
4	Environmental conservation	05/06/2022	Rajesh Dimble	20	5
5	POSCO Awareness	12/06/2022	Rajesh Dimble	16	3
6	Dindi program	15/06/2022	Dr. Prabhakar Desai	600	2
7	International Yoga Day	21/06/2022	Kailas Patel	600	3
8	Kargil Vijay Divas	26/07/2022	Dr. N. N. Shejwal	110	2
9	Save Tiger Prog	29/07/2022	Dr. N N Shejwal	70	1
10	Sawand Karyshala	27/07/2022	Jayant Kishor	700	2
11	EK divas Balirajyasathi	02/08/2022	Rajesh Dimble	10	4
12	Har Ghar tiranga SPPU	09/08/2022	Dr. Karbhari Kale	2000	2
13	Har Ghar Tiranga	14/08/2022	Nitin Ghorpade	140	2
14	Rejuvenate With Yoga	05/09/2022	Mrs.Archana Patil	109	3
15	Blood Donation Camp	07/09/2022	Dr. Murlidhar Tambe	560	8
16	Transgender Participation In	14/09/2022	Mr.Shrikant	1000	16



	Democracy	15/09/2022	Deshpande		
17	Yuvasandan	16/09/2022	Mr. Pratap Mankar	130	3
18	World Spine Bone Day (Walk A Thon)	16/10/2022	Dr. S.B. Patil	600	4
19	Sci-Tech Village Thone	19/10/2022	Dr. Sanjaykumar Pingat	200	4
20	Science Exhibition	20/10/2022	Dr. Vivek Sawant	1200	8
21	Aapulkichi Diwali	21/10/2022	Dr. D. S. Bormane	120	2
22	Rastriya Ekta Diwas	31/10/2022	Dr. D.S. Bormane	350	2
23	Multimedia Digital Exhibit Voters Registration (Election Commission Program)	09/11/2022	Rajiv Kumar CE	650	2
24	Voters Awareness Rally	01/12/2022	Rajesh Dimble	230	2
25	Adult Literacy Program Inauguration Rt. Bishwajeet Ghosh	08/12/2022		170	2
26	G20 Sumittee	14/01/2023	Dr. Karbhari Kale	300	3
27	Republic Day	26/01/ 2023	Chh. Malojiraje	2500	3
28	Swachh Gram In Kalyan	22/02/2023	Rajesh Dimble	1100	4
29	Food Distribution Program	03/03 /20	Dr. D. S. Bormane	87	2
30	Women Entrepreneurship Workshop	04/03/2023	Mrs. Arti Dolas	125	2
31	International Women Day	08 /03/20	Dr. Amit Gogawale	100	2

Table 9.7.13: List of activities AY 2021-22

Sr. No.	Event Name	Chief Guest Name	Date	Location	Parti cipan ts		
	List of Activities on Campus						
1.	Shivswarajya Din	Hon. Dr. Ganesh Raut	06 June 2021	Microsoft	274		
2.	Symbol of Knowledge	Hon. Dr. Rajendra Singh	11 June 2021	Microsoft	218		



2	Yoga Well Being	Hon. Dr. D. S.	21 June 2021	Microsoft	178
3.	D' 1 D (' 1'	Bormane	10		107
4.	Disha Pragtichi	Mr. Rushikesh Sonawane	18 September 2021	Microsoft	197
5.	Wings of NSS	Dr. Savita Kulkarni Dr. Shivaji Pacharne	23 September 2021	Microsoft	355
6.	Tree Plantation	Mr. Rajesh Dimble	24 September 2021	Kalyan	8
7.	Eye Check up Camp	Dr. Sonali Jadhav	24 September 2021	Kalyan	10
8.	Covid Awareness Drive	Mr. Rajesh Dimble	24 September 2021	Kalyan	5
9.	Computer Literacy	Mr. Rajesh Dimble	24 September 2021	Kalyan	4
10.	Cleanliness Drive	Mr. Rajesh Dimble	24 September 2021	Kalyan	15
11.	Save environment rally	Mr. Rajesh Dimble	24 September 2021	Kalyan	19
12.	Mazha Gaon Mazhi Jababdari Rally	Mr. Rajesh Dimble	24 September 2021	Kalyan	19
13.	Woman empowerment	Mr. Rajesh Dimble	24 September 2021	Kalyan	12
14.	Plastic Free Village Drive	Mr. Rajesh Dimble	24 September 2021	Kalyan	12
15.	IPR & Patent	Dr. Ajay Thakur	25 September 2021	Microsoft	587
16.	Symbol of Knowledge	Dr. Vishwambhar Chaudhary	1 October 2021	AISSMS COE	732
17.	Blood Donation Drive	Mr. Hemant Joshi	1 October 2021	AISSMS COE	67
18.	Green Engineering	Mr. Yogesh Kondaskar	1 October 2021	AISSMS COE	123
19.	Cleanliness Drive	Mr. Parag Mate	2 October 2021	Karve Nagar	25
20.	Mazi Vasundhara Campaign	Dr. N. N. Shejwal	10 October 2021	Online	120
21.	Health Check up camp	Ms. Gunfa Ingale	13 October 2021	Tulapur	134
22.	Eye check up Camp	Ms. Gunfa Ingale	13 October 2021	Tulapur	112
23.	Tree Plantation	Ms. Gunfa Ingale	13 October 2021	Tulapur	5



24.	Cleanliness Drive	Ms. Gunfa Ingale	13 October 2021	Tulapur	7
25.	Energy Conservation Survey	Ms. Gunfa Ingale	13 October 2021	Tulapur	3
26.	Heritage Conservation	Ms. Gunfa Ingale	13 October 2021	Tulapur	35
27.	Woman Hygiene Importance	Ms. Gunfa Ingale	13 October 2021	Tulapur	56
28.	Covid Awareness Drive	Ms. Gunfa Ingale	13 October 2021	Tulapur	7
29.	Poshan Pandharwada	Dr. D. S. Bormane	21 October 2021	Pune	34
30.	Mega Vaccination Drive	Dr. D. S. Bormane	27 October 2021	AISSMS COE	117
31.	National Unity Day	Mr. Shivaji Pawar	30 October 2021	AISSMS COE	130
32.	Diwali Faral Packet Distribution	Mr. Shailesh Uchgaonkar	5 November 2021	Pune	15
33.	Gender Sensitization Survey	Maharshri Baya Karve Abhyas Kendra	November 2021	Pune	20
34.	Fit India Run	Mr. D.P. Gaikwad	22 November 2021	Pune	167
35.	Self Defense Training	Mr. Bacchav	23 November 2021	Pune	154
36.	Social Media Awareness WE App	Mr. Abhijit Deshmukh	24 November 2021	Pune	56
37.	National Constitution Day	Dr. D.S. Bormane	26 November 2021	AISSMS COE	53
38.	National AIDS Day	Mr. Himashu Gadge	2 December 2021	AISSMS COE	127
39.	AIDS Awareness Rally	Dr. D.S. Bormane	2 December 2021	AISSMS COE	25
40.	Symbol of Knowledge	Mr. Sajayji Deshmukh	8 December 2021	AISSMS COE	110
41.	YIN Session	Ms. Anuja Patil	10 December 2021	AISSMS COE	45
42.	Tribute to Gen. Bipin Rawat	Dr. N.N. Shejwal	10 December 2021	AISSMS COE	63
43.	Nisarg Sanvad	Mr. Rajeshkumar Saraf	15 December 2021	AISSMS COE	54
44.	Visit to Ammunition Exhibition	Mr. Satish Patil	19 December 2021	AISSMS COE	34
45.	Vivekshakti & Vivekbuddhi	Mr. Milind Swami Mr. Nitin Talhar	12 - 21 January 2022	Online	176
46.	Pantapradhan Awas Yojana	Mr. U. N. Awari	12 January 2022	Kalyan	10
47.	Village development Survey	Dr. Awari	12 January 2022	Kalyan	10
48.	Village development Survey	Mr. Swapnil Pawar	23 January 2022	Singapoor	13



49.	National Girl Child Day	Dr. N. N. Shejwal	24 January 2022	Online	150
50.	Campus Ambassador Training Session 1	Mr. Abhijit Deshmukh	25 January 2022	Online	167
51.	Campus Ambassador Training Session 2	Mr. Abhijit Deshmukh	26 January 2022	Online	62
52.	Symbol of Knowledge	Mr. Avinash Dharmadhikari	27 January 2022	Microsoft	459
53.	National Voters Day	Dr. D.S. Bormane	27 January 2022	Online	150
54.	Heritage Conservation 1	Dr. D.S. Bormane	29 January 2022	Parvati Hills	9
55.	Heritage Conservation 2	Dr. D.S. Bormane	1 February 2022	Hanuman Tekdi	17
56.	Heritage Conservation 3	Dr. D.S. Bormane	2 February 2022	Baramati	10
57.	Heritage Conservation Megastroke	Dr. D.S. Bormane	6 February 2022	Pune City	867
58.	My River My Valentine	Hon. Rajesh Pande	13 February 2022	Pune City	1367
59.	Shivjayanti	Hon. Mohan Shete	18 February 2022	AISSMS COE	134
60.	Plogging	Dr. D. S. Bormane	2 April 2022	AISSMS COE	20
61.	Cleanliness Drive	Mr. Rajesh Dimbale	3 April 2022	Sinhgad Fort	15
62.	100 Years of Shahu Jayanti	Hon. Suresh Shinde	6 May 2022	AISSMS COE	240
63.	75 Years of Independnce	Hon. Anurag Thakur	28 May 2022	AISSMS COE	21
	1 1	Outside College A	ctivities		•
1.	SPPU Covid Vaccination Drive Training	Hon. Prabhakar Desai Sir	1 September 2021	SPPU	7
2.	Pre Republic Day Parade selection	Dr. Savita Kulkarni	17 September 2021	Modern college Pune	9
3.	75 years Jyot	Mr. Prabhakar Desai	14 October 2021	SPPU	83
4.	Gender Sensitization Training	Maharshri Baya Karve Abhyas Kendra	25 November 2021	SPPU	300
5.	Youth Leadership Training	Mr. Umrani Sir	21 – 22 December 2021	SPPU	89
6.	SPPU Foundation Day	Hon. Koshayayi Sir	10 February 2022	SPPU	500
7	My Valentine My Valentine Awareness	Ms. Amrapali Chavan	12 February 2022	MM College of Commerce, Pune	73



8	Savitribai Phule Statue Inauguration	Hon. Bhagat singh Koshayayi	14 February 2022	SPPU	5
9	Gender Sensitization Training	Maharshi Baya Karve Sanstha,Pune	24- 25 March 2022	SPPU	78
10	Changing Farming System	Rajan Gavas	28 March	SPPU	62
11	Marathi Social Media Sanmelan	Hon. Uday Samant	29 April 2022	SPPU	8
		Workshops			
1.	Break The Bias Seminar	Ms. Gaikwad	8 March 2022	AISSMS COE	145
2.	Heritage Conservation – Varsa Darshan	Hon. Mohan Shete	22 March 2022	Pune	110
3.	Value Education Workshop	Hon. Mitesh Ghatte Mrs. Asha Raut	29 March 2022	AISSMS COE	110
		National Lev	vel Events		
1.	NSS PRD university level Camp	Mr. Uday Samant	14 October 2021	SPPU	1
2.	National Youth Festival	Hon. Naremndra Modi	12 Janaury 2022	Online	1
		Special Residential	l Camp		
Sr. No	Activities	Objective	Date		
1.	Tree plantation	To plant more and more tress	28 February to 0 March 2022	06	
2.	Cleaness drive	To clean the dirt and keep the nation clean	28 February to 0 March 2022	06	

Table 9.7.14: List of activities AY 2020-21

Sr No	Activity	Chief Guest	Date	No. of Partici pant	No. of Hou rs
01	World Environment Day (Webinar)	Dr.Shivaji Pancharne	05/06/2020	108	02 hrs
02	Tree Plantation	Hon. Chandrakant Jiwade	05/06/2020		
03	QUIZ- Ek Bharat Shreshta Bharat	Hon. Arun Bhamare	09/06/2020	420	



04	Spitting Kills Campaign	Hon. Kishanrao Tondchore	25/06/2020		
05	Kargil Vijay Divas (Webinar)	Maj.Gen. Shashikant Pitre	26/07/2020	105	02.5 hrs
06	Raksha Bandhan	Hon. Bhaskar Kumbharde	03/08/2020	50	
07	Independence Day	Hon. Gopal Malvi	15/08/2020	15	
08	National Education Policy 2020 (Webinar)	Hon. Prabhakar Desai	23/09/2020	123	02.5 hrs
09	Mahatma Gandhi Jayanti	Dr. Kumar Saptarshi	02/10/2020	250	02.5 hrs
10	World Food Day (Webinar)	Hon. Vineet Jadhav	22/10/2020	134	02 hrs
11	QUIZ- World Food Day	Hon. Santosh Chavan	22/10/2020	238	-
12	Food Distribution Drive	Hon. Sheshraj Patil	22/10/2020		1 week
13	Be Your Own Lakshmi (Webinar)	Hon. Shikha Mittal.	07/11/2020	110	02 hrs
14	Be Vocal Buy Local	Hon. Jayashri Kumbharde	09/11/2020	50	-
15	QUIZ -Constitution Day	Hon. Sujata Bhamare	26/11/2020	250	-
16	Wold AIDS Day (Awareness Drive)	Hon. Vrushali Gadhave	01/12/2020	-	-
17	We the Change- Aamhi Bharatache Lok (Webinar)	Dr. Sunjay Awte	06/12/2020	150	02.5 hrs
18	QUIZ- Armed Force Flag Day	Hon. Uma Patil	07/12/2020	200	-
19	Human Rights Day	Hon. Dilip Ghorpade	10/12/2020	20	-
20	Tree Plantation (Kalyan)	Sarpanch- Shri Rajesh Dimble	25/12/2020	06	01 hr



21	Cleanliness Drive (Kalyan)	Sarpanch- Shri Rajesh Dimble	25/12/2020	06	30 mins
22	Survey regarding Science and Technology Lab (Kalyan)	Sa Hon. Sunil Dimble	25/12/2020	06	30 mins
23	Krishi PragatiKaran Ani Badal(Webinar)	Dr. Manohar Khake	26/12/2020	122	02.5 hrs
24	Awareness- Tobbaco Deaddiction	Hon. Santosh Gadhave	07/01/2021	10	30 mins
25	Pledge- Majhi Vasundhara	Hon. Suresh Bhosale	12/01/2021	157	4 days
26	Health Check-up Camp- Kalyan	Sarpanch- Shri Rajesh Dimble	15/01/2021	142	4 hrs
27	Women Literacy Kalyan	Sarpanch- Shri Rajesh Dimble	15/01/2021	43	2 hrs
28	Mask Distribution Kalyan	Sarpanch- Shri Rajesh Dimble	15/01/2021	150	4 hrs
29	Resperiometer Distribution- Kalyan	Sarpanch- Shri Rajesh Dimble	15/01/2021	150	30 mins
30	Tree Plantation- Kalyan	Sarpanch- Shri Rajesh Dimble	15/01/2021	15	1 hr
31	Cleanliness Drive Kalyan	Sarpanch- Shri Rajesh Dimble	15/01/2021	15	1 hr
32	Corona Awareness Kalyan	Sarpanch- Shri Rajesh Dimble	15/01/2021	100	30 min
33	Best out of Waste Competition- Paste reduction.	Hon. Pooja Bhosale	15/01/2021	10	4 days
34	Welcoming Ministry of Youth Affairs and Sports	Hon. Shri Kiren Rijiju	17/01/2021	12	2 hrs
35	Debate- The changing mind-set if youth.	Hon. Mangala Mavli	18/01/2021	34	1.5 hrs
36	Webinar- Role of youth in Adult Education.	Hon. Sunita Katam	21/01/2021	102	2 hrs
37	Student Literacy Kalyan	Sarpanch- Shri Rajesh Dimble	21/01/2021	50	1 hr



38	Tobacco Deaddiction Awareness- Kalyan	Sarpanch- Shri Rajesh Dimble	21/01/2021	50	30 mins
39	Road Safety Program	Hon. Ghavte	26/01/2021	17	2 hrs
40	Pulse Polio Campaign	Hon. Chief Guest Usha (Mai) Dhore, Mayor Pimpri Chinchwad,	01/02/2021 & 02/02/2021	13	2 days
41	SPPU Foundation Day	Hon. Padmashree Ravindra Kolhe		10	2 hrs
42	Student Activity	Hon. Sunil Dimble	12/02/2021	06	1 hr
43	ShivJayanti	Hon. Malojiraje Chhatrapati	19/02/2021	02	1 hr
44	Health Checkup Camp	Hon. Dr. D.S. Bormane	08/03/2021	12	3 hrs
45	Azadi Ka Amrut Mohatsav	Hon. Chandrkant Patil and Hon. Madand Mohan Goel	12/03/2021	16	2 hrs
46	Blood Donation Camp SPPU	Hon. Nana Patekar	12/04/2021	07	3 hrs
47	Symbol of Knowledge 01	Hon. Padmashree Dr. Milind Kamble	14/04/2021	439	1 hr
48	Tree Plantation Drive	Hon. Swati Jiwade	26/04/2021	05	1 week
49	Webinar- Natural Wellness and Freedom from Poison	Hon. Mr. Siddharth Apte	23/05/2021	186	02 hrs
50	Webinar- Tobacco: A threat to program.	Hon. Mr. Sanjay Seth	31/05/2021	150	01 hr
51	Poetry competition Tobacco Addiction.	Hon. Mr Arun Bhamare	31/05/2021	06	02 days

Table 9.7.15: Glimpses of NSS activities





Cleaning Drive At Dindi



Kargil Vijay Diwas



Soak Pit at Tulapur



Rakshabandhan



Water conservation and Biodiversity



Abhivyakti Programme





Voter Awareness Drive



Swaccha Bharat Abhiyan At Kalyan



Tree Plantation at SPPU



Cyclothon



Saksham Yuva Samartha Bharat



Water Management and Conservation



AISSMS COE Cricket Team 2022-23



Received Gold medal to Pranav Gurav in 100 m run at the 82nd inter University Athletics



C. Annual students' activities (4)

C. Annual students' activities:

Shivanjali (Annual Cultural Event) and Engineering Today (Annual Technical Symposium

We seek to establish an environment and culture which will encourage students to participate in extracurricular activities comprising various competitions, events and programs which will bring out the best in the students which will also help them learn multiple tasking, through seeking a balance between co-curricular and extracurricular activities. AISSM Society beholds a strong heritage and cultural roots through its establishment and through years has proven its excellence in not just academics but sports and other activities with large number of students participating every year and receiving critical acclaim and various awards. Events like "Purushottam Karandak", "Vinodottam Karandak", "Firodiya Karandak", "Vedant", "Dajikaka Gadgil Karandak" and other inter college Competitions throughout the year.

Also bringing out the best from the students in the college level annual cultural events like "Ashwamedh" and "Shivanjali".

Shivanjali: Annual social gathering for students to showcase variety of talents in students. It includes dance forms, drama, skits, our very own "dhol-tasha" Pathak standup comedy, musical performances, orchestra, band, fashion show and other individual student talent showcase.

Engineering Today: We organize Engineering Today every year in first Semester of every academic year.

Below is the list of events conducted in Engineering Today Event.

Table 9.7.16: List of Events

Sr. No.	Date	Title of Activity	Topic	No. of Beneficiaries/
				Participants
		2022-23		
01	18/10/2022	Drone	Air- O-Task (EX1)	40
	To 19/10/2022			
02	18/10/2022	Robotics	Robo Soccer (EX2A)	108
	To 19/10/2022			
03	18/10/2022	Robotics	Robo Wresting (EX	96
	To 19/10/2022		2B)	
04	18/10/2022	Quiz	Comic-Con (EX3)	120
	To 19/10/2022			
05	19/10/2022	Science Exhibition	Science Exhibition	45
		2021-22		
01	29/09/2021	Digimania Online Quiz	Digimania	350
	To 30/09/2021	Competition EC-1		
02	29/09/2021	Poster Competition EC-2	IdeaThon	74
	To 30/09/2021			
03	29/09/2021	Coding Competition EC-3	Code Chronicles	
	To 30/09/2021			
04	01/10/2021	Science Exhibition	Science Exhibition	
			(SCITECH	
			IDEATHON)	

Students from various colleges from Maharashtra and out of Maharashtra had participated in these events.



Table 9.7.17: Glimpses of Shivanjali

'शिवांजली कलेला वाव देणारे व्यासपीठ'

पुणे : शिवांजली हे विद्यार्थ्यांच्या सांस्कृतिक कलागुणांना वाव देणारे व्यासपीठ असून, महाविद्यालयाचा हा मंत्रमुम्ध परिसर पाहून आपण भारावन गेल्याचे मनोगत पहिल्या दिवशी प्रमुख अतिथी असलेल्या प्रसिद्ध मराठी अभिनेत्री हता दुर्गुळे यांनी व्यक्त केले. ढोल-ताशांचा गजर, कर्णमधुर संगीत, नृत्याच्या तालावर धिरकणारी तरुणाई, सुंदर नेपथ्य, अप्रतिम प्रकाशयंत्रणा आणि शिवगर्जनेने दमदमलेले आसमंत अशा अतिशय उत्साही वातावरणात पुण्यातील एआयएसएसएमएस अभियांत्रिकी महाविद्यालयात 'शिवांजली-२०२३' हा वार्षिक सांस्कृतिक सोहळा दोन दिवस पार पडला. प्राचार्य डॉ. डी. एस. बोरमणे यांनी महाविद्यालयातील विद्यार्थी आणि प्राध्यापक यांच्या उल्लेखनीय कार्याचा आढावा घेतला. या कार्यक्रमास संस्थेचे खजिनदार अजय पाटील, संस्थेचे व्यवस्थापन समिती सदस्य निखिल खणसे, संस्थेचे सदस्य धवल जितकर, संस्थेचे सदस्य ऋतुराज टेकवडे उपस्थित होते. या प्रसंगी अभिनेत्री इता दुर्गुळे यांच्या उपस्थितीत, विविध राष्ट्रीय आणि राज्यस्तरीय स्पर्धांमध्ये यश मिळवलेल्या विद्यार्थ्यांचा सन्मान पुढीलप्रमाणे करण्यात आला.











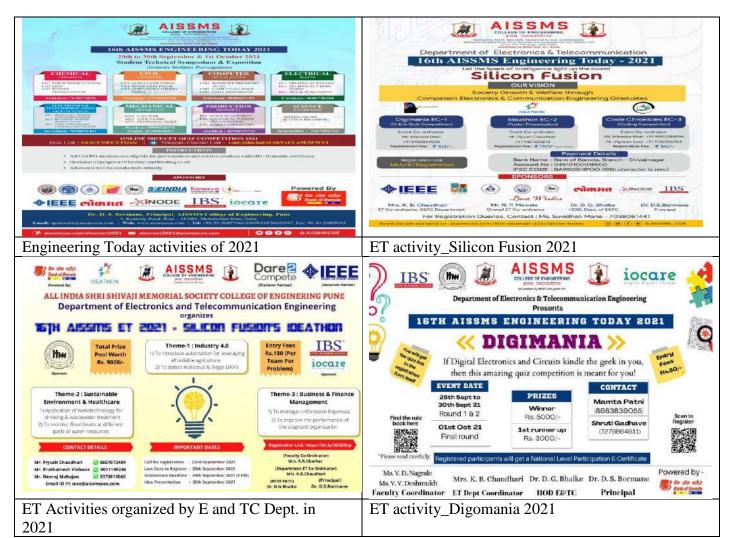




Table 9.7.18: Glimpses of Engineering Today











AISSMS

COLLEGE OF ENGINEERING

ज्ञानम सकलजनहिताय



Approved by AICTE, New Delhi, Recognized by Government of Maharashtra Affiliated to Savitribai Phule Pune University and recognized 2(f) and 12(B) by UGC (Id.No. PU/PN/Engg./093 (1992)

Accredited by NAAC with "A+" Grade | NBA - 6 UG Programmes

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

CRITERION X

Organization, Governance and Transparency



	COLLEGE OF ENGINEERING झानम् सकलजनहिताय	
Affiliated to	red by AICTE, New Delhi, Recognized by Governmen o Savitribai Phule Pune University and recognized 2(f (Id No. PUI/PN/Engg.)093 (1992) credited by NAAC with "A+" Grade NBA - 6 UG P	and 12(B) by UGC

CRITERION X	GOVERNANCE, INSTITUTIONAL SUPPORT & FINANCIAL RESOURCES	120
	Organization, Governance and Transparency	120

10.1	Organization, Governance and Transparency	40
10.1	Organization, Governance and Transparency	40

10.1.1 State the Vision and Mission of the Institute

Vision of Institute:

Service to society through quality education

Mission of Institute:

- Generation of national wealth through academics and research
- Imparting quality technical education at the cost affordable to all strata of the society
- Enhancing the quality of life through sustainable development
- Carrying out high quality intellectual work
- Achieving the distinction of the highest preferred engineering college in the eyes of stakeholders

10.1.2 Governing Body, Administrative Setup, Functions of Various Bodies, Service Rules, **Procedures, Recruitment and Promotional Policies (10)**

AISSMS College of Engineering has a well-established organizational structure to execute the smooth functioning of administrative and academic processes. Various bodies are formulated which constitutes the organization chart. The governing body is the highest decision making body constituting members of the management, Principal and nominated faculty members. College Development Committee (formerly Local Management committee) includes representatives of members of society, Principal, three members elected from teaching faculty and one member of nonteaching staff. The constituents of the organization structure are as follows: Every department has a Department Advisory Board (formerly Department Advisory Committee) to direct policies to excel students in academics and in work environments. It comprises one member each from industry, research establishment, and academic institute of repute, alumni, student, and parents and from management. Principal, Heads of the Departments, sectional heads and co-coordinators of various



committees have adequate participation in making decisions in academic and administrative processes under their supervision.

Members of Governing body, College development committee, Internal quality assurance cell and institute level committees are shown in the tables below:

Governing Body

Table 10.1.1 Constitution of Governing Body

	Governing Body of Institute			
Chairman	To be nominated by the society			
Member	Two to five members (Industrialist / Technologist / Educationalist) to be nominated by the society			
Member	Nominee of the affiliating university			
Member	Nominee of AICTE (Ex – Officio)			
Member	Nominee of State Government			
Member	Industrialist / Technologist / Educationalist from the region to be nominated by the State Government.			
Member Secretary Principal of the college.				
Member	Two faculty members to be nominated from the regular staff, one at the level of professor and one at the level of Assistant Professor.			

Table 10.1.2 List of Governing Body Members for the year 2020-21

Sr. No.	Name	Designation
1	Shri Suresh Pratap Shinde	Chairman (Society)
2	Shri Malojiraje Chhatrapati	Honorary Secretary (Society)
3	Shri Sunil Hambirrao Mohite	Member (Society)
4	Shri Rushiraj Balasaheb Tekawade	Member (Society)
5	Shri Rahul Nanasaheb Yadav	Member (Society)
6	Dr Amit Dutta	Member (AICTE, Regional Officer) Ex- Officio
7	Dr (Smt) Sharmila Chaudhari	Member (Savitribai Phule Pune University Nominee)



8	Dr D R Nandanwar	Member (Govt. of Maharashtra) Industrialist/Technologist/ Educationalist
9	Shri P N Jumle	Member (Ex-Officio)
10	Dr (Mrs) Ashwini Avinash Godbole	Member (Teaching)
11	Shri Ganesh Chandrakant Chikute	Member (Teaching)
12	Dr Dattatraya Shankar Bormane	Member Secretary (Principal)

Table 10.1.3 Number of meetings of Governing Body

S.N.	Academic Year	Number of Meetings
01	2022-23	01
02	2021-22	01
03	2020-21	01

COLLEGE DEVELOPMENT COMMITTEE

Table 10.1.4 Constitution of College Development Committee

	College Development Committee of Institute			
Chairman Chairperson of the management or his nominee ex- officio chairperson				
Member	Secretary of the management or his nominee			
Member	One head of department to be nominated by the principal			
Member Three teachers in the college elected by full time amongst themselves out of whom one shall be women				
Member	One non-teaching employee, elected by regular non-teaching staff			
Member Four local members nominated by management in consult with principal from the field of education industry, research and social service of who least one shall be alumnus				
Member	Coordinator, IQAC of the college			



Member	President and secretary of college student council	
Member Secretary	Principal of the college	

Table 10.1.5 List of College Development Committee members (2020-21)

Sr No.	Name	Designation
1	Shri Suresh Pratap Shinde	Chairman (Society)
2	Shri Malojiraje Chhatrapati	Honorary Secretary (Society)
3	Dr (Mrs) Ashwini Avinash Godbole	Member (Head of Department- Teaching)
4	Shri Diwakar Haribhau Joshi	Member (Teaching)
5	Shri Laxman Shivaji Godse	Member (Teaching)
6	Ms Vismita Devidas Nagrale	Member (Woman - Teaching)
7	Shri Santosh Prabhakar Pimpale	Member (Non-Teaching)
8	Shri Rahul Nanasaheb Yadav	Member (Society)
9	Shri Nikhil Ashok Khanse	Member (Society)
10	Shri Rishiraj Balasaheb Tekawade	Member (Society)
11	Shri Sunil Hambirrao Mohite	Member (Society)
12	Dr Chandrakishor Shrirang Choudhari	Member (Coordinator IQAC : Teaching)
13	Ms Anjali Chaudhari	Member (General Secretary of the College Students Council)
14	Dr Dattatraya Shankar Bormane	Member Secretary (Principal)



Table 10.1.6 Number of meetings of College Development Committee

S.N.	Academic Year	Number of Meetings
01	2022-23	01
02	2021-22	01
03	2020-21	01

Table 10.1.7 Members of Internal Quality Assurance Cell (2020-21)

Sr	Category	Post	Name & Designation of Committee	
No			members	
1	Chairperson	Head of the Institution	Dr Dattatraya Shankar Bormane, Principal	
2	Coordinator	Assistant Professor in	Dr Chandrakishor Shrirang Choudhari,	
		Mechanical	Associate Professor in Mechanical	
		Engineering	Engineering	
3	Administrative	Head of Department	Dr Sandeep Haribhau Wankhade,	
	officers		Associate Professor in Production	
			Engineering	
		Head of Department	Dr (Mrs) Ashwini Avinash Godbole,	
			Professor in Electrical Engineering	
		Co ordinator, NAAC	Dr Daulappa Guranna Bhalke,	
		Steering Committee	Professor in E&TC Engineering	
		Administrative	Mr Abhijit Bhawanrao Bhonsle,	
		Officer	Administrative Officer	
		Registrar	Mr Santosh Prabhakar Pimpale	
			Registrar	
4	Faculty	Civil Engineering	Dr (Mrs) Vidya Nitin Patil,	
			Associate Professor in Civil Engineering	
		Computer	Dr (Mrs) Shabnam Farook Sayyad,	
		Engineering	Assistant Professor in Computer	
			Engineering	
		Mechanical	Dr Avinash Vishvanath Waghmare,	
		Engineering	Associate Professor in Mechanical	
			Engineering	
		Chemistry	Dr Deepak Vitthal Nighot,	
			Associate Professor in Chemistry	
5	Management	Joint Secretary,	Mr Suresh Pratap Shinde	
	member	AISSMS	Honorary Joint Secretary, AISSM Society,	
	7.1	D 10 11 1 01	Pune - 5	
6	Industry	Ex. MD, Kirloskar Oil	Mr R R Deshpande	
		Engines Limited,		
		Pune		



7	Employer	HR Regional Head,	Mr Shekhar Kamble
		TCS, Pune	
8	Parent	Manager, Quality	Mr Hemant Jadhav
		Assurance, ITW (I),	
		Pvt, Ltd, Pune	
9	Student	General Secretary, General Students Association	

Table 10.1.8 Number of meetings of IQAC

S.N.	Academic Year	Number of Meetings
01	2022-23	03
02	2021-22	02
03	2020-21	02

Service rules, Policies and procedures

Institute follows all the defined service rules and policies and code of conduct laid down by AICTE, UGC, Government of Maharashtra and SPPU, for recruitment and promotion of staff. Pay scale, annual increments and other benefits to staff are being given as per the AICTE and Government of Maharashtra norms.

- A) For recruitment of faculty, Institute seeks permission from Savitribai Phule Pune University, Pune and reservation cell of Maharashtra State for the advertisement for recruitment of faculty. Interviews are conducted through a staff selection committee appointed by the University.
- B) For the ad-hoc recruitment, the Institute advertises the posts through newspapers and websites. Local staff selection committee as per SPPU norms is appointed for selection of faculty through interview procedure.
- C) Every employee of the institute is aware of the service, recruitment and promotion rules and code of conduct. These rules are available with the registrar of the institute and also communicated to staff through HODs and published on staff notice boards.

Recruitment norms link: https://aissmscoe.com/wpcontent/uploads/2022/05/Faculty-Recruitment-
<a href="https://aissmscoe.com/wpcontent/uploa

10.1.3 Decentralization in Working And Grievance Redressal Mechanism (10)

We at AISSMS COE believe decentralization of activities and delegation of authorities is the key concept in the success achieved by the institute on different platforms. Basically, the overall working



methodology at institute level is student centric and involvement of each and everyone in the decision-making at their respective levels is ensured through decentralization and delegation of powers. There are various bodies, committees and key administrative positions at institute and department level. In order to ensure transparency in the working of all these committees, a code of conduct and process manual is available with all key administrative officers and central library of the institute.

Various portfolio in-charges have been delegated powers for taking administrative decisions.

Name of Faculty member **Decision Authority** S.N. 01 Dr D S Bormane **Principal** Coordinator, IQAC Dr C S Choudhari 02 H.O.D. (Chemical Engineering) Dr Naniwadekar M Y 03 Dr P B Nangare H.O.D. (Civil Engineering) 04 Dr Athawale S V 05 H.O.D. (Computer Engineering) Dr (Mrs) A A Godbole H.O.D. (Electrical Engineering) 06 Dr S B Dhonde H.O.D. (Electronics and Telecommunications) 07 Dr S V Chaitanya H.O.D. (Mechanical Engineering) 08 Dr D V Nighot H.O.D. (First year Engineering) 09 10 Dr Shekhapure N G H.O.D. (Production Engineering) 11 Mr A B Bhonsale Administrative officer

Table 10.1.9 Teachers delegated with administrative powers

In addition to this, various Institute Level administrative committees have been formed for effective administration.

Details of coordinator and committee members are published on the institute website. (https://aissmscoe.com/wp-content/uploads/2021/01/ILC-for-website-update.pdflink). Also, functions and responsibilities of the committees are also available on the institute website. (https://aissmscoe.com/wp-content/uploads/2022/09/Objectives-and-functions-of-ILCs.pdf) Coordinators of all the institute level committees are delegated with administrative powers for effective functioning of respective committees.



Table 10.1.10 Various Institute level administrative committees and coordinators

	Academic Development Cell					
1	1 Academic Development and Monitoring		Coordinator	Dr. B. D . Bachchhav		
2	Faculty Development		Coordinator	Dr. D P Gaikwad Chaitanya		
3		unagement Information System	Coordinator	Mr. V. B. Gawai		
4		prary Development	Coordinator	Dr Mrs. V. S Dandawate		
5		A Preparations	Coordinator	Dr. M R Phate		
6	NA	AC Steering Committee	Coordinator	Dr D Y dhande		
7	Stu	idents Association and Professional Bodies	Coordinator	Mr N. P .Mawale		
		Centre for Information, Training and	Placements Head	: Dr A V Waghmare		
	8	Placements	Coordinator	Placement Officer		
	9	Training	Coordinator	Mr. V. S. Ponkshe		
1	0	Counseling and mentoring	Coordinator	Dr Mrs. V V Deshmukh		
1	1	Industry Institute Interaction (III)	Coordinator	Mr. P M Warke		
1	2	Entrepreneurship and Skill Development	Coordinator	Mr. S. N. Chiwande		
1	3	Alumni Engagement	Coordinator	Dr. S R Patil		
1	4	Competitive Examinations	Coordinator	Dr R D Nalawade		
		Research and De	velopment Cell			
1	5	Research, Development and Collaborations	Coordinator	Dr. S H Wankhade		
1	6	Innovation, IPR and Start Up	Coordinator	Dr V N Patil		
	Į.	Infrastructure ar	nd Facility Cell			
17 Infrastructure and Facility		Coordinator	Dr. G C Chikute			
		Gymkl	hana			
		Physical Director, Sports In charge, Media	Coordinator	Dr. M. M. Kondhare		
1	8	Cultural In charge	Coordinator	Mrs. K. N. Kulkarni		
1	9	Magazine In charge, Media	Coordinator	Mrs. S. J. Pachouly		
2	0	National Service Scheme	Coordinator	Dr. N. N. Shejwal		
		Students Welfare and Development	Coordinator	Dr.A. B. Patil		
	Administration Cell					
2	22	Budget Preparations (Purchase and maintenance)	Principal	Dr D S Bormane Principal		
2	23	Admissions	Coordinator	Dr D V Nighot		
2	24	Examinations	Coordinator	Dr. D. V. Nighot		
	Media Interface and Outreach Cell					
2	25	Media Liasioning	Coordinator	Mr S M chaudhari		
2	26	Website	Coordinator	Mr. N. R. Talhar		



Other than the above mentioned committees, at department level, committees are formed for the smooth and efficient management of activities at department level. The committees are constituted by the HOD in consultation with faculty.

For effective implementation of various initiatives and for effective decentralization, committees such as department advisory board and program assessment and quality improvement committees are formed at department level.

Table 10.1.11 Department Advisory Board members

S.N.	Representation	Name	Organization
1	Chairman	Dr S B Dhonde	HOD, AISSMS COE
2	Program coordinator	Dr. K B Chaudhari	AISSMS COE
	NBA		
3	PG Coordinator	Dr P P Vast	AISSMS COE
4	Module Coordinator	Mr S B Dhekale	AISSMS COE
	Software Modeling		
	Department academic		
	Coordinator, CITP		
	coordinator		
5	Module Coordinator	Mr. N P Mavale	AISSMS COE
	Humanities, Employability		
	and Skill Development		
	NAAC Coordinaor		
6	Module Coordinator	Ms V D Nagrale	AISSMS COE
	VLSI and Embedded		
7	Module Coordinator	Ms V V Deshmukh	AISSMS COE
	Network & Security		
8	Module Coordinator	Mrs Y P Lad	AISSMS COE
	Communication & Signal		
	Processing	14 11 7 6	1700100 000
9	Module coordinator	Mr V B Gawai	AISSMS COE
10	Network and Security	D 0 D 1 ()	GOED TO 1 1 1 1 1 1 1 1
10	Academics representative	Dr. S P Mahajan	COEP Technological University
11	Industry representative	Dr. Pratap Sanap	Persistence, Pune
12	Alumina representative	Mr Sagar Sadigale	IBM, Pune
13	Parent representative	Mr.Sujit Waghavakar	Barkalyes, Pune
14	Student representative	Ms Saumya Thakur	Student, AISSMS COE



Table 10.1.12 PAQIC members

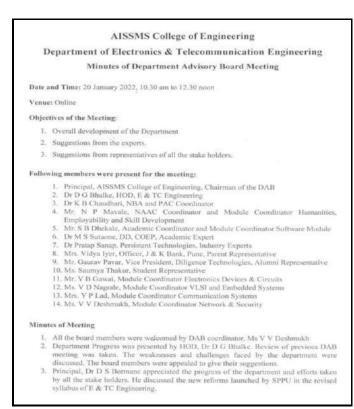
S.N.	Name of Member	Representation	Designation
1	Head of Department	Dr D G Bhalke	Chairman
2	Departmental NBA Coordinator	Dr. K B Chaudhari	Coordinator
3	Department academic Coordinator, CITP coordinator	Mr S B Dhekale	Member
4	Departmental exam Co-ordinator and module coordinator	Mrs Y P Lad	Member
5	Module coordinator Humanities,Employab ility and Skill Development	Mr. N P Mavale	Member
6	PG Coordinator	Dr P P Vast	Member
7	Module Co-ordinator Network & Security	Ms V V Deshmukh	Member
8	Module Co-ordinator VLSI and Embedded	Ms V D Nagrale	Member
9	Module Co-ordinator Project Coordinator	Dr R R Itkarkar	Member



Academic Year: 2022-23								
Sr No	DAB Representative	Name	Organization					
1	Chairman	Prof Dr S B Dhonde HOD	AISSMS COE,Pune					
2	Program Coordinator NBA NAAC	Dr K B Chaudhari Mr N P Mawale	AISSMS COE,Pune					
3	PG Coordinator	Dr P P Vast	AISSMS COE, Pune					
4	Module Coordinator Software Modeling	Mr. S B Dhekale	AISSMS COE, Pune					
5	Module Coordinator Humanities, Employability and Skill Development	Mr. N P Mawale	AISSMS COE,Pune					
6	Module Coordinator VLSI and Embedded	Ms. V D Nagrale	AISSMS COE,Pune					
7	Module Coordinator Network & Security	Dr. V V Deshmukh	AISSMS COE,Pune					
8	Module Coordinator Communication & Signal Processing	Ms. Y P Lad	AISSMS COE,Pune					
9	Module Coordinator Electronics Devices & Circuits	Mr. V B Gawai	AISSMS COE,Pune					
10	Academic Representative	Dr S P Mahajan	Govt COE, Pune					
11	Industry Representative	Dr Pratap Sanap	Persistance Pvt Ltd, Pune					
12	Alumina Representative	Mr Sagar Sadigale	IBM, Pune					
13	Parent Representative	Mr Sujit Waghavkar	BARCLAYS, Pune					
14	Student Representative	Ms Saumya Thakur	AISSMSCOE,Pune					
Depart	HOD ment of E&TC Engineering							

Figure 10.1.1 DAB Committee





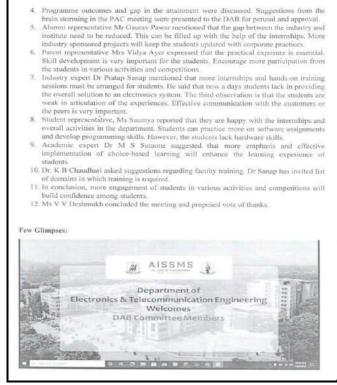






Figure 10.1.2 DAB Committee meeting and minutes of meeting

Grievance redressal is systematically carried out by various teams of teachers and staff acting as committee members acting as committees under the guidance of the Principal of the institution. List of faculty members who are administrators'/ decision makers/committee members for various responsibilities are shown in the tables given below.



A Grievance Redressal Committee (GRC) at the College level is constituted for providing guidance and counseling on the problems related to faculty, staff and students.

The Committee redresses all kinds of grievances, academic or non - academic.

Table 10.1.13 Members of Grievance Redressal Committee (GRC)

S. N.	Faculty Name and Designation	Post
01	Dr (Mrs) M S Deshpande, Professor in Chemistry	Coordinator
02	Mr P B Nangare, Assistant Professor in Civil Engineering	Member
03	Ms M V Waghmare, Assistant Professor in Civil Engineering	Member
04	Mr S V Chaitanya, Assistant Professor in Mechanical Engineering	Member
05	Ms S S Chauhan, Finance Officer	Member
06	General Secretary (Student Member)	Member

Grievance Redressal committee shall meet within a week from the date of receipt of any petition/complaint from anybody and take necessary action as deemed fit and initiate necessary action for solving the problem.

Mechanism of Grievance Redressal committee

- a. An aggrieved stakeholder who has the grievance or grievances shall make a written complaint first to the Head of the Department (HOD). The HOD after verifying the facts, will try to redress the grievance within a reasonable time. If the stakeholder is not satisfied with the solution of the HOD, then the written complaint should be forwarded to the Principal through HOD. The Principal then refers the complaint to the Internal Grievance Redressal Committee.
- b. On receiving the complaint from the Principal, the Internal Grievance Committee meeting is called by the Chairman. The complaint is studied by the Committee. The Committee at all levels observes the law of natural justice.
- c. The Committee arranges a meeting with the aggrieved party first, he/she expresses their views. Similarly meeting with all aggrieved members is scheduled. Thus all the concerned



- are given an opportunity, one by one to express their viewpoint. Each one is requested to give their say in writing. The committee gives a patient hearing to both sides and counsels them. The committee also enlightens them based on their SWOC.
- d. After verifying the facts based on factual data and after deliberations, the report of the committee's findings and remedial measures is prepared and submitted to Principal Sir.
- e. Final decision is communicated to both parties through the Principal.
- f. The Committee, if needed, may recommend to the Principal, necessary corrective action as it may deem fit, to ensure avoidance of recurrence of similar grievance.
- g. Note: The staff/student can lodge their grievance through online link available on Institute's website too (http://aissmscoe.com/academics/online-grievance-redressal/)

Anti-Ragging Committees:

With reference to AICTE (Prevention and Prohibition of ragging in Technical Education, Universities including Deemed to be Universities imparting technical education) Regulations 2009 and as per as per the clause No.6(a) of this AICTE Regulations - 2009, Anti-Ragging Committee is formed comprising of experts, faculty members, parents, students, etc to look into any kind of ragging matter reported to them from time to time. The Committee takes immediate action in the matter reported to them, following all the guidelines given in the referred AICTE Regulation - 2009. The Committee also reviews the activities of the Anti-Ragging Squad and suggests measures to effectively monitor the anti-ragging activities.

Anti Ragging Committee for The academic year 2020-21

Table 10.1.12 Members of Anti Ragging Committee

Sr	Name	Designation	Post	
No				
1	Dr D S Bormane	Principal	Chairman	
2	Shri Suresh P Shinde	Businessman	Civil administration	
3	Shri M M Mujawar	PI	Ex Officer Member	
4	Shri Harsh Dudhe	Reporter, Maharashtra Times	Media Member	
		NewsPapers Ltd,Pune		
5	Shri V R Patil	Assistant Professor in	Member	
		Mechanical Department		



6	Mrs S J Pachouly	Assistant Professor in Computer Engineering Department	Member
7	Mrs Seema Chaudhari	Parent Representative	Member
8	Anjali Chaudhari	Student : GS	Member
9	Shri A B Bhonsle	Administrative Officer	Member

ANTI RAGGING COMMITTEE (SQUAD)

With reference to AICTE (Prevention and Prohibition of ragging in Technical Education, Universities including Deemed to be Universities imparting technical education) Regulations 2009 and as per as per the clause No.6(a) of this AICTE Regulations - 2009, Anti-ragging Squad is formed to look in to the matters of ragging.

The squad will continuously maintain vigil in the College campus and monitor the activities of the students. If any activity of students is found suspicious then immediate action is to be taken. The squad will conduct patrolling of the canteen area, parking area, the College building and Ladies hostel. The patrolling of the outside area near to College will also be done.

The students can contact Committee members at any time regarding any kind of problem faced by them from any students in the Campus or outside the campus. Also, students can personally meet any of the above members in the College during working hours.

Table 10.1.14 Members of anti-ragging squad

Sr. No.	Faculty Name and Designation	Post
01	Mr V R Patil, Assistant Professor & Head, First Year Engineering	Coordinator
02	Dr M K Nikam, Associate Professor in Engineering Mathematics	Member
03	Dr S K Upasani, Associate Professor in Chemistry	Member
04	Mr A J Kadam, Assistant Professor in Computer Engineering	Member
05	Mr A B Bhonsle, Administrative Officer	Member
06	Dr M M Kondhare, Physical Director	Member



Vishakha (Sexual Harassment Committee)

Table No. 10.1.15 Members of Vishakha

Sr. No.	Faculty Name and Designation	Post
01	Dr (Mrs) P S Gajjal, Associate Professor in Mechanical Engineering	Coordinator
02	Ms S J Pachouly, Assistant Professor in Computer Engineering	Member
03	Ms V S Dandawate, Librarian	Member
04	Mr S S Pimpale, Registrar	Member
05	Mr M D Bhalerao, Senior Clerk	Member
06	Mr D S Kulkarni, Technical Assistant	Member

The complaint received by the Principal office from any ladies' staff members or student will be forwarded to the above committee. The said committee will look into the complaint and call the concerned complainant personally for hearing the grievance. The Chairman of the committee will forward their report in the sealed envelope to the Principal within one week from the date of receipt of complaint.

10.1.4 Delegation of financial powers (10)

Financial powers are delegated to the Principal of the institute and the principal is the one of the signing authorities for financial transactions. Provision of petty cash of Rs. 20,000 is also made with the Principal and head of departments also can make expenses using petty cash with the approval of the principal.

Table 10.1.16 Utilization of petty cash in Rs.

Petty cash utilization								
2020-2021 2021-2022 2022-23								
Sanctioned	Utilized	Sanctioned	Utilized	Sanctioned	Utilized			
amount	amount	amount	amount	amount	amount			
150543.00	146403.00	127503.00	127441.00	201190.00	201190			



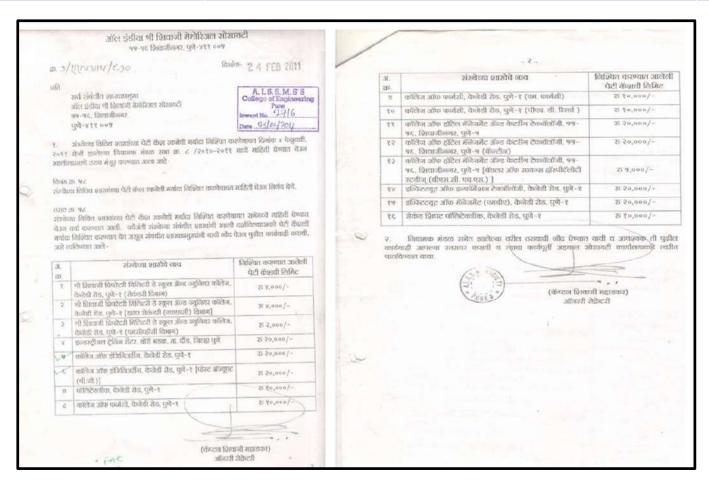


Figure 10.1.3 Petty cash facility allotted to institutes

10.1.5 Transparency and availability of correct /unambiguous information in public domain

- Unambiguous information is displayed on all general notice boards including department notice boards, Center for information, training and placement cell (CITP), student section, library, and other important areas.
- 2. Copies of official notices are circulated to the entire faculty, technical and non-technical staff and students.
- 3. The institute website is continuously updated for disseminating all the information about policies, students, faculty and relevant information. Institute website is www.aissms coe.com.



Table 10.1.17 URLs for information available on institute website

S.N.	Name of document	URL of document on website								
1	Vision, mission, goals and core	https://aissmscoe.com/about-us/college-profile/								
	values of the institute									
2	Admissions	https://aissmscoe.com/admission/admission-								
		enquiry/								
3	AICTE Approval Letters	https://aissmscoe.com/aicte-approvals/								
4	Mandatory disclosure	https://aissmscoe.com/mandatory-disclosure/								
5	Stakeholders feedback	https://aissmscoe.com/stakeholders/								
6	AICTE essentials	https://aissmscoe.com/aicte-essentials/								
Faculty Profile										
7	Department of Chemical	https://aissmscoe.com/chemical-								
	Engineering	engineering/faculty/								
8	Department of Civil Engineering	https://aissmscoe.com/civil-engineering/faculty/								
9	Department of Electrical	https://aissmscoe.com/ electrical-								
	Engineering	engineering/faculty/								
10	Department of Electronics and	https://aissmscoe.com/electronics-								
	Telecommunication	engineering/faculty/								
11	Department of First Year	https://aissmscoe.com/first-year-								
	Engineering	engineering/faculty/								
12	Department of Mechanical	https://aissmscoe.com/ mechanical -								
	Engineering	engineering/faculty/								
13	Department of Production	https://aissmscoe.com/production-								
	Engineering	engineering/faculty/								
	Anr	nual Reports								
14	Department of Chemical	https://aissmscoe.com/chemical-								
	Engineering	engineering/annual-reports/								
15	Department of Civil Engineering	https://aissmscoe.com/ civil-engineering/annual-								
		reports/								
16	Department of Electrical	https://aissmscoe.com/ electrical-								
	Engineering	engineering/annual-reports/								
17	Department of Electronics and	https://aissmscoe.com/electronics-								
	Telecommunication	engineering/annual-reports/								
18	Department of First Year	https://aissmscoe.com/first-year-								
	Engineering	engineering/annual-reports/								
19	Department of Mechanical	https://aissmscoe.com/ mechanical -								
	Engineering	engineering/annual-reports/								
20	Department of Production	https://aissmscoe.com/production-								
	Engineering	engineering/annual-reports/								







Figure 10.1.4 Best Professional College of SPPU

Figure 10.1.5 Best Principal Award by ISTE





Figure 10.1.6 Best Principal Award by SPPU

Figure 10.1.7 Winner of prestigious "Firodiya Trophy 2022"



10.2 Budget Allocation, Utilization, and Public Accounting at Institute level

30

10.2.1 Adequacy of budget allocation (10)

10.2.1 Adequacy of budget allocation

The college has a well formulated financial policy which ensures effective and optimal utilization of finances for academic, administrative and development purposes which help ultimately in realizing the institute's vision and mission.

Institute has made the necessary provision in the books of account towards efficient use of available funds for each academic year. As per the guidelines of the management and Principal, Variance report of sanctioned budget and actual expenditure are regularly maintained.

The Institute has a well-defined procedure to monitor effective and efficient utilization of available financial resources for infrastructure development and academic processes. Every year, the budget is prepared well in advance after taking into consideration the requirements of every Department. Each Department prepares the budget based on the requirement such as equipment, computer as well as consumable required for next academic session. Principal puts up the budget in the Governing Body meeting and after discussion and necessary corrections/modifications; the Governing Body recommends the budget for approval. The budget is reviewed by the management and approved after necessary changes. As and when required, the institute makes a provision for advance additional funds. The Principal and the Head of Departments discuss the requirement and decide the priorities while allocating financial resources for various purposes; and also ensure optimum use of available financial resources. The Governing body studies the annual expenditure, scrutinizes the budget and provides feedback for efficient use of financial resources. The Institute has standardized procedures for sanctioning of funds for various activities and also for settlement of advance and passing of bills for payment.

The Management has given complete support to Principal for organization of various co-curricular & extracurricular activities like technical events, sponsoring of faculty & staff for various skill development programs, providing financial support for attending conferences, workshops, pursuance of higher education etc. Financial support is also provided for participation of students at various national and international level events like Baja, Supra, Effi-cycle, Go-Kart, Aero-design and different clubs like Robotics and Drone.

The Society has constituted a separate purchase Committee composed of Management representative, Principal & college concerned staff. The purchase procedure such as calling quotation, technical bid, preparing comparative statement, negotiation meetings are followed for effective and efficient use of available financial resources. The committee ensures that suitable equipment with right specification is procured at competitive and optimal prices.



Financial audits are conducted by a chartered accountant every financial year to verify the compliance with established processes.

Apart from this the college also provides financial assistance to students for participation at various national & state level cultural & Sports competitions. We are very proud to say that due to the financial freedom given by the management in organization of various sports & Cultural events at institute level and participation of our students in various national & State level culture & Sports competition our students have shown excellent performance in these events.

10.2.2 Utilization of allocated funds (15)

Each department HOD after receiving the approved budget convenes a meeting and discusses the step by step procedure for procuring the equipment and consumables required for the department Faculty who are in charge of the laboratories and course coordinators are nominated to be involved in the purchase of equipment. The nominated faculty members identify the companies/ agencies to receive the quotations and then prepare a comparative statement. The comparative statement will be submitted to the purchase Committee to get approval from the management and then place orders to procure the items. The HOD periodically monitors and takes necessary efforts to see that the purchase of items is complete in all respects and the allocated funds are fully utilized.

10.2.3 Availability of the audited statements on the institute website (5)

Audited statements are uploaded on the institute website and are available to the public.

https://aissmscoe.com/mandatory-disclosure/ (https://aissmscoe.com/mandatory-disclosure/)

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3

CFY: (Current Financial

Year),

CFYm1: (Current Financial Year minus 1), CFYm2: (Current Financial Year minus 2) and

CFYm3: (Current Financial Year minus 3)

Table 1 - CFY 2022-23

Total Income: 399702308.14				Actual expenditure(till): 418105083.99			Total No. Of Students 3032
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Any other, specify	Expenditure per student
398999702.00	0	0	702606.14	378567997.99	39537086. 00	0	137897.46



Table 2 - CFYm1 2021-22

Total Income 384514955.00				Actual expenditure(till): 337150209.65			Total No. Of Students 3030
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Any other, specify	Expenditure per student
383581137.00	0	0	933818.00	329543094.65	7607115.0 0	0	111270.70

Table 3 - CFYm2 2020-21

Total Income 374544068.00				Actual expenditure(till): 300948858.43			Total No. Of Students 3112
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Any other, specify	Expenditure per student
373411482.00	0	0	1132586.00	291096339.43	9852519.0 0	0	96705.93

Total Income 319073736.52				Actual expenditure(till): 359356147.59			Total No. Of Students 2815
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Any other, specify	Expenditure per student
317338255.00	0	0	1735481.52	330815515.52	26120926. 11	0	126798.03

Table 4 - CFYm3 2019-20



Items	Budget ed in 2022-23	Actual Expenses in 2022-23 till	Budgete d in 2021-22	Actual Expenses in 2021-22 till	Budgeted in 2020-21	Actual Expense s in 2020-21 till	Budget ed in 2019-20	Actual Expenses in 2019-20 till
Infrastructure Built- Up	37258928.00	37755455.00	33535208.00	32066113.00	32312734.00	29716580.00	51005208.00	49970510.11
Library	441500.00	3948274.00	4325000.00	4099379.00	5510000.00	5500268.00	3925000.00	3296066.00
Laboratory equipment	3450000.00	34373476.00	5950000.00	4805267.00	8000000.00	7864601.00	6100000.00	5202903.00
Laboratory consumables	1600000.00	1563902.00	700000.00	231398.00	700000.00	542036.00	1000000.00	935167.00
Teaching and non- teaching staff salary	283000000.00	283193697.00	227150000.00	226611240.00	208550000.00	207828775.00	205000000.00	204913144.00
Maintenance and spares	3450000.00	3226710.00	4200000.00	3419956.60	2750000.00	2591638.00	5450000.00	5312396.00
R&D	1700000.00	1120079.00	4200000.00	1723831.00	1400000.00	392884.00	3700000.00	1136690.00
Training and Travel	5800000.00	5420697.00	2850000.00	2750408.62	6020000.00	5330814.00	8300000.00	8328591.00
Miscellaneous expenses *	650000.00	332820.85	580000.00	184210.00	280000.00	58504.00	5430000.00	5331466.00
Others, specify	51076072.00	47169973.14	46577240.88	46296208.49	33143792.00	25400338.23	51789792.00	51947991.84
Total	388426500.00	418105083.99	330067448.88	322188011.71	298666526.00	285226438.23	341700000.00	336374924.95

10.3

Program Specific Budget Allocation, Utilization (30)

10

10.3.1 Adequacy of budget allocation (10)

- As per the regular purchase process of the financial year, requirement of the department is considered for the preparation of the annual budget.
- Before the commencement of the financial year details of the purchase requirement (recurring and non-recurring details) are collected from the laboratory in-charge of the department.
- Budget proposal is finalized by the Head of the Department by considering annual intake of
 the students, university curriculum, industry requirement, laboratory & infrastructure
 development. The requirement Budget of the equipment, computers, software, consumables,
 maintenance & furniture etc. is finalized. Apart from this, budget proposals are prepared for
 co-curricular, extra-curricular and extension activities for the overall development of
 students.
- The Head of the Department submits the proposal of the budget to the Principal and the same is put up in the College Development Committee (CDC) and Governing Body (GB) meeting and after discussion and necessary corrections/modifications, College Development Committee and Governing Body recommends the budget for approval.
- The budget is reviewed by the management and approved after necessary changes.
- The budget allocated by the institute to the department is adequate to cater the need of the department to upgrade the laboratory in terms of equipment, consumables, software, computers, maintenance-spare and furniture etc. and for conducting curricular and extracurricular activities.

10.3.2 Utilization of allocated funds (15)

The Funds allocated to the department are effectively utilized and are adequate as per the departmental academic requirement. As per the requirement of the University curriculum and industry needs, all the laboratories of the department are being upgraded regularly by purchasing new equipment and accessories and upgrading existing equipment.

Allocated budget for the department is properly utilized in the financial year as per requirement.

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3

CFY: (Current Financial Year),

CFYm1: (Current Financial Year minus 1), CFYm2: (Current Financial Year minus 2) and

CFYm3: (Current Financial Year minus 3)

Table 1: CFY 2022-23



7755000.00		Actual expenditure (till): 7428395.00		Total No. Of Students: 229	
Non Recurring Recurring		Non Recurring	Recurring	Expenditure per student	
6500000.00	1255000.00	6497107.00	931288.00	32438.41	

Table 2: CFYm1 2021-22

3985500.00		Actual expenditure (till):3561341.00		Total No. Of Students: 219
Non Recurring Recurring		Non Recurring	Recurring	Expenditure per student
2200000.00	1785500.00	2029836.00	1531505.00	16261.83

Table 3: CFYm2 2020-21

2198000.00		Actual expenditure (till): 1590308.00	Total No. Of Students: 208	
Non Recurring Recurring		Non Recurring	Recurring	Expenditure per student
900000.00	1298000.00	937156.00	653152.00	7641.71

Table 4: CFYm3 2019-20

2491000.00		Actual expenditure (till): 1769798.00)	Total No. Of Students: 187
Non Recurring Recurring		Non Recurring	Recurring	Expenditure per student
300000	2191000	6903	1762895.00	9464.16

Items	Budgeted in 2022-23	Actual Expenses in 2022-23	Budgeted in 2021-22	Actual Expenses in 2021-22	Budgeted in 2020-21	Actual Expenses in 2020-21	Budgeted in 2019-20	Actual Expenses in 2019-20
Laboratory equipment	6500000.00	6467107.00	22,00,000	20,29,836	9,00,000	9,37,156	3,00,000	6,903
Software	250000.00	237846.00	10,00,000	10,15,999	5,00,000	42,909	5,50,000	5,44,558
Laboratory consumable	175000.00	162935.00	1,00,000	86,382	50,000	-	1,00,000	65,844
Maintenance and spares	100000.00	27547.00	1,00,000	1,36,204	1,00,000	67,008	1,00,000	58,444
R & D	200000.00	23500.00	3,00,000	48,719	1,25,000	94,500	3,00,000	-
Training and Travel	480000.00	451725.00	237,500	229201	5,00,000	4,44235	6,91,000	6,94,049
Miscellaneous expenses	50000.00	27735.00	48,000	15,000	23,000	4,500	4,50,000	4,00,000
Total	7755000.00	7398395.00	39,85,500	35,61,341	21,98,000	1590308	24,91,000	17,69,798



10.4 Library and Internet 20

10.4.1 Quality of learning resources

The Learning Resource Center, the Central Library of AISSMS College of Engineering with its state-of-the-art facilities and excellent resources plays a proactive role in providing excellent user services, optimal use of resources supporting quality enhancement in teaching-learning, research and extension. Keeping pace with the developments in the ICTs, Institute library works as a digitized knowledge Center for accessibility with print and e-resources and provides focused services to the students and faculty. The Library has a significant collection of books, journals, e-books, e-journals, secondary sources, databases, digital primary sources.

Integrated Library Management System (SLIM21) is used to manage different functions of libraries for improving accessibility to students. Institute Central Library is using commercial software as well as Open Source software for Automation of Library Services. With SLIM21 retrieval of information becomes easy and even a catchy phrase in the description of the cataloged item can be used for searching. SLIM21 supports a flexible workflow to cover activities related to acquisition of books, serials control, and funds monitoring.

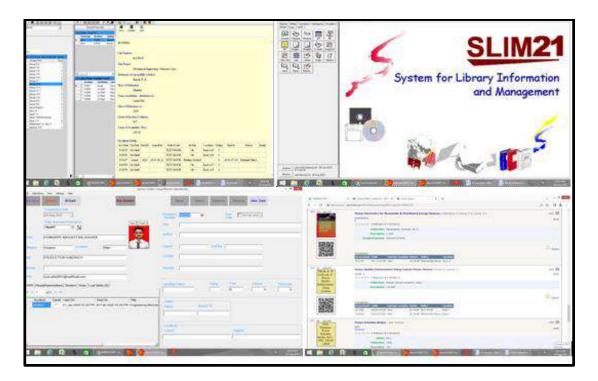


Figure 10.4.1: SLIM Software Screenshots



With the growing popularity of e-resources, libraries are gradually migrating from print documents to e-resources. Qualified and experienced staff play an important role in providing easily accessible and cost-effective information services. Institute library has subscribed / implemented learning and e-learning resources as shown in below tables.

Table 10.4.1: Learning resources available in Library

Learning Resources	Number of resources
Books	36942
E Journals	1014
e-Journals/e-Books	15000
List of print journals/Magazine	91
List of Newspapers	12
CD/DVD	867

Table 10.4.2: Expenditure in last three years on learning resources

Year	No of New Titles added	No of new Editions added	No of new volumes added	Expenditure in Rs.
CFY -2019-20	17	9	99	96197.00
CFY-2020-21	428	314	1324	650064.00
CFY- 2021-22	87	36	277	199492.00
CFY- 2022-23	12	12	20	25926.00

Table 10.4.3: Expenditure in last three years on E-Journals Subscription

Year	Number of E Journals	Expenditure in Rs.
CFY 2019-20	612	2624635
CFY 2020 -21	1016	2493007
CFY 2021-22	1016	2810777
CFY- 2022-23	1016	3041158



Institute Library has made the following online resources available to the staff and students.

Table 10.4.4: Various online resources available in AISSMS COE Library

AISSMS E Contents		Link
Resource		
Science Direct	275 E Journals Access	https://www.sciencedirect.com/
IEEE	169 eJournal Backfile Access- Since 2000)	https://ieeexplore.ieee.org/Xplore/home.jsp
ASME Digital Library	27 E Journals	https://www.asme.org/
ASCE Digital Library	35 E journals	https://www.asce.org/
Access Engineering	365 E journals/ E Books Access	https://www.accessengineeringlibrar y.com/user/login
SPRINGER	149 E Journals	https://link.springer.com/
DELNET	Access Millions of Networked Library Resources through DELNET, 2,20,00,000+ Books available for loan, 5,000+ Full-text E- journals, 1,00,000+ Thesis/Dissertations	http://164.100.247.26/
Knimbus	25000+ ebooks	https://aissms.knimbus.com/user#/h ome
NDL	Includes all disciplines	https://ndl.iitkgp.ac.in/
List of Open Access Resources	Access to all open access resources	https://aissmscoelibrary.weebly.com /open-access-resources.html
S Chand Ebooks	Access to 112 E- Textbooks	https://ebooks.schandgroup.com
New Age Ebooks	Access to 50 E Books	https://digital.elib4u.com/
Person Ebooks	Access to 104 E -Text Books	https://elibrary.in.pearson.com/
Caliber Digital Library	Access to 1012 Free Ebooks	Available in LAN



For easy access, all the online resources are subscribed as IP Based access subscription. This helps users to access any resource from any computer connected in the AISSMS COE Campus LAN and also through WiFi enabled devices. This helps users search multiple databases at a stretch. Remote off campus access facility is created and this can be used by students from home.

Library user tracking students and faculty

Library user tracking for students and faculty is done through the ERP system. daily visit to library reports can be download through ERP system

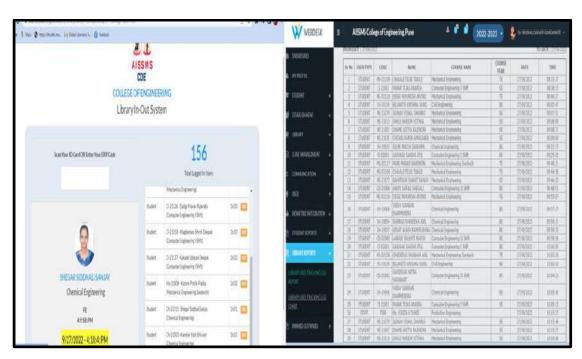


Figure 10.4.2: Screenshot of Library user tracking system

Book Purchase System Process

Library books requirement is collected through a book requisition form which is made available to all faculty through the google drive link. List of books requested by faculty are sent for quotation to the supplier, after that purchase order is placed to the supplier with Head of Department and Principal approval.



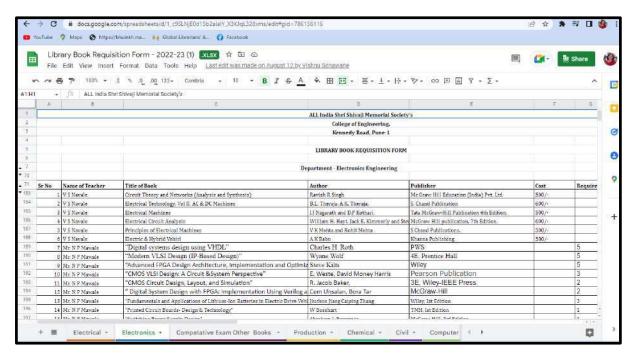


Figure 10.4.3: Screenshot of Library book requisition form

Support to students for self-learning

Institute Library supports students for self-learning activities by creating and making available various platforms for learning. Following resources are accessible to the students:

- 9000 + NPTEL Videos
- 100+ Subjects NPTEL Text Content
- 1500+ E-Books
- Access to previous year question papers
- Access to Ekeeda Learning platform
- Access to IIRS training programs
- Access to Coursera (During Covid pandemic period)
- Access to Edx platform (During Covid pandemic period)
- Organization of book exhibitions, Author meets, E resources training program for students
- Use of SLIM webopac for book search and reissue and reservation process



Digital library has been established by the library for the effective use of these self-learning resources. Question point service, "Ask a Librarian" is a unique online service available where queries and reference questions from students are responded within 24 hours. Additional facilities created in the library for improving accessibility and support to students for self-learning.

- Ask-A-Librarian Question Point Online Reference Service.
- Wi-Fi accessible across the Library.
- Library e-resources Remote Access (off-campus access) through Knimbus remote access platform.
- User Training, Sensitization and Information Literacy programs.
- Research Data Management, Publishing support, Style Manuals.
- Workshops/Programs on research methods Tools.
- Plagiarism Check tools (Turnitin) and services.
- Institutional Repository Dspace for faculty publication
- Faculty publication platform Vidwan
- Print, Scan Services.
- Access to previous year question papers and syllabus
- Mobile App facility available

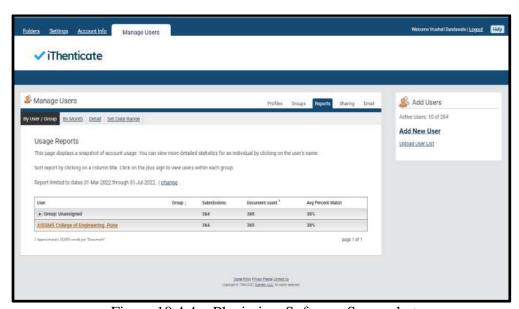


Figure 10.4.4: Plagiarism Software Screenshots





Figure 10.4.5 Library WebOPAC Screenshots

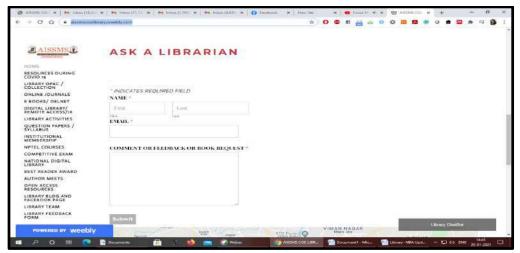


Figure 10.4.6 Ask A Librarian service

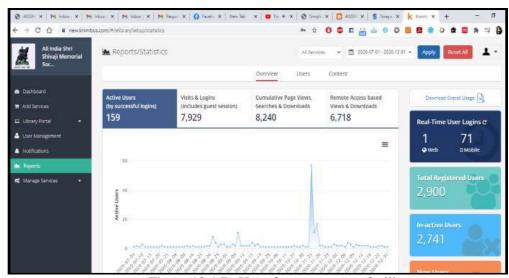


Figure 10.4.7 Use of remote access facility





Figure 10.4.8: Reprography Machine and I card printing facility Information Kiosk

10.4.2 Internet

Name of internet provider	Tata Tele Services Ltd
Available bandwidth	500 Mbps
Wi fi availability	yes
Internet access in labs, classrooms,	Internet access is available in all the labs,
library and offices of all departments;	classrooms, library and offices of all
yes	departments and administrative offices.
Security arrangements	Layer 3 Firewall (SOPHOS XGS 3300 HW
	APPLIANCE WITH 8GE).
	Each user is assigned a user id and password.
	Antivirus software is installed on all computers
	and laptops of the institute.