AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

Electronics & Communication Engg.

Part A: Institutional Information

1	Namo	and	Addrage	of the	Institution

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEE AALIM MUHAMMED SALEGH COLLEGE OF ENGINEE		I.A.F.,MUTHAPUDUPET,CHENNAI-55
2 Name and Address of Affiliating University		
Anna University, Sardar Patel Road, Guindy, Chenna		
3 Year of establishment of the Institution:		
2000		
4 Type of the Institution:		
University	Autonomous	
Deemed University	Affiliated	
Government Aided		
5 Ownership Status:		
Central Government	✓ Trust	
State Government	Society	
Government Aided	Section 25 Company	
Self financing	Any Other(Please Specify)	

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

Name of Institutions	Year of Establishment	Programs of Study	Location		
AALIM MUHAMMED SALEGH ACADEMY OF ARCHITECTURE	2011	B.Arch	"Nizara Educational Campus", Muthapudupet, I.A.F Avadi, Chennai - 600 055		
AALIM MUHAMMED SALEGH POLYTECHNIC COLLEGE	1996	Diploma	"Nizara Educational Campus", Muthapudupet, I.A.F Avadi, Chennai - 600 055		

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

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	То	Program for consideration	Program for Duration	
ELECTRONICS AND COMMUNICATION ENGINEERING	UG	2000	2000	60	Yes	60	Granted accreditation for 3 years for the period (specify period)	2011	2014	Yes	4	
Sanctioned Intake for	Last Five Y	ears fo	r the ELECT	RONICS	AND COM	MUNICATION	ON ENGINEERING					
Academic Year						Sanctioned	l Intake					
2022-23						60						
2021-22						 30						
2020-21						30						
2019-20						30						
2018-19						120						
2017-18						120						
ELECTRICAL AND ELECTRONICS ENGINEERING	UG	2000	2000	60	Yes	30	Granted accreditation for 3 years for the period (specify period)	2011	2014	No	4	
Sanctioned Intake for	Last Five Y	ears fo	r the ELECT	RICAL A	ND ELECT	RONICS E	NGINEERING					
Academic Year						Sanctioned	l Intake					
2022-23					:	30						
2021-22						60						
2020-21						60						
2019-20						60						
2018-19						60						
2017-18						30 30						
CIVIL ENGINEERING	UG	2007	2007	40	Yes	30	Not eligible for accreditation			0	4	
Sanctioned Intake for	Last Five Y	ears fo	r the CIVIL E	NGINEE	RING							
Academic Year					:	Sanctioned	l Intake					
2022-23					;	30						
2021-22						60						
2020-21						60						
2019-20						60						
2018-19						60						
2017-18						30						
MECHANICAL	UG	2007	2007	60	Yes	60	Applying first time			0	4	
ENGINEERING Sanctioned Intake for	Last Five Y	ears foi	r the MECHA	NICAL E	NGINEER	ING						
Academic Year						Sanctioned	l Intake					
2022-23						 60						
2021-22						60						
2020-21						30						
2019-20						120						
2019-20						120						
2017-18	I	I	I .	I	<u> </u>	120	T	I	I .	T		
COMPUTER SCIENCE AND ENGINEERING	UG	2000	2000	40	No	120	Not accredited (specify visit dates, year)	25/03/2011	27/03/2011	0	4	

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	То	Program for consideration	Program for Duration
INFORMATION TECHNOLOGY	UG	2006	2006	60	No	60	Applying first time			0	4

8 Programs to be considered for Accreditation vide this application:

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

9 Total number of employees in the institution:

A. Regular* Employees (Faculty and Staff):

16		2-23	202	1-22	2020-21	
Items	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	42	42	47	47	50	50
Faculty in Engineering (Female)	26	26	29	29	24	24
Faculty in Maths, Science & Humanities (Male)	19	19	23	23	21	21
Faculty in Maths, Science & Humanities (FeMale)	17	17	15	15	15	15
Non-teaching staff (Male)	18	18	18	18	18	18
Non-teaching staff (FeMale)	2	2	2	2	2	2

B. Contractual* Employees (Faculty and Staff):

Items -		2-23	202	1-22	2020-21	
		MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	0	0	0	0	0	0
Faculty in Engineering (Female)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities (Male)	0	0	0	0	0	0
Faculty in Maths, Science & Humanities (FeMale)	0	0	0	0	0	0
Non-teaching staff (Male)	0	0	0	0	0	0
Non-teaching staff (FeMale)	0	0	0	0	0	0

10 Total number of Engineering Students:

Engineering and Technology- UG	Shift1	Shift2
Engineering and Technology- PG	Shift1	Shift2
Engineering and Technology- Polytechnic	Shift1	Shift2
МВА	Shift1	Shift2
MCA	Shift1	Shift2

Engineering and Technology- UG Shift-1

Items	2022-23	2021-22	2020-21
Total no. of Boys	962	890	851
Total no. of Girls	143	112	109
Total	1105	1002	960

11 Vision of the Institution:

The College with Cutting-edge Excellence in Learning, Teaching and Research integrates Academia, Industry and National Progress.

12 Mission of the Institution:

MISSION - 1	To offer Project based learning for all the Subjects beyond the Syllabus.
MISSION - 2	To create multidisciplinary and Interdisciplinary Research Environment among the Students through solving complex Social Technical Problems.
MISSION - 3	To motivate Faculty Members and Students to undergo MOOC Courses and Certifications.
MISSION - 4	To collaborate with Academia and Industry for Intellectual ambience to develop intellectual environment holistically and improve Human Capabilities.

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

Head of the Institution				
Name PROF. DR. S. SATHISH				
Designation	PRINCIPAL			
Mobile No.	9894260193			
Email ID	principal@aalimec.ac.in			

NBA Coordinator, If Designated

Name	Prof. Dr. N. PRABHAKARAN
Designation	Associate Professor/ECE
Mobile No.	9790780124
Email ID	drprabhakaran@aalimec.ac.in

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	60	60.00
2	2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES		120.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	120	120.00
4	STUDENTS' PERFORMANCE	150	110.90
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	147.66
6	FACILITIES AND TECHNICAL SUPPORT	80	80.00
7	CONTINUOUS IMPROVEMENT	50	50.00
8	FIRST YEAR ACADEMICS	50	47.20
9	STUDENT SUPPORT SYSTEMS	50	50.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	120.00
	Total	1000	906

Part B

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

Total Marks 60.00

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

Total Marks 5.00 Institute Marks: 5.00

Vision of the institute		th Cutting-edge Excellence in Learning, Teaching and Research integrate ational Progress.						
	MISSION - 1	To offer Project based learning for all the Subjects beyond the Syllabus.						
	MISSION - 2	To create multidisciplinary and Interdisciplinary Research Environment among the Students through solving complex Social Technical Problems.						
Mission of the institute	MISSION - 3	To collaborate with Academia and Industry for Intellectual						
	MISSION - 4							
	concepts in Electronics and of Electronics and	e Vision & Mission statements of the Department To Excel as a Pedagogical Paradigm inconics and Communication Engineering by practicing Flipped Learning techniques emphas and Entrepreneurship skills for Social good. B. Appropriate / relevance of the statement 1 Communication Engineering will ensure that the contemporary curriculum will be continued.						
Vision of the Department	multi-disciplinary p industry level stude many events in Inte part in the develop Mission There are technical education with technical educ Second and Third industry and resea	e globally competent. 2. To achieve our target vision and mission, many students are encirojects in the final year and they are also encouraged to do internship projects in the indusents are trained in Current technologies through Symposiums, Guest lecturers, Seminars, er and Intra Department level. C1. Consistency of Department Vision with Institute Vision: ment of centre for excellence in learning and research C2. Consistency of Department Mifive foundation stones of our department's mission that are shared with our Institute mission, lifelong learning, leadership and ethical exposure. 1. The Mission is realized through department, to be a successful engineer in industry, research and higher education as stated in mission are realized by producing Students with life-long learning skills and adaptive to clorch. 3. Fourth mission is realized by training the professionals with NPTEL, Certificate confifth mission is ensured by producing dutiful citizen with exposure to equity, society, safety						
Vision of the Department	multi-disciplinary p industry level stude many events in Inte part in the develop Mission There are technical education with technical educ Second and Third industry and resea added course. 4. F considerations.	rojects in the final year and they are also encouraged to do internship projects in the indusents are trained in Current technologies through Symposiums, Guest lecturers, Seminars, er and Intra Department level. C1. Consistency of Department Vision with Institute Vision: ment of centre for excellence in learning and research C2. Consistency of Department Mi five foundation stones of our department's mission that are shared with our Institute mission, lifelong learning, leadership and ethical exposure. 1. The Mission is realized through decation, to be a successful engineer in industry, research and higher education as stated in mission are realized by producing Students with life-long learning skills and adaptive to clotch. 3. Fourth mission is realized by training the professionals with NPTEL, Certificate course.						
Vision of the Department	multi-disciplinary p industry level stude many events in Inte part in the develop Mission There are technical education with technical educ Second and Third industry and resea added course. 4. F considerations. Mission No. Mission	rojects in the final year and they are also encouraged to do internship projects in the indusents are trained in Current technologies through Symposiums, Guest lecturers, Seminars, er and Intra Department level. C1. Consistency of Department Vision with Institute Vision: ment of centre for excellence in learning and research C2. Consistency of Department Mifive foundation stones of our department's mission that are shared with our Institute mission, lifelong learning, leadership and ethical exposure. 1. The Mission is realized through department, to be a successful engineer in industry, research and higher education as stated in mission are realized by producing Students with life-long learning skills and adaptive to clorch. 3. Fourth mission is realized by training the professionals with NPTEL, Certificate confifth mission is ensured by producing dutiful citizen with exposure to equity, society, safety						
Vision of the Department Mission of the Department	multi-disciplinary p industry level stude many events in Inte part in the develop Mission There are technical education with technical education w	rojects in the final year and they are also encouraged to do internship projects in the indusents are trained in Current technologies through Symposiums, Guest lecturers, Seminars, er and Intra Department level. C1. Consistency of Department Vision with Institute Vision: ment of centre for excellence in learning and research C2. Consistency of Department Mifive foundation stones of our department's mission that are shared with our Institute mission, lifelong learning, leadership and ethical exposure. 1. The Mission is realized through department, to be a successful engineer in industry, research and higher education as stated in mission are realized by producing Students with life-long learning skills and adaptive to clorch. 3. Fourth mission is realized by training the professionals with NPTEL, Certificate confifth mission is ensured by producing dutiful citizen with exposure to equity, society, safety sion Statements						
	multi-disciplinary p industry level stude many events in Inte part in the develop Mission There are technical education with technical education w	rojects in the final year and they are also encouraged to do internship projects in the indusents are trained in Current technologies through Symposiums, Guest lecturers, Seminars, er and Intra Department level. C1. Consistency of Department Vision with Institute Vision: ment of centre for excellence in learning and research C2. Consistency of Department Mi five foundation stones of our department's mission that are shared with our Institute mission, lifelong learning, leadership and ethical exposure. 1. The Mission is realized through department, to be a successful engineer in industry, research and higher education as stated in mission are realized by producing Students with life-long learning skills and adaptive to clarch. 3. Fourth mission is realized by training the professionals with NPTEL, Certificate confifth mission is ensured by producing dutiful citizen with exposure to equity, society, safety sion Statements Sion Statements						
	multi-disciplinary p industry level stude many events in Inte part in the develop Mission There are technical education with technical education w	rojects in the final year and they are also encouraged to do internship projects in the indusents are trained in Current technologies through Symposiums, Guest lecturers, Seminars, er and Intra Department level. C1. Consistency of Department Vision with Institute Vision: ment of centre for excellence in learning and research C2. Consistency of Department Mi five foundation stones of our department's mission that are shared with our Institute mission, lifelong learning, leadership and ethical exposure. 1. The Mission is realized through department, to be a successful engineer in industry, research and higher education as stated in mission are realized by producing Students with life-long learning skills and adaptive to change of the control of the						

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

Total Marks 5.00

Institute Marks: 5.00

PEO No.	Program Educational Objectives Statements				
PEO1	Enabling Students to pursue research, or have a successful career in academic Technocrat and Industrialists				
PEO2	To provide students with foundational traits to build solutions or systems of varying competency				
PEO3	students to develop the ability of content writing and ethical Analytical temper leading to Innovation.				

1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

Total Marks 10.00

Institute Marks: 10.00

The Vision, Mission and PEO's are discussed, articulated and disseminated among the internal and external stakeholders by

- 1. Display
- 2. Discussion and Dissemination

A. Adequacy in respect of publication and dissemination: (2)

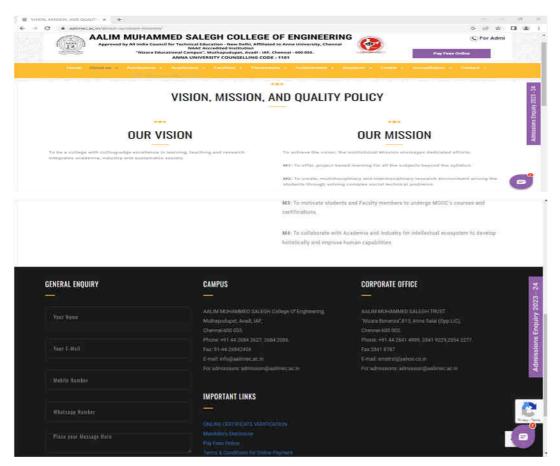
(i) website: www.aalimec.ac.in (http://ww.aalimec,ac,in)

The Vision, Mission and PEO's are conveyed through college website (www.aalimec.ac.in (http://www.aalimec.ac.in/)

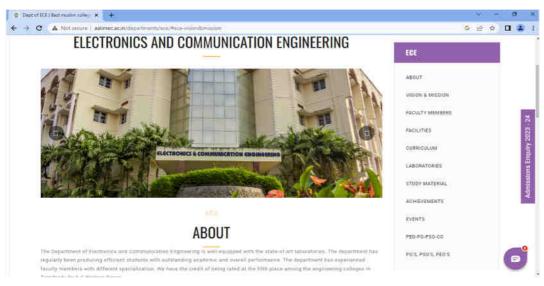
The Vision, Mission and PEO's of the department are printed and displayed at places where teachers and

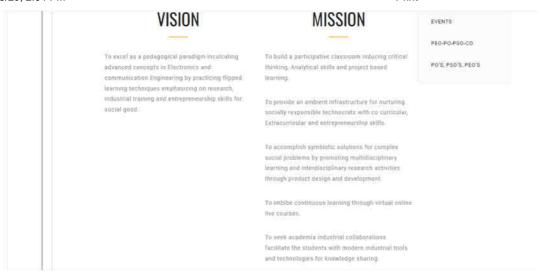
students gather frequently like;

1. Institution Website (All Stake Holders)



2.Department web page (All Stake Holders)





3.Department Laboratories (Internal Stake Holders)



Figure 3.a Electronics Devices and Circuits Laboratory



Figure 3b. Optical and Microwave Laboratory



Figure 3c. Linear Integrated Circuits and Communication Systems Laboratory

- 4.Department Library (Internal Stake Holders)
- 5. Faculty Rooms (Internal Stakeholders)
- 6. Class Rooms (Internal Stakeholders)

Figure 6a. F101 . IInd Year Class Room



Figure II nd year class room



7. HOD Cabin (Internal Stakeholders)



8. Notice Boards (Internal Stakeholders)

 $\textbf{1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program} \ (25)$

Total Marks 25.00

Institute Marks: 25.00

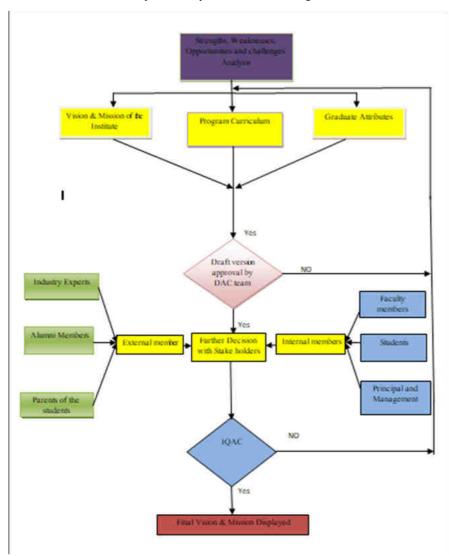
A. Description of process for defining the Vision, Mission of the Department

A department advisory committee is constituted to pursue Vision and Mission of the Department. The constitute of the committee are Head of the Department, Faculty members and representatives from Students, Parents, Alumni and eminent Academicians. The committee pursues with the following activities to establish the Vision and Mission;

- 1. The Strengths, Weaknesses, Opportunities and Challenges (SWOC) analysis are performed.
- 2.Suggestions are invited from the management, faculty Members Visiting Academicians and Parents
- 3. Students are encouraged to participate in Opinion Making.
- 4.Recommendations from the recruiters, Visiting academicians and industrial experts were collected and put in progress.

After framing the preamble of Vision and Mission, the alignment is checked / verified with the Vision and Mission of the Institution. The appropriateness is validated by experts from Academics and Industry. The Vision and Mission of the department get approved by the Principal. The Vision and Mission are further published and disseminated among the stakeholders.

The above mentioned process is depicted as flow chart in Figure 1.4a



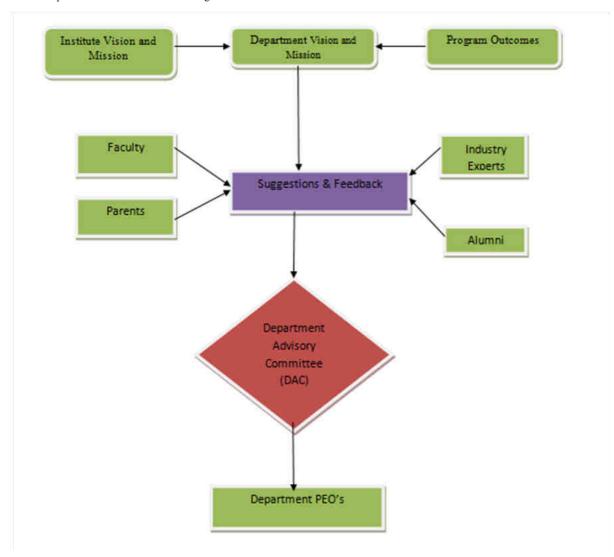
Flowchart 1.4a Process defining Vision, Mission of the department

B. Description of Process for defining the PEOs of the program:

A department advisory committee is formed to establish PEO's. The committee consists of Head of the Department, Senior Faculty members, and representatives from Parents, Alumni, industry experts and eminent academicians. The committee engages with the following activities to establish the PEO's:

- The Program Educational Objectives(PEO's) of the Department were first Outlined by the committee setup by the Head of the Department Keeping Department Vision and Mission, Institute Vision and Mission and Program outcomes in view.
- Proposed Program Educational Objectives(PEO's) have been circulated among the stake holders.
- Discussion on the suggestions received regarding new draft of Program Educational Objectives(PEO's) were sent to the Department Advisory Committee (DAC) for approval.
- · Department Advisory Committee (DAC) approved the PEO's under the chairmanship of Head of the Department.

After establishing/framing the PEOs, the consistency of the PEOs with the mission statements of the Department is checked / verified. The appropriateness of PEOs is validated with the requirements and expectations of employers. The PEOs are further published and disseminated among the stakeholders. The above mentioned process is shown as flowchart in figure.1.4b



Flowchart 1.4b Process defining PEOs

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

Total Marks 15.00

Institute Marks: 15.00

A. Preparation of a matrix of PEOS and elements of Mission statement

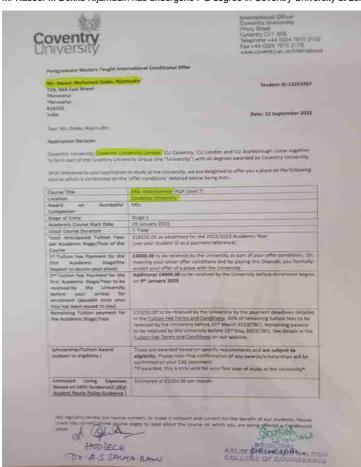
The Program Educational Objectives are in conform with the key points of the Mission of the Department as appended below:

S.NO	PEO Statements	M1	M2	M3	M4	M5
PEO1	Enabling Students to pursue research, or have a successful career in academic, Technocrat, industrialist.	3	3	2	3	3
PEO2	To provide students with foundational traits to build solutions or systems of varying competency.of varying complexity.	3	3	3	3	2
PEO3	Mold students to develop the ability of content writing and Ethical analytical temper leading to		3	2	2	3

Table 1.5a Consistency of PEOs with Mission of the Departmen

Note: M1, M2, M3, M4 and M5 are distinct keywords of the respective Mission statements

Mr Naseer M Dokku Nijamudin has undergone PG degree in Coventry University at London



The Correlation levels are

- 1: Less Moderate.
- 2: Moderate
- 3: Strong

B. Consistancy / justificatioon of co-relation parameters of the above matrix:

PEO	Mission	Consistency

	M1	Strongly correlates as academic plans are formulated to meet program Educational Objectives and program outcomes					
	M2	Strongly correlates as the Institution has a well-built infrastructure					
PEO1	М3	Moderately correlates as the students are provided with the research based projects					
	M4	Strongly correlates as the college organizes Industrial visits to students					
	M5	Strongly correlates as it is related to ethical values					
	M1	Strongly correlates as the students are inculcated with strong foundational concepts in Electronics					
	M2	Strongly correlates as the Department has the well equipped laboratories					
	М3	Strongly correlates as the Department is equipped with advantable tools to develop In house projects					
PEO2	M4	Strongly correlates as the students are given Industrial talks by Industrial Experts on challenges and recent trends					
	M5	Moderately correlates as the students are motivated and guided to do mini projects					
	M1	Strongly correlates as the students are guided to do Project work					
	M2	Strongly correlates as the students are provided High speed Internet connected computers for doing literature survey and projects					
	М3	Moderately correlates as the students are motivated to do projects in their area of interest					
PEO3	M4	Moderately correlates as the students are encouraged to attend industrial internships program					
	M5	Strongly correlates as the students are advised and counseled to follow moral principles					

Table 1.5 b Consistancy of co-relation parameters

PEO Statements	M1	M2	М3	M4	M5
Enabling Students to pursue research, or have a successful career in academic Technocrat and Industrialists	Select 🗸	Select ∨	Select 🗸	Select 🗸	Select 🗸
To provide students with foundational traits to build solutions or systems of varying competency	3 🕶	3 •	3 •	3 🕶	2 🔻
Mold students to develop the ability of content writing and ethical Analytical temper leading to Innovation.	Select 🗸	Select ∨	Select ✔	Select 🗸	Select 🗸

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (120)

Total Marks 120.00

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 a mentioned in Annexurel. Also mention the identified curricular gaps, if any (10)

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

A) Process used to identify extent of compliance of university curriculum for attaining POs and PSOs PROGRAM OUTCOMES (PO's)

Table 2.1.1 Identifying compliance to university

S.No	Process to identify complaince to university
1	Instituion is affiliated to Anna University, Chennai and the Syllabus and Curriculum of Anna University are followed.
2	In addition to University curriculum, students are guided to enhace their technological learning through NPTEL Lectures and Value added
3	Curriculum maintains the equitable balance in the compostion of basic science and engineering, humanities, professional courses and their along with Project Work / Laboratory practices to map the relevant POs.
4	Anna University revises curriculum periodically, keeping in line technical advancements in the current industries needs.
5	Based on the syllabus taught, the level comprehension of all the subjects for the students are discussed and analysed through Class Committee gaps were also identified.
6	Based on the CCM, and the input from the stake holders, the identidied curriculum gaps were considered with the necessary steps in order
7	The POs and PSOs were improved with Seminars, Assignments, Group Discussion, Internships and Industrial Visits.

S.No	POs	Program Outcomes
1	PO 1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the problems.
2	PO 2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated commathematics, natural sciences, and engineering sciences.
3	PO 3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that me appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4	PO 4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, anal and synthesis of the information to provide valid conclusions.
5	PO 5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including predicti engineering activities with an understanding of the limitations.
6	PO 6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issue responsibilities relevant to the professional engineering practice.
7	PO 7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, of, and need for sustainable development.
8	PO 8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9	PO 9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary so
10	PO 10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, s and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11	PO 11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply member and leader in a team, to manage projects and in multidisciplinary environments.
12	PO 12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the b change



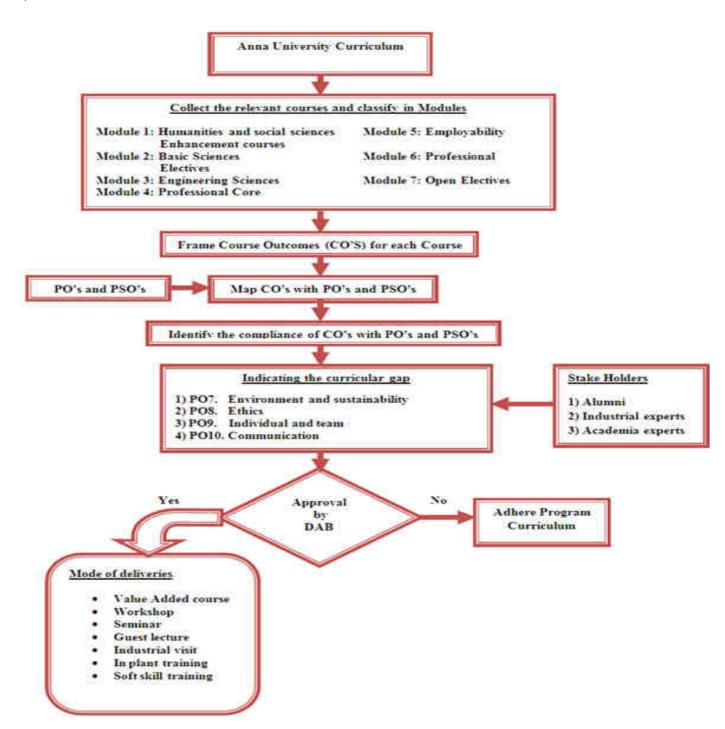


Figure 2.1.1a Flowchart for identifying the curricular gaps

Table 2.1.4 Anna University Regulation

S.No	Batch	Regulation	Affiliation				
1	2013-2017	R - 2013	Anna University Chennai				
2	2014-2018	R - 2013	Anna University Chennai				
3	2015-2019	R - 2013	Anna University Chennai				
4	2016-2020	R - 2013	Anna University Chennai				
5	2017-2021	R-2017	Anna University Chennai				
6	2018-2022	R-2017	Anna University Chennai				
7	2019-2023	R-2017	Anna University Chennai				
8	2020-2024	R-2017	Anna University Chennai				
9	2021-2025	R-2021	Anna University Chennai				

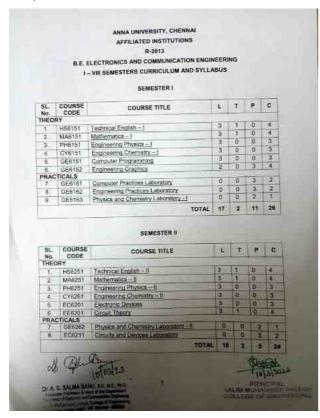


Figure 2.1.1.b Anna University Syllabus Regulation - 2013

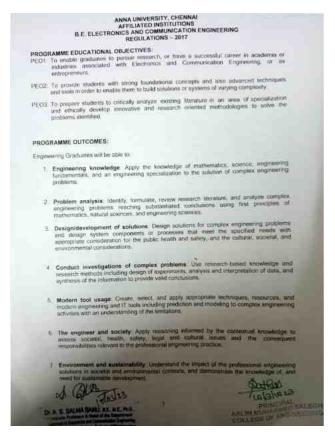


Figure 2.1.1.c Anna University Syllabus Regulation - 2017

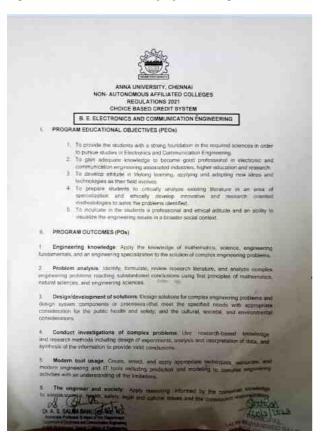


Figure 2.1.1.d Anna University Syllabus Regulation - 2021

Curriculum complaince is a systematic analysis of curriculum, prescribed by university to identify the d syllabi and its contents for attaining the Program Outcomes and program specific outcomes. In this regar Committee (DAC) is framed which comprises of Head of the Department, senior faculty members, and repre Alumni, Industry Experts and Academicians. The Department advisory committee carries out the study/investion the syllabi and its contents intentionally and systematically provide students with opportunities to attain the skill and attitudes. This process helps to identify the gap between University curriculum and Program Outcleads to rectification/remediation.

Table 2.2 Mapping of courses in the R17 curriculum with POs& PSOs

	COURSE OUTCOMES		Pl	ROGI	RAM	PROGRAMME OUTCOMES												
Sem	Course Name	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
	Communicative English						2	3	2	3	2	3						
	Engineering Mathematics – I	3	2	1	2							3	2		1			
	Engineering Physics	1	2	3	2							3	2			1		
	Engineering Chemistry	3	2	1	2							3	2			1		
	Problem Solving and Python Programming	3	2	1	2	1						2	2		3	3		
I	Engineering Graphics	3									3	2	1					
	Problem Solving and Python Programming Laboratory	3	2	3	3	3						2	3		2	3		
	Physics and Chemistry Laboratory	3	2	2	1							3	2					
	Technical English					2	2	3	2	3	2	1	2					
	Engineering Mathematics – II	3	2	1	3							2	1		3			
	Physics for Electronics Engineering	3	2	1	3							2	3			2		
	Basic Electrical and Instrumentation Engineering	3	2	3	2	2	3					2	3		1	3		
	Circuit Analysis	3	2	3	2	3	2					3	2	3		2		
II	Electronic Devices	2	3	3	2	3	1					3	2	3	2	3		
	Circuits and Devices Laboratory	2	3	1	2	3						3	2	1	2	3		
	Engineering Practices Laboratory	2	3	1	2	3						3	2	1		2		

20/20, 2.0				•												
	Linear Algebra and Partial Differential Equations	2	3	1	2	3						3	2	1		
	Fundamentals of Data Structures In C	2	3	1	2	3	2					3	2		3	2
	Electronic Circuits- I	3	2	1	3	2	3					3	2	3		2
	Signals and Systems	2	3	1	2	3	2					3	2	1	2	3
	Digital Electronics	2	3	2	2	3	3					2	3	2	2	3
	Control System Engineering	2	3	2	2	1	2					3	2			2
Ш	Fundamentals of Data Structures in C Laboratory	3	2	3	2	2	3					3	2		2	3
	Analog and Digital Circuits Laboratory	2	2	3	2	2	1					3	2	3		2
	Interpersonal Skills/Listening &Speaking						3		2	3	2	3	2			_
	Probability and Random Processes	2	3	2	2	2						3	2	1		-
	Electronic Circuits II	2	2	3	2	2	3					2	3	1		-
	Communication Theory	2	3	2	2	3	2					2	2	1		-
	Electromagnetic Fields	3	2	2	2	2	2					2	2	2	2	3
	Linear Integrated Circuits	3	2	1	2	2	1					3	2	1		3
	Environmental Science and Engineering	2	2	1	3		2	2	2			3	2	-		2
IV	Circuits Design and Simulation Laboratory	2	2	3	2	3	2					3	2	1		3
	-	2	2	3	2	3	2					3	2	3		3
	Linear Integrated Circuits Laboratory		3	2	2	1	2					3	2	1		2
	Digital Communication	3														
	Discrete-Time Signal Processing	3	2	2	2	3	2					3	2	2	2	3
	Computer Architecture and Organization	2	2	3	2		3					2	2	2		2
V	Communication Networks	2	2	2	2	2	1					2	2	3	2	1
	Total Quality Management						2	2	2		3	2	1			3
	Basics of Bio Medical Instrumentation	3	3	2	3	2	2					2	3	2		3
	Digital Signal Processing Laboratory		3	2	2	1	2					3	2	1	2	3
	Communication Systems Laboratory	2	3	2	2	2	1					3	2	1	2	
	Communication Networks Laboratory	3	2	2	2	1	1					3	2	1	2	1
	Microprocessors and Microcontrollers	2	3	2	3	3	2					2	2	2	3	2
	VLSI Design	2	2	1	2	3	2					3	2	3	2	1
	Wireless Communication	3	2	3	2	1	3					3	2	1		3
	Principles of Management						3	2	1		3	2	1			3
	Transmission Lines and RF Systems	3	2	2	3	2	2					3	2	3	2	
	Wireless Networks	3	2	1	2	2	2					2	2	2	2	
	Microprocessors and Microcontrollers Laboratory	2	2	2	2	2	1					3	2	1	2	3
VI	VLSI Design Laboratory	2	3	2	1	2	1					3	2	1	2	1
	Technical Seminar		2		2	2	1		3	3	2	2	2			2
	Professional Communication						2				2		2			-
		,	2	1	1	2						2		2	-	-
	Antennas and Microwave Engineering	3	2	1	2	3	2					3	2	3	3	2
	Optical Communication	3	2	3	2		3					3	3	3	3	3
	Embedded and Real Time Systems	2	3	2	3	2	2					1	1	2	3	2
	Ad hoc and Wireless Sensor Networks	3	3	2	3	2	1					3	3	2	1	3
VII	Cognitive Radio	3	2	1	2	3	3					3	3	2	3	2
	Industrial Safety	-		_			3	3	3		3	2	3		_	3
	Embedded Laboratory	3	2	3	2	3	2					2	2	2	2	3
	Advanced Communication Laboratory	3	3	2	3	2	3					3	2	3	2	3
	Professional Ethics in Engineering						3	2	3		3	2	2			3
VIII	Satellite Communication	3	3	2	3	2	3					2	3		3	2
	Project Work	3	2	3	2	2	2		3	3	2	2	3	2	3	2
	No. of Courses to Which Mapped	54	54	52	54	46	50	7	10	5	11	62	62	40	32	49
	No. of Courses in the Curriculum	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63

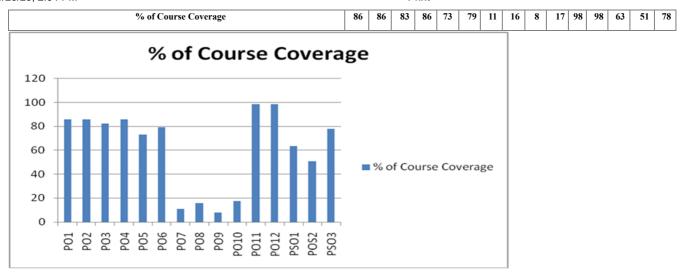


Figure 2.1.1 e Percentage of Course Coverage with POs and PSOs

The set of activities involved in this process are as follows.

The procedural training towards Outcome Based Education (OBE) was imparted to the course instructors. Relevant courses are collected based on modules. For each course, the knowledge level of course contents is identified using revised Bloom's taxonomy and corresponding course outcomes are form

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

In addition to the above process the following steps are followed to identify the curricular gaps.

S.No		Program Outcomes							
1	PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environment contexts, and demonstrate the knowledge of, and need for sustainable development.							
2	PO8	PO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice							
3	PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.							
4	PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with societ large, such as, being able to comprehend and write effective reports and design documentation, make effective Presentatio and give and receive clear instructions.							

List of Curricular gap identified

Table 2.4 Curricular gap identification relevant to POs and PSOs

S. No	Composition of	Number of Subjects		PO's and PSO's		
	Curriculam	R-2013	R-2017	R-2013	R-2017	
1	Humanities and Social Sciences	4	4	PO's (8,10,12)	PO's (9,10,12)	
2	Basic Sciences	10	8	PO's (1,2,3,12)	PO's (1,2,3,5,12)	
3	Engineering Sciences	6	7	PO's (1,2,3,5,9,12)	PO's (1,2,3,4,6,12)	
4	Professional Core	36	33	POs(1,3,4,9.12) & PSO 1	PO's(1,2,3,4,5,7,9,10,11,12)	

5	Professional Electives	6	5	PO's (1,2,3,4,7,8,11,12)	PO's (1,2,3,5,7,12)
6	Employability Enhancement Courses	2	4	PO's (1,2,3,8,9,10,12)	PO's (1,3,4,9,10,11,12)
7	Open Electives	-	2	-	PO's (1,2,3,5,7,10,12)

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

2.1.2 State the delivery details of the content beyond syllabus for the attainment of POs and PSOs (Provide details of the additional course/learning material/co experiments/projects etc., arising from the gaps identified in a tabular form in the format given below)

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

Table 2.1.2 a. Curriculum gap identification

S.No	Process for Identification of curriculum gap
1	It is necessary to identify the curricular gaps and take measures to bridge it by supplementing the curriculum with content beyond syllabus
2	The process to identify the curricular gaps shall be carried out in the following ways. a. Feedback from the class committee and student exit surveys shall be consolidated by the senior advisor for identifying the curricular gaps b. Feedback from the industry experts who conduct placements through Career Planning and Development (CPD) cell shall be consolidated by the program
3	Department Academic Committee shall discuss about the importance of the current scheme with the help of course feedback surveys, passing out graduate surveys.

B .Delivery details of content beyond syllabus

Table 2.1.2 b Delivery Details

S.No.	o. Delivery details Proof							
1.	Library/Internet Assignments							
2.	Additional Laboratory Experiments	Avadi, Tamil Nadu, India AAAM MUHAMMED MARRIM COLLEGE OF ENDIFFERING, HIZAHA BUJCATHOPAL GAMOUR, MUTTAAPUGUPET, CHILMHAT GOODEN LIST IN JAMBIGS* LIST IN JAMBIG						



C. Mapping of content beyond syllabus with the POS and PSOS

Illustrates that the weakly mapped POs are PO7, PO8, PO9 and PO10. The description of the weakly mapped POs are given in Table below:

Table 2.1.2 c. Weakly mapped POs

Sl No	Gaps	Gaps Identified	Program Outcomes	Percentage
1	G1	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.	11
2	G2	PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice	16
3	G3	PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	8
4	G4	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.	17

Content Beyond Syllabus for CAY (2021-2022)

 $Table\ 2.1.2\ d.\ Programme\ \ Conducted\ for\ Curricular\ gap\ for\ the\ Academic\ Year\ 2021-2022$

S.No	Gaps Identified	Mode of Delivery	Date- Month- Year	Resource Person With designation	Venue	Total No.of Students	Relevance to POs, PSOs
1	IT INDUSTRY EXPECTATIONS	WEBINAR	05-01- 2022	Er.Y.MOHA MMED RIZWAN.,M.C.A, M.E M/s INTELLISENSE ACADEMY	ECE DEPARTMENT AMSCE	34	PO6,PO8,PO10, PSO3
2	DIGITAL CIRCUITS	NPTEL	26.07.2021 to 15.10.2021	Prof. Dr.SANTANU CHATTOPADHYAY IIT KHARAGPUR	ECE DEPARTMENT AMSCE	64	PO1,PO2,PO3,PO4,PO5,PO 6,PO11,PO12,PSO1



Figure 2.1.2 a shows the sample proof copy of Table 2.1.2 d.

Content Beyond Syllabus for CAY (2020-2021)

Table 2.1.2 e. Programme Conducted for Curricular gap for the Academic year 2020-2021

S.No	Gaps Identified	Mode of Delivery	Date- Month- Year	Resource Person With designation	No.of Students Attended	Relevance to POs, PSOs
1	FIBER OPTIC COMMUNICATION TECHNOLOGY	NPTEL	14.09.2020 – 04.12.2020	Prof.Dr.DEEPA VENKITESH IIT MADRAS	63	PO1,PO2,PO3,PO4,P011, PO12,PSO1, PSO3
2	DIGITAL CIRCUITS	NPTEL	20.05.2020 – 21-09-2020	Prof.Dr.SANTANU CHATTOPADHYAY IIT KHARAGPUR	45	PO1,PO2,PO3,PO4,P011, PO12,PSO1

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, https://nptel.ac.in/noc/

Roll No: NPTEL20EE70S51320005

TO
SHAHID HUSSAIN
NO:27/23, VINAYAGAR KOIL STREET,
BHARATHIAR NAGAR, PATTABIRAM
,CHENNAI-72.
NO:27/23, VINAYAGAR KOIL STREET,
BHARATHIAR NAGAR, PATTABIRAM,CHENNAI-72.
CHENNAI
TAMILNADU - 600072
PH. NO:9173058655



To validate and check scores: https://nptel.ac.in/noc

No. of credits recommended by NPTEL:3

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



Figure 2.1.2 b shows the sample proof copy of Table 2.1.2 e

Content beyond Syllabus for CAY (2019-2020)

Roll No: NPTEL20EE70S51320005

Table 2.1.2 f. Programme Conducted for Curricular gap for the Academic year 2019-2020

S.No	Gaps Identified	Mode of Delivery	Date- Month-Year	Resource Person With designation	Venue	No.of Students Attended	Relevance to POs, PSOs
1	BRIDGING THE GAP BETWEEN ACADEMIA AND INDUSTRIES	SEMINAR	07.08.2019 3 hours	Er. VIJAY KUMBESWARAN, PRESIDENT AND CEO, CONCINNATE PARTNERS, CHENNAI.	ECE DEPARTMENT AMSCE	60	PO6,PO7,PO10 PSO3

2	BIG DATA	SEMINAR	17.08.2019 2 hours	Er. H. VEDHASANKARAN, M/s FORD INDIA PVT.LTD, CHENNAI.	ECE DEPARTMENT AMSCE	30	PO1,PO2,PO5 PO6,PO7,PO10 PSO1,PSO2 ,PSO3
3	PERSPECTIVE OF ENGINEERING	WORKSHOP	17.07.2019 2 hours	Er. BALAMURUGAN SCIENTIST, IIT MADRAS RESEARCH PARK, CHENNAI	ECE DEPARTMENT AMSCE	30	PO6,PO7,PO8,PO10 PSO3
4	THEME FOR INNOWAH	SEMINAR	11.09.2019 hours	Er. KRISHNAMOORTHY PALS COORDINATOR	ECE DEPARTMENT AMSCE	100	PO7,PO9,PO10, PSO2, PSO3



Figure 2.1.2 c shows the sample proof copy of Table 2.1.2 f

2021-22

S.No	Gap	Action Taken	Date-Month- Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	IT INDUSTRY EXPECTATIONS	WEBINAR	05/01/2022	Er.Y.MOHAMMED RIZWAN M/s INTELLISENSE ACADEMY	90	PO6,PO8,PO10, PSO3
2	DIGITAL CIRCUITS	NPTEL	26/07/2021	PROF.Dr.SANTANU CHATTOPADHY	95	PO1,PO2,PO3,PO4,PO5,PO 6,PO11,PO12,PSO1

2020-21

S.No	Gap	Action Taken	Date-Month- Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	FIBER OPTIC COMMUNICATION TECHNOLOGY	NPTEL	14/09/2020	PROF.Dr.DEEPA VENKITESH	85	PO1,PO2,PO3,PO4,P011, PO12,PSO1, PSO3
2	DIGITAL CIRCUITS	NPTEL	20/05/2020	PROF.Dr.SANTANU CHATTOPADHYAY	91	PO1,PO2,PO3,PO4,P011, PO12,PSO1

2019-20

S.No	Gap	Action Taken	Date-Month- Year	Resource Person with Designation	% of students	Relevance to POs, PSOs
1	BRIDGING THE GAP BETWEEN ACADEMIA AND INDUSTRIES	SEMINAR	07/08/2019	Er. VIJAY KUMBESWARAN, PRESIDENT AND CEO, CONCINNATE PARTNERS, CHENNAI.	80	PO6,PO7,PO10 PSO3
2	BIG DATA	SEMINAR	17/08/2019	Er. H. VEDHASANKARAN FORD INDIA PVT. LTD, CHENNAI.	75	PO1,PO2,PO5 PO6,PO7,PO10 PSO1,PSO2 ,PSO3
3	PERSPECTIVE OF ENGINEERING	SEMINAR	17/07/2019	Er. BALAMURUGAN SCIENTIST, IIT MADRAS RESEARCH PARK, CHENNAI	80	P06,P07,P08,P010 PS03
4	THEME OF INNOWAH	SEMINAR	11/09/2019	Er.KRISHNAMOORTHY, PALS COORDINATOR	100	PO7,PO9,PO10,PSO2, PSO3

2.2 Teaching - Learning Processes (100)

Total Marks 100.00

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

Institute Marks: 25.00

2.2.1 Describe Processes followed to Improve Quality of Teaching & Learning

The Program Educational Objectives (PEO's) are established to guide the Programme and prepare the graduates to achieve career and professional accomplishments. The PEO's are further transformed into specific student performance and behaviors that demonstrate student learning and skill development as Program Outcomes (PO's). Program Outcomes (PO's) are clearly and unambiguously defined. As our college is affiliated to Anna University, We follow the curriculum prescribed by Anna University. All courses have their own course outcomes. Each course outcome is mapped to relevant PO's and PSO's. Achieving course outcomes is the direct way of accomplishing program outcomes. In this context, the teaching-learning process and assessment methods are implemented in a way to achieve the CO's. Teaching-Learning process is crucial part of outcome based education and implements/employs as the set of activities engaging with students to enable them to acquire the knowledge, skills and attitudes. Student-centered and practical oriented lectures, tutorials, collaborative learning, independent learning, peer teaching approaches with integration of appropriate teaching aids, and teaching materials are the educational strategies selected to support the learning outcomes.

The quality improvement of teaching learning process is customized by the following Activities.

1	Academic Calendar
2	Conduct of assessment
3	Allocation of Course
4	Segregations of learners
5	Course Plan
6	Feedback Process
7	Content delivery process

A. Adherence to Academic Calendar

The Academic Calendar serves as an information source and planning document for students, faculty, staff and departments. The Academic Calendar includes Holidays, Start and end date of curricular sessions, Assessment Exams and tentative University exam dates, co-curricular and extracurricular activities.

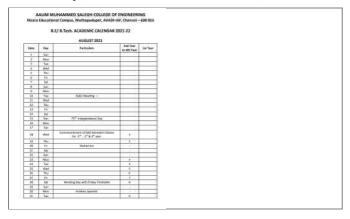


Figure 2.2.1.1 shows the sample proof of Academic Calendar



Figure 2.2.1.2 shows the sample proof of Adherence to Academic Calendar

The curricular activities include

1	Class committee meeting
2	Counseling
3	Syllabus coverage status
4	Commencement of Assessment test
5	Project review dates
6	Revision class
7	Academic Audit

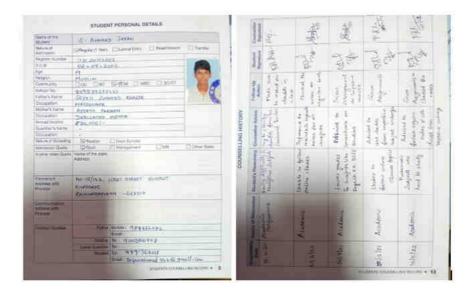


Figure 2.2.1.3 shows the sample copy of students counselling record

The Co-curricular activities include

1 4	Department Association Events like Seminar, guest lectures, Symposium and conference
12	Professional Society events namely PALS, ICTAcademy, ISTE and IET.

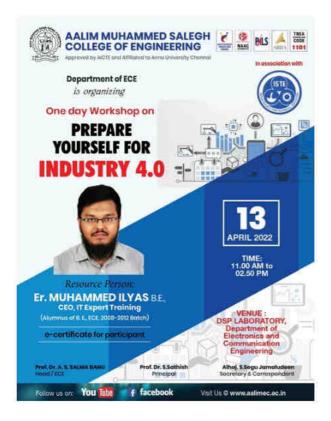


Figure 2.2.1.4 shows the sample copy of Professional event

The Extra curricular activity include

1	Sports day
2	Annual Day
3	Republic day
4	Independence Day



Figure 2.2.1.5 shows the sample copy of Extra Curricular activity

The Academic Calendar is displayed in our college website for remote access by students and faculty. The Time table is prepared on par with the academic calendar and displayed in the department notice board and circulated to the students. The institution completes the curricular activities within the planned time frame and as per calendar. The last working day of semester and University exam dates are announced by Anna University which is subjective to change. Such necessary changes will be announced at the earliest. Every effort has been made to adhere / follow the academic calendar as accurate as possible.

Allocation of Course:

Workload: Faculty is offered with preferred courses. Considering their options, the Head of the department will allot the course for the individual faculty and the workload is finalized. After course allocation, faculty is encouraged to undergo Faculty Development Programme (FDP) and their course delivery process is refined by Faculty Enrichment Programme (FEP) organized at our Institute level.

Timetable: Structured time table will also have an impact in proper planning of work. A well- organized timetable basically helps the faculty to take control of the day from one hour to the next. Time table consists mainly of four domains: students, faculty, timing and venue. Despite of the above factors, additional factors are also considered during the design process of timetable. Class strength, counselors, class committee members and chairperson details are mentioned. The alternate week of Saturdays are utilized for professional society and counseling activities. Apart from the activity, special attention has been given to PDP (Personality Development Programme) by Human Resource Development cell (HRDC) team members.

Course Plan: Course plan is a vital component of the teaching-learning process. Design of course plan is inclusive of Syllabus, Objective of a course and individual units learning outcomes, list of references (Text, Reference Books and Web resources), usage of teaching aids, planning of assessment tests and assignment submission, details of assignment topics, content beyond syllabus, (if identified). The course instructors are instructed to prepare the course plan in prior to the commencement of the semester for the allotted courses. It is prepared for both the theory and laboratory courses. The dispatch of the course plan to the students from day one for strict adherence to the same is made. The motivational perspective of the course instructor is enriched and students focus on the course is also built up by course plan itself. The teaching-learning process is reviewed based on the data recorded in the Log book by the Head of the Department.

		É				Issue D	io:01 m No:00 late:16/15 e Date:19/1				
Ref No A	DEPART	ALIM MU MENT OF	ELECTR	SALEGH (ONICS AN LE FOR E	D COMMU	NICA	TION ENG	INEERIN	iG		
DAY	SEMESTER	1	1		4		- 1	- 6	1		
1 44400		1.00-1.50	and the second	10,50-11.40			1.10-1.53		2.30-3,10	2.10-3.55	
	IV/A	EHF	PRP	LIC	EC4			COL	IS LAB		
	W/H	PRP	EC-R	LIC	LITT		GT	EVS	EC41	EVS	
MONDAY	VIZA	CA	AWP	ME	VLSi		POM	COMMU	ICATION S	11,000,000	
and the same	VI/B	ME	YLSI	CN	AMP		CA		VLSI LAB		
	VIII/A	WIR	LIB	PE	Wife		WG	WN	TQM	MC	
	VIII/B	TQM.	WN	PE	WC		WN	WC	TQM	1.18	
	IV/A	EVS	PRF	PRP	CT		LIC	EVA	LIC	Lift	
	N/B	EC-8	LIC	PRP	EVS			COKBLAB			
TUEBDAY	VI/A	VLBI	POM	CA	WE		SST	VL91 LAB			
TOEBSING	VI/B	CA	ME	AWP	POM		AWP	COMMU	ICATION S	KILLS LAD	
	VIIII/A	PE	WN	TOM	PE	700	WC	PE	TOM	WC	
	VIII / B	wc	TOM	WN	TOM		WITE	LIB	WN	PE	
	WZA	LICLAR			3	CT.	EMF	. 82	STP.		
	TW/A				BB	-GI	EME	LSP	LSP		
	Umye.	FMF	7	contractor to	EME	EVS EVS	100.00	PRF	50	STR	
	W/B	ERF	CT	EC-II	EMP		P.H.P.	LSP	LSP		
WEDNESDAY	VUA	ME	AWF	BST	551		POM	VLBI	Liti	ME	
	VI/B	VLSI	CA	VLSI	AWP		CN	- 6877	CNIAB		
	VIII / A		PROJE	T WORK		PROJECT WORK					
	VIII.7B		PROJE	T WORK		PROJECT WORK					
	NIA	6041	EMF	cr	EMF		EVS	PRF	CT	EC-II	
	W/B		LIC	LAB			PRP	Lic	EMI	LIC	
5234 (A) (B) (C)	VIZA	AWP	CA	VLSI	CN		PDM	CNILAB			
THURSDAY	VI/8	POM	CN.	ME	CA		LIB	CN	POM	SST	
	VIII / A		PROJEC	HINDWITS			PROJECT WORK				
	VIII.		PROJE	T WORK		PROJECT WORK			CTWORK		
	N/A	PRP	EC-II	LIC .	EMF		LIC	CT	PRP	EVS	
	N/B	CT.	EMF	PRP	CT.		EMP	PDA	Lic	EMP	
FRIDAY	VI/A	CN	ME	AVVP	VLIII		AWW	CN	AWP	CA	
	VI/B	AWP	VLSI	BST	SST		VI.31	ME	POM	CN	

Figure 2.2.1 6. Master time table 2018-2019



Fig 2.2.1.7 Sample Copy of Individual Class Time Table

B) Use of various instructional methods and pedagogical initiatives:

The following Instructional methods and pedagogical initiatives are followed by the faculty in content delivery.

1	Chalk & Board.
	ICT Tools (Google classroom, whatapp learning, Department You Tube videos)

3 Demonstration (Physical models/Laboratory)

Collaborative Learning (Group discussions, mini projects,
Brainstorming sessions).

5 Assignment, Quiz & Tutorials.
6 NPTEL lectures & Guest Lectures.

7 Seminars by Students. 8 Technical Events, Professional Society Activities.

9 Industrial Visits and Internships

10 Workshops and Seminars on latest Tools/Technologies.

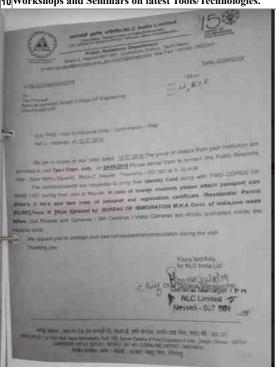


Fig 2.2.1.8 Sample Copy of Industrial Visit

C). Methodologies to support Slow Learners and encourage Bright students:

The strength and weakness of each student are based on their performance in Continuous Assessment Tests and Semester Examination.

They are categorized into

1 Students who secured < 50% marks in the internal examination are considered as weak learners.

2 Students whose performance in previous semester examinations are less than 50% marks are considered as weak learners.

Similarly, the Benchmarks used to identify the Bright students are:

1 The students who secured >70% in the Assessment Examination-1

2 Consistent academic performance

3 Participation in various external events like Project Expos, Hackathons, Programming competitions and Paper presentation contests

The class in charges and mentors will identify the weak Learners and Bright students and the necessary actions will be initiated by the department.

The steps taken to take care of the Slow Learners are:

1 Tutorial classes are conducted to the students who secured <50% of marks in the Assessment examination -1.

Remedial classes are conducted to the students who failed in External Examinations. Previous University question papers are discussed during the remedial classes.

3 Modes like Whatsapp learning, Google Class room, Department You Tube videos, Virtual lab to improve their Academic performance

4 Continuous counselling is also provided.

The steps taken to encourage and enhance the knowledge and skills of the Bright students are:

- On Independence day and Republic day Academic toppers are given certificates and prizes as token of appreciation
- 2 Motivating them to appear for GATE and conduct GATE classes.
- 3 Encouraging them to do company specific projects.
- Encouraging them to participate in student Technical fests /Coding contests, Online courses, Hackathon in other colleges/Universities by reimbursing registration fee.
- 5 Motivating them to get placed in dream companies.
- 6 Encouraging them to do internships in MNCs.
- 7 Encouraging the toppers in every class by giving additional library books.
- 8 Sponsoring the membership in professional bodies for the toppers.
- D) Quality of Classroom Teaching (Observation in a class) (3)

Our Quality Teaching has following metrics to be effectively implemented in the campus

1 HODs will verify the Classnotes as per Lesson Plan and monitor the Class notes of Students frequently						
a) Five minutes interaction session about Previous class						
b) Last 5 minutes for Interaction of the Subject taught	b) Last 5 minutes for Interaction of the Subject taught					
c) Subjectwise Seminar are been conducted in SSTP class						
2 Adequate ICT facility with wall mounted LCD projector is fixed in each classroom.						
3 Our QM defined by our IQAC brought adequate attainment in Teaching – Learning Practices:	Our QM defined by our IQAC brought adequate attainment in Teaching – Learning Practices:					
a) Implementing innovative, critical and creative thinking strategies						
b) Integrating technology						
c) Working in flexible learning environments.						
d) Evaluating the impact of programs						
e) Building collaborative practices.						
f) Improving our campus culture						

E) Conduct of Experiments & continuous assessment in the Laboratory:

The continues assessment in the laboratories for the internal marks is carried out as follows:

1	Anna university inspects the laboratories every year and the Academic Regime of university is strictly followed hence the Department permanently Affiliated
2	All laboratories in the department are well equipped and all experiments are conducted as per the university curriculum.
3	In addition to the regular curriculum experiments, one or two additional experiments beyond syllabus are also conducted.
4	Continuous assessment of the laboratory work is done every week as per the rubrics designed by the faculty handling the laboratory
7	classes. This assessment is used to determine the internal marks scored by the individual students out of 30.
5	The rubrics used by the faculty for the continuous assessment of the laboratory experiments carried out by the students is explained
3	below:
	a) If the student has attended all labs then the Lab performance is considered excellent with the majority of lab assessments rated as
	proficient then the student scores a total of 30 marks.
	b) At most if the student is absent for one lab and the lab performance is considered good with most assessments at the adequate level
	(with no more than 2 substandard then the student scores a total of 26 to 28marks.
	c) If the student has been absent 2-3 times and the Lab performance is fair with most assessments at the adequate and sub standard levels
	then the student scores a total of 25 to 20 marks.
6	Laboratory manuals are maintained by the department and distributed to the students.

F) Continuous Assessment in the laboratory (3)

1	Laboratory Excersises beyond syllabus were conducted and is in practice						
2	Creative questions are given to students to analyse the experiments						
3	Each laboratory experiments are performed usning virtual laboratory initiated by Ministry of Education						
	The Lab courses are evaluated using the following guidelines as per						
4	the Anna University Regulations.						
5	We use the template recommended by R2017 regulation manual						
3	subdivision 12.						
6	After completion of each excercise Viva Questions are asked related						
L	to the experiment						
7	The Laboratory Log book reflects the evaluation parameters and						
′	used to calculate the out of 100 marks and is scaled to 20 Marks.						
	The observation Note of the individual Laboratory Course used for						
8	final evaluation and completing the Laboratory record.						

G) Student feedback on Teaching Learning Process:

	Student feedback about the course delivery methods is taken online once in the middle of the semester.
2	A Class Committee Meeting is conducted thrice in a semester.
11.3	The collected feedback from the students is analyzed by the HOD and the Principal.
	After the feedback is analyzed, suggestions are given to the concerned teachers to improve the Teaching Learning Process.

https://enba.nbaind.org/SARTemplates/eSARUGTierIIPrint.aspx?Appid=7756&Progid=578

Note: This Questionnaire Engineering, to seek feedb environment.					
Name of the Department:					
Class:	Section	n:		Semester	
Name of the Staff:					
In the following table Tick (√) the approp	priate choice f	or each point.		
Rating	1 (Below	III AT AT A TOTO DAY	DOCESTINE TO SERVICE T	4 (Very	5
Subject	Avg)	2 (Avg)	3 (Good)	Good)	(Excellent)
Punctuality in the Class					
1. Regularity in taking Class					
2. Student's attendance/ presence in the class of professor who is being evaluated					
3. Completes syllabus of the course in the time					
Scheduled organization of assignments, class test, quizzes and seminars.					
5. Makes alternate arrangement of class in his/her absence					
SUBJECT CONCERNED QUESTIONS					
1. Focus on Syllabi					
2. Conducting Classroom discussions					
3. Teaching the Subject Matter					
4. Delivery of Structured Lecture					

Fig 2.2.1 c. Feedback Form

 $\textbf{2.2.2 Quality of internal semester Question papers, Assignments and Evaluation} \ (20)$

2.2.2 A Process for internal semester Question paper setting and Evaluation and effective process implementation:

Two internal assessment and one Model Examination are conducted as per the schedule given by the affiliating university and the marks are entered in An portal

2The evaluation of question paper setting and the process of implementation are evaluated by the affiliating university as verified by the inspection commite

3 Head of the Department evaluates and approves the question paper

4The effective process of implementation is performed through student feedback during the Class Committee meeting, each question paper reflects the COs

5The question paper are based on Blooms Taxonomy which covers creating, evaluating, analysing, applying, understanding, remembering

6The question paper is based on mapping of COs

Table 2.2.2 a. Evaluation of Marks

EXAMINATION	Part A	Part B	Part C	Total marks
INTERNAL EXAMINATION	5X2=10	2X13=26	1X14=14	50
MODEL EXAMINATION	10X2=20	5X13=65	1X15=15	100

B. Process to ensure questions from outcomes/learning levels perspective

1 Before conducting the Assessment test department exam cell committee will check the question paper

2 The mapping of course outcomes and the questions are based on revised Blooms Taxonomy

3 The exam cell committe will audit the answer scripts and submit to the Head of the Department for College Academic Audit

C. Evidence of COs coverage in midterm examination:

Sample of Internal Exmination questions mapping BTL and Course outcomes:

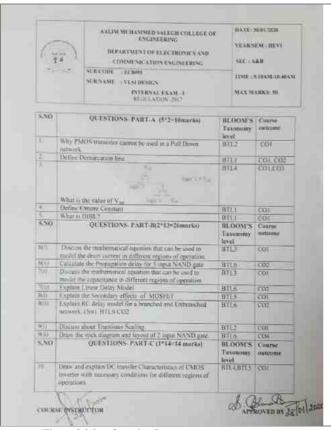


Figure 2.2.2 a. Question Paper

D. Assignments

Students are given Assignments either as paper work or Seminar. Assignments given by the Course Instructors will map with the Course Outcomes of the work Assignments are given to Evaluate student's problem Solving and Analytical skills. Seminars are given to evaluate students understanding and Orating

Evaluation of Assignment - Student's assignment will be evaluated based on the following points.

1	Group Assignments and individual Assignments are given				
	Quality of Assignments is evaluated through oral questions during the				
1	submission of Assignments				
	The Oral test is performed in relevant of COs				
	Assignment topics are checked for the mapping of COs by the Course				
1	Coordinator and HOD				

2.2.3 Quality of student projects (25)

A.Identification of Project amd Allocation methodology to faculty members

- 1 The Students are encouraged to do the projects with Social relevance.
- 2 Students are developing the projects identifying the research gap from recently published IEEE Conference.
- 3 Student Project Supervisors are allotted based on the Student and Faculty field of interest.
- Engineering is application of knowledge. The application must be carried out with judgment, to ensure that the resultant system is efficient and beneficial of an engineering student
- The guidelines for successful completion of B.E., Projects are to facilitate uniform regulation to be carried out during reviews. The Department will design Coordinator has to make certain that project related activities, such as conducting reviews and keeping records are done regularly

The important issues to be addressed while pursuing the projects are as follows:

- a. Assessment of a project
- 6 b.Documenting a project
 - c. Planning, executing, and managing a project
 - d. Selection of a project
- 7 The students are formed into batches of 3 to 4 based on the academic performance such that they work as a team effectively with one of them as team lead
- 8 The Department will identify the broad areas in which the staff members can guide the students for the project work.
- 9 Each individual batch will be allotted to one of the faculty members depending on the areas of interest.
- 10 The students will interact with the faculty members and discuss about the topics for project work.
- The students will identify 2 or 3 topics for their respective project referring to E resources and Journals and meet the faculty members with the releva the project work.
- 12 Identification of Projects and allocation methodology to faculty members

Types and relevance of the Projects and their contribution towards attainment of POs & PSOs:

STUDENT NAME	REG NO	TITLE OF THE PROJECT	SUPERVISOR	TYPE OF TO	
		Artificial Eye for			
Fahima Begam M	110117106011	Blind Using Arduino	Dr A S SALMA BANU	Artificial Intellig	
		and Ultrasonic Sensor			
		Artificial Eye for			
Fariha Parveen S A	110117106012	Blind Using Arduino	Dr A S SALMA BANU	Artificial Intellig	
		and Ultrasonic Sensor			
		Artificial Eye for			
Jabeen	110117106019	Blind Using Arduino	Dr A S SALMA BANU	Artificial Intelliş	
		and Ultrasonic Senso			
Abdur Raquib N	110117106005	Deep Learning Based Indoor Waste Classification For Efficient Management	M. T. M. KADER SAHIB MARICAR	Deep Learning	
Mahamad Salman S 110117106030		Deep Learning Based Indoor Waste Classification For Efficient Management	M. T. M. KADER SAHIB MARICAR	Deep Learning	
		Deep Learning Based Indoor Waste Classification For Efficient Management	M. T. M. KADER SAHIB MARICAR	Deep Learning	
		High Speed Hybrid Logic Full Adder Using High -	M. SYED	VLSI	
Aparna M	110117106007	Performance 10-T XOR-XNOR Cell	MUSTAFAA		
		High Speed Hybrid Logic Full Adder Using High - Performance 10-T XOR-XNOR Cell	M. SYED MUSTAFAA	VLSI	
		High Speed Hybrid Logic Full Adder Using High -	M. SYED	VLSI	
Faritha J	110117106013	Performance 10-T XOR-XNOR Cell	MUSTAFAA		
		High Speed Hybrid Logic Full Adder Using High -	M. SYED		
Yogeshwari G	110117106064	Performance 10-T XOR-XNOR Cell	MUSTAFAA	VLSI	
Mohammed Sirajudeen J	110117106040	Social Distancing and Mask Monitor Drone for COVID Prevention	B. NADHEE R AHMED	Embedded Syste	

2.34 PIVI		PIIIIL		
Mohammed Wasim M S	110117106043	Social Distancing and Mask Monitor Drone for COVID Prevention	B. NADHEE R AHMED	Embedded Syste
Mohammed Asardeen M G	110117106302	Social Distancing and Mask Monitor Drone for COVID Prevention	B. NADHEE R AHMED	Embedded Syst
Abdur Rahman B	110117106004	Weapon Detection Using Neural Network	P. KALIMA BENAZIR	Neural Network
Hassan Fouzan M	110117106017	Weapon Detection Using Neural Network	P. KALIMA BENAZIR	Neural Network
Mohammed Suhail B	110117106032	Weapon Detection Using Neural Network	P. KALIMA BENAZIR	Neural Network
Fathima R	110117106014	Home Automation Using Voice Control	M. SATHISH	Home Automati
Sabiha Tabassum S	110117106050	Home Automation Using Voice Control	M. SATHISH	Home Automati
Sumaiya Banu A	110117106058	Home Automation Using Voice Control	M. SATHISH	Home Automati
Mohamed Ismail Mihal	110117106028	Health Monitoring Application	M. SYED MUSTAFAA	Health Monito
Mohamed Sameer H	110117106031	Health Monitoring Application	M. SYED MUSTAFAA	Health Monito
Mohamed Atheefali S	110117106036	Health Monitoring Application	M. SYED MUSTAFAA	Health Monito
Mohamed Yousuf A	110117106034	Hand Gesture in Machine Learning	A. MOHAMED MYDEEN	Machine Learni
Mohamed Suhail R	110117106041	Hand Gesture in Machine Learning	A. MOHAMED MYDEEN	Machine Learni
Noorulah I	110117106046	Hand Gesture in Machine Learning	A. MOHAMED MYDEEN	Machine Learni
Misbah Fathima A	110117106024	Multipurpose Security System in Automobile Industry	S. JONE ROSY	Security System
Tasneem Fathima K	110117106061	Multipurpose Security System in Automobile Industry	S. JONE ROSY	Security System
Yaasmeen I	110117106063	Multipurpose Security System in Automobile Industry	S. JONE ROSY	Security System
Abdul Malick	110117106002	Data Driven		Embedded
Abul Kalam H	110117106006	Data Driven		Embedded
Mohamed Imran M A	110117106026	Agriculture	M. SATHISH	System
Nandhini R	110117106045	Smart Gloves for Quiet People	M. T. M. KADER SAHIBMARICAR	Embedded Syst
Sowmya R	110117106056	Smart Gloves for Quiet People	M. T. M. KADER SAHIBMARICAR	Embedded Syst
Uma Devi S	110117106304	Smart Gloves for Quiet People	M. T. M. KADER SAHIBMARICAR	Embedded Syst
Abdul Arsath S	110117106001	Smart Vechicle Technology	Dr. A.S.SALMABANU	Automatio n
Bharath V	110117106009	Smart Vechicle Technology	Dr. A. S.SALMABANU	Automatio n
Karthikeyen A	110117106020	Smart Vechicle Technology	Dr. A. S.SALMABANU	Automatio

2.34 FIVI		FIIIIL		
Lokesh N	110117106021	Smart Vechicle Technology	Dr. A. S.SALMABANU	Automatio
Ragavendran M	110117106047	IoT Based Accident Detection Prevention and Tracking Using Smart System	A. MOHAMED MYDEEN	IoT
110117106048 I		IoT Based Accident Detection Prevention and Tracking Using Smart System	A. MOHAMED MYDEEN	IoT
Suhail Ahmad Noor A	110117106057	IoT Based Accident Detection Prevention and Tracking Using Smart System	A. MOHAMED MYDEEN	ІоТ
Manoj L	110117106022	Plant Disease Deduction Using Image Processing	Dr.N. R. SHANKER	Image Processir
Shaif Mohammed Ishaq S	110117106052	Plant Disease Deduction Using Image Processing	Dr.N. R. SHANKER	Image Processir
Tameem Mujahid	110117106060	Plant Disease Deduction Using Image Processing	Dr.N. R. SHANKER	Image Processin
Shaik Muhammed Hedayathullah	Thowfic Ahamed M	Arduino Based Home Automation System with Android and Bluetooth	S. JONE ROSY	Home Automati
Sheik Mohamed Riyaz S	10117106054	Arduino Based Home Automation System with Android and Bluetooth	S. JONE ROSY	Home Automati
Thowfic Ahamed M	110117106062	Arduino Based Home Automation System with Android and Bluetooth	S. JONE ROSY	Home Automati
Irbaz Ahmed R	110117106018	Face Mask Detection Using Python	A. P. KALIMA BENAZIR	Embedded Syst
MD Shoaib Sharief F	110117106023	Face Mask Detection Using Python	A. P. KALIMA BENAZIR	Embedded Syst
Shoaib Akthar Shariff A	110117106055	Face Mask Detection Using Python	A. P. KALIMA BENAZIR	Embedded Syste
Mohammed Fazil J	110117106037	Military Security	M. T. M.	Military
Musthaq N K	110117106044	Military Security	M. T. M.	Military
Shahid Hussain N	110117106051	KADER SAHIB MARICAR	ADER SAHIB MARICAR	Security
Mohammed	110117106039	Integrating Medical Screening in Attendance Systems	A. S. SALMA BANU	Medical Screeni
Raghadan	110117106033	Integrating Medical Screening in Attendance Systems	A. S. SALMA BANU	Medical Screen
Mohamed Uvaiz N	110117106010	Integrating Medical Screening in Attendance Systems	A. S. SALMA BANU	Medical Screen
Dinesh P		Integrating Medical Screening in Attendance Systems	A. S. SALMA BANU	Medical Screeni
Mohammed Ithnan A U 110117106038		Fire and Gas Accident Avoider Using Arduino Compiler	B. NADHEE R AHMED	Security
Riyaz Mohammed M	110117106049	Fire and Gas Accident Avoider Using Arduino Compiler	B. NADHEE R AHMED	Security
Munavar Basha M	110117106303	Fire and Gas Accident Avoider Using Arduino Compiler	B. NADHEE R AHMED	Security
Mohammed Safvan A V	110117106029	Fake Currency Detection in Mobile Phone	N. R. SHANKER	Embedded Syste
Ashick Ahamed M	110117106301	Fake Currency Detection in Mobile Phone	N. R. SHANKER	Embedded Syste
			1	

Table 2.6 Mapping of Student Projects with POs and PSO

C. Continuous Monitoring Mechanism and Evaluation for the Projects: Continuous monitoring Process for Internal Project PROJECT REVIEW SCHEDULE

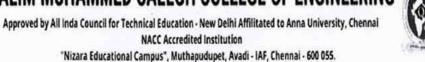
S. No	Review	Batch	Date & Time
1	First Review	AMS_EC_FYP_2021_01 to AMS_EC_FYP_2021_10 &	24/02/2021 9.00 A.M to 4.00 P.M
2		AMS_EC_FYP_2021_11 to AMS_EC_FYP_2021_20 &	25/02/2021 9.00 A.M to 4.00 P.M

	S. No	Review	Batch	Date & Time
	1	Second Review	AMS_EC_FYP_2021_01 to AMS_EC_FYP_2021_10 &	17/03/2021 9.00 A.M to 4.00 P.M
-	2		AMS_EC_FYP_2021_11 to AMS_EC_FYP_2021_20 &	18/03/2021 9.00 A.M to 4.00 P.M

S. No	Review	Batch	Date & Time
1	Model Review	AMS_EC_FYP_2021_01 to AMS_EC_FYP_2021_10 &	31/03/2021 9.00 A.M to 4.00 P.M
2		AMS_EC_FYP_2021_11 to AMS_EC_FYP_2021_20 &	01/04/2021 9.00 A.M to 4.00 P.M



AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING



AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

Department of Electronics Communication Engineering - Project Review Circular for IV year students dated on 05/01/2023

NO.	DATE	ВАТСН	REQUIREMENTS
ZEROTH	12/01/2023	AMS_EC_FYP_2023_01 to AMS_EC_FYP_2023_10	 A complete literature review is expected for this review. PowerPoint(PPT) that describes the following, Objective of the Project Literature Review Problem Statement in existing systems Proposed System(Block Diagram/flow charts/others) Sub section identification – module 1, 2, 3, 4(What is to be done in each module should be mentioned) Action plan for the date of completion of each module in a table form Maximum 10 slides 10 Minutes for Presentation and 5 Minutes for queries Make all the corrections in the zeroth review and get the consent of supervisor. The PowerPoint should be shown to internal supervisor. No one will be allowed to attend First review without Supervisor signature in the progress report (Annexure I)
FIRST	01/03/2023	AMS_EC_FYP_2023_01 to AMS_EC_FYP_2023_10	1. A complete knowledge of the proposed system is expected for this review. PowerPoint(PPT) that describes the following > Final Proposed System > Detailed Literature Review > How Much Percentage of work completed from 05/01/2023 to till date based on Action plan. > Maximum 15 slides > 15 Minutes for Presentation and 5 Minutes for queries 2. Make all the corrections in the first review and get the consent of supervisor. 3. The PowerPoint should be shown to internal supervisor. No one will be allowed to attend second review without Supervisor signature in the progress report (Annexure I).
SECOND	29/03/2023	AMS_EC_FYP_2023_01 to AMS_EC_FYP_2023_10	 The completion of the project is expected for this review based on proposed system. PowerPoint(PPT) that describes the following Objective of the Project Detailed Literature Review Proposed System(Block Diagram) Results(Final output screen shots) and discussion Conclusion and Future work Maximum 15 slides 15 Minutes for Presentation and 5 Minutes for demonstration & queries Make all the corrections instructed in the first & second review and get the consent of supervisor. No one will be allowed to attend the final review without supervisor signature in the progress report (Annexure I). Submission of the conference / journal paper.
MODEL	26/04/2023	AMS_EC_FYP_2023_01 to AMS_EC_FYP_2023_10	1. The complete demonstration of the project is expected for this review. 2. Submit the Final Project report with HOD and supervisor signature at the time of Model review. 3. The Anna University UG project report format download from the following url http://www.annauniv.edu/academic_courses/docs/ugthesis.pdf 4. Submit four(4) copies plus individual student copy of Project reports Particulars No of Copy Anna University O1 General Library Department Library Department Library Supervisor O1 Plus student copy(each one)

ROJECT INCHARGE 5 01/200

HEAD-ECE OSTOL 202

PRINCIPAL

Figure 2.2.3.a. shows the Sample proof copy of Project Review Circular

Assessment and Evaluation Process for Projects:

- a. The project work is evaluated for 100 Marks out of which 20 Marks are for internal evaluation and 80 Marks for External evaluation.
- b. The University will appoint an External Examiner to conduct Project work viva voce.
- c. The panel of examiners consists of the external examiner appointed by the university, the Head of the Department and the project supervisor of the batch
- d. Evaluation done based on

1	Problem identification
2	Requirements elicitation
3	Problem modeling
4	System analysis and specification
5	System design
6	Module implementation and system integration
7	System test and evaluation
8	Documentation
9	Project management

Table 2.6 Rubricks for Internal Evaluation

Criteria	<30%	>30 to 65%	>
Introduction of Project(10M)	Project is not introduced properly (0M)	Clear Introduction of Project (5M)	Project was introduced c interesting fashion.(10)
Understanding of the Project (30M)	Students understanding of the fundamental concepts of the project is unsatisfactory. (10M)	Students are very clear about the fundamental concepts of the project and it implementation (20M)	Student displays exceptions and grasp of the project (;
In the Project presentation Voice: clarity, pace, and fluency(40M)		ensure audience comprehension. (20M)	The Project presenter spea good pace to ensure audier Delivery was fluent and ex
Conclusion of project (10M)	The Project Execution was incomplete (0M)	The presentation was summed up clearly. (5M)	The presentation was sum effectively, with the key po (10M)
Q/A Session with the audience (10M)	Poor response to queries. (3M)		Capable of answering quescomfort level. (10M)

E. Quality of completed projects:

The Quality of completed projects and best projects are assessed based on the following factors:

1	Any Paper published in a Journal / Conference		
2	Real Time practical applications		
3	Project is cost effective		
4	External examiner's report		
5	Awards / Prizes won in any project exhibition or demonstration		

2.2.4 Initiative related to industry interaction (15)

Institute Marks: 15.00

Interaction with Industries is supported by the department with the following initiatives:

Industry Supported Laboratories:

In order to create awareness of industrial practices among students, the experts from industry, public sector undertakings and local entrepreneurs are invited to give guest lecturers to the students.

In addition, Industrial visits are arranged every semester to make the students to observe the industrial practices and to help them to relate the theoretical concepts to the practices followed in the industry.

The students are being sent for training programs, internship programs to reputed industries on a regular basis so that they will have industrial exposure.

4The students are also encouraged to do real time projects in industry as part of their Tech projects in the final year.

5 Contemporary studies are performed through regular online courses, workshops, seminars and webinars.

S.No	Name of the Laboratory	Type of Industry	Organization Name	Objectives
1	IOT LAB	EMBEDDED	AltSense Technology Services© TM	To deliver a structured, sustainable & scalable framework to impart state of the art skills to the unemployed.
2	Embedded & PLC LAB	Embedded &PLC	Chase technologies	To introduce the Laboratory Virtual Instrument Engineering Workbench, Embedded C & Lab View software.
3	Mobile Servicing Lab	Mobile Communication	AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING	To Service & Troubleshoot Mobile Applications
4	Robotics Lab	Robotics Lab	XYZ Robotics	To Develop Robotics for Robo war, Robo race and for other application
5	Jio Lab	Optical Communication	Aalim Muhammed Salegh Collegeof Engineering	To develop and test optical fiber communication and networks based experiments.
6	PCB Lab	Electronics and Circuits Lab	Aalim Muhammed Salegh College of Engineering	To design and test the basics of electronic devices and B. circuits with the necessary softwares.
7	CCNA Training	Computer Networking Lab	Aalim Muhammed Salegh College of Engineering	To understand the computer networking concepts with the networked switches and routers.

Industry involvement in the program design and Partial Delivery of Courses by Industry Experts:

Table 2.4.4 List of Technical Talk/ Guest Lectures Arranged for CAY (2021-22)

S.No	Title of the Talk	No. Of Hours	Resource Person	Target Students	Remarks
1	Webinar on "IT Industry Expectations"	02	Mr. Y.Mohammed Rizwan, Senior Engineering Specalist, Software AG, Ascendas International Tech Park.	II,III, IV Years	The Students learned about IT Industry Expectations

Table 2.4.4 List of Technical Talk/ Guest Lectures Arranged for CAY (2020-21)

S.No	Title of the Talk	No. Of Hours	Resource Person	Target Students	Remarks
1	"Internet of Things" Hands on session on Arduino, Raspberry PI and Contiki OS	02	Dr.Abdul Quadir, Managing Director	II,III, IV Years	The Students learned about Internet of Things and how to do IOT withArduino, Raspberry PI and Contiki OS
2	Technical Expertise- "Robotic Process Automation"	02	Er. Syed Ali Fathima	III, IV Years	The Students Learned about the Robotic Process Automation to take advantages of studies

Table 2.4.4 List of Technical Talk/ Guest Lectures Arranged for CAY (2019-20)

S.No	Title of the Talk	No. Of Hours	Resource Person	Target Students	Remarks
1	WORKSHOP ON "BIG DATA"	02	Mr. H.Vedhasankaran, Ford India Pvt.Ltd, Chennai.	III, IV Years	The Students learned about the importance of BIG DATA and how to do big data processing
2	WORKSHOP on "Perspective of Engineering"	02	Mr.Balamurugan, Scientist, IIT Madras Research Park,Chennai	III, IV Years	The Students Learned about the Perspective of Engineering to take advantages of studies
3	Seminar on "Bridging the gap between academia and industries"	3 hours	Mr. Vijay kumbeswaran, PRESIDENT AND CEO, CONCINNATE PARTNERS, CHENNAI.	III Year	The Students learned the "Bridging the gap between academia and industries"

Table 2.2.4.2 List of Technical Talk/ Guest Lectures Arranged for CAYm1 (2018-19)

S.No	Title of the Talk	No. Of Hours	Resource Person	Target Students	Remarks
			Dr.N.R.SHANKER,		The Students did the Mini
1	MINI PROJECT	07	Chennai.	III, IV Years	Project on ECE
2	Seminar on" Career Planning Diversity & Inclusion at	3 hours	Mr. Charles Kemy Paulose, Microsoft	1 & 11	Career Planning
	your work place/ surroundings"	Jilouis	Corporation	1 & 11	Carcer Flamming

S.No	Title of the Talk	No. Of Hours	Resource Person	Target Students	Remarks
------	----------------------	-----------------	-----------------	--------------------	---------

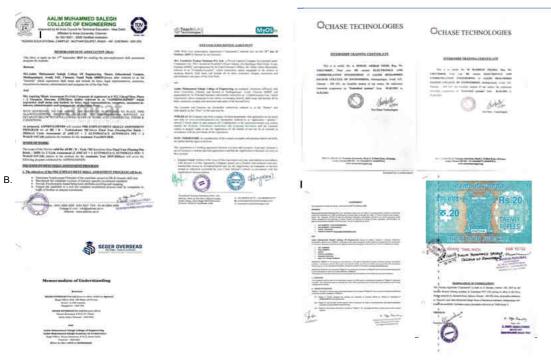
1	MINI PROJECT	07	Dr.N.R.SHANKER, Chennai.	III, IV Years	The Students did the Mini Project on ECE
2	Seminar on" Career Planning Diversity & Inclusion at your work place/ surroundings"	3 hours	Mr. Charles Kemy Paulose, Microsoft Corporation	I & II	Career Planni

C. Impact Analysis of Industry Institute interaction and actions taken thereof

Impact analysis is analysed based on the training report and feedback. Our Students have undergone Internship as part of the Industry Institution Interaction programme

SI No	Program Name	Company / Organization / Title	Name of the Student	Year
1	ELECTRONICS AND COMMUNICATION ENGINEERING	Chase Technologies	A.SUHAIL AHMAD NOOR	2020-2021
2	ELECTRONICS AND COMMUNICATION ENGINEERING	Chase Technologies	FARITHA BANU K	2020-2021
3	ELECTRONICS AND COMMUNICATION ENGINEERING	Chase Technologies	HAKKIM ARSATH M	2020-2021

A.



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

A.Industrials Training/ tours for students:

The industrial visits arranged for the students are listed in the tables A.1, A.2

Table A.1 List of Industrial Visits for CAY (2019-20)

S.No.	Date	Name of the Company Visited	Type of Industry	Objective	No. of Students
1	09/01/2019	Neyveli Lignite Corporation, Neyveli	Electrical Power Generation Industry	The objective of this visit was to deepen their understanding of how electricity is generated and transmitted.	61
2	16/02/2019	IIT Madras, Chennai	Academic Research Institute	The objective of this visit was to gain the knowledge of Research and Development in the field of Electronics and Communication Engineering	34

Table A.2 List of Industrial Visits for CAY (2018-19)

S.No.	Date	Name of the Company Visited	Type of Industry	Objective	No. of Students
1	12/03/2018	Neyveli Lignite Corporation, Neyveli	Electrical Power Generation Industry	The objective of this visit was to deepen their understanding of how electricity is generated and transmitted.	94

Table B.1 List of Internships for CAYm1 (2020-21)

S.No	Name of the Student	Industry	Type of Industry	Objective	No. of Students
1	Mr. S. Shaikabdulkadar	Shiash info solutions private Limited	Software	Software Testing	1
2	Mr. S. Shaikabdulkadar	The Entrepreneurship Network	Software	To Gain knowledge in Java Domain	1
3	Farheen Anjum B Faritha Banu K Hakkim Arsath M Haleema Humaira P M S Jauhar Fathima B Kreethika V Mohamedassain M Mohamed Fardeen.S	Chase Technologies	Software	To Gain knowledge in Robotics	8
4	B. Jauhar Fathima K. Faritha Banu	Python Machine Learning	Software	To Gain knowledge in Python	2

Table B.2 List of Internships for CAYm1 (2019-20)

S. No	Name of the Student	Industry	Type of Industry	Objective	No. of Student s	D
	Mohamed Yousuf. A.					\vdash
	Nandhini R	-				
	Sabiha Tabassum S	-				
	Suhail Ahmad Noor A	_				
	Yaasmeen I	-				
	S.Uma Devi	Chase Technologies				
	Tasneem Fathima.K	-		To Gain knowledg e in Robotics	10	
1	Ragavendran.M	_	Software	III Robotics	10	
	Shaik Muhammed Hedayathullah	-				
	Rasheed Thariq.M	_				
	Mohamed Yousuf.A.	-				

Table B.3 List of Internships for CAYm1 (2018-19)

S. No	Name of the Student	Industry	Type of Industry	Objective	No. of Students
	Mohammed Ithnan A				
	U				
	Mohammed Raghadan	_			
	Mohammed Sirajudeen.J				
	Mohammed Suhail R			To Gain knowledg e	
1	Mohamed Noorul Taslima	Chase Technologies	Software	in Robotics	8
	Mohamed	_			
	Shafiq.H.M				
•	Anish Fathima.I				
2	Praveen Kumar .G.S				

B. Impact Analysis of industrial training

1	All these Initiatives related to industry internship/summer training have positively impacted the learning culture of students.
2	MOUs, employers, alumni and parents who are working in core companies help in identifying the industries for industrial visits and in-plant training.
3	Assessment will be based on type of industry, objectives, number of students participated, relevant area of training, documented visit report.
4	Due to such training and placement initiatives, the employability and placement of prospective students is improved. Students have opportunity to interact with the technocrats.
5	The effectiveness of the industry training is assessed by the students' feedback.
6	Based on the analysis of student learning level and usefulness of the training, an Initiative/Action taken to sign more MOUs with the industry and tie up with the company for placements are undertaken with the help of Industry Institute Interaction Cell.

C.Student Feedback on Initiative

Feedback is obtained from the students regarding the training. Taking necessary actions with regard to the feedback given by the students who underwent trainin are used to analyze the impact of the industry collaboration with the department. The following feedback is obtained from the students

Fig: Scanned copy of Industry Internship feedback form

emesterIV Group		te of V	isit	6/02	12019
ame & Address of Company Visited					
ck the most appropriate option without any bias		ongly			trongly Agree
The visit was technology oriented		1	2 3	بل	7.5
The program was applicable to my future needs		1	2 3	4	5
Enhancement in skills		1	2 3	4	A.
The program was well placed within the allotted	time	1	2 3	4	5
The Resource/Industry person was a good comm	unicator	1	2 3	4	15
The material was presented in an organized man	ner	1	2 3	4	×,
I would be interested in attending such visits in I	uture	i	2 3	4	3
Any suggestions for improvement? Tirring should be too or more inclustry visit	change of	1.	Plea	e o	irroge

Scanned copy of Industry Visit feedback form

Feedback Form [Indu	istrial vis	it]					
Name of Student ABDUR RAGIB		-11					
Semester Group							
Name & Address of Company Visited							
Tick the most appropriate option without any bias:	Strongly Disagree			Strongly Agree			
The visit was technology oriented	1-	2	3	4 5			
2 The program was applicable to my future needs	. 1	2	3	J 5			
3 Enhancement in skills	1.	2	3	4 1			
4. The program was well placed within the allotted time		2	.3	4 3			
5. The Resource/Industry person was a good communicator	1	2	3	J/ 5			
6. The material was presented in an organized manner	1	2	3	4 8			
7. I would be interested in attending such visits in future	1	2	3	4 3			
8. Any suggestions for improvement?							
Timing should be changed. Please arrange two or more industry visit per semester.							
Please return this form to the coordinator. Signature of student							

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (120)

Total Marks 120.00

Define the Program specific outcomes

 $\textbf{3.1 Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) \\ \textbf{(20)}$

Total Marks 20.00

PSO1 To analyze, design and develop solutions by applying foundational concepts of electronics and communication engineering				
PSO2	To apply design principles and best practices for developing quality products for scientific and business applications.			
PSO3	To adapt to emerging information and communication technologies (ICT) to innovate ideas and solutions to existing/novel problems.			

3.1.1 Course Outcomes(COs)(SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses and made available as evidence, if asked) (5)

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

Institute Marks: 5.00

Course Name :		C2 04	Course Year :	2019-2020		
Course Name Statements						
C2 04.1	C2 04.1 Acquire the knowledge of mathematical description and representation of continuous and discrete time signals and systems.					
C2 04.2	Represent continuous-time periodic signals as a Fourier series.					
C2 04.3	Use the Fourier transform and the Laplace transform to analyze continuous time signals and systems.					
C2 04.4	Apply discrete-time Fourier transfo	Apply discrete-time Fourier transform and the z-transform to analyze discrete-time signals and systems				
C2 04.5 Determine the impulse response, step response and frequency response of both continuous-time and discrete-time systems.						

Course Name :		C2 14	Course Year :	2019-2020	
Course Name	Statements				
C2 14.1	Analyze various Current Mirror C	Circuits, Basic Concept o	f OP-AMP using BJT and FET and its Characteristi	CS	
C2 14.2	Design Linear and Non-Linear A	pplications of OP-AMPs.			
				i	

C2	14.1	Analyze various Current Mirror Circuits, Basic Concept of OP-AMP using BJT and FET and its Characteristics
C2	14.2	Design Linear and Non-Linear Applications of OP-AMPs.
C2	14.3	Design Applications using Analog Multiplier and PLL.
C2	14.4	Design analysis ADC and DAC using OP-AMPs.
C2	14.5	Construct various waveforms using OP-AMP circuits and Analyze Special Function ICs

Course Name :	C3 02	Course Year :	2020-2021

Course Name	Statements			
C3 02.1	Apply DFT for the analysis of digital signals & systems.			
C3 02.2	Design IIR filters.			
C3 02.3	Realize FIR digital filters for various specifications.			
C3 02.4	Illustrate various types of finite word length effects.			
C3 02.5	Summarize the architecture, addressing modes and instruction sets of DSP processors			

Course Na	ame:	C3 14	Course Year :	2020-2021
-----------	------	-------	---------------	-----------

Course Name	Statements
C3 14.1 Explain the characteristics of transmission lines and its losses.	
C3 14.2	Write about the standing wave ratio and input impedance in high frequency
C3 14.3	Transmission lines Analyze impedance matching by stubs using smith charts.
C3 14.4	Analyze the characteristics of TE and TM waves.
C3 14.5	Design a RF transceiver system for wireless communication

Course Name :	C4 04	Course Year :	2021-2022
Godico Italiio .	0.70.7	Godioo Todi .	

Course Name	Statements
C4 04.1	Apply the basic principles and evaluate antenna parameters
C4 04.2	Apply the basic principles and evaluate link power budgets
C4 04.3	Design the performance of various antennas.
C4 04.4	Assess the performance of various antennas.
C4 04.5	Design a microwave system given the application specifications

Course Name :	C4 10	Course Year :	2021-2022
---------------	-------	---------------	-----------

Course Name	Statements
C4 10.1	Analyze the satellite orbits.

C4 10.2	Analyze the earth segment.
C4 10.3	Analyze the space segment.
C4 10.4	Analyze the satellite Link design
C4 10.5	Design various satellite applications

3.1.2 CO-POmatrices of courses selected in 3.1.1(Six matrices to be mentioned; one per semester from 3rd to 8th semester) (5)

Institute Marks : 5.00

1 . course name : C204

Course	PO1		PO2		PO3		PO4		PO5		PO6		P07		PO8		PO9		PO10		PO11		PO12	
C204.1	3	~	3	~	2	~	2	~	1	~	1	~	-	~	- ,	~	-	~	-	~	1	~	1	~
C204.2	3	~	3	~	1	~	1	~	1	~	1	~	-	~	- ,	~	-	~	-	~	1	~	1	~
C204.3	3	~	3	~	2	~	2	~	1	~	1	~	-	~	- ,	~	-	~	-	~	1	~	1	~
C204.4	3	~	3	~	1	~	1	~	1	~	1	~	-	~	- ,	~	-	~	-	~	1	~	1	~
C204.5	3	~	3	~	2	~	2	~	1	~	1	~	-	~	- ,	~	-	~	-	~	1	~	1	~
Average	3.00		3.00		1.60		1.60		1.00		1.00		0.00		0.00		0.00		0.00		1.00		1.00	

2 . course name : C214

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C214.1	3	~	2	~	3	~	3	~	2	~	1	~	-	~	-	~	-	~	-	~	1	~	2	~
C214.2	3	~	2	~	3	~	3	~	2	~	1	~	-	~	-	~	-	~	-	~	1	~	2	~
C214.3	3	~	2	~	3	~	2	~	2	~	1	~	-	~	-	~	-	~	-	~	1	~	2	~
C214.4	3	~	2	~	3	~	2	~	2	~	1	~	-	~	-	~	-	~	-	~	1	~	2	~
C214.5	3	~	2	~	3	~	3	~	2	~	1	~	-	~	-	~	-	~	-	~	1	~	2	~
Average	3.00		2.00		3.00		2.60		2.00		1.00		0.00		0.00		0.00		0.00		1.00		2.00	

3 . course name : C302

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C302.1	3	~	3	~	2	~	2	~	2	~	1	~	-	~	-	~	-	~	-	~	1	~	1	~
C302.2	3	~	3	~	2	~	2	~	2	~	1	~	-	~	-	~	-	~	-	~	1	~	1	~
C302.3	3	~	3	~	2	~	2	~	1	~	1	~	-	~	-	~	-	~	-	~	1	~	1	~
C302.4	2	~	1	~	1	~	1	~	1	~	1	~	-	~	-	~	-	~	-	~	1	~	1	~
C302.5	3	~	2	~	2	~	1	~	1	~	1	~	-	~	-	~	-	~	-	~	1	~	1	~
Average	2.80		2.40		1.80		1.60		1.60		1.00		0.00		0.00		0.00		0.00		1.00		1.00	

4 . course name : C314

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C314.1	3	~	3	~	2	~	2	~	1	~	2	~	-	~	- \	-	-	~	2	~	1	~	2	~
C314.2	2	~	3	~	2	~	3	~	1	~	1	~	-	~	- \	-	-	~	2	~	1	~	2	~
C314.3	2	~	3	~	3	~	2	~	1	~	1	~	-	~	- `	-	-	~	2	~	1	~	1	~
C314.4	3	~	2	~	3	~	2	~	1	~	1	~	-	~	- \	-	-	~	2	~	1	~	1	~
C314.5	2	~	2	~	3	~	2	~	1	~	2	~	-	~	- \	-	-	~	2	~	1	~	2	~
Average	2.40		2.60		2.60		2.20		1.00		1.40		0.00		0.00		0.00		2.00		1.00		1.60	

5 . course name : C404

Course	PO1		PO2		РО3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C404.1	3	~	3	~	3	~	2	~	1	~	2	~	-	~	-	~	-	~	-	~	-	~	3	~
C404.2	3	~	3	~	3	~	3	~	2	~	-	~	-	~	-	~	-	~	-	~	-	~	-	~
C404.3	3	~	3	~	3	~	3	~	2	~	-	~	-	~	-	~	-	~	-	~	-	~	1	~
C404.4	3	~	3	~	3	~	3	~	3	~	-	~	-	~	-	~	2	~	2	~	2	~	1	~
C404.5	3	~	3	~	3	~	2	~	3	~	-	~	-	~	-	~	2	~	1	~	2	~	2	~
Average	3.00		3.00		3.00		2.60		2.20		0.40		0.00		0.00		0.80		0.60		0.80		1.40	

6 . course name : C410

Course	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8		PO9		PO10		PO11		PO12	
C410.1	3	~	3	~	2	~	2	~	1	~	2	~	1	~	-	~	-	~	-	~	1	~	1	~
C410.2	3	~	3	~	2	~	2	~	1	~	2	~	1	~	-	~	-	~	-	~	1	~	1	~
C410.3	3	~	3	~	2	~	2	~	1	~	2	~	1	~	-	~	-	~	-	~	1	~	1	~
C410.4	3	~	3	~	2	~	2	~	1	~	2	~	1	~	-	~	-	~	-	~	1	~	1	~
C410.5	3	~	3	~	2	~	2	~	1	~	2	~	1	~	-	~	-	~	-	~	1	~	1	~
Average	3.00		3.00		2.00		2.00		1.00		2.00		1.00		0.00		0.00		0.00		1.00		1.00	

1 . Course Name : C204

Course	PSO1		PSO2	2	PSO3	3
C204.1	2	~	2	~	1	~
C204.2	2	~	2	~	1	~
C204.3	2	~	2	~	1	~
C204.4	2	~	2	~	1	~
C204.5	2	~	2	~	1	~
Average	2.00		2.00		1.00	

2 . Course Name : C214

Course	PSO1		PSO2	2	PSO3	,
C214.1	3	~	1	~	1	~
C214.2	3	~	3	~	1	~
C214.3	3	~	2	~	1	~
C214.4	3	~	2	~	1	~
C214.5	3	~	2	~	1	~
Average	3.00		2.00		1.00	

3 . Course Name : C302

Course	PSO1		PSO2	!	PSO3	
C302.1	2	~	2	~	2	~
C302.2	2	~	2	~	2	~
C302.3	2	~	2	~	2	~
C302.4	2	~	2	~	2	~
C302.5	2	~	2	~	2	~
Average	2.00		2.00		2.00	

4 . Course Name : C314

Course	PSO1		PSO2	!	PSO3	;
C314.1	2	~	2	~	2	~
C314.2	2	~	2	~	2	~
C314.3	2	~	2	~	2	~
C314.4	2	~	2	~	2	~
C314.5	2	~	2	~	2	~
Average	2.00		2.00		2.00	

5 . Course Name : C404

Course	PSO1		PSO2	!	PSO3	}
C404.1	2	~	3	~	2	~
C404.2	2	~	2	~	2	~
C404.3	1	~	2	~	3	~
C404.4	2	~	1	~	2	~
C404.5	1	~	3	~	1	~
Average	1.60		2.20		2.00	

6 . Course Name : C410

Course	PSO1	PSO2	PSO3
Course	PSO1	PSO2	PS03

Average	1.00		2.00		2.00	
C410.5	1	~	2	~	2	~
C410.4	1	~	2	~	2	~
C410.3	1	~	2	~	2	~
C410.2	1	~	2	~	2	~
C410.1	1	~	2	~	2	~

3.1.3 - A Program level Course-PO matrix of all courses INCLUDING first year courses (10)

Institute Marks: 10.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	0	1.8	1.2	1.6	1.2	1	1.4	1.7	3	3	1	2.6
C102	2.5	1.8	0.8	2.5	0	1.8	1.1	0	0.8	0.8	1.8	1.8
C103	2.4	2	1.8	1.8	1.3	1.8	1.6	1.1	1.1	1.1	0	1.5
C104	2.7	1.8	2	2	0.9	1.8	1.5	0.9	1.4	1.3	0.9	2
C105	2.7	2.7	2.7	0.9	1.3	0	0	0	0	0	0	0
C106	2.9	2.9	1.9	1	2.5	1.9	1	0	0	0	0	2.9
C107	3	3	3	3	3	1	1	0	2	2	3	0
C108	2.7	2.7	2.2	2	2	2.6	2.4	1.2	1.6	1.8	1.4	2.2
C109	0	1.2	1	1.6	1.2	1	1.2	1.8	3	3	1	2.8
C110	2.8	2.8	2.4	2.4	1	1.4	1	1	1	1.8	1.8	2.4
C111	3	2.6	2.6	2.6	2.6	2.8	2.2	1.2	1.6	1.6	1.2	3
C112	3	3	2	2	2	0	2	2	0	0	0	2
C113	2.6	2	2.2	2.6	2.2	2	2	1.2	1.6	2.2	2	3
C114	2.2	2.6	2.2	2.6	1.4	2.2	2.2	1.8	2.2	1.4	2	2.2
C115	3	3	3	3	2.2	3	1.8	1	3	3	1	3
C116	3	3	3	3	2.4	3	2.2	1.6	3	3	1	3
C201	3	3	2	2	1	0	0	0	0	0	1	2
C202	3	2.8	2.8	3	3	1.8	0	0	0	0	1.8	1.8
C203	3	2.6	2.2	1.8	1	0.2	0	0	0	0	0.2	1
C204	3	3	1.6	1.6	1	1	0	0	0	0	1	1
C205	1.8	1.2	2.6	0.6	1.2	0.8	0	0	0	0	0.2	0.2
C206	1.8	1.8	2.8	0.4	0.4	0.4	0	0	0	0	1	1.6
C207	3	2.4	1.8	1.8	1.2	1	0.8	0.4	0.4	0.4	1.2	2.4
C208	3	2.6	2.4	1.6	1.2	0.6	0.8	0.4	0.4	0.4	1.2	1.8
C209	0	0	1	1	1	2	0	2	2	2	1	0
C210	3	3	2	2	2	0	0	0	0	0	1	2
C211	2.6	2	2.8	3	1.8	1	0	0	0	0	1	2
C212	2.6	2	1.6	1.6	1	1	0	0	0	0	1	1
C213	2.6	2.2	1.6	1.6	0.4	1	0	0	0	0	0.8	1.6
C214	3	2	3	2.6	2	0.8	0	0	0	0	0.8	2
C215	3	3	0	2	0	1	1	2	0	0	1	2
C216	2.4	2.2	2.6	1.4	1	1	0.8	0.4	0.4	0.4	1.2	2.2
C217	3	2	2.2	1.2	1.2	1.2	0.8	0.4	0.4	0.4	1.8	2.6
C301	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C302	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C303	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C304	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C305	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2

C306	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C307	3	2	2.6	1	1.8	0.4	0.8	0.4	0.4	0.4	0.6	2.6
C308	3	2.6	2.8	1.8	2.4	0.4	0.8	0.4	0.4	0.4	0.6	2.4
C309	2.4	2.6	2.8	2.2	2.4	1.6	2	1.4	0.6	2.2	1.2	3
C310	2.6	2.6	1.6	1.6	1.6	0.4	0	0	0	0	0	0.8
C311	3	2	3	2.4	2	0.6	0	0	0	0.2	0.8	1.6
C312	3	2	2.2	1	0.6	0	0.6	0	0	0	0	2
C313	1	0	0	0	0	0	0	2	2.8	2.2	3	2
C314	1.6	1.8	1.6	1	1.8	0.8	0	0	1.2	1	1.2	1.4
C315	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C316	2.4	2.6	2.4	2.2	2.4	1.6	2	0.4	0.4	2.2	1.2	3
C317	2	1	1.8	1.6	1.6	0.4	0.8	0.4	0.4	0.4	0.6	1.6
C318	0	0	0	0	0	0	1.3	1.3	2	2	0	1
C319	0	0	0	0	0	0	1	1.3	2	3	1.3	1
C401	3	3	2.4	2	1	0	0	0	0	0	1	2
C402	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C403	1.4	1.8	1.6	1	1.4	0.4	0	0	0.8	0.6	0.8	1.4
C404	1.4	1.8	1.6	1	1.4	0.4	0	0	0.8	0.6	0.8	1.4
C405	3	2.8	2.2	1.8	1.6	1.2	1.2	0.4	0.2	0.2	0.4	0.4
C406	2	2	2	1.6	1.6	1	0.2	0	0.2	1.6	0	1.2
C407	1	2.3	2.33	2.3	3	1	0	0	1.3	1.3	1.3	0
C408	3	2	2.6	2	2.3	1.6	1	0	0	2	2	1.6
C409	0	0	0.4	0.4	0	2	1.6	3	0.6	0.4	0.8	2
C410	3	3	2	2	1	2	1	0	0	0	1	1
C411	3	2.6	2.8	2	2	1.2	1.4	2	2.2	2.2	2.2	2.4

Course	PSO1	PSO2	PSO3
C101	2.4	2.8	2
C102	2.5	2.5	1.6
C103	2.1	1	1
C104	2.7	2.7	2
C105	2.5	0.9	0.8
C106	1.9	2.9	1.4
C107	3	3	1
C108	2	2	1
C109	2.8	1.8	2
C110	1	2	1
C111	2	2	1
C112	3	2	2
C113	1.4	2	1
C114	3	1.8	1
C115	2.6	2.2	1.2
C116	2.8	2.6	2
C201	2	2	1
C202	3	3	1.2
C203	3	2.6	2.4
C204	2	2	1
	<u> </u>	=	· .

62016 2 1	/28/23, 2:34	PIVI	Print	
CADT 24 3 2 C200 24 3 2 C200 1 1 1 C210 2 2 1 C211 3 26 26 C212 1 2 2 C213 2 2 0 C214 3 2 1 C215 1 2 1 C216 3 2 1 C217 3 24 2 C316 3 24 1 C317 3 24 2 C301 2 2 2 C302 2 2 2 C303 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C307 3 12 2 C308 2 2	C205	2	2.6	1.2
C208 2.4 3 2 C209 1 1 1 C210 2 2 1 C211 3 2.6 2.6 C212 1 2 2 C218 2.2 2 0.8 C214 3 2 1 C216 1 2 1 C216 3 2.4 2 C217 3 2.4 2 C307 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C307 3 12 0 C308 2 2 2 C309 2.4 3 2 C310 1.6 <td< td=""><td>C206</td><td>3</td><td>1.8</td><td>1</td></td<>	C206	3	1.8	1
C000 1 1 1 1 C210 2 2 1 C211 3 2.6 2.6 C212 1 2 2 C213 2.2 2 0.8 C214 3 2 1 C215 1 2 1 C216 3 2.4 2 C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C3030 2 2 2 C3030 2 2 2 C3030 2 2 2 C3030 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C307 3 1.2 0 C308 2.8 3 2 C309	C207	2.4	3	2
C210 2 2 1 C211 3 26 26 C212 1 2 2 C213 2 0 0 C214 3 2 1 C215 1 2 1 C216 3 2.4 2 C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C303 2 2 2 C303 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C307 3 1.2 3 C308 2.8 3 2 C309 2.4 3 2 C301 1.6 2 C311 3 1.4 1 <td>C208</td> <td>2.4</td> <td>3</td> <td>2</td>	C208	2.4	3	2
C211 3 2.6 2.6 C212 1 2 2 C214 3 2 1 C216 1 2 1 C216 1 2 1 C217 3 2.4 2 C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C303 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C307 3 1.2 0.8 C308 2.8 3 2 C309 2.4 3 2 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4	C209	1	1	1
C212 1 2 2 0.8 C214 3 2 1 2	C210	2	2	1
C213 22 2 0.8 C216 1 2 1 C216 1 2 1 C216 1 2 1 C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C304 2 2 2 C306 2 2 2 C307 3 1.2 0.8 C308 2 2 2 C307 3 1.2 0.8 C308 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.0 C312 3 1.6 1.1 C312 3 1.6 1.1 C313 2.4 2.2 2 C314 <t< td=""><td>C211</td><td>3</td><td>2.6</td><td>2.6</td></t<>	C211	3	2.6	2.6
C214 3 2 1 C216 1 2 1 C216 3 24 2 C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C307 3 1.2 0.8 C308 2.8 3 2 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2 2 C314 0.8 1.4 1.4 C315 2 2 2 C314 0.8 1.4 1.4 C316	C212	1	2	2
C215 1 2 1 C216 3 2.4 2 C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C306 2 2 2 C307 3 1.2 0.8 C308 2.8 3 2 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2 2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2 2 C317 1.6	C213	2.2	2	0.8
C216 3 2.4 2 C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C304 2 2 2 C306 2 2 2 C307 3 1.2 0.8 C308 2.8 3 2 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.8 C313 2.4 2 2 C314 0.8 1.4 1.4 C315 2 2 2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 1	C214	3	2	1
C217 3 2.4 1.4 C301 2 2 2 C302 2 2 2 C303 2 2 2 C304 2 2 2 C305 2 2 2 C306 2 2 2 C307 3 1.2 0.8 C308 2.8 3 2 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.8 C313 2.4 2 2 C314 0.8 1.4 1.4 C315 2 2 2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2 1 C317 1.6 2 1 C318 <	C215	1	2	1
C301 2	C216	3	2.4	2
C302 2	C217	3	2.4	1.4
C303 2 2 2 2 C304 2 2 2 2 C305 2 2 2 2 C306 2 2 2 2 C307 3 1.2 0.8 3 2 C308 2.8 3 2 <td>C301</td> <td>2</td> <td>2</td> <td>2</td>	C301	2	2	2
C304 2 2 2 C306 2 2 2 C307 3 12 0.8 C308 2.8 3 2 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 1 1 C312 3 1.6 1.6 C313 2.4 2 2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 1 C318 2 1 1 1 C319 0.8 1 2 2 C401 2 1 2 2 C402 2 2 2 C403 1 1	C302	2	2	2
C305 2	C303	2	2	2
C306 2 2 2 C307 3 1.2 0.8 C308 2.8 3 2 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1 2 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406	C304	2	2	2
C307 3 1,2 0,8 C308 2.8 3 2 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6	C305	2	2	2
C308 2.8 3 2.4 C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C306	2	2	2
C309 2.4 3 2.4 C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C307	3	1.2	0.8
C310 1.6 2.6 1.4 C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C308	2.8	3	2
C311 3 2.4 1 C312 3 1.6 1.6 C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C309	2.4	3	2.4
C312 3 1.6 1.6 C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C310	1.6	2.6	1.4
C313 2.4 2.2 2.2 C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C311	3	2.4	1
C314 0.8 1.4 1.4 C315 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C312	3	1.6	1.6
C316 2 2 2 C316 2.4 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C313	2.4	2.2	2.2
C316 2.4 2 C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C314	0.8	1.4	1.4
C317 1.6 2 1 C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C315	2	2	2
C318 2 1 1 C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C316	2.4	2.4	2
C319 0.8 1 2 C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C317	1.6	2	1
C401 2 1.2 1 C402 2 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C318	2	1	1
C402 2 2 C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C319	0.8	1	2
C403 1 1.6 1.8 C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C401	2	1.2	1
C404 1 1.6 1.8 C405 2 2 2 C406 2 2 2 C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C402	2	2	2
C405 2 C406 2 C407 2 C408 2 C409 0.6 C410 1 2 2 2 2 2 2 2 2 2 2	C403	1	1.6	1.8
C406 2 2 C407 2 2.3 C408 2 1.3 C409 0.6 0.6 C410 1 2 2 2	C404	1	1.6	1.8
C407 2 2.3 1.3 C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C405	2	2	2
C408 2 1.3 1 C409 0.6 0.6 0.6 C410 1 2 2	C406	2	2	2
C409 0.6 C410 1 2 2	C407	2	2.3	1.3
C410 1 2 2	C408	2	1.3	1
	C409	0.6	0.6	0.6
C411 3 2.8	C410	1	2	2
	C411	3	2.8	2.8

 $\textbf{3.2 Attainment of Course Outcomes} \ (50)$

Total Marks

 $\textbf{3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)$

Institute Marks:

A. Internal Assessment / Exams:

S.No	Process of Internal Assessment
1	Adhering to the University and Institution Academic Calendar, three internal assessments will be scheduled in a semester. Internal Assessment - I covers 30% of the syllabus, Internal Assessment - II covers 60% of the syllabus and Internal Assessment - III covers 100% of the syllabus. The Internal Assessments will be conducted by the Department Exam Cell.
2	The course instructor will prepare the question paper for their respective subject with reference to the University specified pattern and will submit to the exam cell.
3	The course instructor prepares the answer key for each Internal Assessments and evaluates the performance of students. The internal marks are awarded based on the student's performance in internal assessments.
4	The students securing less than 60% are identified and instructed to attend the special classes.

Table 3.2.1 a. Internal Assesment process

	AALIM MUHAMMED SALEGH COLLEGE ENGINEERING	OF
	DEPARTMENT OF ELECTRONICS AND COMMUNICATION	DATE: 21/05/2022 YEAR/SEM : III/VI
fa ?	SUB CODE : EC8651 SUB NAME : TRANSMISSION LINES AND R SYSTEMS	TIME: 9.10A.M-10.40A.M MAXMARKS:50
	INTERNAL EXAM - II REGULATION -2017	

PART-A (5*2=10 MARKS)

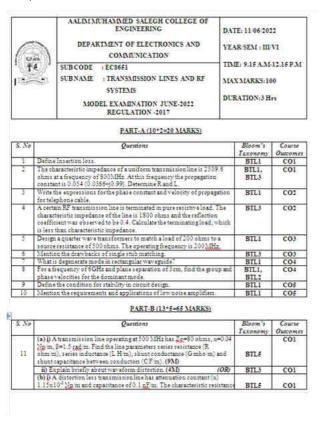
S. No	Questions	Bloom's Taxonomy	Course Outcomes
1	What is principal wave?	BTL1	CO4
2	Give applications of Eight wave line.	BTL2	CO2
3	Write applications of smith chart.	BTL2	CO3
4	Define SWR.	BTL1	CO2
- 5	Distinguish between single stub and double stub matching.	BTL2	CO3

PART B (7+7+5+7=26 MARKS)

S. No	Questions	Bloom's Taxonomy	Course Outcomes
6	A 30m long lossless transmission line with Z_0 =50 Ω operating at 2MHz is terminated with a load Z_L =60+j40 Ω . If u=0.6c (c is velocity of light, u is phase velocity) on the line, find (a) The refection co-efficient $\Gamma(b)$ The standing wave ratio S (c) The input impedance Z_{∞} . (7M)		CO2
7	Derive the expression that permit easy measurements of power flow on a line of negligible losses. (7M)	BTL1	CO2
8	Design a quarter wave transformers to match a load of 200Ω to a source resistance of 500Ω . Operating frequency is $200 \text{ MHz}_{*}(5\text{M})$	BTL5	CO2
9	Derive voltage and current for dissipation less line. (7M)	BTL1	CO2

PART-C (10+4=14 MARKS)

S. No	Questions	Bloom's Taxonomy	Course Outcomes
9	Derive field components of Transverse Electric Wave between two parallel planes. (10M)	BTL1	CO4
10	Discuss the operation of quarter wave transformer and mention its applications. $(4M)$	BTL2	CO3



11	\(\sum_L C)=50ohms. Find the sessistance, industance, conductance and capacitance per meter of the line. (6M)		
	A cable has been uniformly loaded by an industance such that S. Assuming leakage conductance to be nil, deduce an expression for attenuation and phase constant without neglecting R. (7M)	BTL3	coı
	(a) i) Briefly explain on (1) Standing Waves (2) Standing Wave Ratio (3) Relation between Standing Wave Ratio and Reflection Coefficient (13M) (OR)	BTL3	co:
12	b) i) Describe an experimental set up for the determination of VSWR of an RF transmission. (7M)	BTL3	co:
	 ii) A radio frequency line with Zg=70 ohms is terminated by Zg=115- 180 ohms at 1,=2.5 cm. Find the VSWR and the maximum and minimum line impedances. (6M) 	BTL5	co
	a) () Explain single stub matching on a transmission line and derive the expressions for the location and length of the stub used for matching on a line. (13M) (OR)	BTL3	COS
13.	b) A load (50 - 100) chang is connected across a 50 ohms line. Design a short currented stub to provide matching between the two at a signal frequency of 30 MHz using smith chart. (13M)	BTL3	cos
	a) Using Bessel function derive the TE wave components in circular waveguides (13M) (OR)	BILI	CO
14	b) For a frequency of 10GHr and plane separation of 5cm in air, find the cutoff frequency, cutoff wavelength, guided wavelength, propagation constant, velocity of propagation, characteristic wave impedance for TE and TM wave, group velocity and phase velocity of the wave, (13M)	BTL3	co
15	Derive the equation for power gain, available power gain and transducer power gain (13M) (OR)	BTL3	COS
	b) Explain about high electron mobility transisters (HEMTs) (13M)	BTL5	CO

PART - C (15*1=15 MARKS)

	a) For a load of Z ₁ , Z ₂ = 0.5-(1). 2 design a double of stub tuner making the distance between the stubs 30.5. Specify the stub length and distance from the load to first stub. The stubs are short-distuited, verify using smith chart. (1830)	BTL3	COS
16	(a) A rectangular sir-filled copper surceguids with dimension 0.9 inch 0.4 inch cors rection and 12 inch length is operated at 9.2 GHz with dominant mode. Find out-off frequency, out-off wavelength, guided wavelength, proposed velocity, phase swhortly and characteristic wave impedance of a waveguide. (10 M)	BILS	CO1
	ii) Derive the expressions for input impedence of open and short circuited lines. (SM)	BTL3	CO2

B. Laboratory Exam Evaluation:

1. The laboratory course instructors will award internal marks, based on student's attendance, student's involvement in doing the experiments and timely submission of observation and records.

C. Seminar Work Evaluation:

S.No	Process for Seminar Work Evaluation
1 I	As per the curriculum, Technical Seminar course is conducted for VI semester students to assess their technical, presentation and communication skills.
2	The course instructor ensures that the students select topics on recent trends and technologies.
3	The course instructor follows the rubrics set by the Department for evaluation.

Table 3.2. 1 b Process used for Seminar evaluation

Rubrics of evaluation for student technical seminars:

Table 3.2.1.3 Seminar Assessment Rubrics

S .No	RUBRICS	MAX MARKS: 100
1	Topic and Background Survey	20
2	Slides and Report	30
3	Presentation Skills	30
4	Interaction	20

Table 3.2.1.c Seminar Assessment for Rubrics

D. Project Work Evaluation:

S.No	Project Evaluation
1	The project coordinator prepares the schedule for project reviews adhering to the Department academic calendar and displayed in notice board.
2	The abstract of the project work will be submitted by the students to the project supervisor for scrutiny.
3	Project batches are formed as per the instruction given by the project coordinator.
4	The project batches are allotted to the faculty members based on their specialization and competency skills.
5	The faculty members will act as project supervisor.
6	The project supervisors will monitor their student's progress on regular basis.
7	The project coordinator conducts periodic review in the presence of project supervisor to know the status of the project work and follow the rubrics to assess the student's performance.

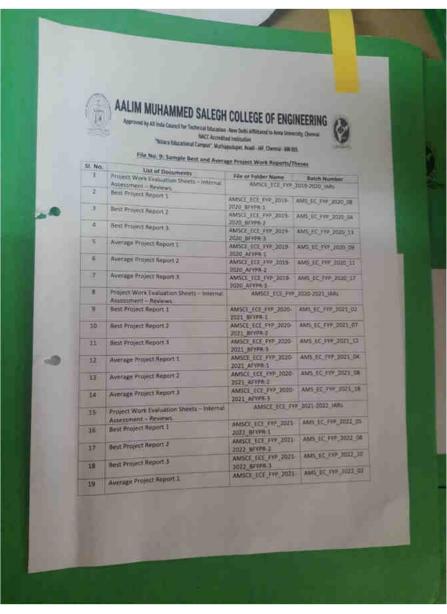
Project Work Viva-Voce Examination is conducted by the panel of examiners deputed by the University.
 The students are encouraged to present their work in National and International Conferences and to publish in the reputed journals.

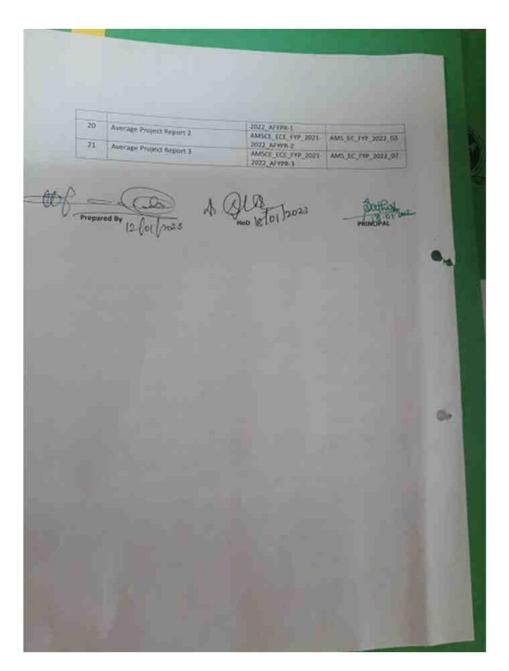
Table 3.2. 1 d. Process for Project work evaluation

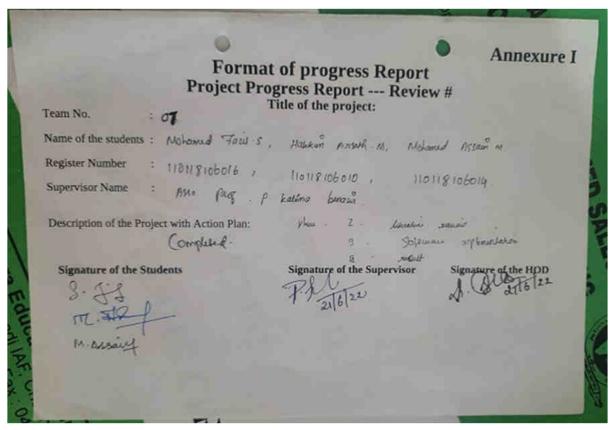
Rubrics of evaluation for Project Work Evaluation:

S.No	Agenda	Assessment	Review Assessment Weightage	Marks Distribution	Overall Marks
1	Review-1	R1 – 30% of the project work should have been completed.	100	Average (R1:R3) =	
2	Review-2	R2 – 60% of the project work should have been completed.	100	100 marks normalized to 20 marks	
3	Review-3 / Model	R3 - 100% of the project work should have been completed.	100		100 Marks
4	Project Work Viva- Voce Examination	AUR	100	100 marks normalized to 80 marks	

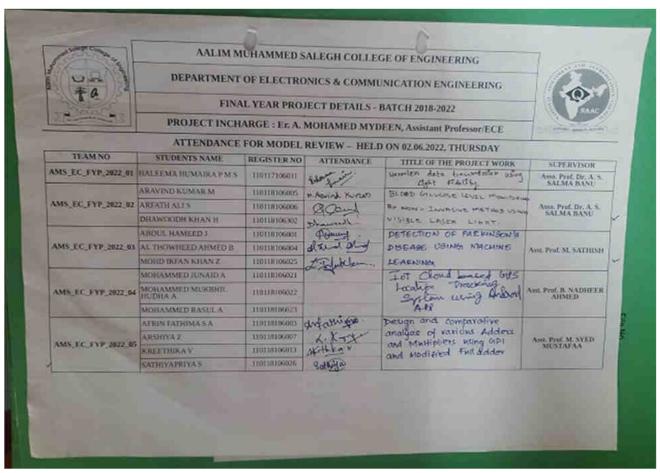
Table 3.2.1. e. Project Assessment Rubrics











	BHASHEETH R	110178106301	The		T
MS_EC_FYP_2022_06	FARHAN MOHAMMED B	110118106303	Luly 00	Dough of Patricular of 1x2	Aug. Prof. A. DURA
	SUNIL KUMAR C.H	110113106306	Lillian	Design of Rebrief Of 1×2 Array by publications	BABE
	HAKKIM ARSATH M	110118106010	reste -	Real time provinces	
AMS_EC_FYP_2022_07	MOHAMEDASSAIN M	110118106014	II LINE	pataction using meline	AMI, POUL P. KALIMA BENAZIR
	MORAMED FAZIL 5	110118106016	C 121	Jaming	DECAZIA
AMS_EC_FYP_2022_08	MOHAMED HAJA PARVEZ 5	110118106017	1 marsh	A content based Mesmore	Ant. Prof. A.
AMS_11. F 1F 2022 90	SHAIK ABBUL KADER S H	119118106028	-kadel-	Motheraldian manetoric	MOHAMED MYDEEN
	FARHEEN ANIUM B	110118106008	a badantegor.	TOT BASED CONTROLLENG AND	
AMS_EC_FYP_2022_0	FARITHA BANUK	110338106209	Antithe	MEGITANO THE POWER	And Prof. S. JONE ROSY
8	SAURAR FATHIMA B:	110138306032	guinest .	CONSUMPTION OF HOME APPLIANCES	
	MOHAMED FARDELN S	130118196012	Hart	DEEP LEARNING BASED	Aust. Prof. M. T. M.
AMS_EC_FYP_2022_1	0 MCHAMMED THABRAZ)	110118106024	The state of the s	FRUIT DETECTION AND	KADER SARIB MARICAR
-	MURALI KRISHNA	110118100005	May	FRESH NESS MRADININ	
	MOHAMMED AAQIBA	110118100020		CONTEXTS BASED SMAET	Aug Prof. A.
AMS_EC_FYP_2022_	11 SYED MORAMMED S	110118109329		MOHAMED MYDEEN	
	THABEEB MOHAMED BURY	-	H BONKS	Real time foce mask	
AMS_EC_FYP_2022_	MOHAMED SAFEES P	110118106019	P. Cha	detection wing suplement	PRE DE N. H. SHANKER
	PROJECT INCHARGE	n	Bear 100 16 2	Paul Carl	
				2	

 $\textbf{3.2.2 Record the attainment of Course Outcome of all courses with respect to set attainment levels } \\ (40)$

Institute Marks: 40.00

1. List of Assessment Processes:

 ${\bf COs}$ are formulated for each course in the curriculum by respective course instructor.

To evaluate the attainment of COs, the data is gathered from the following assessments.

S.No	Assessment Process
1	Student's performance in internal assessments.
2	Student's performance in the university examination.
3	To assess the course outcomes, direct assessment tools and indirect assessment tools are used.

Table 3.2.2 a. Attainment of COs

A. Direct Assessment Tools: The assessment tools for computing the course outcomes are explained below.

S.No	Direct Assesement tool	Course outcome
1	Internal Examinations	Internal examination is conducted within 3-4 weeks after the start of teaching of each semester. The syllabus of the exam conducted covers around 30-40% of the total course content. Totally 3 internal exams are conducted in a semester
2		End semester examination is conducted at the end of semester. Complete syllabus is covered in this examination. Major Weightage of marks is given to this component.
3	Practical Courses	In these courses, continuous evaluation is done through viva-voce and report submission.
4	Project Work	Project work is evaluated by taking reviews at regular intervals. The project guides and project coordinators follow rubrics for evaluation. The average of all the reviews will be awarded as their internal marks.

Table 3.2.2 b Weightage distribution of Direct Assessment Components

S.No	Course Type	Assessment Methods	Weightage
1		Internal Exams	20 M
1	Theory	End Semester Exam	80 M
		Internal Assessment	20 M
2	Lab	End Semester Exam	80 M
		Internal Assessment	20 M
3	Project	External Viva Voce	80 M

Table 3.2.2 c. Weightage distribution of Direct Assessment Components

B. Indirect Assessment tool

S.No	Indirect Assessment	Process
1	Assignments	3 Assignments are given to students and their performance is evaluated.
2	Seminars	Students should prepare and present Seminar in each semester
3	The Quality / Relevance of Assessment processes and tools are used	To evaluate the attainment of COs, following tools are used .

Table 3.2.2 d Indirect Assesment

Direct Assesment tool

a. Internal Evaluation:

S.No	Evalaution Process
1	Theory Courses (Internal Examination)
2	Lab courses (Continuous Evaluation)
3	Seminar (Reviews)
4	Project work (Reviews)

Table 3.2.2 e Internal evaluation

b. University Exams:

S.No	Process
1	Theory Courses
2	Lab Courses
3	Project work (Viva-Voce)

Table 3.2.2 f . University exam

S.No	Indirect Assessment tool
1	Assignments
2	Seminars

Table 3.2.2 g . Indirect Assessment

S. No	Name of the Assessment Tool		Weightage	Frequency
	Direct Assessment Tools	Internal Exams		
1	Direct Assessment Tools	End Semester Exam	80%	End of Semester
2	Indirect	Assignments and Seminars	20%	End of Semester
_	Assessment Tools	Assignments and Seminary	2070	Line of Semester

Table 3.2.2 h . Assesment tool

C. Course Outcome Attainment:

Evaluation of internal and external examination marks for setting Course attainment levels for all courses.

S.No	Semester	Internal	External	Total Marks
Academic Year	I	20	20	100
Academic year	II	20	80	100

Table 3.2.2 i. Internal and External evalutaion process

Step 1 : Direct Assessment

Measurement of Course attainment levels for Internal Examinations:

Attainment Level 1 If the percentage of course outcome attainment is less than 30%.	
Attainment Level 2	If the percentage of course outcome attainment is in between 30% to 59.99% (inclusive).
Attainment Level 3	If the percentage of course outcome attainment is above 60 % (inclusive).

Measurement of Course attainment levels for External Examinations:

Attainment Level 1	If the percentage of course outcome attainment is less than 35%.
Attainment Level 2	If the percentage of course outcome attainment is in between % to 59.99% (inclusive).
Attainment Level 3	If the percentage of course outcome attainment is above 60 % (inclusive).

Overall Direct Assessment including Internal and University examinations:

Weightage to University Examinations	80%
Weightage to Internal Examinations	20%

Step 2: Indirect Assessment

Tools:

- 1. Assignments
- 2. Seminars
- 3. Process: Average of 3 assignment marks and seminar is taken for evaluation.

Step 3: Overall Course Outcome Attainment including Direct and Indirect Survey:

Attainment of Course outcomes = 80% of Direct Assessment + 20% of Indirect Assessment

CO Attainment of a Course: Linear Integrated Circuits (EC8453)

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING	
CHENNAI - 600 055	

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Course Code: 214

Year / Sem : II / IV

Total No. of Students : 34

Name of the Faculty: B. Nadheer Ahmed Subject Code and Name: EC8453 – Linear Integrated Circuits

		Test Dates													
S.No	Reg No	Name of the Students	IA1	IA2	IA3	A1	A2	A3	S	AUR	CES1	CES2	CES3	CES4	CES5
1	110118106001	ABDUL HAMEED J	83	90	98	8	10	8	7	A	2	3	2	3	3
2	110118106003	AFRIN FATHIMA S A	90	100	100	7	8	9	10	A +	2	2	2	3	2
3	110118106004	AL THOWHEED AHMED B	70	96	95	8	8	7	7	B+	3	3	3	2	2
4	110118106005	ARAVIND KUMAR M	100	100	100	7	8	8	10	A +	2	2	2	3	2
5	110118106006	ARFATH ALI S	72	100	99	10	7	8	9	A	3	2	2	2	2
6	110118106007	ARSHIYA Z	100	92	99	8	9	10	7	A +	3	2	2	2	2
7	110118106008	FARHEEN ANJUM B	73	80	98	10	10	9	7	B+	2	3	2	2	3
8	110118106009	FARITHA BANU K	96	100	100	9	9	7	8	A +	3	2	2	3	2
9	110118106010	HAKKIM ARSATH M	74	70	95	7	9	9	10	В	2	3	2	2	2
10	110118106011	HALEEMA HUMAIRA P M S	78	76	99	7	10	8	8	B+	3	2	2	2	3
11	110118106012	JAUHAR FATHIMA B	100	100	100	7	7	8	8	A +	2	3	3	3	3
12	110118106013	KREETHIKA V	100	100	100	8	8	8	9	A +	2	2	2	3	2
13	110118106014	MOHAMED ASSAIN M	70	76	95	8	8	7	9	B+	3	2	3	3	3
14	110118106015	MOHAMED FARDEEN S	70	82	99	10	10	10	7	B+	3	3	3	2	2
15	110118106016	MOHAMED FAZIL S	70	92	98	9	8	8	9	B+	3	3	3	2	3
16	110118106017	MOHAMED HAJA PARVEZ S	100	100	100	9	10	10	8	A +	3	3	2	2	2
17	110118106019	MOHAMED SAFEEK P	70	70	95	9	8	10	7	В	2	2	3	2	2
18	110118106020	MOHAMMED AAQIB A	85	100	98	10	10	7	10	A	3	2	2	3	2
19	110118106021	MOHAMMED JUNAID A	70	74	96	8	7	10	10	В	2	2	2	2	2
20	110118106022	MOHAMMED MUKBHIL HUDHA A	100	96	99	8	8	10	7	A +	2	3	3	3	3
21	110118106023	MOHAMMED RASULA	70	72	98	8	10	8	9	B+	2	2	3	2	3
22	110118106024	MOHAMMED THABRAZ J	70	98	100	10	8	10	7	A	2	3	2	3	3
23	110118106025	MOHD IRFAN KHAN Z	100	100	100	8	7	7	10	A +	2	2	2	3	3
24	110118106026	SATHIYAPRIYA S	100	100	100	8	10	8	10	A +	3	2	3	2	3
25	110118106027	SHABEER B	70	76	95	9	10	7	10	В	3	2	3	3	3

26	110118106028	SHAIK ABDUL KADER S H	70	100	100	8	8	7	7	A	3	2	3	2	3
27	110118106029	SYED MOHAMMED S	100	70	99	7	7	8	8	A	3	2	3	3	2
28	110118106030	THABEEB MOHAMED BURVEZ M	77	94	96	9	9	7	7	B+	3	2	2	2	3
29	110118106301	BHASHEETH R	70	70	97	8	9	7	9	В	3	2	2	2	2
30	110118106302	DHAWOODH KHAN H	100	100	100	7	7	8	7	A +	3	2	3	2	3
31	110118106303	FARHAN MOHAMMED B	70	90	95	9	9	8	9	B+	3	3	2	3	3
32	110118106304 MOHAMMED ISMAIL.S		70	70	96	9	10	8	9	В	2	2	3	2	2
33	110118106305	MURALI KRISHNA	70	80	97	8	7	10	9	В	2	3	3	3	3
34	110118106306	SUNIL KUMAR C H	70	90	99	9	9	8	9	B+	3	2	3	3	3
	No of students Appeared		34	34	34	34	34	34	34	34	34	34	34	34	34
	No of students Pass / Assignment Mark		34	34	34	284	292	282	287	34	87	80	84	84	86
	No of students below the target		0	0	0	-	-	-	-	0	-	-	-	-	-
	Percentage of Pass / Scored / Outcome		100	100	100	84	86	83	84	100	85	78	82	82	84
	Signature of the Faculty														

Table 3.2.2 j . Internal and external evaluation sheet

COs Mapping:

	Direct Assessmen	ı <u>t</u>								
CO	Assessment Tool Assessment Internal Assessment Test: 01 (>=60%) 100									
CO1	Internal Assessment Test: 01 (>=60%)	100		100						
	University Result (>= Grade B)	100								
CO2	Internal Assessment Test: 01 (>=60%)	100		100						
CO2	University Result (>= Grade B)	100		100						
CO3	Internal Assessment Test: 02 (>=60%)	100		100						
CO3	University Result (>= Grade B)	100								
CO4	Internal Assessment Test: 02(>=60%)	100		100						
CO4	University Result (>= Grade B)	100		100						
CO5	Internal Assessment Test: 03 (>=60%)	100		100						
COS	University Result (>= Grade B)	100		100						
	Indirect Assessme	<u>nt</u>		ı						
CO	Questionnaire		Assessme	ent						
CO1	Can you Analyze various Current Mirror Circuits, Basic Concept of Ol Characteristics?	P-AMP using BJT and FET and its	85							
CO2	Can you Design Linear and Non-Linear Applications of OP-AMPs. 78									
CO3	O3 Can you Design Applications using Analog Multiplier and PLL. 82									
CO4	CO4 Can you Design analysis ADC and DAC using OP-AMPs. 82									
CO5	Can you Construct various waveforms using OP-AMP circuits and	Analyze Special Function Ics.	84							
	T-bl- 2221- CO 444-i									

Table 3.2.2.k. CO Attainment levels of Linear Integrated Circuits Course

		<u>Attai</u>	nment Level				
Course	Mapping with PO	Ass	essment in %	Tanget Set	% of Total	Attainment	Damanka
Outcome		Direct (80%)	Indirect (20%)	Target Set	Assessment	Level	Remarks

CO1	PO1,PO2,PO3,PO4,PO5,PO	12	100	80	2.4	85	1	7	0.51	60)%	9	7	2.	.91	
CO2	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12			80	2.4	78	15	5.6	0.468	60)%	9	96	2.	.87	
CO3	PO1,PO2,PO3,PO4,PO5,PO6,PO1	100	80	2.4	82	10	5.4	0.492	60)%	9	96	2.	.89		
CO4	PO1,PO2,PO3,PO4,PO5,PO6,PO1	1,PO12	100	80	2.4	82	10	5.4	0.492	6)%	9	96	2.	.89	
CO5	PO1,PO2,PO3,PO4,PO5,PO6,PO1	100	80	2.4	84	10	5.8	0.504	60)%	9	7	2.	90		
		100	80	2.4	82.20	16	.44	0.49	60)%	96	.44	2.	.89		
			PO	-CO	Avera	ige Att	ainme	nt Lev	<u>el</u>							
CO/PO	PO1	PO2	PO3	P	04	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2.89	1.93	2.89	2.	89	1.93	0.00	0.00	0.00	0.00	0.00	0.00	1.93	2.89	0.96	0.96
CO2	2.89	1.93	2.89	2.	89	1.93	0.96	0.00	0.00	0.00	0.00	0.96	1.93	2.89	2.89	0.96
CO3	2.89	1.93	2.89	1.	93	1.93	0.96	0.00	0.00	0.00	0.00	0.96	1.93	2.89	1.93	0.96
CO4	2.89	1.93	2.89	1.	93	1.93	0.96	0.00	0.00	0.00	0.00	0.96	1.93	2.89	1.93	0.96
CO5	2.89	1.93	2.89	2.	89	1.93	0.96	0.00	0.00	0.00	0.00	0.96	1.93	2.89	1.93	0.96
Average	2.89	1.93	2.89	2.	51	1.93	0.96	0	0	0	0	0.96	1.93	2.89	1.93	0.96

Table 3.2.2 I . Attainment Level

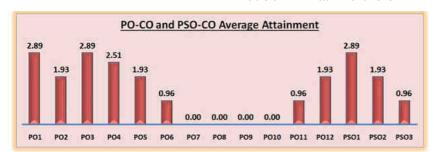


Table 3.2.2 m . PO and PSO Attainment

 $\textbf{3.3 Attainment of Program Outcomes and Program Specific Outcomes} \ (50)$

Total Marks 50.00

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

Specific Outcomes (10)

Institute Marks: 10.00

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

(Describe the assessment tools and processes used to gather 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 process that demonstrate the degree to which the Program Outcomes and Program Specific Outcomes are attained and document the attainment levels)

1. Attainment of POs and PSOs is based on direct assessment tools as well as indirect assessment tools.

A. List of Assessment Tools:

S.No	Direct Assessment tool
1	Direct assessment of POs and PSOs is based on the students' performance in both internal examinations and university examinations for all courses.
2	Performance of all the students in different assessments such as internal tests and university exams lead to attainment of COs which in turn lead to attainment of POs and PSOs based on the mapping of COs with POs and PSOs.
3	Direct Assessment Tools are given 80% Weightage.

Table 3.3. 1 a Direct Assessment tool

S.No	Indirect Assessment tool
1	Assignments
2	Seminars

B. The quality and Relevance of the Process used for measuring attainment of POs and PSOs

Step 1: Direct Asssesment

POs and PSOs attainment at course level is calculated by taking the average of arithmetic multiplication of course outcomes attainment levels and CO-PO matrix.

Sum of (each CO-PO mapping x CO attainment levels)

CO-PO Attainment Level = Total PO Mapping Points

Step2: Indirect Assessment

Tools

- 1. Assignement
- 2. Seminar
- 3. Process: Average of 3 assignment marks and seminar is taken for evaluation

Step3: Overall Attainment of POs and PSOs including Direct and Indirect Survey:

Attainment of POs and PSOs = 80% of Direct Assessment

20% of Indirect assessment.

8* Direct PO attainment + 0.1 * Assignment Avg + 0.1 * Seminar)

3.3.2 Provide results of evaluation of PO&PSO (40)

Institute Marks : 40.00

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	0	1.74	1.16	1.55	1.21	0.97	1.36	1.62	2.91	2.91	0.97	2.52
C102	2.24	1.64	0.74	2.24	0	1.64	0.93	0	0.74	0.74	1.64	1.64
C103	2.46	1.96	1.80	1.80	1.31	1.80	1.64	1.14	1.14	1.09	0	1.47
C104	2.49	1.66	1.83	1.87	0.83	1.66	1.38	0.83	1.332	1.16	0.83	1.83
C105	2.43	2.27	2.43	0.81	1.01	0	0	0	0	0	0	0
C106	2.72	2.72	1.81	0.90	2.36	1.81	0.90	0	0	0	0	2.72
C107	2.72	2.52	2.14	2.07	1.47	2.11	3	1.93	1.08	1.28	1.92	2.21
C108	2.72	2.64	2.14	2.02	2.06	1.47	1.93	0	2.05	2.42	2.08	0

28/23, 2:34	PIVI						Print					
C109	0	1.11	0.92	1.48	1.11	0.92	1.11	1.67	2.74	2.78	0.92	2.59
C110	2.42	2.42	2.07	2.07	0.86	1.21	0.86	0.86	0.86	1.55	1.55	2.07
C111	2.40	2.08	2.08	2.08	2.08	2.24	1.76	0.96	1.28	1.28	0.96	2.40
C112	2.44	2.44	1.63	1.63	1.63	0	1.63	1.63	0	0	0	1.63
C113	1.71	1.31	1.44	1.71	1.44	1.31	1.31	0.79	1.05	1.44	1.31	1.97
C114	1.67	1.97	1.67	1.97	1.06	1.67	1.67	1.36	1.67	1.06	1.51	1.67
C115	1.51	1.76	1.76	1.26	0.75	0.75	0	0	0	0	0.75	1.26
C116	2.84	1.89	1.58	1.89	2.84	1.89	0	0	0	0	1.89	2.21
C201	2.20	2.20	1.47	1.47	0.73	0	0	PO8	0	0	0.73	1.47
C202	1.96	1.79	1.79	1.96	1.96	1.96	0	0	0	0	1.96	1.96
C203	2.12	1.77	1.42	1.24	0.71	0	0	0	0	0	0	0.71
C204	2.37	1.98	1.58	1.39	0.79	0	0	0	0	0	0	0.79
C205	2.76	2.18	2.65	1.19	2.38	1.19	0	0	0	0	0	0
C206	1.47	1.47	2.20	0.73	0.73	0.73	0	0	0	0	1.10	1.10
C207	2.92	2.60	0.97	2.27	0.97	0.97	0	0	0	0	0.97	1.95
C208	2.72	2.72	1.81	1.81	0.91	0.91	0	0	0	0	0.91	0.91
C209	2.92	2.60	0.97	2.27	0.97	0.97	0	0	0	0	0.97	1.95
C210	2.28	2.28	1.52	1.52	1.52	0	0	0	0	0	0.76	1.52
C211	2.03	1.66	2.03	2.21	1.47	0.74	0	0	0	0	0.74	1.47
C212	1.69	1.33	1.07	1.07	0.61	0.61	0	0	0	0	0.61	0.61
C213	2.09	1.71	1.33	1.14	0.76	0.76	0	0	0	0	0.76	1.14
C214	2.27	1.51	2.27	1.89	1.51	0.76	0	0	0	0	0.76	1.51
C215	2.41	2.41	0	1.61	0	0.80	0.80	1.61	0	0	0.80	1.61
C216	1.51	1.76	1.76	1.26	0.75	0.75	0	0	0	0	0.75	1.26
C217	2.84	1.89	1.58	1.89	2.84	1.89	0	0	0	0	1.89	2.21
C301	1.46	1.46	1.46	1.10	1.10	0.73	0.73	0	0.73	1.10	0	0.73
C302	1.44	1.44	1.44	1.08	1.08	0.72	0.72	0	0.72	1.08	0	0.72
C303	1.54	1.54	1.54	1.16	1.16	0.77	0.77	0	0.77	1.16	0	0.77
C304	1.41	1.41	1.41	1.06	1.06	0.71	0.71	0	0.71	1.06	0	0.71
C305	1.43	1.43	1.43	1.07	1.07	0.72	0.72	0	0.72	1.07	0	0.72
C306	1.63	1.63	1.63	1.22	1.22	0.82	0.82	0	0.82	1.22	0	0.82
C307	2.10	2.10	2.10	1.40	2.10	0	0	0	0	0	0	1.40
C308	2.10	2.10	2.10	1.40	2.10	0	0	0	0	0	0	1.40
C309	2.20	2.39	2.57	2.02	2.20	1.47	1.84	1.29	0.92	2.02	1.10	2.76
C310	2.55	2.55	1.96	2.62	1.96	1.96	0	0	0	0	0	1.96
C311	2.75	1.83	2.75	2.20	1.83	0.92	0	0	0	0.92	0.92	1.83
C312	2.94	1.96	2.26	1.63	1.47	0	1.47	0	0	0	0	1.96
C313	0.93	0	0	0	0	0	0	1.85	2.60	2.04	2.78	1.85
C314	1.49	2.79	2.48	2.32	2.09	1.86	0	0	1.86	1.55	1.86	1.63
C315	1.96	1.96	1.96	1.57	1.57	0.98	0.98	0	0.98	1.57	0	1.18
C316	2.46	1.64	2.21	1.57	1.57	0.98	1.96	0.98	0.98	0.98	1.47	2.62
C317	2.36	2.56	2.36	2.16	2.36	1.57	1.97	0.98	0.98	2.16	1.18	2.95
C318	0.93	0	0	0	0	0	0	1.85	2.60	2.04	2.78	1.85
C401	1.70	2.92	2.59	2.43	2.27	1.94	0	0	1.94	1.46	1.94	1.70
C402	2.94	2.94	2.35	1.96	0.98	0	0	0	0	0	0.98	1.96
C403	2.95	2.75	2.16	1.77	1.96	1.47	1.47	0.98	0.98	0.98	1.96	1.96
C404	2.94	0.98	0.98	0.98	2.94	0	0	0	0	0	0.98	0.98
	1.94	1.94	1.94	1.55	1.55	0.97	0.97	0	0.97	1.55	0	1.16
C405	1.94								I	I		l
C405 C406	1.94	1.91	1.91	1.53	1.53	0.96	0.96	0	0.96	1.53	0	1.15

C408	2.96	1.97	2.76	1.58	1.97	1.38	1.38	0.99	0.99	1.58	1.77	2.17
C409	2.87	2.87	1.91	1.91	0.96	1.91	0.96	0	0	0	0.96	0.96
C410	0	0	1.90	1.90	0	2.31	1.90	2.85	2.85	1.90	1.90	1.90
C411	2.94	2.55	2.74	1.96	1.96	1.18	1.37	1.96	2.16	2.16	2.16	2.35

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	2.26	2.11	1.94	1.76	1.55	1.51	1.40	1.43	1.61	1.73	1.39	1.81
Direct Attainment	2.20	2.03	1.85	1.65	1.51	1.26	1.33	1.39	1.38	1.52	1.34	1.65
InDirect Attainment	2.5	2.45	2.3	2.2	1.7	2.5	1.7	1.6	2.55	2.55	1.6	2.45

PSO Attainment

Course	PSO1	PSO2	PSO3
C101	1.98	2.31	1.74
C102	1.79	1.7	1.85
C103	2.15	0.99	1.21
C104	2.48	2.48	2.04
C105	2.12	0.81	1.56
C106	1.72	2.58	2.56
C107	1.22	1.63	1.87
C108	2.53	2.53	2.23
C109	2.59	1.67	1.92
C110	2.1	1.60	1.65
C111	1.6	1.6	1.32
C112	1.63	1.31	1.57
C113	0.922	1.36	1.20
C114	0.75	1.6	1.8
C115	1.3	1.7	1.45
C116	1.1	1.3	1.22
C201	1.47	1.56	1.45
C202	1.96	1.96	2.06
C203	2.12	1.77	1.85
C204	2.37	2.37	2.21
C205	2.12	2.65	2.32
C206	2.20	2.20	2.56
C207	2.92	1.30	1.35
C208	1.81	2.72	2.01
C209	1.81	2.04	2.16
C210	1.52	1.72	1.62
C211	2.21	2.03	2.01
C212	0.61	1.23	1.35
C213	1.71	1.33	1.54
C214	2.27	1.51	1.23
C215	0.80	0.78	1.01
C216	2.26	1.51	1.62
C217	2.84	1.89	1.56
C301	1.46	1.46	1.25
C302	1.44	1.44	1.23
C303	1.54	1.54	1.98
C304	1.41	1.41	1.45

C305	1.43	1.43	1.65
C306	1.63	1.63	1.35
C307	1.12	1.26	1.25
C308	2.20	2.76	2.56
C309	1.12	1.26	1.36
C310	1.24	1.24	1.26
C311	1.29	1.29	1.35
C312	1.23	1.23	1.23
C313	1.21	1.21	1.45
C314	1.26	1.26	1.26
C315	1.26	1.26	1.35
C316	1.16	1.16	1.01
C317	1.12	1.12	1.11
C318	1.12	0.56	0.89
C401	1.05	1.40	1.45
C402	1.44	1.20	1.26
C403	1.12	1.44	1.87
C404	0.97	1.29	1.23
C405	1.32	1.32	1.35
C406	1.45	1.45	1.25
C407	1.31	1.53	1.26
C408	1.64	1.09	1.23
C409	1.56	1.56	1.92
C410	2.55	2.55	2.53
C411	2.94	2.75	2.76

PSO Attainment Level

Course	PSO1	PSO2	PSO3
CO Attainment	1.64	1.58	1.55
Direct Attainment	1.65	1.61	1.62
InDirect Attainment	1.586	1.470	1.270

4 STUDENTS' PERFORMANCE (150)

Total Marks 110.90

https://enba.nbaind.org/SARTemplates/eSARUGTierIIPrint.aspx?Appid=7756&Progid=578

Table 4.1

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2022-23 (CAY)	2021-22 (CAYm1)	2020- 21(CAYm2)	2019- 20(CAYm3)	2018- 19(CAYm4)	2017-18 (CAYm5)	2016-17 (CAYm6)
Sanctioned intake of the program(N)	60	60	60	120	120	120	120
Total number of students admitted in first year minus number of students migrated to other programs/ institutions plus No. of students migrated to this program (N1)	36	58	16	29	28	60	58
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	5	13	2	5	3	7
Separate division students, If applicable (N3)	0	0	0	2	0	0	0
Total number of students admitted in the programme(N1 + N2 + N3)	36	63	29	33	33	63	65

Table 4.2

Year of entry	Total No of students admitted in	Number of students who have successfully graduated without backlogs in any semester/ year of students (Without Backlog means no compartment or failures in any semester/ year of study)						
	the program (N1 + N2 + N3)	l year	II year	III year	IV year			
2022-23 (CAY)	36	0	0	0	0			
2021-22 (CAYm1)	63	12	0	0	0			
2020-21 (CAYm2)	29	15	1	0	0			
2019-20 (CAYm3)	33	4	6	6	0			
2018-19 (LYG)	33	3	3	3	3			
2017-18 (LYGm1)	63	19	12	3	3			
2016-17 (LYGm2)	65	20	18	12	7			

Table 4.3

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]					
		l year	II year	III year	IV year		
2022-23 (CAY)	36	0	0	0	0		
2021-22 (CAYm1)	63	60	0	0	0		
2020-21 (CAYm2)	29	16	29	0	0		
2019-20 (CAYm3)	33	29	33	33	0		
2018-19 (LYG)	33	28	33	33	25		
2017-18 (LYGm1)	63	60	63	63	59		
2016-17 (LYGm2)	65	58	65	65	62		

4.1 Enrolment Ratio (20) Total Marks 14.00

Institute Marks: 14.00

	N (From Table 4.1)	N1 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2022-23 (CAY)	60	36	60.00
2021-22 (CAYm1)	60	60	100.00
2020-21 (CAYm2)	60	16	26.67

Average [(ER1 + ER2 + ER3) / 3]: 62.22

Assessment: 14.00

4.2 Success Rate in the stipulated period of the program $\left(40\right)$

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

Total Marks 15.25

Institute Marks : 2.00

Item	Latest Year of Graduation, LYG (2018- 19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2 LYGm2 (2016-17)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	33.00	63.00	65.00
Y Number of students who have graduated without backlogs in the stipulated period	3.00	3.00	7.00
Success Index [SI = Y / X]	0.09	0.05	0.11

Average SI [(SI1 + SI2 + SI3) / 3]: 0.08

Assessment [25 * Average SI]: 2.00

4.2.2 Sucess rate in stipulated period (15)

Item	Latest Year of Graduation, LYG (2018- 19)	Latest Year of Graduation minus 1, LYGm1 (2017-18)	Latest Year of Graduation minus 2 LYGm2 (2016-17)
X Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable	33.00	63.00	65.00
Y Number of students who have graduated in the stipulated period	25.00	59.00	62.00
Success Index [SI = Y / X]	0.76	0.94	0.95

Average SI[(SI1 + SI2 + SI3) / 3]: 0.88

Assessment [15 * Average SI]: 13.25

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 Academic Performance in Third Year (15)

Total Marks 11.56

Institute Marks: 11.56

Institute Marks: 13.25

Academic Performance	CAYm3 (2019-20)	LYG (2018-19)	LYGm1 (2017-18)
Mean of CGPA or mean percentage of all successful students(X)	7.67	7.54	7.91
Total number of successful students(Y)	33.00	33.00	63.00
Totalnumber of students appeared in the examination(Z)	33.00	33.00	63.00
API [X*(Y/Z)]:	7.67	7.54	7.91

Average API [(AP1 + AP2 + AP3)/3]: 7.71

Assessment [1.5 * AverageAPI]: 11.56

4.4 Academic Performance in Second Year (15)

Total Marks 11.69

Institute Marks: 11.69

Academic Performance	CAYm2 (2020-21)	CAYm3 (2019-20)	LYG (2018-19)
Mean of CGPA or mean percentage of all successful students(X)	7.80	7.62	7.96
Total number of successful students (Y)	29.00	33.00	33.00
Total number of students appeared in the examination (Z)	29.00	33.00	33.00
API [X * (Y/Z)]	7.80	7.62	7.96

Average API [(AP1 + AP2 + AP3)/3]: 7.79

Assessment [1.5 * AverageAPI]: 11.69

 $\textbf{4.5 Placement, Higher Studies and Entrepreneurship} \ (40)$

Total Marks 38.40

Institute Marks: 38.40

Item	LYG (2018- 19)	LYGm1 (2017- 18)	LYGm2 (2016- 17)
Total No of Final Year Students(N)	33.00	63.00	65.00
No of students placed in the companies or government sector(X)	30.00	55.00	59.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	2.00	4.00	4.00
No of students turned entrepreneur in engineering/technology (Z)	0.00	0.00	0.00
x + y + z =	32.00	59.00	63.00
Placement Index [(X+Y+Z)/N] :	0.97	0.94	0.97

Average Placement [(P1 + P2 + P3)/3]: 0.96

Assessment [40 * Average Placement]: 38.40

Program Name:

Assessment Year Name : CAYm1

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	AL THOWHEED AHMED B	2022ECE01	AL THOWHEED AHMED B	1609677
2	SYED MOHAMMED S	2022ECE02	SYED MOHAMMED S	7415
3	AFRIN FATHIMA S A	2022ECE03	AFRIN FATHIMA S A	7416
4	KREETHIKA V	2022ECE04	KREETHIKA V	7417
5	MOHAMMED AAQIB A	2022ECE05	MOHAMMED AAQIB A	100324758
6	MOHAMMED THABRAZ J	2022ECE06	MOHAMMED THABRAZ J	020800
7	HALEEMA HUMAIRA PMS	2022ECE07	HALEEMA HUMAIRA PMS	TCSLDT20218326691
8	SHEIK ABDUL KADER SH	2022ECE08	SHEIK ABDUL KADER SH	TCSLDT20218102579
9	MOHAMMED RASUL A	2022ECE09	MOHAMMED RASUL A	MPHTHCD20222077
10	SATHYAPRIYA S	2022ECE10	SATHYAPRIYA S	2069362ELTP-CAMPUS/2022
11	MOHAMMED JUNAID A	2022ECE11	MOHAMMED JUNAID A	34233
12	MURALI KRISHNA	2022ECE12	MURALI KRISHNA	PTC115034
13	JAUHAR FATHIMA B	2022ECE13	JAUHAR FATHIMA B	16-11-2022
14	MOHD.IRFAN KHAN Z	2022ECE14	MOHD.IRFAN KHAN Z	16-11-2022
15	DHAWOODH KHAN H	2022ECE15	DHAWOODH KHAN H	16-11-2022
16	THABEEB MOHAMED BURVEZ M	2022ECE16	THABEEB MOHAMED BURVEZ M	16-11-2022
17	FARITHA BANU K	2022ECE17	FARITHA BANU K	16-11-2022
18	MOHAMED HAJA PARVEZ S	2022ECE18	MOHAMED HAJA PARVEZ S	16-11-2022
19	MOHAMMED MUKBHIL HUDHA A	2022ECE19	MOHAMMED MUKBHIL HUDHA A	16-11-2022
20	ABDUL HAMEED J	2022ECE20	ABDUL HAMEED J	13-05-2022
21	MOHAMED FARDEEN S	2022ECE21	MOHAMED FARDEEN S	QS2022ECE05
22	ABDUL HAMEED J	2022ECE22	ABDUL HAMEED J	QS2022ECE06
23	ARFATH ALI S	2022ECE23	ARFATH ALI S	QS2022ECE07
24	ARVIND KUMAR M	2022ECE24	ARVIND KUMAR M	04-08-2022

Assessment Year Name : CAYm2

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	FARIHA PARVEEN S A	2021ECE01	FARIHA PARVEEN S A	TCSL DT20207328020
2	LOKESH N	2021ECE02	LOKESH N	MPHASIS2021ECE01
3	ABDUL KALAM	2021ECE03	ABDUL KALAM	HCL2021ECE01
4	MOHAMED SAMEER	2021ECE04	MOHAMED SAMEER	ZOHO2021ECE01
5	ABDUR RAQUIB	2021ECE05	ABDUR RAQUIB	INT2021ECE01
6	ASHANI A R	2021ECE06	ASHANI A R	PNEUMATIC2021ECE01
7	ABDUR RAHMAN	2021ECE07	ABDUR RAHMAN	PNEUMATIC2021ECE02
8	MOHAMED ISMAIL MIHAL	2021ECE08	MOHAMED ISMAIL MIHAL	PNEUMATIC2021ECE03
9	MISBAH FATHIMA	2021ECE09	MISBAH FATHIMA	SUTH2021ECE01
10	FATHIMA R	2021ECE10	FATHIMA R	SUTH2021ECE02
11	TASNEEM FATHIMA K	2021ECE11	TASNEEM FATHIMA K	SUTH2021ECE03
12	APARNA M	2021ECE12	APARNA M	SUTH2021ECE04
13	MOHAMMED SIRAJUDEEN J	2021ECE13	MOHAMMED SIRAJUDEEN J	SUTH2021ECE06
14	MOHAMED SALMAN S	2021ECE14	MOHAMED SALMAN S	SUTH2021ECE07
15	MOHAMMED ATHEEF ALI	2021ECE15	MOHAMMED ATHEEF ALI	SUTH2021ECE08
16	SUHAIL AHAMAD NOOR	2021ECE16	SUHAIL AHAMAD NOOR	SUTH2021ECE09
17	MOHAMED ASARDEEN	2021ECE17	MOHAMED ASARDEEN	SUTH2021ECE11
18	SHEIK MOHAMED RIYAZ	2021ECE18	SHEIK MOHAMED RIYAZ	SUTH2021ECE12
19	MD. SHOAIB SHARIEF	2021ECE19	MD. SHOAIB SHARIEF	SUTH2021ECE13
20	MOHAMED YOUSUF	2021ECE20	MOHAMED YOUSUF	SUTH2021ECE14
21	DINESH P	2021ECE21	DINESH P	SUTH2021ECE15
22	UMA DEVI S	2021ECE22	UMA DEVI S	SUTH2021ECE22
23	NANDHINI R	2021ECE23	NANDHINI R	SUTH2021ECE23
24	MUSTAQ MOHAMMED RAGHADAN	2021ECE24	MUSTAQ MOHAMMED RAGHADAN	SUTH2021ECE24
25	MOHAMMED WASIM M	2021ECE25	MOHAMMED WASIM M	SUTH2021ECE25
26	SHAIK MUHAMMED HEDAYATHULLAH	2021ECE26	SHAIK MUHAMMED HEDAYATHULLAH	SUTH2021ECE26
27	MOHAMED IMRAN M A	2021ECE27	MOHAMED IMRAN M A	QS2021ECE04

Assessment Year Name : CAYm3

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	MOHAMED IMTIAZ S	2020ECE01	MOHAMED IMTIAZ S	13958718
2	DEEPAK D	2020ECE02	DEEPAK D	09-03-2020
3	MOHAMED ZAFER AZGHAR K	2020ECE03	MOHAMED ZAFER AZGHAR K	09-03-2020
4	SANTHANA KRISHNAN	2020ECE04	SANTHANA KRISHNAN	09-03-2020
5	MOHAMED ZUBAIR	2020ECE05	MOHAMED ZUBAIR	09-03-2020
6	NOUMI SINGH	2020ECE06	NOUMI SINGH	09-03-2020
7	FOUZIA A K	2020ECE07	FOUZIA A K	QS2020ECE08
8	ANISH FATHIMA	2020ECE08	ANISH FATHIMA	QS2020ECE09
9	KADEEJA N	2020ECE09	KADEEJA N	QS2020ECE10
10	HAFIZA SHAFREEN S	2020ECE10	HAFIZA SHAFREEN S	25-02-2020
11	SHABANA A K	2020ECE11	SHABANA A K	25-02-2020
12	MOHAMED JASIM J	2020ECE12	MOHAMED JASIM J	25-02-2020
13	MOHAMMED OSAMAH KA	2020ECE13	MOHAMMED OSAMAH K A	25-02-2020
14	REHANA BANU K	2020ECE14	REHANA BANU K	11-03-2020
15	MOHAMED ASHIQ ALI	2020ECE15	MOHAMED ASHIQ ALI	27-07-2020
16	YASIN ASLAM	2020ECE16	YASIN ASLAM	27-07-2020
17	SHABANA KARIM	2020ECE17	SHABANA KARIM	27-07-2020
18	MUJEEBA AFREEM M A	2020ECE18	MUJEEBA AFREEM M A	27-07-2020
19	YOUSUF JAFFERY	2020ECE19	YOUSUF JAFFERY	27-07-2020
20	SUHAILUR RAHMAN	2020ECE20	SUHAILUR RAHMAN	27-07-2020
21	ABDUL RASOOL K	2020ECE21	ABDUL RASOOL K	27-07-2020
22	MOHD IRFAN K	2020ECE22	MOHD IRFAN K	27-07-2020
23	MOHD NADEEM	2020ECE23	MOHD NADEEM	27-07-2020
24	SHAJITHA BANU A	2020ECE24	SHAJITHA BANU A	27-07-2020
25	ABDUS SATHAR	2020ECE25	ABDUS SATHAR	27-07-2020
26	AFRATH MAJEED	2020ECE26	AFRATH MAJEED	27-07-2020
27	MOHD TAYYIB	2020ECE27	MOHD TAYYIB	27-07-2020
28	MAJOTH PRATHAP	2020ECE28	MAJOTH PRATHAP	27-07-2020
29	FOUZIYA KARIM A K	2020ECE29	FOUZIYA KARIM A K	27-07-2020
30	NOORUL TASLIMA	2020ECE30	NOORUL TASLIMA	27-07-2020
31	MOHD MOHIDEEN	2020ECE31	MOHD MOHIDEEN	27-07-2020
32	KHAJA FARIDIDDEEN	2020ECE32	KHAJA FARIDIDDEEN	27-07-2020
	·		*	

4.6 Professional Activities (20) Total Marks

4.6.1 Professional socities/ chapters and organizing engineering events (5)

Institute Marks

4.6.1.1 List of Professional Societies.

S.No	Year	Name of the Professional Societies/Chapters	No. of Faculty Membership	No. of Student Membership		
		ISTE	11	95		
1	2021-2022	ICT		I		
		PALS				
2	2020-2021	PALS				
2	2020-2021	ICT	Institution Membership			
3	2019-2020	PALS				
		ICT				
4	2018-2019	PALS				

NOTE: Faculty Members have professional Society memberships like IAENG, IFERP, IRED, IAOP.

ACADEMIC YEAR 2021-2022:

 Table 4.6.1. A. Availability & Activities of Professional Societies/Chapters

S.No	Name of Professional Societies/Chapters	EVENTS	DATE	RESOURSE PERSON	No. of Student Participants	Pos Mapping
1	ISTE	Prepare yourself for Industry4.0	13/4/2022	Er.Mohammed Iliyas,CEO ,IT Expert Training	62	PO1,PO2,PO3PO4,PO5,PO6, PO12
2	ISTE	Automatic vehicle accident information system using GSM and GPS	18/4/2022 to 19/4/2022	Trainers from Live Wire,Ambattur	62	PO1,PO2,P03PO4,PO5,PO6, PO11
3	ICT	Oracle – Java Programming (Online Live FDP)	27 /12 2021 to 07 /012022	Dr.Purnima Bansal	5	PO1,PO2,PO3PO4,PO5,PO6PO8,PO9,PO10,PO1
4	ICT	Robotics	22/3/2022 to 2/4/2022	Dr.Kishore Pungabati	10	PO1,PO2,P03PO4,PO5,PO6, PO11
5	ICT	Digital Teaching Techniques	24/01/2022 to 28/01/2022	Trainers from Atos and Syntel	2	PO1,PO2,P03PO4,PO5,PO6, PO11

ACADEMIC YEAR 2020-2021:

Table 4.6.1.2.2 List of Events Conducted through Professional Societies for CAY (2020-21)

S.No	Name of Professional Societies/Chapters	Events	Date	Resourse Person	No.Of Student Participants	Pos Mappin
1	PALS	Virtual industial visit on project management from L&T hydrocarbon division,Varadhora	16/9/2020	L&T hydrocarbon Engineer	5	PO1,PO2,PC PO4,PO5,PC PO12
2	PALS	VLAB workshop	14/9/2020 to 18/9/2020	Dr.K.V.Gangadharan	2	PO1,PO2,P(PO4,PO5,PC PO11

3	PALS	Pals campus event aspire- EV component technologies for two and three wheelers	1/10/2020	Engineers form Aspire Systems	4	PO1,PO2,PC PO4,PO5,PC PO12
4	PALS	IIT pals Virtual curious program	21/10/2020	IIT Madras ,HTIC Med Tech Incubator	5	PO1,PO2,PC PO4,PO5,PC PO12
5	PALS	Pals Aspire campus event	3/11/2020	Engineers form Aspire Systems	4	PO1,PO2,PC PO4,PO5,PC PO12
6	PALS	Pals FSDP on Project Management	21/11/2020 to 6/12/2020	Mr.Arun Iyer	4	PO1,PO2,PO PO4,PO5,PO PO12
7	PALS	Webinar on Shifting Gears-Adapting your Research during the pandemic	19/11/2020	Dr.R.Venkatesan, Dr.Sudha Ramalingham,Dr.Ramalingham	5	PO1,PO2,PC PO4,PO5,PC PO12
8	PALS	Pals FSDP on Cryptography insights,innovative thinking and recent trend topics	7/12/2020 to 9/12/2020	IBM ,Pune	4	PO1,PO2,P(PO4,PO5,P(PO12
9	ICT	Team Building And Managing	20/8/2020 to 22/8/2020	ICT academy	3	PO1,PO2,PC PO4,PO5,PC PO12
10	ICT	New India Learnathon	May/June 2020	ICT academy	18	PO1,PO2,PC PO4,PO5,PC PO12

ACADEMIC YEAR 2019-2020

S.No	Name of Professional Societies/Chapters	Events Date Resourse Person		No.Of Student Participants	Pos Mapping	
1	ICT			ICT Academy	demy 1 PO1,PO2,PO3,PO4,PO5,PO	
2	ICT	Emotional Intelligence	14, 16, and 17 August 2019.	ICT Academy	1	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12
3	ICT	Innowah Q&A Workshop	5/9/2019	IITM ,Madras	3	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12
4	ICT	Team Building And Managing	20/8/2020 to 22/8/2020	ICT Academy	5	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12
5	ICT	Tinkathon	25/7/2019	ICT Academy	5	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12
6	Assosiation of ECE Department	Workshop on IOT for IV year students		Mr.Kumaravel, PanTech Solution.	65	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12
7	Assosiation of ECE Department Workshop on Bridging the gap between Academia and Industries		Mr.Vijay Kumleswaran,President &CEO ,Cocinnate Panners,Chennai.	92	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12	

8	Assosiation of ECE Department	Workshop on Big Data Engineering using Hadoop and Spark	17/8/19	Mr.vedashankaran, Ford Motors PVT LTd	92	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12
9	Assosiation of ECE Department	Workshop on Basics of Electronic Devices.	17/8/19	Mr.Bala Murugan, Scientist, IIT Madras	63	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12
10	Assosiation of ECE Department	Industrial visit to Fortron Krikit pvt ltd,perungudi	6/8/19	-	33	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12

ACADEMIC YEAR 2018-2019

S.No	Name of Professional Societies/Chapters	EVENTS	DATE	RESOURSE PERSON	No.of participants	Pos Mapping
1	Association of ECE Department	Things for IV year and III		Prof.Rajesh Kunnath,CEO,Radio Studio	88	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
2	Association of ECE Department	Workshop on Electronic circuit Design	10/8/2018	Prof.Rajesh Kunnath,CEO,Radio Studio	95	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
3	Association of ECE Department	Integrated Development 10/11/2018 Asst Prof M Kader Shahib Marican		25	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO	
4	Association of ECE Department	Conducted Inter Department Competition	2/2/2019	-	95	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
5	Association of ECE Department	Workshop on Networking For II year Students	For 16/7/2019 Mr.M.Pasupathi,FIIT,Chennai		33	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
6	Association of ECE Department	Fundamentals ,Developments and recent trends in VLSI	11/3/2019	Mr.Anandan.M,Qualcomm India Pvt ,Bangalore	95	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
7	PALS	Awareness Program Of TPM- PALS A Productive Tool" & "Whose faces are you wearing" PALS TEAM		PALS TEAM	5	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
8	PALS	Adapting to work environment after college	25/1/2019	PALS TEAM	3	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
9	PALS	Wind Energy-Ever Last Energy Everywhere	7/2/2019	IITM,Madras	5	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO
10	PALS	Successful Startup idea Conceptualization to Commercialization and	20/2/2019	HTM,Madras	2	PO1,PO2,PO3, PO4,PO5,PO6,PO11,PO

 $[\]textbf{4.6.2 Publication of technical magazines, newsletters, etc.} \ (5)$

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

(The Department shall list the publications mentioned earlier along with the names of the editors, publishers, etc.)

A. Quality & Relevance of the Contents and Print Material

Table 4.6.2.A. List of Magazines/NewsLetters.

S.No	Year	Name of the Magazine/Letter	No.of Issues	Hardcopy/Softcopy
1	CAYm12020-21	AMSCE ECE VOICE	1	HardcopySoftcopy
2	CAYm22019-20	AMSCE ECE VOICE	1	Hardcopy Softcopy
3	CAYm32018-19	AMSCE ECE VOICE	1	Hardcopy Softcopy

B. Participation of Students from the Program

Table 4.6.2. B .Publication of Magazines/News Letters for past 3 years.

S.No	Year	Name of the Magazine/Letter	Name of the Chief Editor	Name of the Associate Editor	Volume No/Month	Na Ed
1	CAY m12020-21	AMSCE ECE VOICE	Dr.A.S.Salma Banu	Dr.A.S.Salma Banu Er.Nadeer AhamedEr.Kalima Benazir	2020-21	1) 2) ₁ 3).
2	CAY m2 2019-20	AMSCE ECE VOICE	Dr.A.S.Salma Banu	Dr.A.S.Salma Banu Er.Jone Rosy Er.Kalima Benazir	2019-20	1)
3	CAY m3 2018-19	AMSCE ECE VOICE	Dr.A.S.Salma Banu	Dr.A.S.Salma Banu Er.Mohammed Mydeen Er.Kalima Benazir	2018-19	2)1

4.6.3 Participationininter-institute events by students of the program of study (10)

Institute Marks: 10.00

S.No	Name of theStudent	Name of the Event	Торіс	Place	Award
1	Haleema Humaira PMS	Tinkathon – PALS 2019-20	Project based Workshop	Chennai	First place
2	Sheik Mohammed IShoq S	Tinkathon – PALS 2019-20	Project based Workshop	Chennai	Participated

Table 4.6.3.A List of Students Participated within the State for CAYm1 (2018-19)

S.No	Name of the Student	Name of the Event	Торіс	Place	Award
1	S. Sheik Mohammed Riyaz	PALS 2018-19	PALS events	Chennai	Sparkling Star
2	Aravindkumar.R	Roboveda'18 / Gati	Robotics	Chennai	First Place
3	Karthikeyan.T	Roboveda'18 / Gati	Robotics	Chennai	First Place
4	Dinesh .B	Zenista'18 / Robo Prix	Robotics	Chennai	Second Place
5	Sathiya Priya.S	Nptel Certification	Fundamentals Of Semiconductor Devices	Chennai	Successfully Completed
6	Jauhar Fathima.B	Nptel Certification	Fundamentals Of Semiconductor Devices	Chennai	Successfully Completed
7	Fariha Parveen.S.A	Nptel Certification	Analog Circuits	Chennai	Successfully Completed
8	Aparna.M	Nptel Certification	Analog Circuits	Chennai	Successfully Completed
9	Munavar Basha.M	Boomtronix 2K19 / Monstrover	Robotics	Chennai	Second Place
10	Mohammed Fazil J	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place
11	Shahid Hussain.N	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place
12	Shoab Sheriff.F.M.D	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place

A. Events Outside the State

Table 4.6.3.B List of Students participated in inter-institute events for CAY (2019-20)

S.No	Name of the Student	Name of the Event	Торіс	Place	Award
1	Haleema Humaira PMS	Tinkathon – PALS 2019- 20	Project based Workshop	Chennai	First Place
2	Sheik Mohammed Ishoq S	Tinkathon – PALS 2019- 20	Project based Workshop	Chennai	Participated

Table 4.6.3.B.1 List of Students participations in inter-institute events for CAYm1(2018-19)

	Name of the					
S.No	Student	Name of the Event	Торіс	Place	Award	
1	S. Sheik Mohammed Riyaz	PALS 2018-19	PALS events	Chennai	Sparklin Star	
2	Aravindkumar.R	Roboveda'18 / Gati	Robotics	Chennai	First Place	
3	Karthikeyan.T	Roboveda'18 / Gati	Robotics	Chennai	First Place	
4	Dinesh .B	Zenista'18 / Robo Prix	Robotics	Chennai	Second Place	
5	Sathiya Priya.S	Nptel Certification	Fundamentals Of Semiconductor Devices	Chennai	Successfully Completed	
6	Jauhar Fathima.B	Nptel Certification	Fundamentals Of Semiconductor Devices	Chennai	Successfully Completed	
7	Fariha Parveen.S.A	Nptel Certification	Analog Circuits	Chennai	Successfully Completed	
8	Aparna.M	Nptel Certification	Analog Circuits	Chennai	Successfully Completed	
9	Munavar Basha.M	Boomtronix 2K19 / Monstrover	Robotics	Chennai	Second Place	
10	Mohammed Fazil J	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place	
11	Shahid Hussain.N	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place	
12	Shoab Sheriff.F.M.D	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place	

A.Prizes/Awards Received in the Event

Table 4.6.3.C. List of Prizes/Awards by Students in the Events for CAY (2019-20)

S.No	Name of the Student	Name of the Event	Торіс	Place	Award
1	Haleema Humaira PMS	Tinkathon – PALS 2019-20	Project based Workshop	Chennai	First Place

Table 4.6.3.3.2. List of prizes/awards by students in the events for CAYm1 (2018-19)

S.No	Name of the Student	Name of the Event	Торіс	SPlace	Award
1	S. Sheik Mohammed PALS 2018-19 Riyaz		PALS events	Chennai	Sparkling Star
2	Aravindkumar.R	Roboveda'18 / Gati	Robotics	Chennai	First Place
3	Karthikeyan.T	Roboveda'18 / Gati	Robotics	Chennai	First Place
4	Dinesh .B	Zenista'18 / Robo Prix	Robotics	Chennai	Second Place
5	Sathiya Priya.S	Nptel Certification	Fundamentals Of Semiconductor Devices	Chennai	Successfully Completed
6	Jauhar Fathima.B	Nptel Certification	Fundamentals Of Semiconductor Devices	Chennai	Successfully Completed
7	Fariha Parveen.S.A	Nptel Certification	Analog Circuits	Chennai	Successfully Completed
8	Aparna.M	Nptel Certification	Analog Circuits	Chennai	Successfully Completed
9	Munavar Basha.M	Boomtronix 2K19 / Monstrover	Robotics	Chennai	Second Place
10	Mohammed Fazil	ohammed Fazil Boomtronix 2K19 / Monstrover		Chennai	First Place
11	Shahid Hussain.N	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place
12	Shoab Sheriff.F.M.D	Boomtronix 2K19 / Monstrover	Robotics	Chennai	First Place

5 FACULTY INFORMATION AND CONTRIBUTIONS (200)	Total Marks 147.66

Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof/Assoc. Prof.).	Initial Date of Joining
DR. A.S. SALMA BANU	AXAPS7119M	ME/M. Tech and PhD	03/12/2019	INFORMATION AND COMMUNICATION	2	0	19	Associate Professor	02/01/2019	21/09/2000
A. DURAIBABU	ANDPD7318Q	M.E/M.Tech	02/05/2002	MICROWAVE AND OPTICAL	0	0	01	Assistant Professor		08/09/2007
A. MOHAMMED MYDEEN	ANQPM5448R	M.E/M.Tech	03/06/2006	COMMUNICATION SYSTEMS	1	0	06	Assistant Professor		09/10/2008
S.JONE ROSY	CIDPI8632P	M.E/M.Tech	30/06/2008	APPLIED ELECTRONICS	1	0	08	Assistant Professor		11/07/2016
R VITHYA	ARHPV5160C	M.E/M.Tech	30/06/2015	APPLIED ELECTRONICS	0	0	15	Assistant Professor		11/07/2016
D. EESWAR SAMHITHAN	ABZBE1594R	M.E/M.Tech	28/06/2013	PROCESS CONTROL AND INSTRUMENTATION	0	0	13	Assistant Professor		21/10/2022
J.G PREM	ECXPP0342T	M.E/M.Tech	29/06/2012	APPLIED ELECTRONICS	0	0	12	Assistant Professor		01/07/2019
FATHIMA	CSJPK6217J	M.E/M.Tech	30/06/2011	EMBEDDED SYSTEM AND TECHNOLOGY	0	0	11	Assistant Professor		01/07/2019
M SYED MUSTAFAA	FTSPS8109G	M.E/M.Tech	30/06/2011	VLSI DESIGN	0	0	11	Assistant Professor		01/07/2013
M SATHISH	FYUPS0833N	M.E/M.Tech	30/06/2014	APPLIED ELECTRONICS	0	0	14	Assistant Professor		25/06/2014
P. KALIMA BENAZIR	GMUPK3552F	M.E/M.Tech	30/06/2016	APPLIED ELECTRONICS	1	0	16	Assistant Professor		01/03/2021
M T M KADER SAHIB MARICAR	AMRPM3176G	M.E/M.Tech	30/06/2015	APPLIED ELECTRONICS	0	0	15	Assistant Professor		02/07/2018
I MOHAMMED FAROOK	BQWPM3496H	M.E/M.Tech	30/06/2014	VLSI	0	0	14	Assistant Professor		25/06/2014
N NAZRIN FATHIMA	ARNPN4649N	M.E/M.Tech	30/06/2014	APPLIED ELECTRONICS	0	0	14	Assistant Professor		25/06/2014
NADHEER AHMED B	AFKPN3853M	M.E/M.Tech	30/06/2006	APPLIED ELECTRONICS	0	0	06	Assistant Professor		12/01/2011
DHANASEKARAN S	EAMPS9684C	M.E/M.Tech	29/06/2012	COMMUNICATION SYSTEMS	0	0	12	Assistant Professor		25/11/2016

5.1 Student-Faculty Ratio (20)

Total Marks 12.00

Institute Marks: 12.00

UG

No. of UG Programs in the Department 1

	ELECTRONICS AND COMMUNICATION ENGINEERING										
	CAY				CAYm1		CAYm2				
Year of		(2022-23)		(2021-22)				(2020-21)			
Study	Sanction Actual admitted through lateral entry students		Sanction Actual admitted through lateral entry students		-	Sanction Actual admitted through la entry students					
2nd Year	60	5	60	60 13		60		4			
3rd Year	60	13	60 4		12	0	5				
4th Year	60	4	120	120 5		12	0	4			
Sub-Total	180	22	240 22		30	0	13				
Total	202		262	262		31	313				
Grand Total 202			262			313					

PG

No. of PG Programs	in the Department 0	
Grand Total		

SFR

No. of UG Programs in the Department 0

Description	CAY(2022-23)		CAYm1 (2021-22)		CAYm2 (2020-21)	
Total No. of Students in the Department(S)	202 all (UG+PG) students	Sum total of	all (UG+PG) students	Sum total of	313 all (UG+PG) students	Sum total of
No. of Faculty in the Department(F)	9	F1	13	F2	14	F3
Student Faculty Ratio(SFR)	22.44	SFR1=S1/F1	20.15	SFR2=S2/F2	22.36	SFR3=S3/F3
Average SFR	21.65	SFR=(SFR1+SFR2+SFR3)/3				
F=Total Number of Faculty Members in the Department (excluding first year faculty)						

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

- 1. Shall have the AICTE prescribed qualifications and experience.
- 2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
- 3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

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

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2022-23)	9	0
CAYm1(2021-22)	13	0
CAYm2(2020-21)	14	0

Average SFR for three assessment years: 21.65

Assessment SFR: 12

5.2 Faculty Cadre Proportion (25) Total Marks 10.00

Institute Marks: 10.00

Year	Professors		Associate Professors		Assistant Professors	
	Required F1	Available	Required F2	Available	Required F3	Available
CAY(2022-23)	1.00	0.00	2.00	1.00	6.00	8.00
CAYm1(2021-22)	1.00	0.00	2.00	1.00	8.00	12.00
CAYm2(2020-21)	1.00	0.00	3.00	1.00	10.00	13.00
Average Numbers	1.00	0.00	2.33	1.00	8.00	11.00

 $\label{eq:Cadre Ratio Marks [(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 12.5: 10.00 }$

5.3 Faculty Qualification (25)

Total Marks 10.66

Institute Marks: 10.66

	x	Y	F	FQ = 2.5 x [(10X + 4Y) / F)]
2022-23(CAY)	1	8	10.00	10.50
2021-22(CAYm1)	1	12	13.00	11.15
2020-21(CAYm2)	1	13	15.00	10.33

Average Assessment: 10.66

5.4 Faculty Retention (25)

Total Marks 15.00

Institute Marks: 15.00

Description	2021-22	2022-23
No of Faculty Retained	12	8
Total No of Faculty	14	14
% of Faculty Retained	86	57

Average: 71.00

Assessment Marks: 15.00

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

Total Marks 20.00

Institute Marks : 20.00

Some Of the Methods Adopted by faculty for improvement of student learning are:

- Faculty members prepare quality study materials to enrich student's knowledge.
- Mode of teaching in this institute is not only limited to the traditional Chalk & Talk methods, but also an amalgamation of the modern technology (e.g. power point presentation, audio/visual teaching etc.) with the traditional one.
- The faculty shares the study material to the students via e-mail, hand-outs, google classrooms etc.
- The biggest resource for self-learning is the college library. The college library not only possesses plenty of books to meet the student's syllabus-oriented needs, but it also houses numerous books by eminent national and international authors on a variety of topics which students may regularly access to sharpen and broaden their knowledge. The library also has a number of magazines and periodicals related to different branches of science and technology which the students may readily access.
- The library also subscribes to a host of online and printed journals which are also made readily available to the students.
- A digitized library, often used by students to access various forms of e-materials for their self-development.
- Students are encouraged to attend NPTEL lectures to increase their knowledge about the subject. Moreover, through these activities, students acquire relevant knowledge which is beyond the syllabus as per the university curriculum.
- This apart, students are also endowed with various resource materials by the teachers for their self- development and they are also encouraged by them to participate in various
 competitions for technical innovations by which they increase their innovative thinking.
- The Department organizes Soft Skill classes, based on the availability and requirement, to enhance the student's communication skills, grooming and body language to equip them
 for the professional world.

1.Physical Models:

Faculty members of Electronics and Communication Engineering use components like Transistors, Diodes, integrated chips (ICs), Circuit Boards and other components in the classroom as physical models. Use of these models helps the teachers to create a clear cut understanding among the students about the working of various components.

2.Demonstration of Products:

While teaching courses like Digital Signal Processing, Embedded and Real Time Systems, Digital image processing, the products developed by the senior students guided by the faculty members are demonstrated in the classroom. The objective of product demonstration is to give students the opportunity to improve team work and communication skills in the process of explaining the products to the faculty.

3. Audio/Visual Presentations:

The presentations are prepared in such a way that the total content of the syllabus is covered in the slides along with afore-mentioned diagrams and is shared with the students so that they can use them as reference.

S. No	Subject
1	ADHOC AND WIRELESS SENSOR NETWORKS
2	COMMUNICATION NETWORKS
3	WIRELESS COMMUNICATION
4	MEDICAL ELECTRONICS
5	COMMUNICATION THEORY
6	ELECTRONIC DEVICES

Table 5.5.1 Example List of Power Point Presentations

4. Peer teaching, Mentoring and Guest Lectures:

a. Peer Teaching: Peer to peer teaching is an effective teaching method used in the classroom/ laboratory courses to enhance learning. This will enable the students to revise their learning topics and be able to consolidate it by teaching to fellow students. This also improves their subject knowledge as well as increases their confidence. The faculty plays the role of a facilitator in the classroom. Every student of the dept has been given space to deliver their own prepared content based on their field of interest.

There are many benefits to peer teaching which are:

- · Learning is reinforced: By teaching to a peer, students review their own learning, which allows them to reinforce their own knowledge and skills.
- Confidence is Increased: This type of learning activity enhances the levels of self-confidence among students because they realize that the classroom teacher perceives them as experts and trusts them enough to share their expertise with a peer.
- Communication Skills are developed: Students must use good communication skills to have clear directions, listen to feedback, and then adjust the next set of instructions accordingly so that their peers are successful.
- Learning can be assessed: The teacher will be able to assess student's understanding of the material based on their ability to share their knowledge and skills with a fellow
 peer, that could not be accomplished using an assessment test.

b.Lecture can be delivered: Every student in the classroom is given an opportunity to deliver a lecture on a concept. This activity will encourage students to gather information, prepare notes, and participate in discussion with peers and teachers.

5. Guest Lectures:

Guest speakers from industry/academics are invited to deliver lectures on emerging technologies. These lectures expose students to industrial oriented technologies. It also widens students' educational experience

6.Online Resources:

The following are the online resources used in the Teaching Learning Process.

NPTEL: The faculty and students are given the opportunity to register for NPTEL online courses in many subjects. Online courses like Fundamental of Semiconductor Devices, Principles of Signals and Systems and Digital Circuits have been completed by both the students and the faculty.

S. No	Name of the Subject	Name of the Online Course
1	FUNDAMENTAL OF SEMICONDUCTOR DEVICES.	NPTEL
2	PRINCIPLES OF SIGNALS AND SYSTEMS	NPTEL
3	DIGITAL CIRCUITS	NPTEL
4	PRINCIPLES OF COMMUNICATION SYSTEM	NPTEL
5	PYTHON FOR DATA SCIENCE	NPTEL
6	ANALOG CIRCUITS	NPTEL

Table No 5.5.2 List of NPTEL Registered Courses

7. Google Classrooms:

Students are advised to share their assignments in Google classroom. The submitted assignments are evaluated and marks are awarded. The course materials and video lectures, PPTs are shared to the students through Google classroom.

S. No	Name of the Subject	Year
1	ELECTRONIC DEVICES	I
2	DIGITAL ELECTRONICS	II
3	COMMUNICATION THEORY	II
4	DISCRETE-TIME SIGNAL PROCESSING	III
5	WIRELESS COMMUNICATION	III
6	MICROPROCESSORS AND MICROCONTROLLERS	III
7	EMBEDDED AND REAL TIME SYSTEMS	IV
8	ADHOC AND WIRELESS SENSOR NETWORKS	IV

Table 5.5.3 List of Google Classroom Subjects

Web Managing:

 $The ECE \ Department information \ is \ available \ in \ college \ website \ https://www.aalimec.ac.in/departments/ece/ \ (https://www.aalimec.ac.in/departments/ece/)$

8.Innovative Workshops:

Innovative workshops are conducted for the students to enlarge their Skills on advanced technologies like Digital Signal Processing, Data Science, IOT etc., and also conducted workshops on programming languages like python programming.

S. No	Name of the Event	Resource Person	Date	Year	No. of students
1	DSP TOOLS AND IDDE	Er.M.T.M. KADER SAHIB MARICAR, AP/ECE	10.11.2018	NA	NA

2	IT INDUSTRY EXPECTATIONS	Mr. Y. MOHAMMED RIZWAN,SENIOR ENGINEERING SPECIALIST,SOFTWARE AG	05.01.2022	II III IV	29 33 33
3	AUTOMATIC VEHICLE ACCIDENT INFORMATION SYSTEM USING GSM AND GPS	LIVE WIRE,AMBATTUR	18.04.2022 & 19.04.2022	II III IV	29 33 33

Table 5.5.4 List of Innovative Workshops Conducted

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

Total Marks 15.00

Institute Marks: 15.00

Name of the faculty		Max 5 Per Faculty	
name of the faculty	2021-22 (CAYm1)	2020-21 (CAYm2)	2019-20 (CAYm3)
ASST PROF. MS. A. S. SALMA BANU	5.00	5.00	5.00
ASST. PROF. MR. A. DURAI BABU	5.00	5.00	5.00
ASST. PROF.MR.MOHAMME D MYDEEN	5.00	5.00	5.00
ASST. PROF. MR. M.SYED MUSTAFAA	5.00	5.00	5.00
ASST.PROF.MR.SATH ISH.M	5.00	5.00	5.00
ASST.PROF.MS.JONE ROSY	5.00	5.00	5.00
ASST.PROF.MS.VITH YA	3.00	3.00	5.00
ASST.PROF.MR.DHA NASEKARAN	3.00	5.00	5.00
ASST. PROF. M. T. M. KADER SAHIB MARICAR	3.00	3.00	3.00
ASST. PROF. P KALIMA BENAZIR	3.00	3.00	0.00
Sum	42.00	44.00	43.00
RF = Number of Faculty required to comply with 20:1 Student Faculty Ratioas per 5.1	10.10	13.10	15.65
Assessment [3*(Sum / 0.5RF)]	24.95	20.15	16.49

Average assessment over 3 years: 20.53

5.7 Research and Development (30)

Total Marks 25.00

5.7.1 Academic Research (10) Institute Marks: 10.00

	Experimental				
	analysis using				
	automated		Sensor letters,		
	industrial	A: https://www.ingentaconnect.com/content/asp/senlet/2018/00000016/0000007/art00006	American		
	sensor with				
1A.S.SALMA BANU	integrated		Scientific	2.58	2018
	distributed data		Publishers vol.		
	fault in		16, no.7, pp.		
	distributed		529-538		
	sensor				
	networks.				
	THREE				
	JUNCTURE				
	BASED		Journal of		
	ISSUER		Emerging		
2A.S.SALMA BANU				7 95	2019
	OUT SYSTEM		and Innovative	1.93	2019
	IN A		Research		
	DISTRIBUTED		Research		
	SERVERS				
	SERVERS				
	Artificial Eye		Journal of		
	for Blind to		Emerging		
IZIA C CAI MA DANII	Read Translate	https://www.jetir.org/archive?v=1&i=6	_	7.95	2023
	and Navigate		and Innovative		
	and itavigate		Research		
	Non-invasive				
	method of				
	melanoma				
	detection on the				
	skin surface		Current		
	through	https://www.currentscience.ac.in/Volumes/124/05/0562.pdf	Science		
1 N.PRABHAKARAN	extraction of	(https://www.currentscience.ac.in/Volumes/124/05/0562.pdf)	Science	1.169	2023
	image features		(SCI/SCOPUS)		
	using modified				
	CAT				
	Optimization				
	Algorithm				
	_			_	
2 S.JONE ROSY	MEMS Based		Journal of		
	infant		Emerging		
	Monitoring	https://www.jetir.org/papers/JETIR2111217.pdf		7.95	2021
	System to		and Innovative	1	
	Prevent Sudden		Research		
	infant Death.				
3					

RESEARCH ARTICLES

Non-invasive method of melanoma detection on the skin surface through extraction of image features using modified CAT optimization algorithm

N. Prabhakaran*

In this study, melanoma was detected at an early stage using modified CAT optimization algorithm (MCOA) based on non-convex boundary edge extraction, pixel size, shape and intensity variations on the skin, MCOA can detect skin cancer at an early stage yet rareting the non-convex boundary edge extraction, pixel size, shape and intensity variations on the skin, MCOA can detect skin cancer at an early stage yet variating the non-convex boundary size extraction and intensity of the detection of melanoma size and beat data in one-convex boundaries of melanoma in the skin image. The non-convex boundary region leads to visualization of discriminative features of melanoma in the skin image. The non-convex boundary region leads to visualization of discriminative features of melanoma as the skin image. The non-convex boundary region leads to visualization of discriminative features of melanoma as the skin image is non-convex boundary region leads to visualization of discriminative features of melanoma as the skin image. The non-convex boundary region leads to visualization of discriminative features of melanoma as the skin image with fliets and extraction from the image with less accuracy. The particle morphological changes in the skin through size, shape, colour and texture feature extraction from the image is colour and texture feature extraction from the image is colour and texture feature extraction from the image is colour and its colour and



MEMS BASED INFANT MONITORING SYSTEM TO PREVENT SUDDEN INFANT DEATH

S. Jone Rosy', P. Kalima Benaziri

Assistant professor, Aalign Muhammed Salegh, college of Engineering

la.jonerosv@salimec.sc.in

²Assistant professor. <u>Aslim Muhammed Salegh</u> college of Engineering.

Kalimabenazir p@aalimec.ac in

ABSTRACT:

MEMS based Infant Monitoring device provides solution for sudden infant death due to anticipated changes in temperature, respiration rate, heart beat and sleeping position. The wireless monitoring device measures the Heart beat, respiratory rate and body temperature of an infant as well as its surrounding carbon monoxide concentration. These are considered

parameters and start the treatment immediately.

INTRODUCTION:

Sudden infant death syndrome (SIDS), also known as cot death or crib death, is the sudden unexplained death of a child less than one year of age [1]. Sudden infant death syndrome (SIDS) is the sudden death of an infant without any previous percetvible medical conditions. However, the cause of SIDS is

5.7.2 Sponsored Research (5) Institute Marks : 0.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount
HEMODIALYZER	2 YEARS	BIPAC SOLUTION	20000.00
			Total Amount(X): 20000.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount

2019-20 (CAYm3)

Duration	Funding Agency	Amount
	Duration	

Cumulative Amount(X + Y + Z) = **5.7.3 Development Activities** (10)

7.3 Development Activities (10) Institute Marks: 10.00

The faculty along with the students developed projects in the following areas:

- 1.SIGN LANGUAGE RECOGNITION USING ML
- 2.WEATHER MONITORING USING IOT
- 3.YOLO OBJECT DETECTION USING TENSORFLOW
- 4. CHATBOT USING AI
- 5.VOICE CONTROLLED HOME AUTOMATION USING RASPBERRY Pi
- 6. DIGITAL FARMING BY IMAGE PROCESSING
- 7.ROBOTIC ARM
- 8.BATTERY MANAGEMENT SYSTEM

Table 5.7.3.1 List of Projects Developed by the Department for CAY (2021-22)

S.No	Team Members	Guide Name	Title of the Project	Type of the project
1	ABDUR RAQUIB. MOHAMMAD ISMAIL MIHAL. MOHAMMAD ISHAK. MOHAMMAD SALMAN.	Mr. KADER SAHIB MARICAR	SIGN LANGUAGE RECOGNITION USING ML	MACHINE LEARNING
2	APARNA,M ASHANI.A.R FARITHA.J MISBAH FATHIMA.A	Mr. M. SATHISH	WEATHER MONITORING USING IOT	ЮТ

Table 5.7.3.1 List of Projects Developed by the Department for CAY (2020-21)

S.No	Team Members	Guide Name	Title of the Project	Type of the project
1	S.A.FARIHA PARVEEN M.FAHIMA BEGAM R.FATHIMA JABEEN	Mr. KADER SAHIB MARICAR	YOLO OBJECT DETECTION USING TENSORFLOW	MACHINE LEARNING
2	VINOD BHARATH DINESH	Mr. MOHAMMED MYDEEN	CHATBOT USING AI	AI

Students showing Demo of the Mini Projects

Table 5.7.3.2 List of Projects Developed by the Department For CAYm1 (2019-20)

S.No Team Members	Guide Name	Title of the Project	Type of the project
-------------------	------------	----------------------	---------------------

1	S.A.FARIHA PARVEEN M.FAHIMA BEGAM R.FATHIMA JABEEN	Dr. A.S.SALMA BANU	VOICE CONTROLLED HOME AUTOMATION USING RASPBERRY Pi	AI
2	ABDUL ARSATH .S MOHAMED ASARDEEN. M.	Mr. M. SYED MUSTAFAA	DIGITAL FARMING BY IMAGE PROCESSING	DIGITAL IMAGE PROCESSING

Table 5.7.3.2 List of Projects Developed by the Department For CAYm1 (2018-19)

S.No	Team Members	Guide Name	Title of the Project	Type of the project
1	A.SUHAIL AHMAD NOOR M.RASHEED THARIQ J.MOHAMMED SIRAJUDEEN	Mr. M. SATHISH	ROBOTIC ARM	EMBEDDED SYSTEMS
2	MOHAMMED RAGHADAN WASSEEM ABDUL RAHMAN	Mr.A. DURAI BABU	BATTERY MANAGEMENT SYSTEM	EMBEDDED SYSTEMS

Students showing Demo of the Mini Projects

C. Instruction Materials:

E-content development:

- The faculty will prepare the instructional material for the subjects and technical training handled by them for every semester and it will be placed in the college portal.

 www.aalimec.ac.in (http://www.aalimec.ac.in/)
- E content is provided in the central library

Laboratory Manuals:

• All lab manuals are prepared by our faculty and same will be shared to the students

5.7.4 Consultancy(from Industry) (5)

Institute Marks: 5.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount
computerized Exam centre	1	CORE INTEGRA,CDAC,TANGO,	1273748.00
			Total Amount(X): 1273748.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount

2019-20 (CAYm3)

Project Title	Duration	Funding Agency	Amount

Cumulative Amount(X + Y + Z) =

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

Total Marks 30.00

Institute Marks: 30.00

Faculty Performance Appraisal and Development System (30)

Name	A. MOHAMED MYDEEN
Present Position	ASSISTANT PROFESSOR
Academic Year	2021-2022
Teaching Process	

A. Teaching Process (Max Point 25)

SI. No.	Semester	Course Code/ Name	No. of scheduled Classes	No of actually held classes	Points earned	Enclosure No.
1	VII/ 2018- 19	EC6703/EMBEDDED & REAL TIME SYSTEMS	45	48		
2	VIII-A sec/ 2018-19	EC6801/ WIRELESS COMMUNICATION	45	49		
3	VIII-B-sec/ 2018-19	EC6801/ WIRELESS COMMUNICATION	45	49		
4	V-A- sec/2019-20	EC8551/ COMMUNICATION NETWORKS	45	59		
5	V-B- sec/2019-20	EC8551/ COMMUNICATION NETWORKS	45	58		
6	II/2019- 2020	EC8251/ ELECTRONIC DEVICES	45	52		
7	VIII/2019- 20	EC6811/ PROJECT WORK	180	195		
8	V/2020-21	EC8551/ COMMUNICATION NETWORKS	45	54		
9	VII/2020- 21	EC8071/ COGNITIVE RADIO	45	45 55		
		Total	540	619	25	

Earned Points : 25 out of 25

B..Students' feedback (Max Point 25)

S. No.	Semester	Course Code/ Name	Average Student feedback on the scale of 25	Enclosure No.
1	V/ 2020-21	EC8551	25	
2	II / 2019-20	EC8251	23.13	
3	VII / 2018-19	EC6703	23.95	
		Total	72.08	

Points Earned = 72.08x25/75 = 24.03 Out of 25

C.Departmental Activities (Max credit 20)

S. No.	Semester	Activity	Credit Point	Criteria	Enclosure No
1	VIII/ 2018-19	Project Co- ordinator	3	3 Point/ semester	
2	ODD/2018-19	NAAC – Criterion 5	3	3 Point/ semester	
3	EVEN/2018-19	NAAC – Criterion 5	3	3 Point/ semester	
4	ODD/2019-20	NAAC – Criterion 5	3	3 Point/ semester	
5	ODD/2019-20	DSP Lab Incharge	3	3 Point/ event	
6	VIII/ 2019-20	Project Co- ordinator	3	3 Point/ semester	
8	EVEN/2019-20	NAAC – Criterion 5	3	3 Point/ semester	
9	ODD/2020-21	NAAC – Criterion 5	3	3 Point/ semester	
10	VIII/ 2020-21	Project Co- ordinator	3	3 Point/ semester	
11	EVEN/2020-21	DSP Lab Incharge	3	3 Point/ event	
12	EVEN/2020-21	NAAC – Criterion 5	3	3 Point/ semester	
		Total	33		

Earned Points: 20 Out of 20

Calculation of Credit Points

(Sample Calculations Page-2)

D.Institute Activities (Max Credit 10)

Sl. No.	Semester	Activity	Credit Point	Criteria	Enclosure No.
1	ODD/ 2018- 19	HOD	4	4 Point/semester	
2	ODD/ 2018- 19	Head-Centre for SoftSkill Training Programme	4	4 Point/semester	
3	ODD/ 2018- 19	NAAC Incharge – Criterion 5	4	4 Point/semester	
4	EVEN/ 2018-19	Head-Centre for SoftSkill Training Programme	4	4 Point/semester	
5	EVEN/ 2018-19	NAAC Incharge – Criterion 5	4	4 Point/semester	

6	ODD/ 2019- 20	Head-Centre for SoftSkill Training Programme	4	4 Point/semester
7	ODD/ 2019- 20	NAAC Incharge – Criterion 5	4	4 Point/semester
8	EVEN/2019- 20	Head-Centre for SoftSkill Training Programme	4	4 Point/Event
9	EVEN/ 2019-20	NAAC Incharge – Criterion 5	4	4 Point/semester
10	ODD/ 2020- 21	NAAC Incharge – Criterion 5	4	4 Point/semester
11	ODD/2020- 21	Head-Centre for SoftSkill Training Programme	4	4 4 Point/Event
12	EVEN/ 2020-21	NAAC Incharge – Criterion 5	4	4 Point/semester
13	EVEN/2020- 21	Head-Centre for SoftSkill Training Programme	4	4 Point/Event

Earned Points: 10 Out of 10

E.ACR maintained at institute level (Max Credit 10)

	Extraordinary	Excellent	Very Good	Good	Satisfactory
Γ	10	9	8	7	5

S.N o.	Year	Activity	Credit Point	Criteria	Enclosure No.
1	2018-19	ACR	8	Very Good	
2	2019-20	ACR	8	Very Good	
3	2020-21	ACR	8	Very Good	
	Average				

Earned Points = 08 Out of 10

F.Contribution to Society (Max Credit 10)

S. No.	Semester	Activity	Credit Point	Criteria	Enclosure No.
1	-	INDUCTION PROGRAM	-	-	
2	-	UNNAT BHARAT ABHIYAN	-	-	
3	-	YOGA CLASSES	-	-	
4	-	BLOOD DONATION	-	-	

⁻ Total Points Earned : A+B+C+D+E+F = 24.72+24.03+20+10+8+0

= 86.75 Out of 100n = 8.68 Out 0f 10

Summary

	Academic Year	Academic Year	Academic Year
Summa ry	1	2	3
A. Teaching Process (Max Points 25)	25	25	25
B. Students' feedback (Max Points 25)	25	23.13	23.95
C. Departmental Activities (Max Points 20)	9	12	12
D. Institute Activities (Max Points 10)	10	10	10
E. ACR (Max Points 10)	8	8	8
F. Contribution to Society (Max Points 10)	0	0	0
Total (Max Points 100)	77	78.13	78.95
Total on 10 Point scale	7.7	7.8	7.8

STUDENT'S FEEDBACK FORM

Academic Year:	2019-20	Name of the Faculty	A. MOHAMED MYDEEN
COURSE	EC8251/ELECTRONIC DEVICES	SEMESTER	П
		Date of the feedback	18-02-2020

For getting filled in through student

S.	Description	Very Poor	Poor	Good	Very Good	Excellent
No.		(1)	(2)	(3)	(4)	(5)
1	Has the Teacher covered entire Syllabus as prescribed by University/ College/ Board?					5
2	Has the Teacher covered relevant topics beyond syllabus				4	
	Effectiveness of Teacher in terms of:					
3	(a) Technical content/course content					5
	(b) Communication skills					-
	(c) Use of teaching aids					
4	Pace on which contents were covered				4	
5	Motivation and inspiration for students to learn					5
	Support for the development of Students' skill					
6	(i) Practical demonstration					5
	(ii) Hands on training					
7	Clarity of expectations of students					5
8	Feedback provided on Students' progress				4	
9	Willingness to offer help and advice to students.					5
	Total					42

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

Total Marks 10.00

Institute Marks: 10.00

A.Provision of Visiting /Adjunct/Emeritus Faculty etc:

The College has a policy for recruiting the Visiting/Adjunct/Emeritus faculty members at UG level based on requirements of the program. The qualification and experience for Visiting/Adjunct/Emeritus faculty positions is as per the norms of AICTE/ANNA UNIVERSITY.

B.Minimum 50 Hours per Year Interaction:

Academic Year	Details Of Visiting Faculty	No of Hours Taught	Topics Covered
CAY (2022-23)	AY (2022-23)		
CAY (2021-22)	Prof.Dr. RAJESH KUNNATH Radio Studio 50, Thomas Nagar, Little Mount, Saidapet, Chennai, Tamil Nadu 600015	54	ELECTROMAGNETIC FIELDS
CAYm1 (2020-21)	Prof.Dr. RAJESH KUNNATH Radio Studio 50, Thomas Nagar, Little Mount, Saidapet, Chennai, Tamil Nadu 600015	58	ANTENNA & WAVE PROPAGATION
CAYm2 (2019-20)	Prof.Dr. RAJESH KUNNATH Radio Studio 50, Thomas Nagar, Little Mount, Saidapet, Chennai, Tamil Nadu 600015	54	TRANSMISSION LINES & WAVE GUIDES

Table 5.9.1. List of Visiting/Adjunct/Emeritus Faculty Members

6 FACILITIES AND TECHNICAL SUPPORT (80)

Total Marks 80.00

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

Institute Marks: 30.00

Total Marks 30.00

		Number of		Weekly utilization	Technic	cal Manpower S	Support
Sr. No	Name of the Laboratory	students per set up(Batch Size)	Name of the Important Equipment	status(all the courses for which the lab is utilized)	Name of the Technical staff	Designation	Qualification
1	EC8761 ADVANCED COMMUNICATION LABORATORY	33	1.OPTICAL POWER METER 2. MICROWAVE BENCH SETUP 3. OPTICAL FIBER KIT	UTILIZED	Er. B. RAMESH	LAB INSTRUCTOR	B.E. (ECE)
2	EC8711 EMBEDDED LABORATORY	30	1. Embedded trainer kits with ARM board 2. Embedded trainer kits suitable for wireless communication 3. Adequate quantities of Hardware, software and consumables	UTILIZED	Er. VMM Kader Sahib	LAB INSTRUCTOR	B.E. (ECE)
3	EC8661 VLSI DESIGN LABORATORY	30	1.Xilinx ISE 2.Xilinx FPGA Boards 3.Tanner EDA Tools	UTILIZED	Er. VMM Kader Sahib	LAB INSTRUCTOR	B.E. (ECE)
4	EC8681 MICROPROCESSORS AND MICROCONTROLLERS LABORATORY	30	1. 8086 development kits 2.Interfacing Units 3.8051 Microcontroller kits 4.8086 Assembler 5.8051 Cross Assembler	UTILIZED	Er. VMM Kader Sahib	LAB INSTRUCTOR	B.E. (ECE)
5	EC8561 COMMUNICATION SYSTEMS LABORATORY	30	1.Communication Trainer Kits. 2. Dual Trace Oscilloscope. 3. Cathode Ray Oscilloscope 4. Digital Storage Oscilloscope. 5. Function Generator.	UTILIZED	Mr. Ameer Basha	LAB INSTRUCTOR	Diploma (ECE)
6	CS8382-DIGITAL SYSTEMS LAB	30	Digital IC Trainer Kit. 2. Linear IC Trainer.	UTILIZED	Mr. Ameer Basha	LAB INSTRUCTOR	Diploma (ECE)
7	EC8462-Linear Integrated Circuits Lab.	30	Cathode Ray Oscilloscope Digital Storage Oscilloscope. 3. Function Generator.	UTILIZED	Mr. Ameer Basha	LAB INSTRUCTOR	Diploma (ECE)
8	EE 8461 Linear and Digital Circuits Laboratory	30	Digital IC Trainer Kit. 2. Linear IC Trainer. 3. Cathode Ray Oscilloscope 4. Digital Storage Oscilloscope. 5. Functional	UTILIZED	Mr. Ameer Basha	LAB INSTRUCTOR	Diploma (ECE)
9	EC8361-ANALOG & DIGITAL CIRCUITS LABORATORY	30	Digital IC Trainer Kit. LInear IC Trainer 3. Cathode Ray Oscilloscope 4. Digital Storage Oscilloscope. 5. Functional	UTILIZED	Mr. M. Mohamed Sheik Abdul Kader	LAB INSTRUCTOR	Diploma (ECE)
10	GE8261-ENGINEERING PRACTICES LAB	30	Digital IC Trainer Kit. LInear IC Trainer 3. Cathode Ray Oscilloscope 4. Digital Storage Oscilloscope. 5. Functional	UTILIZED	Mr. M. Mohamed Sheik Abdul Kader	LAB INSTRUCTOR	Diploma (ECE)
11	EC8261-CIRCUITS AND DEVICES LAB	30	Digital IC Trainer Kit. LInear IC Trainer 3. Cathode Ray Oscilloscope 4. Digital Storage Oscilloscope. 5. Functional	UTILIZED	Mr. M. Mohamed Sheik Abdul Kader	LAB INSTRUCTOR	Diploma (ECE)
12	EC8461-CIRCUITS DESIGN AND SIMULATION LAB	30	Digital IC Trainer Kit. LInear IC Trainer 3. Cathode Ray Oscilloscope 4. Digital Storage Oscilloscope. 5. Functional	UTILIZED	Mr. M. Mohamed Sheik Abdul Kader	LAB INSTRUCTOR	Diploma (ECE)
13	EC8562-DIGITAL SIGNAL PROCESSING LABORATORY	30	1.DESKTOP COMPUTERS- HP(INTEL CORE i5) WITH HP MONITOR 2.TMS320C50 BASED STARTER KIT	UTILIZED	Mr. R. SAI PRASAD	SYSTEM ADMIN / LAB INSTRUCTOR	Diploma (ECE)
14	EC8563-COMMUNICATION NETWORKS LABORATORY	30	1.DESKTOP COMPUTERS- HP(INTEL CORE i5) WITH HP MONITOR 5.ROUTER-CISCO 6.LAN TRAINER KIT	UTILIZED	Mr. R. SAI PRASAD	SYSTEM ADMIN / LAB INSTRUCTOR	Diploma (ECE)

 $\textbf{6.2 Additional facilities created for improving the quality of learning experience in laboratories} \ (25)$

Total Marks 25.00

Institute Marks: 25.00

Sr. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	PCB FABRICATION SETUP	1.SMT SOLDERINGAND DESOLDERING STATION WITH ACCESSORIES 2.PCB DRILLING MACHINE WITH ACCESSORIES	TO PROVIDE TRAINING FOR PCB FABRICATION	UTILIZED	INTEGRATED CIRCUITS	PO1,PO2,PO3, PO4,PO5,PO6,PO11,P12,PSO1,PSO3
2	SOFTWARE DEFINED RADIOS	1.NooElec USB Stick Set with RTL2832U and R820T SDR with Accessories - 2 set 2.584-ADALM-PLUTO RF development Tools SDR Active Learning Platform with Accessories - 1 set	To provide hands on experience to students to design, test, and simulate SDR based wireless systems	UTILIZED	ADVANCED WIRELESS COMMUNICATION SYSTEMS	PO1,PO2,PO3, PO4,PO5,PO6,PO11,P12,PSO1,PSO3
3	ARDUINO BOARDS	ARDUINO UNO BOARDS – 4 Nos. with shield and interfaces	TO DO MINI PROJECTS IN THE AREA OF EMBEDDED SYSTEMS	UTILIZED	EMBEDDED SYSTEMS AND ROBOTICS	PO1,PO2,PO3,PO4,PO5,PO6, PO11,P12,PSO1,PSO2,PSO3
4	LAB VIEW Software	ESS-NI-LV-UG NI - 10 users	To Conduct workshops, Seminars to strengthen the technical skills of the Faculty members and students	UTILIZED	Communication Systems	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12,PSO1,PSO2,PSO3
5	Spectrum Analyser	SA 5011A	To analyse and verify Project outputs	UTILIZED	RF Communication Systems	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12,PSO1,PSO3
6	LAN Trainer Kit	Benchmark LAN-T-Lite Trainer Kit 1.LAN -T NEU - 1 no. 2.LAN-T- NIU - 2 nos. FALCON LTS-01-LAN trainer with LAN Protocol Analyzer S/W - 1 no.	To analyse and verify different types of Routing Algorithms and Protocols	UTILIZED	Communication Networking	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12,PSO1,PSO3
7	Digital Storage Oscilloscope	ADS 1152CM	To analyse and verify Project output waveforms	UTILIZED	Electronics and Communication Systems	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12,PSO1,PSO3
8	DSP STARTER KITS	1.TMS320C6713 BASED STARTER KIT 2.TMS320C5416 BASED STARTER KIT	To design and develop Signal processing applications and solutions for Signal Processing problems	UTILIZED	Digital Signal Processing and its Applications	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12,PSO1,PSO3
9	ROUTERS	Multiservice Access Gateway CISCO 1841 10/100 Base T Modulator Router	Data sharing and communication among the networks	UTILIZED	Computer Networks	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12

 $\textbf{6.3 Laboratories: Maintenance and overall ambiance} \ (10)$

Total Marks 10.00

Institute Marks: 10.00

Department has 5 well equipped and spacious laboratories. The laboratories are effectively utilized by the department to handle laboratory classes. Students are instructed how to handle the equipment/system/component before the conduct of experiments during their lab sessions.

Maintenance:

- · Laboratory components and equipment are periodically serviced.
- · Maintenance of Desktop Computers, LAN Setup and software installations are performed by the respective Lab Instructors.

Ambience:

- Separate work tables are provided in each laboratory.
- Backup UPS Power supply for Computer labs.
- Backup Generator supply for Circuits labs.
- Projector and white board provided in Computer Labs.
- White board provided in all the Labs.
- Store facility to keep laboratory equipment. Students are assisted for academic projects, mini projects and internships in laboratories.

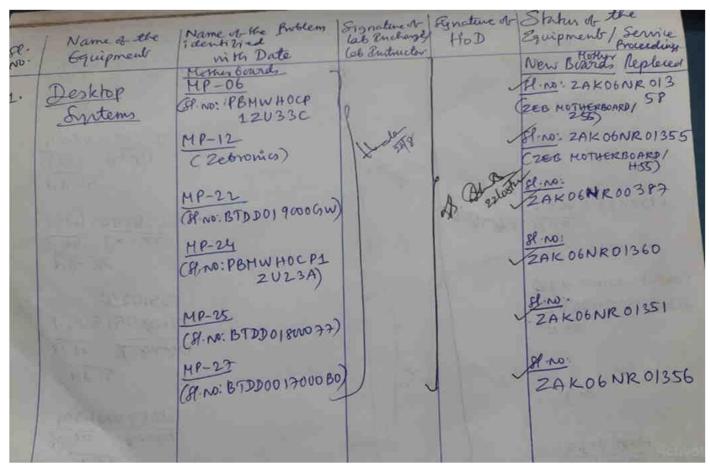


Fig 6.3.1 Laboratory Maintainance Register

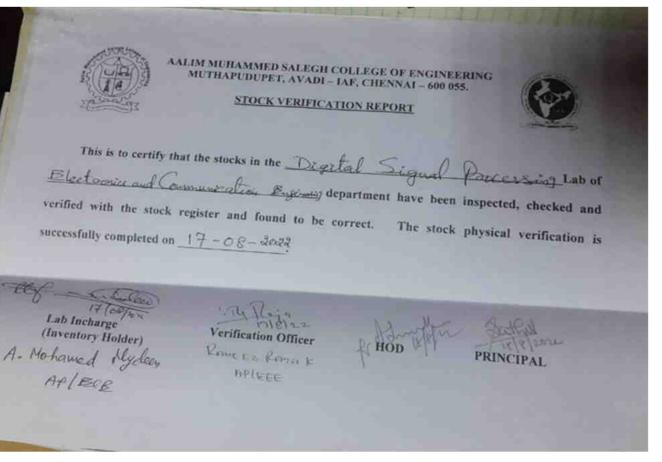


Fig 6.3.2 Stock Verification Report

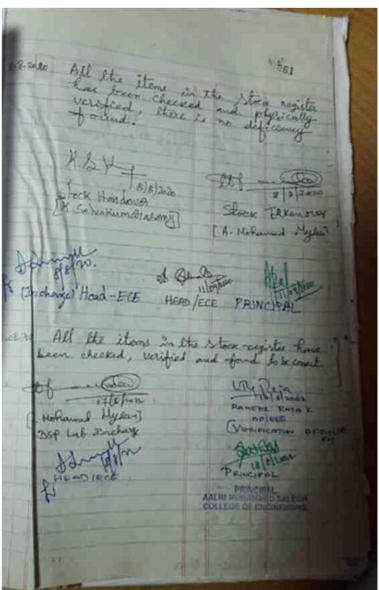


Fig 6.3.3 Stock Verification Report

6.4 Project laboratories (5) Total Marks 5.00

Institute Marks : 5.00

SLNO	NAME OF THE LABORATORY	NAME OF THE IMPORTANT	WEEKLY UTILIZATION STATUS	NAME OF THE TECHNICAL STAFF	DESIGNATION	QUALIFICATION
1	OPTICAL AND MICROWAVE LABORATORY	MICROWAVE BENCH SETUP AND POWER METER (SOIL DETECTION SYSTEM PROJECT)	UTILIZED	Er. B. Ramesh	LAB INSTRUCTOR	B.E (ECE)
2	VLSI AND EMBEDDED LABORATORY	ARDUINO BOARDS – 4 No. with shield and interfaces, TANNER EDA 15.0	UTILIZED	Er. VMM Kader Sahib	LAB INSTRUCTOR	B.E (ECE)
3	DIGITAL SIGNAL PROCESSING LABORATORY		UTILIZED	Er R Ramesh	LAB INSTRUCTOR	B.E. (ECE)

6.5 Safety measures in laboratories (10)

Total Marks 10.00

Institute Marks: 10.00

Sr. No	Laboratory Name	Safety Measures
1	OPTICAL AND MICROWAVE LAB	WELL TRAINED SUPPORTING STAFF • SERVICING OF EQUIPMENTS IS DONE PERIODICALLY. • MAINTAIN A CLEAN AND WELL ORGANIZED LABORATORY • UPS FOR LABORATORY IS MAINTAINED WITH SAFETY. All labs are Equipped with 1. Fire extinguisher 2. First aid box 3. Water supply 4. Display boards showing list of experiments, major equipment's, and working model of basic experiments. 5. Do's & Dont's
2	VLSI AND EMBEDDED LABORATORY	WELL TRAINED SUPPORTING STAFF • SERVICING OF EQUIPMENTS IS DONE PERIODICALLY. • MAINTAIN A CLEAN AND WELL ORGANIZED LABORATORY • UPS FOR LABORATORY IS MAINTAINED WITH SAFETY. All labs are Equipped with 1. Fire extinguisher 2. First aid box 3. Water supply 4. Display boards showing list of experiments, major equipments, and working model of basic experiments. 5. Do's & Dont's
3	COMMUNICATION SYSTEMS LAB	WELL TRAINED SUPPORTING STAFF • SERVICING OF EQUIPMENTS IS DONE PERIODICALLY. • MAINTAIN A CLEAN AND WELL ORGANIZED LABORATORY • UPS FOR LABORATORY IS MAINTAINED WITH SAFETY. All labs are Equipped with 1. Fire extinguisher 2. First aid box 3. Water supply 4. Display boards showing list of experiments, major equipments, and working model of basic experiments. 5. Do's & Dont's
4	ELECTRONIC AND DEVICES LAB	WELL TRAINED SUPPORTING STAFF • SERVICING OF EQUIPMENTS IS DONE PERIODICALLY. • MAINTAIN A CLEAN AND WELL ORGANIZED LABORATORY • UPS FOR LABORATORY IS MAINTAINED WITH SAFETY. All labs are Equipped with 1. Fire extinguisher 2. First aid box 3. Water supply 4. Display boards showing list of experiments, major equipments, and working model of basic experiments. 5. Do's & Dont's
5	DIGITAL SIGNAL PROCESSING LAB	WELL TRAINED SUPPORTING STAFF • SERVICING OF EQUIPMENTS IS DONE PERIODICALLY. • MAINTAIN A CLEAN AND WELL ORGANIZED LABORATORY • UPS FOR LABORATORY IS MAINTAINED WITH SAFETY. All labs are Equipped with 1. Fire extinguisher 2. First aid box 3. Water supply 4. Display boards showing list of experiments, major equipments, and working model of basic experiments. 5. Do's & Dont's

7 CONTINUOUS IMPROVEMENT (50)

Total Marks 50.00

7.1 Actions taken based on the results of evaluation of each of the POs & PSOs (20)

Total Marks 20.00

Institute Marks : 20.00

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

28/23, 2:34 PM			Print
POs	Target Level	Attainment Level	Observations
PO 1 : Engineerin	ng Knowledge		
PO 1	1.8	2.0472	Students were adequately aware of mathematics, sciences with engineering fundamentals. They sufficiently participated in exercises solving complex, mathematical equations. Students did not incline to attempt to write mathematical based equations in End Semester Examinations.
` '		g problems in End Semester Examir medial classes based one to one int	nations by giving practice. (ii) The students will be able to solve complex teractions.
PO 2 : Problem A	nalysis		
PO 2	1.8	1.80361	Students did not have inclination to attend Part C Questions because of lack of analytical skills.
1.,	ntations, Help them to find the so uraged to solve the problems du		ems and conduct test for problem solving, group discussions to find solutions. (ii)
PO 3 : Design/dev	velopment of Solutions		
PO 3	1.8	1.80024	Less count of product design and development based projects.
.,	g to product design and develop uraged to register in Arduino IDI	• · · /	lents are motivated to identify the design based projects from Arduino IDE.
PO 4 : Conduct Ir	nvestigations of Complex Prob	olems	
PO 4	1.8	1.47166	Investigations are conducted through mock test, AMCAT, MCQ Online. Target is not attained. Exposure to do mini projects and development oriented activities. Students have to enhance their knowledge related to research analysis for complex problems.
(i) Low performers	are identified. (ii) Regular pract	ce is given in remedial classes to so	olve complex problems.
PO 5 : Modern To	ol Usage		
PO 5	1.8	1.2902	Modern tools are identified as low in number based on syllabus given by the affiliating University.
1	_	-	nings. (ii) Provided well equipped laboratories to meet the curriculum and research ucted to get more exposure and knowledge level.
PO 6 : The Engine	eer and Society		
PO 6	1.8	0.8875	Social relevance based projects are less in number.
(i) Students are as	ked to identify the problem in so	cial environment through registering	themselves in Hackathon and Symposium.
PO 7 : Environme	ent and Sustainability		
PO 7	1.8	0.7193	Awareness about disposal of e-waste is identified through assessment of professional ethics subject.
(i) Students are ma	ade inclined to attend webinars t	or getting awareness of disposal of	e-waste.
PO 8 : Ethics			
PO 8	1.8	0.56026	Target level is not attained. Ethical principles are inculcated to the Student who are successful in program completion. Professional Ethics course is offered as an elective.
\ '		nce and motivational talks are arrar ducted workshops through industry	nged to improve the ethical values and responsibilities. (ii) The students are experts
PO 9 : Individual	and Team Work		
PO 9	1.8	0.6374	Individual and team work are assessed during organizing the technical events like symposiums and conferences where effective communication is identified less.
(i) Groups Discuss	sions through Soft Skill Training l	Programme (SSTP) are conducted.	(ii) Entrepreneur Development cell is created, various Skill developments and
personality develo their team work.	pment programs are done to mo	tivate and help to become a succes	esful entrepreneur. (iii) Students are motivated to do Mini Project for enhancing
PO 10 : Commun	ication		
PO 10	1.8	0.98017	Report writing from project reports, effective communication of the document is identified and assessed as a moderate level.
1	ng is imparted to students to enherefective communication throug		Communication /technical talks by group discussions. (ii) Providing adequate
PO 11 : Project M	anagement and Finance		
PO 11	1.8	0.7363	The students lack in effective planning and executing their projects.

' '	(i) Awareness about project management and finance are conducted through webinar, seminar and online courses. (ii) Provided well equipped laboratory facilities with latest configuration tools to fulfill their project work requirements. (iii) Conducting technical Symposiums ,project expo to get exposure in multi disciplinary environments.						
PO 12 : Life-lon	PO 12 : Life-long Learning						
PO 12	1.8	1.250	Life long learning through online is provided through SWAYAM NPTEL video courses and the number of students passed out of the course is less				

(i) We are encouraging the students to have life long learning through NAAN MUDHALVAN courses initiated by Tamilnadu Government. (ii) Using ICT facilities, such as PPTs, live demonstration of topic imparted using video Lecture includes new technological developmental tools and knowledge of new Products.

in number

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

PSOs T	Target Level	Attainment Level	Observations
--------	--------------	------------------	--------------

PSO 1: To analyze, design and develop solutions by applying foundational concepts of electronics and communication engineering

PSO 1 1.8 1.74076	Design and analysis part is performed and trained well, whereas developing a solution was impeded.
-------------------	--

(i) Desired level approach in applying fundamental concepts through assigning mini projects. (ii) Provided hardware equipments and simulation software to do experiments, miniprojects, will be assigned to improve the knowledge level. (ii) Guest lectures from academia and technocrats of industries by regular industrial visits and internships.

PSO 2: To apply design principles and best practices for developing quality products for scientific and business applications.

	PSO 2	1.8	1.6742	The final projects to product, technology transfer is low.					
- 1	(i) Technology transfer is promoted among the students through training from IPR cell. (ii) Medium ideas to product conversion was moderate even such as symposium,								
Н	technical quiz, project ex	κρο, and Intra Departmental Comp	etitions.						

PSO 3: To adapt to emerging information and communication technologies (ICT) to innovate ideas and solutions to existing/novel problems.

PSO 3	1.8	1.47855	Students are not effectively addressed to societal needs with their acquired technical knowledge.

(i) To develop the quality product and product design and development knowledge and awareness provided to the students through webinar and ED cell. (ii) MS/ME registration, through ED cell startups, funding awareness are provided.

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

Total Marks 10.00

Institute Marks: 10.00

A) ASSESSMENT SHALL BE BASED ON CONDUCT AND ACTIONS TAKEN IN RELATION TO CONTINUOUS IMPROVEMENT

The process consists of internal audits and inter-departmental audits. Audits are conducted for Faculty Members, Laboratories, and departmental activities.

Academic Administration Audit:

The following academic records maintained by faculty members are verified during the academic audit for meaningful outcomes.

- 1. Calendar of events
- 2. Competency skills
- 3. Course File

In addition to the above mentioned parameters, the following parameters are audited for Laboratory probing:

Laboratory Audit:

- 1. Lab Course File & Manual.
- 2. Stock Report Availability of SOP (Standard Operating Procedures).
- 3. Laboratory Experiment Completion Status Report Additional Facilities Created, Content Beyond Syllabus.

Academic auditing is done through 3 levels to measure quality as follows.

TargetLevel FixationforPOsand PSOs



Figure 7.2a Target Level Fixation for POs and PSO:

Department Review Meeting (DRM):

As part of the Internal auditing system Department Review Meetings are conducted to discuss about the department academic activities

IC NI	Accocament Critaria	A ation Talean	Conduct Machaniam
S.IN0	Assessment Criteria	Action Taken	Conduct Mechanism

Quality course materials have been prepared by the Instructors and the File Verification has been done within the deadline Scheduled. Faculties were asked to collect quality materials by referring quality textbooks and self learning aids. Innovative teaching methods and Slow learners of each class have been identified from contents also to be incorporated in the file. their academic performance and initiatives also The course file to be filled with important Q&A too. planned. Based on the internal and external assessment, the students categorized as fast and slowlearners. Special classes and evening coaching classes Parents were communicated for parents meeting to to be initiated. Personal counseling also to be done by the respective discuss the academic performance of their wards and planned to collect feedback regarding them is to reach The respective class In Charges will contact the parents. The agenda of the Vision and Mission.. the meeting also to be communicated to parents. The feedback forms with the dissemination of Vision and Mission also made ready by the Department Advisory Board Meeting has been Incharges to collect feedback from the parents. scheduled for the new target setting of Vision and Internal members and the convener of DAC will discuss the schedule Reviewofactionstaken as Mission. of Next DAC meeting and major points regarding new Vision Mission per the previous DRM PEO statements to be discussed in the meeting also will be finalized. Students identified their area f interest to do their Circular will be circulated to the Pre final year students regarding projectwork and were encouraged to develop a miniproject works by the mini project coordinator. The plan, schedule and project in the 5th semester. A detailed plan for project deadline also will be displayed in the notice board. work with target dates and milestones prepared. The time table coordinator will prepare the timetable by referring subject allocation, academic schedule and credits of course. Time table was prepared and distributed on time. The old procedures of mentoring will be audited by HOD and the faculty to be advised to concentrate on some more aspects related to academics and personal issues of students. Effective mentoring System has been fine-tuned and proper instructions are given to faculty by HOD. Alumni those who are placed inreputed industries will be called by the alumni coordinator and Interactions also to be arranged with current students. Alumni meet interactions were arranged for current Students to get self-motivated

Table 7.2.2.1 Department Review Meeting

Table 7.2.1. Levels of Academic Auditing.

Sl.no.	Name of the Auditing	Level	Assessment based on Co Po and PSo
1	Internal auditing	Faculty level	COs/POs/PSOs
2	DAC auditing	Department level	COs/POs/PSOs
3	IQAC auditing	Intuitional level	COs/POs/PSOs

Table 7.2. List of events that are conducted to improve attainment of POs and PSOs for CAY (2022-23).

S.NO	Date	Name of The	No Of	PO's Mapping	
5.110	Date	Events	Participants/Attendees	1 O s Mapping	
1	18.04.2022&19.04.2022	Workshop :Automatic Vehicle Accident Information System Using GSM and GPS	95	PO1,PO2,PO3,PO4,PO5,PO6,PO9,PO10,PO11,PO12, PSO1, PSO2	
2	18.05.2022	Workshop: IOT & Android App Development	95	PO1,PO2,PO3,PO4,PO5,PO6,PO9,PO10,PO11,PO12, PSO1, PSO2	
3	07.06.2022	Workshop: Robotics	62	PO1,PO2,PO3,PO4,PO5,PO6,PO9,PO10,PO11,PO12, PSO1, PSO2	

4	11.03.2023	Webinar: Recent Trends And Industrial Expectations in Embedded Systems Design, Development and Testing	33	PO1,PO2,PO3,PO4,PO5,PO6,PO9,PO10,PO11,PO12, PSO1, PSO2
5	21.03.2023	AMP Career Guidance Seminar: Drug Abuse - Alarming Rise Prevention and Safe Guards	63	PO1,PO2,PO3,PO4,PO5,PO6,PO9,PO10,PO11,PO12, PSO1, PSO2
6	21.03.2023	AMP Career Guidance Seminar: Human Capital Skill Gaps-Industry Ready (Pre final and Final years)	29	PO1,PO2,PO3,PO4,PO5,PO6,PO9,PO10,PO11,PO12, PSO1, PSO2



Figure 7.1. Workshop



Figure 7.2. Workshop



Figure 7.3. Workshop



Figure 7.4. Webinar

3/28/23, 2:34 PM

Print **ACADEMIA-INDUSTRY** CONNECT AMP CAREER **GUIDANCE SEMINAR CHENNAI CHAPTER** Topic DRUG ABUSE- ALARMING RISE PREVENTION AND SAFE GUARDS. (1 & 2 YEAR) speaker Dr. Niha Rumaisa MBBS, MD (Psychiatry) Consultant Psychiatrist at ARK Hospital, Velachery Date & Time: Tuesday, 21st March 2023 at 11:00 am to 12:30 pm Venue: Aalim Muhammed Salegh College of Engineering, Nizara Educational Campus, Muthapudupet, IAF, AVADI, Chennai - 600055.

Co-convenor: Syed Faheem & Syef Deen Mohamed



Convenor: Shereen Sultana



Figure 7.5. Brochure of "AMP Career guidance Seminar" event.



Figure 7.6. Brochure of "AMP Career guidance Seminar" event.

Table7.2.2.List of events that are conducted to improve attainment of POs and PSOs for CAY(2021-22)

S.No	Gaps Identified	Seminars/ Workshops/Value added Courses	No.of hours	Resource Person	No.of Students Attended	Relevance to POs, PSOs
1	IT INDUSTRY EXPECTATIONS	Webinar		Mr.Y.MOHAMMED RIZWAN Intellisense Academy	34	PO6,PO8, PSO3
2	Digital Circuits	NPTEL		Prof. Santanu Chattopadhyay IIT KHARAGPUR	06	PO1,PO2,PO3,PO4,PO5,PO6,PO11,PO12

Table 7.2.3. List of events that are conducted to improve attainment of POs and PSOs for CAY(2020-21)

S.No	Gaps Identified	Seminars/ Workshops/Value added Courses	No.of hours	Person With	No.of Students Attended	Relevance to POs, PSOs
1	Fiber optic communication Technology	NPTEL	12	Prof.DeepaVenkitesh IIT MADRAS	33	PO1,PO2,PO3,PO4,P011,PO12,PSO1,PSO3
2	Digital circuits	NPTEL	12	Prof. Santanu Chattopadhyay IIT KHARAGPUR	29	PO1,PO2,PO3,PO4,P011,PO12,PSO1
3	Principles of Signals and Systems	NPTEL	12	Prof. Santanu Chattopadhyay IIT KHARAGPUR		PO1,PO2,PO3,PO4,P011,PO12,PSO1,PSO3

Table 7.2.3. List of events that are conducted to improve attainment of POs and PSOs for CAY (2019-20)

S.No	Gaps Identified	Seminars/ Workshops/Value added Courses	No.of hours	Resource Person With designation	No.of Students Attended	Relevance to POs, PSOs
1	Bridging the gap between academia and industries	SEMINAR	3	Mr. Vijay Kumbeswaran, PRESIDENT AND CEO, CONCINNATE PARTNERS, CHENNAI.	60	P06,P07,PS03
2	Big data	SEMINAR	2	Mr. H. Vedhasankaran Ford India Pvt. Ltd, Chennai.		PO1,PO2,PO5 PO6,PO7,PSO1,PSO2 ,PSO3
3	Perspective of Engineering	WORKSHOP	2	Mr.K. Balamurugan Scientist, IIT Madras Research Park, Chennai	30	PO6,PO7,PO8,PSO3

 $\textbf{7.3 Improvement in Placement, Higher Studies and Entrepreneurship} \ (10)$

Total Marks 10.00

Institute Marks: 10.00

A.Improvement in Placements:

Table 7.3.1 Placement data for CAY (2021-22)

S.No	No. Of Students Placed	Name of company	Pay Scale
1	1	MPHASIS	250000
2	2	M/s. TATA CONSULTANCY SERVICES	300000
3	1	M/s.CAPGEMINI	34000
4	3	M/s.JASMIN INFOTECH (P)LTD	30000
5	1	M/s.INFOSYS LTD	30000
6	1	M/S.WIPRO LTD	29000
7	1	M/s. TECH MAHINDRA	30000
8	1	M/S. AMAZON	20000
9	1	M/S.CSS CORP	20000
10	7	M/S. SUTHERLAND GLOBAL SERVICES	20000
11	1	M/S.GLENWOOD SYSTEMS LLC	15000
12	3	M/S.QSPIDER	12000
13	1	M/S.ZEUS SOLUTIONS	14000
То	24		

Table 7.3.2 Placement data for CAYm1 (2020-21)

s.NO	No.of Students Placed	Name of company	Pay Scale
1	5	M/s. HCL	365000
2		M/s. PNEUMATIC VACUUM ELEVATORS & LIFTS INIDA (P) LTD	300000
3	1	M/s. INTELIZIGN	258000

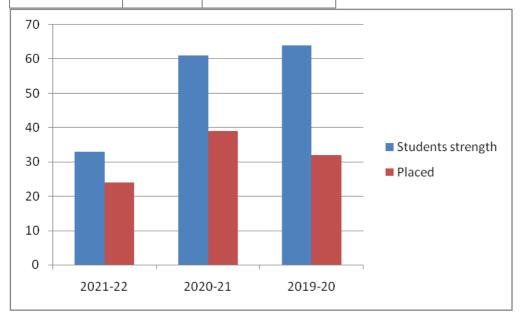
		M/s. SUTHERLAND GLOBAL SERVICES	
4	25		300000
		M/s. Q Spider	
5	6		300000
		Total number of students Placed	
			39

Table 7.3.3 Placement data for CAYm2 (2019-20)

S.No	No. of Students Placed	Name of company	Pay Scale
1	1	M/s. COGNIZANT TECHNOLOGY SOLUTIONS	401986
2	5	M/s. AVALON TECHNOLOGIES PVT LTD	300000
3	3	M/s. QSPIDER	300000
4	4	M/s. CSS CORP PVT LTD	350000
5	1	M/s. MC AMDOIS TECH SOLUTIONS PVT LTD	144000
6	18	M/s. SUTHERLAND GLOBAL SERVICES	300000
	Total numb	32	

Table 7.3.5 Number of students Placed in past three years

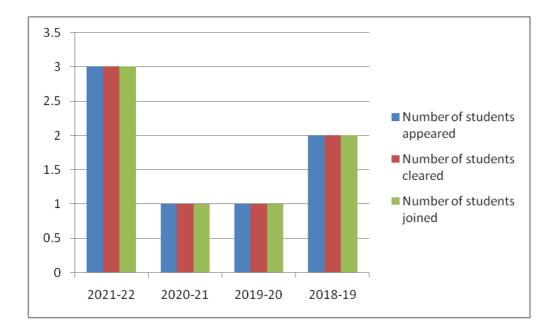
ACADEMIC YEAR	Students strength	Placed
2021-22	33	24
2020-21	61	39
2019-20	64	32



A.Improvement in Higher Studies:

Table 7.3.6 Number of students joined for higher studies

S.No	Year	Number of students appeared	Number of students cleared	Number of students joined
1	2021-22	3	3	3
2	2020-21	1	1	1
3	2019-20	1	1	1
4	2018-19	2	2	2
	Total number o	07		



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

Total Marks 10.00 Institute Marks : 10.00

monde marks . 10.00

Item	2022-23	2021-22	2020-21	
National Level Entrance Examination	No of students admitted	0	0	0
	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
State/ University/ Level Entrance Examination/ Others	No of students admitted	36	58	16
January 2016 2016 2016 2016 2016 2016 2016 2016	Opening Score/Rank	44	0	0
	Closing Score/Rank	86	0	0
Name of the Entrance Examination for Lateral Entry or lateral entry	No of students admitted	0	5	13
details	Opening Score/Rank	0	0	0
	Closing Score/Rank	0	0	0
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		0	0	0

8 FIRST YEAR ACADEMICS (50)

Total Marks 47.20

8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Total Ma

Institute Marl

Please provide First year faculty information considering load for the particular program

Name of the faculty member	PAN No.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining		ching lo	ad (%) CAYm2	Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	Date leavi case Curr Asso
DR.K.SURESH	BFNPS5956J	M.Sc. and PhD	28/08/2013	PHYSICS	Associate Professor	17/10/2008	100	100	100	Yes	Regular	13 14
DR. T. TITUS §	AQIPT4100E	M.A and Ph.D	19/10/2005	TAMIL LITERATURE	Assistant Professor	25/08/2022	100	0	0	Yes	Regular	
DR. D. ZUNAI	ABCPZ6831B	ME/M. Tech and PhD	28/07/2022	CIVIL ENGINEERING	Assistant Professor	01/12/2020	100	100	100	Yes	Regular	
DR. A. MARIAI	ANSPM0427E	M.A and Ph.D	30/07/2009	LIBRARY SCIENCE	Assistant Professor	01/10/2000	100	100	100	Yes	Regular	
DR. A. SALEEI	BJWPS0377L	M.A and Ph.D	21/12/2017	LIBRARY AND INFORMATION SCIENCE	Assistant Professor	04/01/2018	100	100	100	Yes	Regular	
DR. K. CHANE	AGMPC7535J	ME/M. Tech and PhD	27/12/2013	ELECTRICAL AND ELECTRONICS ENGINEERING	Associate Professor	01/03/2013	100	100	100	Yes	Regular	
MR. K. SHAGL	FPPPS3603E	M.Phil	17/08/2013	CHEMISTRY	Assistant Professor	04/08/2014	100	100	100	Yes	Regular	
MS. K. JEEVA	AOFPJ3727A	M.Phil	30/04/2005	CHEMISTRY	Assistant Professor	08/02/2021	100	100	100	Yes	Regular	
MS. A. JUVIN I	BKZPJ3024M	M.Phil	30/08/2016	PHYSICS	Assistant Professor	16/08/2018	0	100	100	No	Regular	30/0
MS. D. BHAGY	BIVPB2278K	M.Phil	29/04/2017	PHYSICS	Assistant Professor	25/10/2017	0	0	100	No	Regular	03/0
MS. N.S. NAN	AOQPN9330N	M.Phil	30/09/2010	ENGLISH	Assistant Professor	01/07/2019	0	100	100	No	Regular	31/0
MS. R. SHAZA	NLDPS1047G	MA	28/04/2017	ENGLISH	Assistant Professor	05/08/2020	0	100	100	No	Regular	31/0
MS. C. ABHINA	CWQPA6301N	M.Phil	24/06/2019	ENGLISH	Assistant Professor	04/08/2021	100	100	0	Yes	Regular	
MR. K. NISHAI	BIFPN1276B	MA	10/11/2020	ENGLISH	Assistant Professor	04/08/2021	100	100	0	Yes	Regular	
MS. SAJIDHA	OESPS0914H	MA	07/12/2021	ENGLISH	Assistant Professor	04/08/2021	100	100	0	Yes	Regular	
MS. S. GOPIKI	BUZPG9923J	M.Phil	16/05/2022	ENGLISH	Assistant Professor	01/08/2022	100	0	0	Yes	Regular	
MS. BHUVANE	BDAPB4872P	M.Sc	30/04/2008	MATHEMATICS	Assistant Professor	03/11/2008	100	100	100	Yes	Regular	
MR. P. VINAYA	ASUPV0992Q	M.Phil	31/08/2013	MATHEMATICS	Assistant Professor	04/08/2020	0	100	100	No	Regular	30/0
MR. V. SHYAM	CLFPS0744H	M.Phil	29/08/2014	MATHEMATICS	Assistant Professor	01/07/2019	100	100	100	Yes	Regular	
MS. P. CATHE	CLPPP5741P	M.Phil	31/05/2014	MATHEMATICS	Assistant Professor	25/07/2022	100	0	0	Yes	Regular	
MS. G. GEETH	BBFPG0795K	M.Phil	29/08/2008	MATHEMATICS	Assistant Professor	05/08/2020	0	100	100	No	Regular	30/0
MS. K. KALAIS	GMVPK1677J	M.Phil	30/09/2011	MATHEMATICS	Assistant Professor	12/08/2022	100	0	0	Yes	Regular	
MS. B. POORN	COTPB4052C	M.Phil	30/08/2016	MATHEMATICS	Assistant Professor	01/08/2022	100	0	0	Yes	Regular	
MS. S. SYLVIA	GDUPS0022R	M.Phil	31/01/2012	MATHEMATICS	Assistant Professor	01/08/2022	100	0	0	Yes	Regular	
MR. K. FAYAZ	ACRPF2384D	M.Phil	30/08/2016	MATHEMATICS	Assistant Professor	22/11/2021	0	100	0	No	Regular	30/0
MS. M. DEEPA	CFOPM8365R	M.Phil	30/11/2012	MATHEMATICS	Assistant Professor	01/07/2019	0	0	100	Yes	Regular	

MR. J. MOHAN	ATEPJ0469P	M.E/M.Tech	30/06/2010	ELECTRICAL AND ELECTRONICS ENGINEERING	Assistant Professor	04/10/2010	100 100 100	Yes	Regular	
MR. S.F. SYEC	BPTPS1959H	M.E/M.Tech	30/06/2006	ELECTRICAL AND ELECTRONICS ENGINEERING	Assistant Professor	06/07/2009	0 100 100	No	Regular	30/07
MR. K. RAMEE	BCMPR4101A	M.E/M.Tech	30/06/2015	ELECTRICAL AND ELECTRONICS ENGINEERING	Assistant Professor	16/07/2018	100 100 100	Yes	Regular	
DR. A. MOHAN	AUKPM2342R	ME/M. Tech and PhD	08/12/2022	ELECTRICAL AND ELECTRONICS ENGINEERING	Assistant Professor	18/12/2003	100 100 100	Yes	Regular	
MR. A. RAVIKU	AAHPR0158H	MBA	30/05/1985	MANAGEMENT STUDIES	Assistant Professor	14/02/2012	100 100 100	Yes	Regular	
MR. S. BABU	ALQPB4481P	MBA	31/01/2011	MANAGEMENT STUDIES	Assistant Professor	16/03/2016	100 100 100	Yes	Regular	
MR. IMTHATH	ABKPI9001J	MBA	30/04/2012	MANAGEMENT STUDIES	Assistant Professor	16/03/2016	100 100 100	Yes	Regular	
MS. MUBEEN/	ATLPM2402N	MA	30/04/1999	LIBRARY SCIENCE	Assistant Professor	05/01/2009	100 100 100	Yes	Regular	
DR. M. ABILA I	BEOPA1499G	M.Sc. and PhD	28/12/2016	PHYSICS	Associate Professor	11/07/2022	100 0 0	Yes	Regular	
MR. A. MOHAN	BAGPM7489E	M.Phil	06/04/1999	PHYSICS	Assistant Professor	04/08/2020	100 100 100	Yes	Regular	
MS. R. MAHAL	DDRPM8583B	M.Phil	27/02/2015	PHYSICS	Assistant Professor	03/11/2022	100 0 0	Yes	Regular	
MR. J. MOHAN	BQEPM1093E	M.Phil	28/09/2013	MATHEMATICS	Assistant Professor	04/08/2014	0 100 100	No	Regular	30/0
MR. M.F. NAZ	AVGPN9253M	M.E/M.Tech	28/06/2013	CIVIL ENGINEERING	Assistant Professor	11/07/2016	100 100 100	Yes	Regular	
DR. A. MOHAN	ACKPI4307E	M.Sc. and PhD	16/05/2022	CHEMISTRY	Associate Professor	02/06/2014	100 100 100	Yes	Regular	
MR. T. BIBINJ(CKCPB4195F	MCA	30/06/2018	COMPUTER APPLICATIONS	Assistant Professor	02/07/2019	100 100 100	Yes	Regular	
Mr.A.YUVARA、	AKJPY0784A	M.E/M.Tech	30/06/2015	ELECTRICAL AND ELECTRONICS ENGINEERING	Assistant Professor	21/12/2017	0 100 100	No	Regular	31/0
Mr.A.SARAVAN	CHUPS1689G	M.E/M.Tech	30/06/2012	ELECTRICAL AND ELECTRONICS ENGINEERING	Assistant Professor	23/07/2012	100 100 100	Yes	Regular	
Ms.S.SARANY	EAWPS0754M	M.E/M.Tech	30/06/2014	CIVIL ENGINEERING	Assistant Professor	22/06/2015	0 100 100	No	Regular	10/06
MS. A. ASHMA	AVFPA0663F	M.Phil	25/03/2014	CHEMISTRY	Assistant Professor	02/07/2012	100 100 100	Yes	Regular	
MS. S. SATHIY	DQLPS6937J	M.E/M.Tech	30/06/2015	COMPUTER SCIENCE ENGINEERING	Assistant Professor	03/08/2020	100 100 100	Yes	Regular	
MS. C.S. NANI	AXHPN1181F	M.E/M.Tech	30/06/2015	COMPUTER SCIENCE ENGINEERING	Assistant Professor	03/08/2020	100 100 100	Yes	Regular	
MS. K. VANITH	CVKPK7111B	M.E/M.Tech	30/06/2015	COMPUTER SCIENCE ENGINEERING	Assistant Professor	03/08/2020	100 100 100	Yes	Regular	

Year		mbor Of Students/annroyed	me	umber of Faculty embers(considering fractional ad) F	FYSFR (N/F)		ssessment= 20)/FYSFR(Limited to Max.5)
2020-21(CAYm2)	420		36		12	5.0	00
2021-22(CAYm1)	420)	38		11	5.0	00
2022-23(CAY)	3(CAY) 420		36		12	5.0	00
Average 0		0		0		0	

 $\textbf{8.2 Qualification of Faculty Teaching First Year Common Courses} \ (5)$

Total Marks 4.33

Institute Marks: 4.33

Year	x (Number Of Regular Faculty with Ph.D)	y (Number Of Regular Faculty with Post graduate Qualification)	RF (Number Of Faculty Members required as per SFR of 20:1	Assessment Of Faculty Qualification [(5x + 3y) / RF]
2020- 21	4	24	21	4.00
2021- 22	4	23	21	4.00
2022- 23	8	22	21	5.00

Average Assessment: 4.33

8.3 First Year Academic Performance (10)

Total Marks 7.87

Institute Marks: 7.87

Academic Performance	2022-23	2021-22	2020-21
Mean of CGPA or mean percentage of all successful students(X)	7.45	8.11	8.05
Total Number of successful students(Y)	60.00	16.00	29.00
Total Number of students appeared in the examination(Z)	60.00	16.00	29.00
API [X*(Y/Z)]	7.45	8.11	8.05

Average API[(AP1+AP2+AP3)/3]: 7.87

Assessment [1.5 * Average API]: 7.87

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

Total Marks 10.00

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

Institute Marks : 5.00

Assessment process for Course Outcomes (COs) calculation:

In line with COs formulated by Affiliating University, COs are reframed for each course in the curriculum by the guidance of course coordinator. To calculate the attainment of COs, the data are gathered from the Internal Assessment Test and University semester Examinations.

Attainment level for Course Outcomes:

The attainment of CO of the First year Courses are recorded as per the following benchmark.

For Theory Subjects:

luation of course attainment levels for Internal Assessment Tests and Affiliating University Examinations:

- 1. If the course outcome attainment is > 60%, the Attainment Level is 3.
- 2. If the course outcome attainment is between > 50% and < 60%, the Attainment Level is 2.
- 3. If the course outcome attainment is < 50 %, the Attainment Level is 1.

For Laboratory Subjects:

luation of course attainment levels for Internal Practical Examinations and University Practical Examinations:

- 1. If the course outcome attainment is > 60%, the Attainment Level is 3.
- 2. If the course outcome attainment is between > 50% and < 60%, the Attainment Level is 2.
- 3. If the course outcome attainment is < 50 %, the Attainment Level is 1.

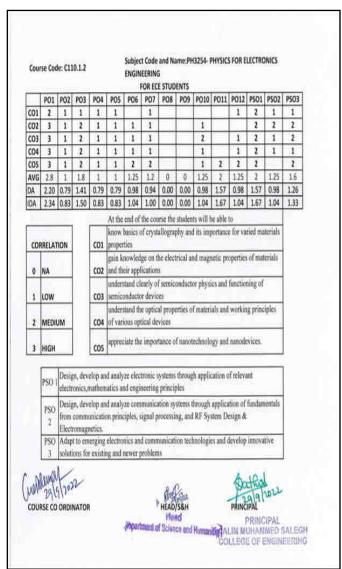


Figure.8.4.2.1. A Sample of CO-PO Mapping of the subject Physics for Electronics Engineering for ECE Students

Table 8.4.2.1. List of Subjects with Course and Subject Codes for all First Year Courses

COURSE	SUBJECT	SUBJECT NAME
CODE NO.	CODE	SCHOLLING
		SEMESTER - I
C101.1	HS3151	PROFESSIONAL ENGLISH-I
C102.1	MA3151	MATRICES AND CALCULUS
C103.1	PH3151	ENGINEERING PHYSICS
C104.1	CY3151	ENGINEERING CHEMISTRY
C105.1	GE3151	PROBLEM SOLVING AND PYTHON PROGRAMMING
C106.1	BS3171	PHYSICS AND CHEMISTRY LABORATORY
C107.1	GE3171	PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY
		SEMESTER - II
C108.1.1	HS3251	PROFESSIONAL ENGLISH-II
C109.1.1	MA3251	STATISTICS AND NUMERICAL METHODS
C110.1.2	PH3254	PHYSICS FOR ELECTRONICS ENGINEERING
C111.1.1	GE3251	ENGINEERING GRAPHICS
C112.1.2	BE3254	ELECTRICAL AND INSTRUMENTATION ENGINEERING
C113.1.2	EC3251	CIRCUIT ANALYSIS
C114.1.1	GE3271	ENGINEERING PRACTICES LABORATORY
C115.1.2	EC3271	CIRCUIT ANALYSIS LABORATORY

Table.8.4.2.2.CO Attainment

Course Code		A	ttainmen	t of Vario	ous COs	
No.	CO1	CO2	СОЗ	CO4	CO5	Final Attainment
		1s	t Semest	er		
C101.1	2.84	2.84				
C102.1	2.77	2.74	2.77	2.77	2.77	2.76
C103.1	2.37	2.36	2.47	2.56	2.54	2.46
C104.1	2.83	2.85	2.82	2.80	2.82	2.82
C105.1	2.82	2.81	2.83	2.83	2.79	2.82
C106.1	2.90	2.90	2.90	2.91	2.89	2.90
C107.1	2.92	2.92	2.90	2.89	2.90	2.91
		2n	d Semest	er		
C108.1.1	2.77	2.80	2.80	2.78	2.77	2.78
C109.1.1	2.39	2.40	2.41	2.40	2.39	2.40
C110.1.2	2.36	2.37	2.38	2.42	2.40	2.39
C111.1.1	2.76	2.75	2.76	2.74	2.74	2.75
C112.1.2	2.57	2.55	2.56	2.55	2.55	2.56
C113.1.2	2.50	2.53	2.52	2.51	2.52	2.52
C114.1.1	2.92	2.92	2.89	2.90	2.91	2.91
C115.1.2	2.90	2.91	2.91	2.92	2.92	2.91

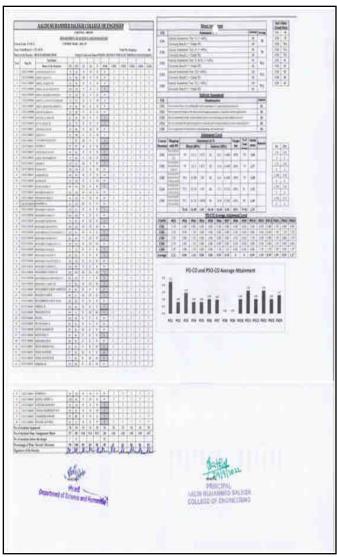


Figure.8.4.2.2. CO-PO Attainment sheet of the subject Physics for Electronics Engineering

8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5) Institute Marks: 5.00

A. LIST OF ASSESSMENT PROCESS

- 1. To assess the course outcomes, Direct assessment tools are used.
- 2. To evaluate the attainment of COs, the data are gathered from the following assessments.
 - (i) Student's performance in the Internal Examinations.
 - (ii) Student's performance in the Semester University Examination.

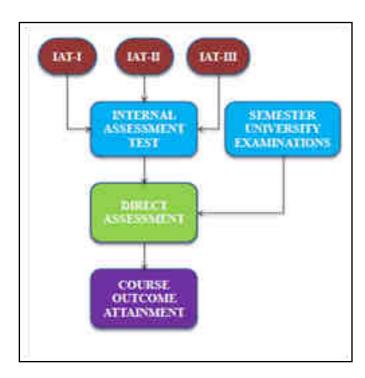


Figure.8.4.1.1. Process of CO attainment

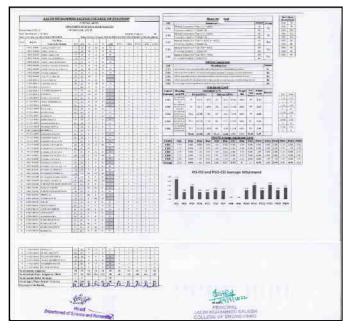


Figure.8.4.1.2. A sample for the Process of CO attainment

B. THE RELEVANCE OF ASSESSMENT TOOLS USED

Direct Assessment tools: The assessment tools for computing the course outcomes are explained below.

1. a . Internal Examinations (For Theory subjects): Internal Examinations are conducted as per the academic schedule framed by Affiliating University. The syllabus covered in the internal exams compatible to Regulations 2017 and 2021 of Affiliating University is appended below:

For Regulations-2017:

Table.8.4.1.1. Syllabus covered for Internal Assessment Examinations

Test	Syllabus Completed	Overall Syllabus(%)
Internal Assessment Test-I	Unit-I - 100%	30%
1000	Unit-II - 50%	2070
Internal Assessment Test -II	Unit-II - 50%	30%
internal rissessment rest in	Unit-III - 100%	3070
Internal Assessment Test -III	Unit-IV - 100%	40%
incomment research research	Unit-V - 100%	.070

Three Internal Assessments were scheduled in a semester. Internal Assessment Test-II covers 30% of the Syllabus, Internal Assessment Test-III covers next 30% of the Syllabus and Internal Assessment Test-III covers remaining 40% of the Syllabus. The Internal Assessment were conducted by the Internal Examination cell. Marks awarded for each unit of syllabus taught is depicted below:

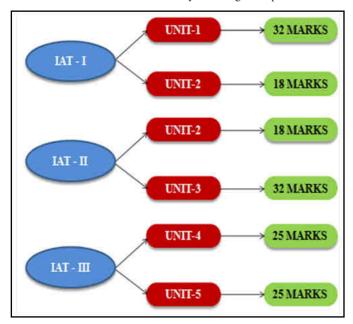


Figure.8.4.1.3. Allocation of marks for each unit of Syllabus (Regulations 2017)

For Regulations-2021

Table 8.4.1.2. Syllabus covered for Internal Assessment Examinations

Test	Syllabus Completed	Overall Syllabus(%)
	Unit-I - 100%	
Internal Assessment Test-I	Unit-II - 100%	50%
	Unit-II - 50%	
	Unit-III - 50%	
Internal Assessment Test -II	Unit-IV - 100%	50%
	Unit-V - 100%	

Subject Class	Name of the Subject (Ornory Cab)	Same of the Faculty	Athened Servencia	Actual Hes	Altered	Calle Caparterior's	Nage.	Semantic of Hills
100111	PROFESSIONAL SMILLISM	NA HERMARTHAN ASSTRACES / SNOLERS	5	A		Unit (1) 50°	(Bred	
100111	HACTHICER AND CALCUSTIN	ANTERING FIGURA 6	6	99	3	Come E military	(P.GAL	
1000	пченительно этотнем	THE RESIDENCE OF STREET, THE S	15	4	16012	County of	CHL	
(WELL)	DIEDALIANI G CHISANON	SHEMINEY CHEMINERY	5	5	(4)	"Little	de	
altını	PROBLEM NOUNTRE AND PATERING PROCEDURES.	AST MOC CS.	5	4	12 Bellen	General Trans	Distri	
301771	PHYSICS 404 CHARACTEY	IN ABILA MARKEDIAM AREE. PROCEPHYSICS	Ä	4	ritti-	theps cap	del	
auto o	LANGRATURY	HIS PROJECT HANDS IN A SHEET				Asach condenya	\$	
OULTE	PROBLEM BOLUBG AND PYTHON PROBLEMMONITARIES	NE NACHER ARRANDS ASSE NOW / 1236	4	4	-83	Car 6	present	
ûniti	DESCRIPTION LABOURA YORKY	201 BURNOUS CAUCIONS	2	2	=	Limit 11 151	Was	
oum	ODETAGE OF EXHILE	HIDAYAYHILLAH A ART MAW/FINGHER	1	- 13		Henry H-1801	Continga	
	WEST WILL PRACTICE PROGRAMMENT OF PROGRAMMENT	MA WARMAN	2	:2)	-	unit Tisk	good_	

Figure.8.4.1.4. Syllabus covered report

Two Internal Assessments were scheduled in a semester. Internal Assessment Test-I covers 50% of the Syllabus, Internal Assessment Test-II covers next 50% of the Syllabus.

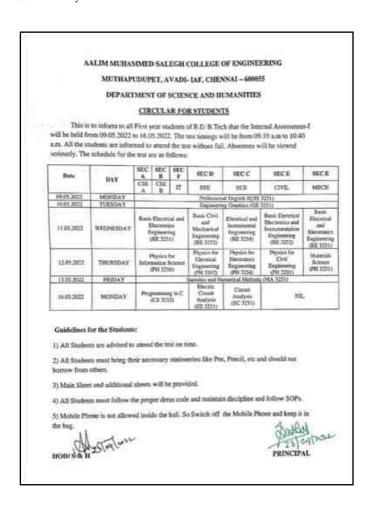


Figure.8.4.1.5. Student Circular - Internal Assessment Test-I -II semester - 2021-22

Marks awarded for each unit of syllabus taught is depicted below:

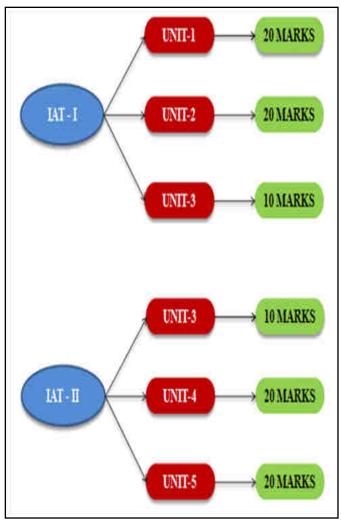


Figure.8.4.1.6. Allocation of marks for each unit of Syllabus (Regulations 2021)

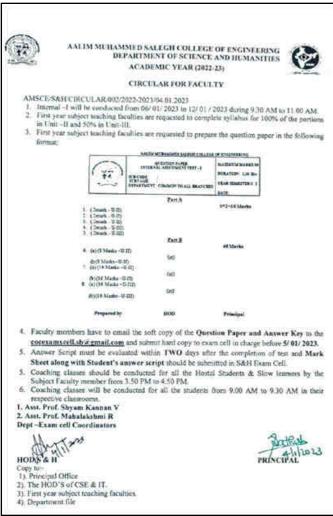


Figure.8.4.1.7. Circular For Faculty Members- question paper setting

- 1. Question Papers and Answer key were set by the Course Coordinator as per the norms of the Institution.
- 2. The Student secured < 60%, advised to attend the tutorial classes.

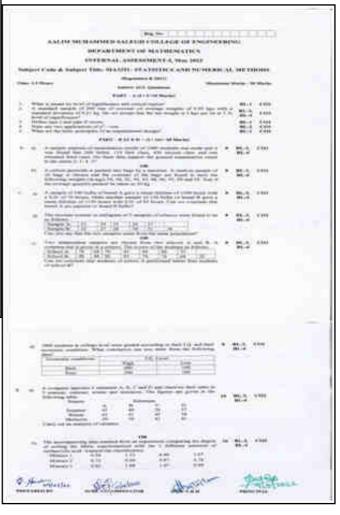


Figure.8.4.1.8. Specimen question paper - Internal Assessment Test

1. b. Internal Practicals Test:

Model practical tests were conducted and uploaded to the Affiliating University.

2. University Semester Examinations: University Semester examinations are conducted as per Affiliating University Schedule.

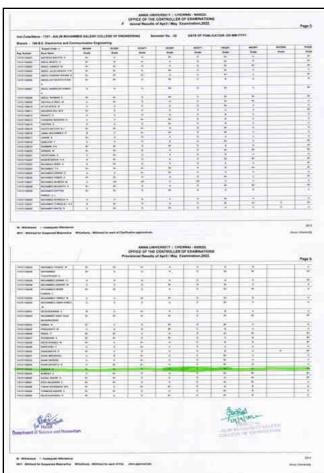


Figure.8.4.1.9. Affiliating University Results Published Copy of ECE students for the academic year 2021-22.

6	(M)	HART	ME.	HT LAF MINIST	HXX FRA	NEE I	NO 18	His	erres			Tie		onn ti	
	NCCCORE.	ili						-				A spek	Œ	1.50	100
commenced that	1110012	413	12							7	00	eus.	1000	1110	727
April 1	NAME OF THE PARTY.	+	н	1111		200		1476	-	6.4	in.	-			
400		+	н	-	-		1	3		148		P.P		-	
7.00	Millionia Exercis	1 1	Ξ	ps.	.6	2	1					K		385	
		#	15	-		-	4	01	B.	-			-	THE	-
140-	TAXABLE PE	K R	Ė	-	÷	130	÷	2	- 64	3	3	111			77
11-1-1-1	COLUMN TO SERVICE STREET, STRE	5 5	×	-	1	8	-		de br	+	-	144		734	
1000	and the same of th	1 10	10		1	y.	÷	100	1	-	70	P-MA		146	
	SEPHENTS PORTLANDANCE PORTLANDANCE	1 H	×	-	1	No.	- 4-	40		-	-0.	H	-	140	000
	STATE OF THE PARTY OF		H	÷	臣		4		100	-			- 4	43	
	ALCOHOL STATE OF	1		30.3	1	1	3.	-81	-	+	4	144	i		
	CEATIE CA	1	i i	-	-	á	+		-	-		144	1	15	7
1-0-()) (mm-r) [b)	1111	1 10	E		E	4		100		4.	-	122	- 0	14	3
	HALL BEHAVIOR NO	#	15	-	1	-1	1	9	F (50)	81	-	100 7AA	77	120	
Dominate h	DESCRIPTION OF THE PERSON OF T		Ŕ	760	15	- 11	÷	-10	30	*	100	714	1.74	1.01	1.0
THE SECTION	ARTESTS T.	18.2.16			7	37	1.0	580	197	- 1	0	CKK	3	18	13
T THAT I SHOW NO	A Tributed Williams	\$ 10 8 18	H	-	E.	9	3	8-	*	- 1	+		1	100	.1
11000	OF SHIP I		Œ	3		C11	.4.	100	.81	#	3	111	-	==	11
100000	DEFENDENCE AND	* i	151	÷	-	1	4	4	20	-	-	=	-	6.00	78-
		-	-				-	-	-						
1		sl's													-
	Committee of the second	4 4	H	né-	-	ė	-	1	÷	4	-	-		301 301	4
E Intritti i mani di	make and the	1 1	П	-	E		Á	8	÷	10	-	Trible	1.0	- 194	4.0
Dan E	ANGEL WALLAND	7 10	H	je.			CAL A	100	34.	30	문	Feb.	4	5.6	1.0
		16.3-16	5163	-9-1	÷	á	ě.	2	81	0.		Dub.	10.00	100	9.
	MARKET THE REAL PROPERTY.	1 14	Н			-	-	-	7	*	-	100	1	11	*
100000	2002-2005-5	4	Ħ	+		161	4		2		=	Ē	nin-	110	
1	mark to be w				- 1	F	-	P.	*	-	-	116	HE S	18	
A STREET, SQUARE, SQUARE,	AND DESCRIPTION OF THE PARTY OF	T.	i.	4	D.	.91	- 4	A	-4	-	0.00	Posts Posts		275	7.
1	model state w	Ě	ш	-		-	4	3	-	-	W.	146.	X.	10	1.0
	ments (sec.)		Н	-	- 64		-		ŒΠ		-	186		10	2
1		#	Н	-	4		-	1	=	-	-	155	1	17	3.
THAT HERE DO	CONTRACTOR STATE			6	7	4	4	301	91	20	-	110		1,67	7
Tracilities by	State of the state			P.	.4	(4)	-81	8-	30.	4.		144	1	764	0.7
1007110000.04	1011.7	+	-		31	-		+1	-	÷	-	744	-	181	
	110000		П	100		+	-	*		\equiv	-	he.			1
Concession to	Aheana I	H	Н	ř	4	chin	de.	ă.		-	-	=		-	-
Tax and P	REPRESENTATION	ФI	bx-t	-0.1	46.7	81.7		1	100	40.	100	Yes.	20	197	T
	MACHINE TO STATE OF THE PERSON NAMED IN COLUMN	100	H	9			-	-	-	40	-	116.	-	1.56	-
100000	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	18.	ĸ.	20.		3	7.	-5.	*	+	-	=		10	T
	Marie No.		렆	91	-21	81	-	-	-	-		1=	nint	1.0	-
THE RESERVE	THE STREET	45.	П		45	1	3	- Pr	n-	0	-	HE.		7.00	1
	WM DODEN		H	7	2		-	20	MAG	AL.	-	185	100	55	44
1	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO	GE.	ĸ.	9111	40.	-	2.	2	41		-	75	1933	175 146	7
	CHARLE	30	H.	9	3	100	*:	2.1	200	7.	= 1	1346.	Heal	14.1	-
	THE RESIDENCE			-01	10	18	-	-	-	-		=			
	90.0F119F7	****	144		9	18	- 1		=	-	-	-			
	90, 07 111987 Po. of 111987	1 000			0		4	- 0	110	- 100	18	- 81			
	Secret del CLAM	ERSYT.	MOE.	PLA.	H.T.	66.29	T1.0	60.74	Mad	100	198	11.86			
- 44					18/40	1.50	100	201	5.3	=	10	+			
	201.00	1110	196	Acr.	-	40	-3		-	-	-	1			
-	WHIST IS NOT THE	1 501		-	ì	14	- 0	7		+	÷	-			
					-	14	1	=	3	-	-				
- Table 1	SHIP IT HE STORY OF	7.36	н		-	-		- 3	=	=	-	÷			
E-7981351 H.J.	a wasani amin'ny mpona	T Like	t is	88,00	10.79	10.44	H34	75.07	- 99	m	199	1845			
nm nm	Activity opening design	TT-THE	Ats	New	.66	10.50	mat	41.0	Man	-take	-total-	18.16			
	ACCOMPANY OF THE STATE OF THE S	Des	ő	2	-		1	- 6			=	Ξ			
	90/08/2001	i tem.	48)	7	-	1		3	-	=	=				
	THE PLACE THAT AND ADDRESS.	11114	#	111	86.14	200	80.81	54	1	-	-	nn.			
	THE PERSON AND THE PE	188	184	40.7	100	28	m14	FA	91.41	100	100	T#			
	Trees.	4. Part	22		-										
		111		-											
A Nat			1	W	idai					1		5		43	600
14000										db	400			力块	A Parket
NEST PROPER	000	EE	W	COHR	DI%«	XXIII			11	OH 13	a)IC		7)	HOGS	PH.

Figure. 8.4.1.10. Calculation of CGPA of students for the academic year 2021-22

Overall Direct Assessment including Internal and University Semester Examinations:

- 1. Affiiating University Examinations evaluated to: 80%
- 2. Internal Examinations evaluated to: 20%

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

Total Marks 20.00 Institute Marks : 15.00

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

POs Attainment:

Course	PO1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO10	PO11	PO12
C101.1	0	0	0	0	0	0	0	0	0	2.94	0	0.98
C102.1	2.82	2.82	2.26	2.63	0	1.25	0	0	0	0	0	1.69
C103.1	2.45	2.12	1.63	0	1.96	1.63	0.82	0	0	0.82	0	1.63
C104.1	1.45	0.97	1.45	0.97	0.97	0.97	0.97	0.97	0	0	0.97	0.97
C105.1	2.90	2.13	1.94	0.97	1.16	0	0	0	0	0.97	0	0.97
C106.1	1.60	2	1.60	1.60	1.60	2.20	1.20	1	1.60	1.33	1	2
C107.1	3	3	2.60	2.60	2.40	2.60	0	1	2.60	1.80	0	2.20
C108.1.1	0	0	0	0	0	0	0	0	0	2.86	0	0.95
C109.1.1	2.38	2.38	2.38	2.38	0	2.38	1.74	0	1.58	0.79	1.11	1.43
C110.1.2	2.20	0.79	1.41	0.79	0.79	0.98	0.94	0	0	0.98	1.57	0.98
C111.1.1	2.81	2.18	2.34	2.18	0.94	0	0	0	0	2.81	0	0.94
C112.1.2	1.20	1.88	2.05	1.93	1.93	1.71	0.86	0	0	0	0.86	1.28
C113.1.2	2.52	2.31	2.31	2.31	1.85	1.68	1.68	2.10	1.68	1.26	1.68	2.31
C114.1.1	2.20	2	1.80	1.40	0	0	1	0	2.20	1	0	3
C115.1.2	3	2.75	2.75	2.75	2.20	2	2	2.50	2	1.50	2	2.40

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Direct Attainment	2.35	2.10	2.04	1.88	1.58	1.74	1.25	1.51	1.94	1.59	1.31	1.58
CO Attainment	2.35	2.10	2.04	1.88	1.58	1.74	1.25	1.51	1.94	1.59	1.31	1.58

PSOs Attainment:

Course	PSO1	PSO2	PSO3
C101.1	0	0.98	0
C102.1	1.88	1.88	1.69
C103.1	1.36	1.36	1.36
C104.1	0.97	0	0.97
C105.1	0.97	1.29	0
C106.1	1.75	1.75	2
C107.1	1.33	1.50	1.50
C108.1.1	0.95	0	0
C109.1.1	1.43	1.43	1.43
C110.1.2	1.57	0.98	1.26
C111.1.1	1.87	1.68	1.17
C112.1.2	1.37	1.37	1.37
C113.1.2	2.02	1.85	2.02
C114.1.1	2	1.4	1
C115.1.2	2.40	2.20	2.40

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	1.56	1.51	1.51
CO Attainment	1.56	1.51	1.51

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

Institute Marks: 5.00

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

POs	Target Level	Attainment Level	Observations			
PO 1 : Engineering Kno	O 1 : Engineering Knowledge					
PO 1 2.00 2.35 For the proceeding year, the target would be progressive.						
Action 1: Students were motivated to participate in academic events , which helped in improving general awareness for real time applications.						

PO 2 : Problem Analysis

PO 2	2.00	2.10	For the proceeding year, the target would be progressive.			
Action 1: Incorporated various analytical problems in the regular classes and tutorial classes were conducted for Mathematics and Programming Courses.						

PO 3 : Design/development of Solutions

|--|

Action 1:. Students were encouraged to undergo NPTEL courses and to attend Workshops to include various Parameters and constraints to design solution for engineering problems.

PO 4: Conduct Investigations of Complex Problems

	PO 4	1.98	1.88	Better interactive programs for varied research ideas will achieve the desired.		
Action 1: Access to complex problem analysis, and solutions in implementing real time industry needs in their respective academic Projects.						

PO 5: Modern Tool Usage

PO 5	1.98	1.58	Lack of modern tool usage is noticed.		
A sking of A suppose of the sking of the ski					

Action 1: Awareness programs relevant to enhance the student ability in comprehension were introduced.

PO 6: The Engineer and Society

PO 6 1.98 1.74 Low participation in extra curricular activities resulted in adequacy in societal awareness and responsibilities.	1 PO 6 11.98	1.74	
--	----------------	------	--

Action 1: Organized out reach programs in cultural and societal activities. To expand the students knowledge on improved professional engineering practices, Industrial visits are helpful.

PO 7: Environment and Sustainability

PO 7	1.90	1.25	Lack of awareness on environment and sustainability is noticed.			
Action 1: Expert talks on Environment and sustainability should be given to students. Students are encouraged to present papers on Global and Environmental issues						

PO 8 : Ethics

PO 8	1.90	1.51	Lack of ethical values in few courses were noticed.

Action 1: Ethical values are imbibed with reference to Guru-sishya Parmbarya, societal responsibilities and professional ettiqutes. Motivational talks, corporate lectures and career guidance program are arranged for the students to make them understand about professional ethics and responsibility in engineering practice.

PO 9: Individual and Team Work

	PO 9	1.90	1.94	For the proceeding year the target would be progressive.	
--	------	------	------	--	--

Action 1: Programs and Projects provided platforms to students to develop their leadership traits, to work effectively as a team member and also to work as a individual in the fields of engineering.

PO 10 : Communication

PO 10	1.95	1.59	Lack of effectiveness in communication is noticed.
	5 16.4		

Action 1: Soft skill Training Program are arranged for the students to enhance their performance in Group Discussions, Presentations and to raise confidence among them to attend Job Interviews without nervousness.

PO 11 : Project Management and Finance

PO 11	1.95	1.31	Attaining financial management in few courses are not sufficient to achieve the target.
Action 1: Through specifi	ic courses awareness created amo	ng the students on managing projec	cts and in Multidisciplinary environments.

PO 12 : Life-long Learning

PO 12	1.95	1.58	Independency in Life long learning skills like usage of modern tools are not sufficient in Basic Engineering Courses.

Action 1: Learning never ends, with this philosophy, we gave the students the value of education and learning. We counselled the students to look beyond syllabus taught during the course to venture into emerging cross technologies. This demands Life long learning.

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

PSOs	Target Level	Attainment Level	Observations
PSO 1 : To analyze, des	ign and develop solutions by ap	plying foundational concepts of	electronics and communication engineering
PSO 1	1.90	1.56	Lack of Knowledge to analyzing, designing and developing solutions in foundation concepts are noticed.
Action 1: Seminar and W	orkshops are arranged for students	s on relevant Electronics Engineeri	ng and Mathematics Principles.

PSO 2 : To apply design principles and best practices for developing quality products for scientific and business applications.

PSO 2	1.90	1.51	Application oriented knowledge to be enhanced to overcome the deficiency in achieving the target.
Action 1: Incorporating a	oplication oriented seminars to dev	velop design and developing produc	ets will achieve the desired target.

PSO 3: To adapt to emerging information and communication technologies (ICT) to innovate ideas and solutions to existing/novel problems.

PSO 3	1.90	l 1 51	Lack of knowledge in finding solutions to problems among basic Engineering courses are noticed.
Action 1: Students are m	otivated to do Projects and Mini Pr	ojects on emerging communication	technologies to find innovative solutions in Engineering disciplines.

9 STUDENT SUPPORT SYSTEMS (50)

Total Marks 50.00

9.1 Mentoring system to help at individual level (5)

Total Marks 5.00

Institute Marks: 5.00

Type of Mentoring: Students are counselled for academic improvement, career improvement and personality development

Frequency of the Meeting: Once in a Month

No. of students / Mentor: 15 to 20

Mentoring Process:

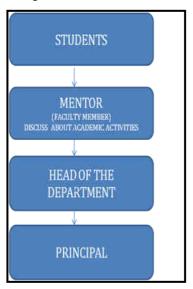


Figure 9.1.1 Mentoring Process

Student's personal and academic details and their progression are updated in the student's Academic performance book (Success book).

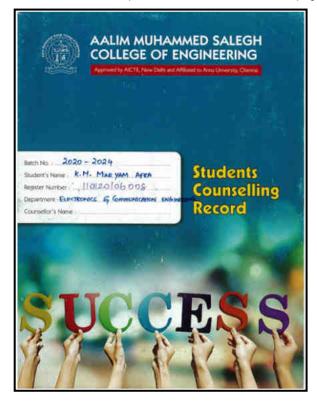


Figure 9.1.2 Student Academic performance book

Counselling is provided on the following parameters:

Professional/ Academic/ Course work specific:

The mentors discuss issues related to personal development with the assigned students every two weeks that improves academic performance. The student mentors also contribute to the academic and personal growth of peers/juniors by providing them assistance when required. Also mentoring is provided for choosing elective subjects. Further, mentoring is provided on all Co-Curricular related activities like attending Conferences, paper presentations, publications etc., For first year students, counselling is provided on all academic related activities. Also, information is provided by mentors on details, related to the availability of scholarships.

Outcome: It helps students to learn and hone their study skills. Also, dropout rates have been reduced to an extent due to the counselling provided.

Counselling Date	Points of Discussion	Student's Reasoning	Counsellor Advice	Follow-Up Action	Student Signature	Counsell
	Beneval Counting or Academics or Hen-Academic	Yes, I will have my hand.	matrials the ser Academic and try to traprove factor. Try to to the	her to posticipe to livery competitions.	*	8h-Q
26/5/24	Regularity of Classes and Ocademic persons	his staving health insula I will concenhole on studies furth		Green assignents to Improve her grades	整	May
12/6/2	Regularity of Classes	Health Issues	Informed to have personal and the person	Duily Call to her yes; parents	8	PSL
416123	Academic. Per formance.	I will by to come regularly.	Clase regularly. Just Activised to come to close regularly.	chesied her presence and informal to her proents	\$	Pelin
-				de,		Ш

Figure 9.1.3 Counselling History recorded in Student Counselling book

Personal:

Personal issues amongst students, Junior or Senior students, and emotional upheavals are discussed by the Individual teacher mentors. Parents are also called and counselled by the College Counsellor available on campus and if required they are referred to the external counselling. For first year students, counseling is provided to improve students confidence level, assist in effective transition from school environment to college environment and reduce home-sickness as most hostel students may be staying away from home for the first time.

Outcome: Both students and parents become aware of and realize each others needs and problems and make efforts to overcome them, so that the students are able to focus more on academics.

Skill based:

Students are Guided to own their skills beyond course work by venturing into emerging technologies in the form of NPTEL, ICT, IOT etc.,

Outcome: Such mentoring help the Student in deep Learning beyond Course work.

Career Development:

Career development is the process of learning and utilizing short-term skills to progress towards long-term professional goals. Mentors and Alumni counsel the students on the various opportunities for higher studies.

Outcome: Such a mentorship helps students to identify the options and opportunities for their Placement and Higher studies.

Overall Development & Attitude:

The Guidance provided by Faculty member and the professional counsellors brings a change in attitude of students affected by behavioral/habitual disorders. If any student is subjected to social isolation, it is also taken care of. Counselling on extracurricular activities is also provided depending on the students interest and creativity.

Outcome: This helps students to develop a positive attitude, improve their social etiquettes and also set goals for their future.



Figure 9.1.4 In the Year 2005, AICTE, New Delhi Placed on record Institution's Mentoring system

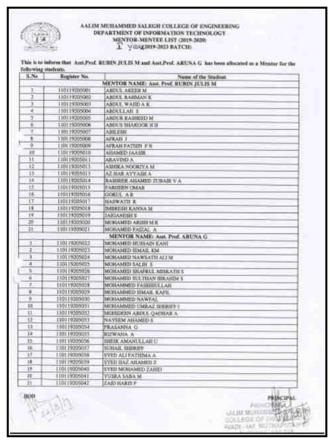


Figure 9.1.5 Mentor-Mentee list

9.2 Feedback analysis and reward / corrective measures taken, if any (10)

Total Marks 10.00

Institute Marks: 10.00

A. Methodology being followed for analysis of feedback and its effectiveness

A well defined feedback mechanism is developed and deployed in our institution. Appropriate Feedbacks are collected from the stake holders for analysis, improvement and implantation.

Feedback collected for all courses: Yes

Specify the feedback collection Process: One regular class Period is designated for the purpose.

Who is responsible for collecting the feedback?: Respective Class In-charges

Table 9.2.1: Feedback collection sources

S.no	Stake holders	Feedback	Objective
		Course end survey	To measure the indirect attainment of COs
1	Students	End semester Faculty feedback	To assess the effectiveness of faculty member
1	Students	Class committee meeting (Thrice in a semester)	To improve Teaching-Learning Process and other issues
		Outgoing student feedback	To measure indirect attainment of POs
2	Faculty Members	Faculty member perception on course curriculum	To expertise the course curriculum
3	HOD	360 Degree Performance Appraisal form	To improve overall performance of Faculty members
4	Parents	Facilities	To Improve the facilities and services.
5	Alumni	Facilities	To develop and Improve our Standards on facilities and services.

Flowchart- Feedback analysis process for faculty members

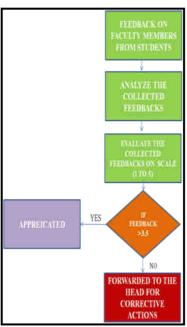


Figure 9.2.1 Flowchart- Feedback analysis process for faculty members

Basis of reward / corrective measures, if any:

The collected feedbacks are analyzed and a report is generated for all Faculty members. It is evaluated on the scale of 1 to 5. In case the feedback is less than 3.5 for any teacher, he/she will be suggested by The HEAD for their improvement. If required, faculty members may be deputed for Faculty Development Program.

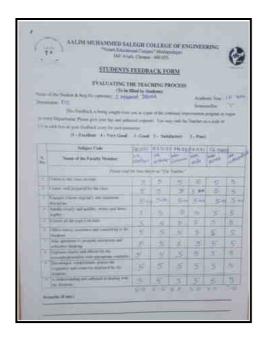


Figure 9.2.2 Students feedback on teaching Faculty member

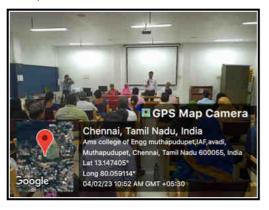


Figure 9.2.3 Parent and Teachers Meeting

B. Record of corrective measures taken

Procurement of electrical/carpentry/plumbing/water purifier items by the management directly for speedy redressal of problems.

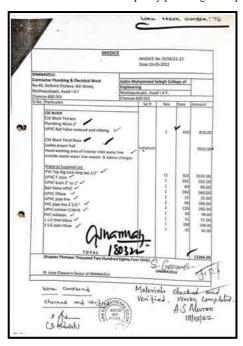


Figure 9.2.4 Plumbing Materials invoice



Figure 9.2.6 Students with 100 % Attendance are appreciated to continue and maintain the attendance during the celebration of Republic Day. One of Students, Ms. Sobana M of II Year ECE received the cash prize.

9.3 Feedback on facilities (5) Total Marks 5.00

Institute Marks: 5.00

A. Feedback Collection Analysis and Corrective action

Feedback obtained from the students.

CLASSROOMS

LABORATORIES

COMPUTING FACILITIES

LIBRARY

WASHROOMS AND SANITATION

CAFETERIA

HOSTEL

TRANSPORTATION

BANKING

SPORTS

MEDICAL SUPPORT

Based on the feedback collected, corrective measures, if any, carried out.

INFRASTRUCTURE

Class Committee Meetings are held thrice in a Semester. During the interaction between the students, deficiencies, if any related to academic facilities and amenities are recorded and ensured correction within shortest possible time. We are fortunate enough; the management is very receptive and responsive in providing all facilities required for a better educational campus. Our campus hosts well design friendly living Hostel for Men and Women, Banking facilities, Campus Cafeteria, Medical emergency support, Prayer Halls, Safe drinking water with RO WATER PLANT adequately sufficing standby power generation equipped with 125 kVA, 180 kVA, 250 kVA standby power generators with additional 20kW solar Power generator

LIBRARY

College central Library is well stacked with tittles and volumes on varied faculties of Sciences

and Engineering with Additional facility of e-Library computing facilities.

TRANSPORTATION

With Pride, we mention that the transportation facilities for the student and the teachers is facilitated for commuting with zero on road break down.

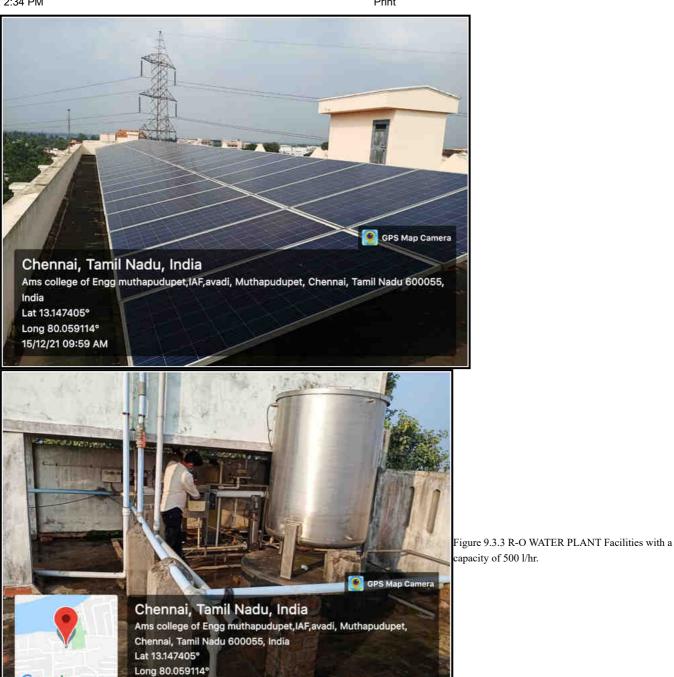
HOSTEL

Hostel committee meetings are convened twice in a year before the commencement of every semester. Interim meetings were also conducted as when necessary to shoot the problems, if any. Hostel inmates are blessed food arrangements are directly supervised by the management by providing nutritious food.

As a part of Continuous Quality Improvem our standards on Facilities and Services.	emic Year: ent, your Feedba	ck is valuat	te as it helm	Anna	
sur standards on Facilities and Services.	ent, your Feedba	ck is valuat	te se it belo	- commenced design	The second second
Register Number:	ni		ic as a neip	s us to deve	lop and impro
Fear: 16 - 30 Sminch: 17		West Control	- Harris 1	Average	Below Average
PARAMETERS	Excellent (5)	Very Good (4)	Good (3)	(2)	(1)
eedback on Classrooms					
Adequate classrooms				أكسا	
Adequate seating arrangements		5			
Projectors					
Cleanliness		0			
eedback on Laboratory					
Adequate Seating arrangements			111111111111111111111111111111111111111		
Availability of Computers			5		
Accessibility of Internet/wi-fi Availability of Software and Maintenance	V 1		1		
Availability of Software and Maintenance			-/		
Availability of material for prescribed readings					r -
Availability of reference Books			1		
Accessibility of Books and Journals		_	1.00		
Availability of latest e-Books and e-Journals	7	0			
Availability of latest Editions	1	-3/			
ufrastructural Facilities					
Medical room	~				
Drinking water			~		
Cafetena		~			
Transportation					>
Washrooms	1				
nstitutional Environment	- D			,	.,
Career Planning and Development					
Grievance Redressal Mechanism					12/
Student Administration Relationship	~				
Hostel facilities (only for hostlers)		V			
Student council relationship		V			
Attitude of College towards Extra-curricular activities			-		
Availability of Extra-curricular activities			V		
Sports facilities Bank and ATM					
		V			
nternet facility within the Campus Overall ratings	2		1		

Figure 9.3.1 Feedback forms on Infrastructure and Facilities

Figure 9.3.2 20 KW Rooftop Solar Panel



14/12/21 04:26 PM

Google

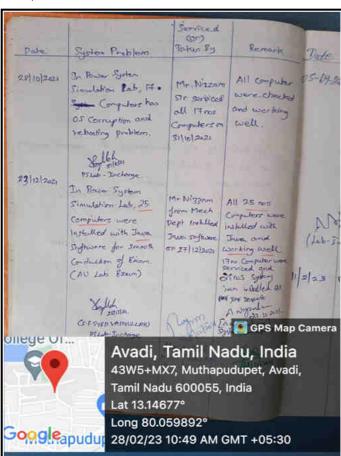


Figure 9.3.4 PS Laboratory Service Register

9.4 Self-Learning (5) Total Marks 5.00

Institute Marks: 5.00

A. Scope for Self-Learning.

Self-Learning is a process of garnering information, processing and retaining it without taking help of another individual. It helps to enhance the students knowledge acquired in their field of interest. Motivation for self-learning are provided in the classrooms. A teacher has a great role to play in this regard. Discussing subject beyond the syllabus, providing exposure to exciting developments in science and technology around the globe, attempting solutions to problems in daily life etc. are the ways to motivate students for self-learning. They should also be motivated to do things themselves so that they gain confidence to try anything with their own hands.

Students Earned laurels to the College:

- 1. SMART INDIA HACKATHON
- 2. WORLD ROBORACE CHAMPIONSHIP
- 3. GUINNESS WORLD RECORDS Longest Power Strip of 50 Numbers by Mohammed Nawaz on 11.10.2018
- 4. KURUKSHETRA, ANNA UNIVERSITY CHENNAI
- 5. PALS-INNOWAH (Alumni Fraternity, IITM)
- 6. YOUNG SCIENTIST AWARD



Figure 9.4.1 Team EMBLAZE Students of EEE won the First Runner Up award SMART INDIA HACKATHON 2018

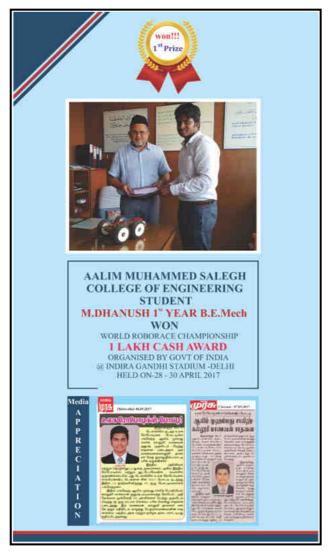


Figure 9.4.2 Mr. M.Dhanush, from the department of Mechanical participated and won World Roborace Championship.

B. The institution needs to specify the facilities, materials for learning beyond syllabus, webinar, podcast, MOOCs etc., and demonstrate its effective utilization.

To facilitate the self-learning process the Institution provides various platforms to keep the students active.

- 1. Library Facility
 - Central Library
 - Digital Library
 - Department Library
- 2. NPTEL / Online Courses
- 3. Mini Projects
- 4. Industrial Visits
- 5. SOFT SKILLS TRAINING PROGRAMME (SSTP)
- 6. Internships / In-Plant Trainings
- 7. Association of Professional Bodies
- 8. PALS- Pan IIT Alumni Leadership Series (IITM)
- 9. "NAAN MUDHALVAN" State's skill development Scheme

1.LIBRARY FACILITY

CENTRAL LIBRARY

Central Library supports the self-learning process, wherein the students and faculty members are enriched to make use of Library facilities. Currently there are 11357 tittles 73,953 volumes, 2720 Academic CDs and statutory requirement of International/National Journals. To inculcate the habit of visiting Library a library hour is included in daily routine timetables.



Figure 9.4.3 Students Reading Area in Library

b. Digital Library:

Digital Library enables the students to access the facility beyond the working hours wherein 23 computers have been dedicated with reprographic facilities. Our students can make use of various online modes of digital library such as AICTE-(e-KUMBH), DELNET, e-books, National digital library, IITM Central Library, Anna University.

c.Department Library

In addition to Central library, every department has its own library.

2. NPTEL / Online Courses:

To facilitate the self learning process, we motivate the students to enroll for SWAYAM-NPTEL online certificate courses and guide them to complete the course by allotting mentors of specialized discipline.



Figure 9.4.4 NPTEL SPOC Nomination letter



Figure 9.4.5 NPTEL online certificate

3. MINI PROJECT:

We enhance the Scientific & Research temper among Students to facilitate projects on specific and beyond Syllabus



Figure 9.4.6 Shell And Tube Heat Exchanger Apparatus

4. INDUSTRIAL VISITS:

In order to provide exposure about the practical working environment and to get awareness on industry practices. We organise Industrial visits for all the Second, Third and Final year students.

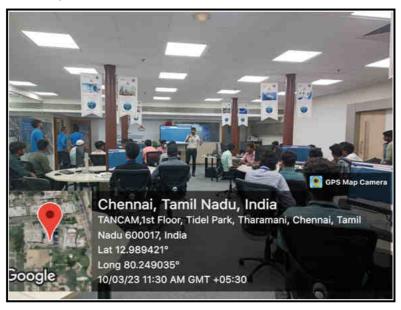


Figure 9.4.7 II Year Students of Mechanical Engineering Department went for Industrial visit to Tamilnadu centre for Excellence for Advanced Manufacturing (TANCAM) in TIDEL Park, Chennai on 10.03.2023

5. Soft Skill Training Programme (SSTP):

We provide SSTP for the First and Second year Students in order to enhance the Skills in IELTS, Aptitude, Seminar, NPTEL, Interpersonal Skills, Communication Skills etc.,



Figure 9.4.8 SSTP Seminar Session

6. INTERNSHIPS / IN-PLANT TRAININGS:

To improve hands-on experience in desired field of studies, Students are encouraged to associate with Internships and In-Plant trainings in Industry Environment.



Figure 9.4.9 In-Plant training certificate

7. PROFESSIONAL BODIES:

To imbibe the Professional abilities and etiquettes, Students are Advised to seek membership from the Professional bodies such as ISTE, IET, CSI etc.,

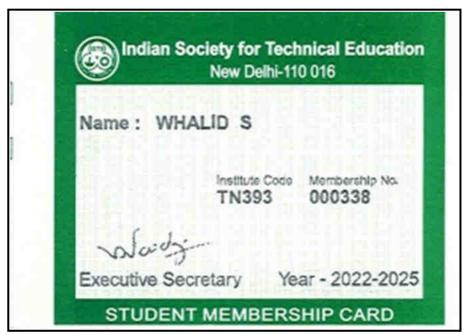


Figure 9.4.10 ISTE Student Membership Card

8. PALS:

As an initiative to make the students expose to the scientific and technological development, we collaborate with PALS which is an educational initiative by volunteers from Alumni Fraternity of various IITs, for the benefit of students of engineering colleges in Tamil Nadu.

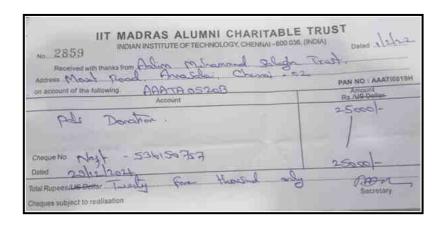


Figure 9.4.11 PALS Renewal Receipt

9. "NAAN MUDHALVAN" States skill development Scheme

The Tamil Nadu Naan Mudhalvan Scheme was unveiled on March 1st, 2022 by MK Stalin, the state's chief minister. The main Objective is to Provide Skill Development Training to impart current industry skill gap. Through this flagship program the students will be able to get trained and ensure they get jobs according to their skill sets. Now II and III year total 577 Students of our College were part of the scheme.

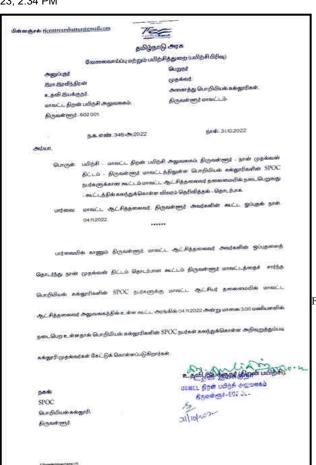


Figure 9.4.12 NAAN MUDHALVAN SCHEME SPOC Communication Letter

Table 9.4.1: Number of students benefitted through Self Learning

S.No.	CONTENT	No. of Students benefitted in CAY 2021-22	No. of Students benefitted in CAYm1 2020-21	No. of Students benefitted in CAYm2 2019-20
1-a	Central Library	243	124	266
1-b	Department Library	148	92	111
2	NPTEL / Online Courses	74	71	61
3	Mini Project	98	124	200
4	Industrial Visit	627	139	347
5	SSTP	518	416	472
6	Internships / In-plant Training	52	312	907
7	Professional Bodies	43	-	-
8.	PALS	7	68	872
9.	Naan Mudhalvan Scheme	577	NA	NA

9.5 Career Guidance, Training, Placement (10)

Total Marks 10.00

Institute Marks: 10.00

A. Availability of Career Guidance Facilities:

A Career guidance, training & placement cell has sufficient infrastructure in order to conduct mock interviews, group discussions, alumni interaction and online examinations. A career guidance, training & placement cell is established with the team members as follows:

Table 9.5.1. CAREER GUIDANCE, TRAINING & PLACEMENT CELL.

ACADEMIC YEAR 2021-22

s.no.	NAME	DESIGNATION	PARENT DEPARTMENT
1	Mr. RAVI KUMAR R	PLACEMENT OFFICER	CPD
2	Ms. RAJALAKSHMI B	PLACEMENT CO- ORDINATOR	CIVIL
3	Mr. MOHAMMED YOUSUF M	PLACEMENT CO- ORDINATOR	МЕСН
4	Ms.AMARSHREE V	PLACEMENT CO- ORDINATOR	CSE
5	Ms.JONE ROSE	PLACEMENT CO- ORDINATOR	ECE
6	Mr. RAMEEZ RAJA K	PLACEMENT CO- ORDINATOR	EEE
7	Ms. DHIVYA BHARATHI P	PLACEMENT CO- ORDINATOR	IT
8	Ms. ABHINAYA C	PERSONALITY DEVELOPMENT TRAINER	ENGLISH
9	Mr. KARTHIK T	PLACEMENT TRAINER	CPD CELL
10	Mr. BIBIN JOHN M	PLACEMENT TRAINER	CPD CELL

B. COUNSELLING FOR HIGHER STUDIES (GATE/GRE, GMAT, etc.,)

During the Last life of Studentship, Interactive Programmes are arranged to develop the Higher Education. (In-home scholars and Scholars from R&D are invited). The Training and Placement division facilitates the students on their Career by organizing Career guidance programmes. Eminent personalities from various organizations both in Government and Private sectors are the invitees. Department specific Alumni interactions are also organized to motivate the students. Intimation & notifications on admissions and various schemes for pursuing higher education are circulated and displayed on the notice board



Figure 9.5.1 Counselling for Higher Education by Ms.Aruna A/P (I.T)



Figure 9.5.2 SIVAKUMAR NEDUNCHEZIAN of Computer Science Engineering has joined M.S in the University of Nottingham academic year 2020-2021

Table 9.5.2 HIGHER STUDIES DETAILS

DEPARTMENT	NO. OF STUDENTS- TAKING UP HIGHER STUDIES
MECHANICAL	8
ECE	10
CSE	5
IT	12

C. PRE-PLACEMENT TRAINING

Institution has constituted the Training and Placement Cell with Technical, Aptitude and Soft Skill Trainers.

The students are provided with various skills in Industry focused areas as Tabulated below.

Table 9.5.3 List of Soft Skills Provided

S. NO.	NAME OF THE SKILL
1	Aptitude
2	Verbal Reasoning
3	Resume preparation, Communication & Group Discussion
4	Programming & Technical Skills
5	Soft Skills

D. PLACEMENT PROCESS AND SUPPORT

The skill sets are facilitated to students through internal trainers and external trainers based on the requirement (Say company specific, mock tests and interviews). Performances of the student are monitored and necessary suggestions are given to the individuals for improvement. The Training and Placement Cell invites various companies to the institution for recruitment and conduct On-campus Interviews. The Training and Placement division supports students to participate in off campus drive conducted by the neighbouring institutions and organizations. The Training and Placement Cell also extends its continuous support by organizing Career Guidance Programmes to support the students to have an exposure on higher education, Job fields etc.,

Table 9.5.4 ANNUAL PLACEMENT TRAINING DETAILS

Academic Year 2021-22

28/23,	2:34 PM					Print
					Third Year	Final Year
S. No.	Trainings	Venue	Resource Person	Dept	No. of Students Participated	No. of Students Participated
			Mr. M. Bibin	EEE	16	27
	In house Regular		John for III	ECE	33	33
	Placement Training Conducted for	Respective Department Class Rooms	year students	CSE	85	62
1	Third Year & Final		Mr. T. Karthik	IT	40	14
	Year Students		for IV year	MECH	60	61
			students	CIVIL	29	22
			<u>Aptitude</u>	EEE	NA	27
			Mr. T. Karthik			
			<u>Verbal</u>	ECE	NA	33
	Company Specific		Asst. Prof.			
•	Training Conducted	Online Class	Janani.L	CSE	NA	62
2	(TCS & Cognizant) for Final Year		Technical Asst.Prof.	IT	NA	14
Ş	Students		K.Kaja		1771	
			Mohideen,	MECH	NA	61
			Asst.Prof. Bakkiya			
			Lakshmi	CIVIL	NA	22
TCS Ninio			Aptitude &	EEE	NA	27
	ГСS Ninja		Technical Conducted by	ECE	NA	33
	Company Specific		MyOsin,	CSE	NA	62
3	Training conducted by MY OSin for		TechSub Techno Solutions Pvt Ltd.	IT	NA	14
	Final Year Students			МЕСН	NA	61
				CIVIL	NA NA	22
	AMCAT Training			CIVIL	IVA.	22
	Programme and			CSE	NA	33
	Company Specific	D	<u>Aptitude</u>	ECE	NA	22
4	Training of M/s.	TT Data & Class Room Iphasis	Mr. T. Karthik		11/1	
	NTT Data &			EEE	NA	22
	Conducted for the			TTD	N	10
	Final Year Students			IT	NA	10
	DEPARTMEN	T	NO. O	NO. OF STUDENTS PLACED		
	MECHANICA		46			
	ECE		30			
CSE				39		

Table 9.5.7 STUDENTS PLACED DETAILS Academic Year 2021-22

	DEPARTMEN	T	NO. 0	F STUDE!	NTS PLACED	
MECHANICAL			46			
	ECE			30		
	CSE			39		
	IT			9		

Table 9.5.8 CPD Cell Web link

CPD Cell	Web link
Placement Details	https://www.aalimec.ac.in/placement/placement-details/ (https://www.aalimec.ac.in/placement/placement- details/)

9.6 Entrepreneurship Cell (5)

Total Marks 5.00

Institute Marks: 5.00

Entrepreneurial Development Cell (EDC) was established on its own initiative on 15th February 2012. Entrepreneurial Development Cell has been conducting various "Entrepreneurship development programmes".

A. Entrepreneurship Initiatives

Objective:

To promote entrepreneurship among the youth and to nurture a passion for self-employment, this turns the Job-seekers into job creators.

The broad objectives of the ED Cell would include:

- 1. To create awareness on entrepreneurship among students,
- 2. To inculcate entrepreneurial spirit and culture among the Engineering graduates.
- 3. To conduct programs on entrepreneurship enabling skills.
- 4. To identify and motivate budding entrepreneurs.
- 5. To assist entrepreneurs in finance source, identifying markets, preparation of business plan and product development.
- 6. To guide the prospective entrepreneurs in knowledge based ventures
- 7. To help entrepreneurs to acquire necessary skills to run the industry effectively.
- 8. To bridge the gap between Industries and Institutions by carrying out the research activities for the industries.
- 9. To conduct Skill development training programs with updated technologies.
- 10. To provide need-based consultancy services.

Table 9.6.1 Members Entrepreneurship Development Cell

S. No.	Name	Designation	Position
1.	Janab. S. Segu Jamaludeen	Secretary & Correspondent	Patron
2.	Janab. Shaik Athaullah	Trustee Administrator	Patron
3.	Prof. Dr. S. Sathish	Principal	Convener
4.	Prof. Dr. M. Afzal Ali Baig	IQAC Chairman	Co-convener
5.	Prof Dr. N.R. Shankar	IQAC Director	Co-convener
6.	Asst. Prof. K. Khaja Mohideen	Coordinator, ED Cell, CSE	Coordinator

Table 9.6.2 Members List – 2021- 22

S.No.	Name of the Member	Designation
1.	Prof. Dr. S. SATHISH	Principal
2.	Asst. Prof. K. Khaja Mohideen	Convener - ED Cell
3.	Asst. Prof. Abdul Rahman	Assistant Professor / Mech. & Coordinator- ED Cell
4.	Asst. Prof. M. Abdul Jabbar	Assistant Professor / Civil, Member –ED cell
5.	Asst. Prof. K. Rameez Raja	Assistant Professor / EEE & Member –ED cell
6.	Asst. Prof. Syed Mustafaa	Assistant Professor /ECE & Member –ED cell
7.	Asst. Prof. Mohamed Iqbal	Assistant Professor/ CSE & Member –ED cell
8.	Asst. Prof. Ganesh	Assistant Professor / IT & Member – ED cell
9.	Asst. Prof. F. Habib Mohammed Afzal Bijli	Assistant Professor /MCA & Member – ED cell

Table 9.6.3 Event List 2021-22

1.	10.07.2021	Entrepreneurial Awareness Meetup	Mr.T.C.Sankar., A.P/MCA, SVCET, Thiruvallur
2	30.09.2021	Aispiring entrepreneurs program 2021 Under the aegis of Ict academy.	ICT Academy
3	14.10.2021	Enterpreneur Cluster Development Talk (ECDT)	Ms. Syedali Fathima., Team lead, Accenture pvt ltd, Chennai
5.	11.11.2021	Enterpreneurship Programme Student Induction Programme 2021-22	Mr.mohammed adhil, Founder & CEO Ifelse Technologies,Chennai
6.	18.11.2021	Entrepreneurial talk	Asst. Prof. M.Rabbek, CEO, SYPAA , Chennai

B. Data on Students benifitted

Table 9.6.4 List of Entrepreneurs

DEPARTMENT	NO. OF ENTERPRENEURS
MECHANICAL	4
ECE	2
CSE	2
IT	3



Figure 9.6.1 Entrepreneurship Development by Er.Mohammed Adhil Founder & CEO, Ifelse Technologies, Chennai

Table 9.6.5 ED Cell Web link

ENTREPRENEURSHIP	https://www.aalimec.ac.in/facilities/entrepreneurship-
DEVELOPMENT CELL	development-cell/

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

Total Marks 10.00

Institute Marks: 10.00

9.7. Co-curricular and Extra-curricular Activities

(10)

A. Availability of Sports and Cultural facilities

(3)

The institution has the strategy to identify and cultivate the talents among the students. At the beginning of every academic year during the induction program students are informed about facilities and opportunities to exhibit their talent by participating in extra-curricular and co-curricular activities. Strategies for scouting and fostering the talents in sports, cultural activities and quiz/competition are by hosted in our institution and also by participating in other institutions and University programs. Following are some of the strategies adopted to promote student's participation in extra-curricular and co-curricular activities. Students are allowed to participate in various intra and inter institution competitions like Technical quiz, Symposiums etc., to develop their competition skills. Seminar halls & Auditoriums are available for performing student activities.

Table 9.7.1 Co-Curricular Activities

S.NO	CO-CURRICULAR ACTIVITIES		
1.	ROBOTICS CLUB	Dr.A.MOHANASUNDRAM., M.E., PhD Asst.Prof., EEE, Aalim Mohammed Salegh College of Engineering	
2.	ENGLISH LITERARY AND INNOVATIVE FORUM (ELIF) CLUB	Ms.C.ABHINAYA., M.A., M.Phil Asst.Prof., English, Aalim Mohammed Salegh College of Engineering	

1. ROBOTICS CLUB

The Aalim Mohammed Salegh College of Engineering has given high preference and exposure to the student community in the field of ROBOTICS. The Students have participated in the various Robotic competitions held at IITs, NITs, Anna University and other reputed institutions all over the country.



Figure 9.7.1 robotics workshop for the EEE and ECE Students

2. ENGLISH LITERARY AND INNOVATIVE FORUM (ELIF) CLUB

English Literary and Innovative Forum (ELIF) aims to enhance the creative writing and communication skills of the students by conducting various Language activities such as Essay writing, Elocution, Debate etc.,

English Literary and Innovative Forum (ELIF) Members

Asst.Prof. C. Abhinaya - Convener

Asst.Prof. K. Nishanth - Co-Convener

Asst.Prof. S. Gopikha - Member

Asst.Prof. S. Sajidha Begum - Member

English Literary and Innovative Forum (ELIF) under the aegis of the Department of Science and Humanities has conducted a one-day event, Young Flames'22 for the first, second and third year students of all the Engineering disciplines on 28 MAY 2022, at Dr. A.P.J. Abdul Kalam Auditorium. The students had actively enrolled their names in the following competitions conducted on the one-day event:

- 1. Debate
- 2. Shipwreck
- 3. Stress Interview
- 4. Just a Minute (JAM)

The Principal awarded the overall trophy to the Department of Computer Science and Engineering which achieved the maximum number of winners.



Figure 9.7.2 Young Flames'22 Poster

Table 9.7.2 Extra-Curricular Activities

S .NO	EXTRA-CURICULLAR ACTIVITIES		
1.	PHYSICAL EDUCATION DEPARTMENT	1. Mr.G.Vinoth Kumar., M.P.Ed. M.Phil., M.Sc (Yoga)., P.G.Dip.F.W.N.I.S	
2.	NATIONAL SERVICE SCHEME (NSS)	Dr.K.Suresh Kumar., M.Sc., M.Phil., PhD., NSS Programme Officer	
3.	YOUTH RED CROSS (YRC)	Mr.K.Shagul Hameed., M.Sc., M.Phil., (PhD) YRC Programme Officer	
4.		Mr.G.Vinoth Kumar M.P.Ed. M.Phil., M.Sc (Yoga)., P.G.Dip.F.W.N.I.S NCC Officer	

3. PHYSICAL EDUCATION DEPARTMENT

The Physical Education Department, monitored and marshaled by G.Vinoth Kumar, Physical Director for overseeing the Sports activities and periodical sports trainings for the Faculty members and Students.

Table 9.7.3 INDOOR AND OUTDOOR FACILITIES

S.No	OUTDOOR FACILITIES	INDOOR FACILITIES
1	Cricket Ground	Table Tennis
2	Volleyball Court	Weight Lifting
3	Badminton Court	Indoor games
4	Basketball court	GYM facilities
5.	Kabbadi	

ADDITIONAL ACADEMIC SUPPORT

Students represented by State/Nationals are given scholarships during Admissions.ON-Duty will be granted to students, when they represent the Institution, University or National level sports as well as Cultural events. Special classes and Internal assessment tests are conducted for those students who tend to miss their regular academic classes on account of Extracurricular and Co-curricular activities.

SPECIAL DIETARY REQUIREMENTS, SPORTS UNIFORM AND MATERIALS

- 1. Special dietary requirements, sports uniform and materials are provided, during practice and match sessions.
- 2. Uniforms and ID cards are provided to all sports teams representing the institution.
- 3. Sports materials and kits are provided.
- 4. During practice and contest, TA and DA are given as per the norms fixed by the Sports Committee.



Figure 9.7.3 S.A College State Level Inter Engineering College Volley Ball Tournament (MEN) HELD ON 20.02.2020 & 21.02.2020–WINNERS

Table 9.7.4 Physical Education Department Events organized

ACADEMIC YEAR	STUDENTS PARTICIPATED IN SPORTS EVENTS
2021-2022	03
2020-2021	04
2019-2020	10
2018-2019	10

Table 9.7.5 Physical Education Department Weblink

2. National Service Scheme (NSS

National Service Scheme is a student centric programme. It is a noble experiment in Academic extension. It inculcates the spirit of voluntary work among Students and teachers through sustained community interaction. It brings the academic institutions closer to the society. It is a link between the campus and community, the college and village, knowledge and action. In our Institution, NSS Students have undertaken various Programmes by adopting five nearby villages. (Palavedu, Pakkam, Puliyur, Kadavur, Pandeswaram). NSS volunteers have served 120 hours per year and 240 hours for 2 consecutive years and seven days Special Camp by organizing several events such as Rashtriya Ekta Diwas, Swachh Bharat Abhiyan, Special Medical camp, International Day of Yoga, Unnat Bharat Abhiyan (UBA) Rural Visit, National Deworming Day, Azadi ka Amrit Mahotsav.



Figure 9.7.4 Student rural visit in Palavedu village, Tiruvallur Dist

Unnat Bharat Abhiyan (UBA), a flagship programme of Ministry of Human Resource Development (MHRD), Govt. of India. Higher educational institutions (HEIs) of the country adopt villages for their development. Faculty and students to be involved in village development plan in collaboration with district administration. Aalim Muhammed Salegh college of Engineering is participating in UBA and adopted following villages for their development in collaboration with district administration. 1. PALAVEDU 2. PAKKAM 3. PULIYUR 4. KADAVUR 5. PANDESWARAM.



Figure 9.7.5 UBA poster

Table 9.7.6 Students Participated In NSS Events

ACADEMIC YEAR	STUDENTS PARTICIPATED IN NSS EVENTS
2022-2023	11
2021-2022	15
2020-2021	10
2019-2020	16

Table 9.7.7 NATIONAL SERVICE SCHEME WEBLINK

NSS	https://www.aalimec.ac.in/nss/	
1155	(https://www.aalimec.ac.in/nss/)	

Table 9.7.8 Academic Year 2022-23 Event/ Activities

S.NO.	NAME OF THE EVENT / ACTIVITY	DATE	NO.OF PARTICIPANTS	NO.OF PEOPLE BENEFITED
1	NATIONAL DEWORMING DAY	14.02.2023	5	265
2	UNNAT BHARAT ABHIYAN (RURAL VISIT)	10.11.2022 TO 17.11.2022	10	500
3	WELFARE SCHOOL VISIT	10.11.2022	5	30
4	MEDICAL AWARENESS PRGRAMME	14.11.2022	10	270
5	RASHRIYA EKTA DIWAS (NATIONAL UNITY DAY)	31.10.2022	10	1100
6	NSS DAY 2022 CELEBRATION	24.09.2022	50	200
7	NATIONAL DEWORMING DAY	09.09.2022	5	250
8	AZADI KA AMRIT MAHATSAV 2022	11.08.2022 TO 13.08.2022	50	1100
9	INTERNATIONAL DAY OF YOGA	21.06.2022	5	250
10	MASS CLEANING PROGRAMME	11.06.2022	25	Deena Dayalan Nagar, pattabiram,
11	ROLE OF YOUTH IN FUTURE INDIA	04.06.2022	5	260

4. YOUTH RED CROSS (YRC)

The Indian Red Cross Society is made up of Young volunteers who can make a significant contribution by meeting the needs of the most vulnerable people within their local communities through the Red Cross youth programme (YRC). The students of Aalim Muhammed Salegh College of Engineering are a part of it. Blood donation programmes are actively participated by the students.



Figure 9.7.6 Blood Donation certificate Table 9.7.9 STUDENTS PARTICIPATED IN YRC EVENTS

ACADEMIC YEAR	STUDENTS PARTICIPATED IN YRC EVENTS
2022-2023	14 (Blood Donations)
2021-2022	15 (Blood Donations)
2020-2021	10 (Blood Donations)
2019-2020	18 (Blood Donations)

Table 9.7.10 YOUTH RED CROSS WEBLINK

YOUTH RED CROSS	https://www.aalimec.ac.in/yrc/ (https://www.aalimec.ac.in/yrc/)
-----------------	--

6. National Cadet Corps (NCC)

The NCC of 1(TN) CTC Battalion NCC Unit (Army Wing), Madras 'B' group had established on 10th December 2021 in the College campus, Male and female students of Aalim Muhammed Salegh College of Engineering are a part of it. The enrolled students should undergo three years training continuously, before the Degree course. Eligible cadets will be trained to appear for 'B' and 'C' certificate Examinations.

The Aim of the NCC:

To develop character, comradeship, the Ideal of Service and the capacity for Leadership in Young cadets. To provide service training to young cadets so as to stimulate interest in the Defense sector of the Country. To build up a reserve of potential officers so as to enable the Armed forces to expand rapidly in a National emergency. Our NCC Cadets are undergoing rigorous training in regular Parades, conducted thrice in a week and nutrient diet provided on the day of training. They have actively organized and participated in various events such as Puneeth Sagar Abhiyan, Jallianwala Bagh Massacre Remembering Day, Role of youth in Future India, International Yoga Day. 12 Cadets have successfully completed NCC 'B' Certificate Examination which was held on 11th and 12th of Feburary 2023 in Loyala College, Chennai. In the Academic year 2022 – 2023, 19 students from both genders were enrolled in the NCC



Figure 9.7.7 NCC Flag Raising ceremony



Figure 9.7.8 NCC Students collecting the plastic and other waste products in Marina Beach

Table 9.7.11 Students Participated In NCC Events

ACADEMIC YEAR	STUDENTS PARTICIPATED IN NCC EVENTS
2022-2023	01
2021-2022	04

Table 9.7.12 NCC Weblink

NCC	https://www.aalimec.ac.in/national-cadet-corps/ (https://www.aalimec.ac.in/national-cadet-corps/)		
-----	--	--	--

Table 9.7.2 Extra-Curricular Activities

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

Institute Marks: 5.00

Vision:

The College with Cutting-edge Excellence in Learning, Teaching and Research integrates Academia, Industry and National Progress.

Mission:

MISSION - 1	To offer Project based learning for all the Subjects beyond the Syllabus.
MISSION - 2	To create multidisciplinary and Interdisciplinary Research Environment among the Students through solving complex Social Technical Problems.
MISSION - 3	To motivate Faculty Members and Students to undergo MOOC Courses and Certifications.
MISSION - 4	To collaborate with Academia and Industry for Intellectual ambience to develop intellectual environment holistically and improve Human Capabilities.

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

Institute Marks: 10.00

A. Governing body composition, senate, and all other academic and administrative bodies; their membership, functions, and responsibilities; frequency of the meetings; participation details of external members and attendance therein

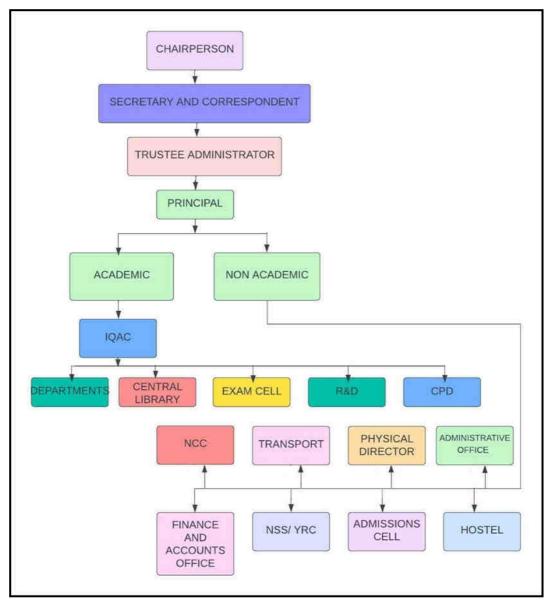


Figure 10.1.2.1 Organization Chart

A. Governing body composition, senate, and all other academic and administrative bodies; their membership, functions, and responsibilities; frequency of the meetings; participation details of external members and attendance therein

GOVERNING COUNCIL

Governing Council comprises of Management delegates and members drawn from distinguished cross sections of the society. The Governing Council meets before the onset of every academic year. Previous year Occurrence and Forthcoming year requirements and Budgets will be discussed.

Table 10.1.2.1 Governing Council

S. NO	Name	Designation	Position
1	Ms. Ahamed Nasrin	Vice Chairperson	Chairman
2	Mr. S. Segu Jamaludeen	Secretary & Correspondent	Member
3	Mr. T.S.K Shaik Fareed	General Manager	Member
4	Mr. Shaik Athaullah	Trustee Administrator	Member
5	Prof. Dr. S. Sathikh, Former Vice Chancellor, University of Madras, Chennai.	Academician	Member
6	Prof. Dr. S. Sathish	Principal	Ex Officio & Member
7	Prof. Dr. M. Afzal Ali Baig	HOD / Dept. Of Civil Engg.	Ex Officio & Member
8	Prof. Dr. N.R. Shanker	Director, IQAC	Ex Officio & Member
9	Prof. Dr. S.B Mohan Professor/EEE SA Engineering College, Chennai.	Academician	Member
10	Dr. Rajesh Kunnath	Industrialist	Member

ACADEMIC COMMITTEE:

The academic Committee of the Institution comprise of Principal, Heads of the Department and the Coordinator of various Committees supervises all the academic activities of the Institution. The Committee meets every six months once to discuss and to take decisions on academic matters. The Minutes of these meetings are shared to all the faculty members through Head of the departments.

Table 10.1.2.2 Academic Monitoring Committee

S.No	Name	Designation	Position
1	Dr. S. Sathish	Principal	Chairperson
2	Dr. N.R.Shanker	Director IQAC	Member
3	Dr. M.Amanullah	Head/IT	Member
4	Dr. A.S. Salma Banu	Head/ECE	Member
5	Dr. S. Ramkumar	Head / MECH	Member
6	Er. K. Khaja Mohideen	Head/CSE	Member
7	Er. M.S Rajan	Head/EEE	Member
8	Dr. M. Afzal Ali Baig	Head/CIVIL	Member
9	Ms. A. Ashma	Head/S&H	Member
10	Dr. K. Suresh Kumar	NSS Coordinator	Member
11	Er. K. Khaja Mohideen	ED Cell Coordinator	Member
12	Er.P. Muni Raja Chandra	Exam Cell Coordinator	Member
13	Dr. A. Saleem	Admissions Coordinator	Member
14	Mr. R. Ravikumar	CPD Cell Coordinator	Member
15	Dr. Mariamma Alex	Librarian	Member
16	Mr. G. Vinoth Kumar	Physical Director	Member
17	Er. Abdullah B	Campus Manager	Member



Figure 10.1.2.2 Academic Committee held on 05.01.2023 at IQAC

FUNCTIONS OF VARIOUS COMMITTEES

All cognitive academic committee are designed and constituted by the Principal.

Table 10.1.2.3 Various Committees and its role

S. No	Name of the Committee / Cell	Purpose of the Committee / Cell	Frequency of Meeting
1	IQAC	IQAC plays a crucial role in ensuring that the institution maintains high standards of quality in all its academic and administrative processes. It guides the institution to continuously improve and innovate in its pursuit of excellence in education practices	General Meeting once in a Academic year
3	Research and Development Cell (R&D)	Research and Development Cell of our Institution is the foundation head to imbibe scientific temper among the students and young Faculty Members by delivering periodical lectures by the Director of the Cell.	General Meeting twice at the end of every Semester
4	Career Planning Development Cell (CPD Cell)	The main emphasis of the Career Development Cell is the processes for career development – career awareness, career exploration.	General Meeting Once in a Academic year
5	Industry Institute Interaction Cell	To bridge the gap between the industry, the real world and the institute.	General Meeting twice in a Academic year
6	Discipline Committee	Discipline Committee of our Institution is responsible for developing, implementing and monitoring the policies of the Institution and to take disciplinary actions.	and Circumstantial

7	Anti-Ragging Committee	Anti Ragging Committee in its place very agile having an eagle's eye on the movement of the students during the induction of fresh batches to arrest the nagging and Ragging and on record campus free from any mishap.	General Meeting Once in a Academic year and Circumstantial meeting if necessary
8	Hostel & Mess Committee	To Keep a check on the daily issues regarding the hostel amenities, housekeeping, mess facilities, quality of food, etc. and ensures an enriching stay at the campus.	General Meeting Once in a Academic year and Circumstantial meeting if necessary
10	Transportation Committee	Drawn from Students, Staffs and Motor Vehicle Drivers to take the stock of pick up and drop, safe driving etiquettes of public road are taking cognizance and formulated all safety norms for the bus commuters	General Meeting Once in a Academic year
11	SC/ST welfare Cell	To create a platform where students can point out their problems, regarding academic and non academic matters. To monitor the implementation of reservation policy in the institution.	General Meeting Once in a Academic year and Circumstantial meeting if necessary
12	Women welfare Committee	To investigate all the complaints / charges thoroughly & professionally within stipulated time. To ensure confidentiality & time bound response to the complaints & build confidence about impartially.	General Meeting Once in a Academic year and Circumstantial meeting if necessary
13	Extra-Curricular Activities Committee	To garner Comradely and Humane Values towards making holistic society and the Nation	General Meeting Once in a Academic year
14	Newsletter & Magazine Committee	To conduct meetings in order to organize different events. To collect the data from different departments i.e., Student & Faculty members staff achievement.	General Meeting twice in a Academic year

A. The Published Service Rules, Policies and Procedures with Year of Publication

Code of Conduct Core Values

- 1) The College published a hand book with the guidance of the Governing Council enumerating all service rules and regulations.
- 2) Awareness created every year on all subjects of the organization by placing the rules and regulations of the college, promotional and recruitment policies in the website.

Recruitment Process

- $1) \ Recruitment \ procedure \ is \ very \ transparent \ and \ competency \ is \ the \ criteria.$
- 2) The recruitment of the teaching cadre is direct by nature drawn from open society as per the norms of AICTE and Affiliating University
- 3) Cadre promotions are awarded as per norms of AICTE and Affiliating University.

Resignation by Employees

- 1) Every candidate employed in the college will be considered for a minimum of one year as a probationary period. .
- 2) He / She shall be relieved only at the end of the academic year.
- 3) They should give three months prior notice after for getting relieved from the Institution.

Employee Welfare and Promotion Policy

The College has a Self-Appraisal Method to evaluate the performance of the faculty in Teaching, Research and Extension programs. At the end of the academic year, every faculty member submits the Self Appraisal Form duly endorsed by the Head and is evaluated on the basis of academic credentials, research contribution, quality enhancement, campus life enrichment, contribution to the university work and extensions services.

The administration, through IQAC, encourages the faculty members to upskill their knowledge and transfer it to the Students.

The institution has the provision of EPF and contributes the eligible amount to the respective account.

Gratuity

Every staff of the institute is provided a gratuity after his/her tenure.

Personal Accidental Insurance

College has taken an initiative to have group insurance for those who are willing to be a part of this initiative.

Soft Loan

The Institute offers interest free Soft loans to the necessitous Employee promptly which can be repaid on monthly basis.

Maternity Leave

College renders a maternity leave to women staff as per the rules of the government.

Medical Health Care Centre Facility

Dr. Glory, M.B.B.S. has been appointed as Medical Officer to take care of all the stakeholders of the campus.

Promotions

Faculty members are promoted based on the qualification, services, and outcome of the performance appraisal.

Publication Incentives

Incentives are given to the faculty members to participate in National and International conferences and also for publications.

Sponsorship for higher studies

Faculty members are granted with On Duty for pursuing their Higher Education.

Retirement

- 1) The faculty and Principal shall retire from service in accordance with the age fixed by AICTE.
- 2) The age of retirement of all Faculty members and Principals / Directors of institutions shall be 65 years. An extension of 5 years (till the attainment of 65 years of age) may be given to those faculty members who are physically fit, have written technical books, published papers and have average 360⁰ feedback of more than 8 out of 10 indicating them being active during the last 3 preceding years of service.
- 3) If the date of retirement is during the month, the incumbent can continue in service till the end of that month.

B. Minutes of the meetings and action-taken reports

The Circular, Minutes of Meeting and the necessary action taken report are filed in the respective folders. The Conveners, Co-Conveners and members of various committees will take action on different issues to rectify and resolve the problem which was given below

Action taken reports of Various Committees

10.1.2.4 Anti-Ragging Committee			
Academic Year	Issues	Action Taken	
2019-2020, 2020-2021, 2021- 2022 & 2022-2023	Nil	Anti Ragging Awareness programme was conducted every year and Posters has been displayed in Common Venues.	



Figure 10.1.2.3 Display Of Anti Ragging Poster in Department Notice Board

10.1.2.5 Transport Committee					
Academic Year	Date	Issue	Action Taken		
2022-2023	20.12.2022	Departure of Valluvar kottam route bus before the scheduled time	Bus Driver was summoned and advised to maintain the scheduled timings by Principal and Transport committee In charges		
2022 2020	30.01.2023	Non proper stoppage of Mathur Bus at appropriate point	Bus Driver was summoned and advised to maintain the scheduled timings by Principal and Transport committee In charges		
2021-2022	22.12.2021	Change of Boarding and Dropping place due to Metro Rail work	The Transport In charge was instructed to follow the approved schedule for Boarding and Dropping points.		

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING MUTHAPUDUPET, AVADI IAF, CHEENAI-600055 TRANSPORT COMMITTEE ACTION TAKEN REPORT

Date & Day: 20.12.2022 (Tuesday)

OBSERVATIONS	ACTION TAKEN
Valluvar Kottam route bus departs from the point before the stipulated time .	Committee members along with Principal and Transport Supervisor advised the bus driver to start the bus at the scheduled time and maintain the timings for the points.

Co-Convenor

Convenor Convenor

Principal Principal

Figure 10.1.2.4 Transport Committee Action taken report sample

	10.1.2.6 Mess Committee				
Date	Issues	Action Taken			
	Drinking water (RO) is disrupted.	Plumbing done and the facility was restored.			
	Quality of Vegetable supplied questioned	Complaint verified and enquired. Vegetables were moderately fresh and advised for correction			
26.10.2022	Mess timings to avoid ragging	For a ragging Free Environment, Mess Timings both Lunch as well as Evening Snacks Timings were changed.			
	Follow for the purchase of Vegetables and meat	A separate Note is maintained for the Entry of the Meat as well as Vegetables and duty was allotted to the Caretaker			
	Quality of Milk questioned	Store in charge was provided with Lactometer to assess the quality of Milk.			
	Hand Sanitizer got displaced due to cranky habits of students	Ensured placed Hand sanitizer in right place and to follow up.			
06.08.2021	Maintaining of COVID-19 SOPs	Instructed the Mess In-charge to adhere the SOPs			
	Social Distance markings are not proper	Campus manager was informed about the markings			

AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING MUTHAPUDUPET, AVADI IAF, CHEENAI-600055 MESS COMMITTEE ACTION TAKEN REPORT

Date & Day: 26.10.2022 (Wednesday)

OBSERVATIONS	ACTION TAKEN	
RO drinking water availability should be ensured. Delayed purchasing of Groceries. Instruction was given to Committee members to change the Mess timings to avoid ragging. Follow up should be maintained for the purchase of Vegetables and meat Quality of Milk Purchased has to be verified LPG Cylinder Purchase to be done before two days.	 A Separate R.O. Line was installed for the dining hall. Purchase of Groceries is done in One Week advance to avoid any deficit in the Store. For a ragging Free Environment, Mess Timings both Lunch as well as Evening Snacks Timings were changed. A separate Note is maintained for the Entry of the Meat as well as Vegetables and duty was allotted to the Caretaker. Milk quality was ensured with the help of Lactometer and the readings were entered for follow up. LPG Cylinder delivery is maintained in a separate Note for Effective follow up. 	

Figure 10.1.2.5 Mess Committee Action taken report

10.1.2.7 Hostel Committee			
Date	Issues	Action Taken	
12.12.2020	Hand Sanitizer setup is not available in mens hostel and ladies hostel.	To purchase the new Hand Sanitizer setup, campus manager was called and instructed to put a purchase order	
	Due to Pandemic, floors are stained and dust	Sweepers are instructed to clean all the floors and room which was supervised mess supervisor	
10.08.2021	Hand Sanitizer setup damaged in First year mens hostel	Campus manager was informed about the damage in Hand Sanitizer Setup and instructed to rectify it befor the commencement of first year classes	
	Basic amenities such as Fan and Light are not working in few rooms. In few rooms damaged cots also found	Electrician was called and shown the non-working far and light which was rectified on the spot. Damaged co were replaced with a new one by campus manager	

02.11.2022	Basic amenities such as Fan and Tube light were not working in few rooms	Electrician was called and shown the identified non- working Fan and Tube light which were rectified on the spot
	In few rooms it was found that some cots were damaged	The damaged cots were replaced with a new on by our campus manager
	Hand Sanitizer setup damaged in First year mens hostel	Campus manager was informed about the damage in Hand Sanitizer Setup and instructed to rectify it before the commencement of first year classes
	Allotment of rooms in the ground floor for first year 2022-23 batch in hostel were discussed	Rooms have been allotted in the ground floor for first year 2022-23 batches in hostel.



AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING MUTHAPUDUPET AVADI, CHENNAI - 600 055.



HOSTEL COMMITTEE ACTION TAKEN REPORT

Date: 02.11.2022

Observations	Action Taken Report By Warden	
Basic Amenities such as Fan and Tube light were not working in few rooms.	 Electrician was called and shown the identified non working Fan and Tube light which were rectified on the spot. 	
In few rooms it was found that some cots were damaged.	 The damaged cots were replaced with a new one by our Campus Manager. 	
Hand sanitizer setup damaged in First year Men's Hostel.	Campus Manager was informed about the damage in hand sanitizer setup and instructed to rectify it before the	
Allotment of rooms in the ground floor for first year 2022-23 batch in hostel were discussed.	 commencement of First year Classes. Rooms have been allotted in the ground floor for first year 2022-23 batches in hostel. 	

what

Principal

Figure 10.1.2.6 Hostel Committee Action taken report

10.1.2.8 Discipline and welfare committee			
Academic Year	Date	Issue	Action Taken

			PIIIIL	
	19.01.2023	Students coming late after break time.	Canteen In charge was instructed to stop the sales at 10.50 am. For first year students, separate sales point will be made at first year block.	
2022-2023	19.01.2023	Some students were not adhering the rules of the Institution such as Punctuality, Wearing the ID cards, Hairdressing and Formal dress code	Defaulters will be counseled by the respective Counselors and informed to their parents in needed. Student with improper Haircut will be sent back and allowed only after dressing their hair properly.	
	19.01.2023	Regularity	The Student was counseled by the Counselor and also informed to the parents about required attendance percentage for semester examination.	
	19.01.2023	Usage of Mobile Phone in working hours	Department wise Mobile Phone checking squads was formed to check the students possessing Mobile Phones and will be seized if it is in switched on mode	
	24.11.2021	Few Students were not following COVID 19 SOPs such as Wearing mask and Social distance.	Students were given awareness class wise about the COVID 19 SOPs by Dr. Suresh Kumar, NSS Programme Officer Awareness posters had been displayed in common venues.	
2021-2022	24.11.2021	A few students are not adhering to the institutions standards regarding formal dress code, hairstyles, wearing ID cards, and punctuality	The Class In charges and Class Counselors are instructed by the HOD to Counsel the defaulters to follow the rules of the college.	
	24.11.2021	Regularity	The Student was counseled by the Counselor and also informed to the parents	
	24.11.2021	Usage of Mobile Phone in working hours	To check students possession of mobile phones and seize them if they are turned on, department-specific mobile phone checking squads were established.	

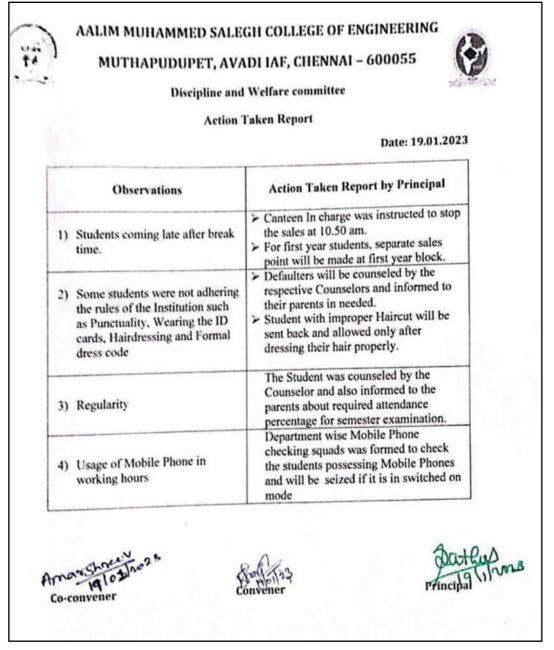


Figure 10.1.2.7 Discipline and welfare Committee Action taken report

10.1.3 Decentralization in working and grievanceredressal mechanism (10)

Institute Marks: 10.00

Decentralization

Decentralization in working and grievance redressal mechanisms refers to the process of delegating decision-making power and authority to lower levels of an organization or society. This approach aims to promote greater participation, accountability, and efficiency in the management of work and resolution of grievances.

The Administrative structure of the Institute clearly depicts the decision tree and chain of command. The Institution was spearheaded by the Chairperson and followed by Secretary & Correspondent, Trustee administrator and Principal. Daily Academic activities are administered by the Principal with the support of all Head of Departments. The Principal guides and monitors Academic, Non-academic and co-curricular activities of the Institute.

Heads of the Department are second line administrators actively support and execute the decision with the Coordination of Faculty members. Heads of the Department are empowered with the desired freedom of administration in decision taking in consultation with the Faculty Members. Other activities related to Curricular, Co Curricular and Extra-curricular will be approved by the Principal in concurrence with the concerned department Heads.

A. List of names of the faculty members who have been delegated powers for taking administrative decisions.

Table 10.1.3.1 Delegation of powers

	Print		
S.No	Name	Roles and responsibilities	
1	Principal	The Principal provides academic and administrative leadership that involves enhancing academic policies and research ensuring high academic standards of the Institution, Finance and Infrastructure management	
2	Director IQAC	Responsible for ensuring high quality of the Institution to meet the accreditation standards of NBA and NAAC, preparing the SAR and AQAR.	
3	Head of the Department	The HODis responsible for the recruitment and evaluation of Faculty members, Welfare of the students and Department Management.	
4	Exam Cell Coordinator	The Exam Cell Coordinator is responsible for the smooth conduction of Anna University examination process.	
5	Librarian	librarians play a vital role in supporting academic success and fostering a culture of learning within the college community.	
6	Career Planning and Development Cell Coordinator	To assist the students developing their academic, career of interests, and their goals by provide various skill developmental training to the students and to Conducton and off campusinterviews	
7	Entrepreneurial Development Cell Coordinator	To create awareness regarding entrepreneurship as a career option through conducting ED programs andarranging interactions with Alumni Entrepreneurs with the students of the Institution	
8	Physical Director	The Physical Director is responsible for ensuring the sports facilities, developing sports programs that promote physical fitness and wellness among students by organizing intramural sports leagues, hosting intercollegiate sports competitions, and offering fitness classes.	
9	Admissions Coordinator	Admission Coordinator is responsible for planning and coordinating admissions events, supervising the application process, reviewing applications, providing information about the institution or program to the applicants and Inquirer.	
10	NCC Officer	NCC Officers are responsible for training and mentoring cadets in various disciplines, organize camps.	
11	NSS Programme Officer	The NSS programme officer is responsible conducts and supervises NSS activities and maintaining records	
12	YRC Programme Officer	The YRC Programme Officer is responsible for developing and implementing YRC activities in the such as organizing awareness campaigns, health camps, blood donation drives and other initiatives to promote humanitarian values among young people.	
13	Campus Manager	Assist management with accurate information as required for all campus associate activities and initiate decisions.	

$\boldsymbol{B}.$ Specify the mechanism and composition of grievance redressel cell.

Grievance Redressal Cell

After meticulous inquiry genuine grievances are addressed and confident level restored of the complainant

10.1.3.2 Women Grievances cum Redressal Committee

S.No	Name	Designation	Role
1	Dr.A.S. Salma Banu	Assoc. Professor	Faculty
2	Mrs. Bhuvaneswari Raja	Asst. Professor	Faculty
3	Dr.P. Kamala Glory	Medical Officer	Campus Medical Officer
4	Dr.V. Uma	Social Worker	Suyam Managing Trustee

10.1.3.3 Discipline and Welfare Committee

S.No	Name	Designation	Role
1	Dr. S. Sathish	Principal	Chairman
2	Dr.M. Afzal Ali Baig	Head/Civil	Member
3	Dr.S.Ramkumar	Head/Mech	Member
4	Er.M.SRajan	Head/EEE	Member
5	Ms. A. Ashma	Head/S&H	Member
6	Ms. Bhuvaneswari Raja	Student Counsellor (Faculty)	Convener
7	Er. G. Arun	Deputy Warden of Men's Hostel	Member
8	Dr. A. Saleem	Deputy Warden of Men's Hostel	Member
9	Ms. V. Amarshree	Deputy Warden of Women's Hostel	Member
10	Dr. A. S. Salma Banu	Lady faculty member	Member

10.1.3.4 Anti-Ragging Committee

S.No	Name	Designation	Role
1	Prof. Dr. S. Sathish	Principal	Chairman
2	Mr. D. RAJI	Police Inspector	Member
3	Mr. Joei Doss S	Revenue / Taluk / Civil / Officers	Member
4	Mr.T.R.Sarathivasan	Official of NGO	Member
5	Mr. A. Parthasarathy	Representatives of Parents	Member
6	T. Mohammed Saleem	Representatives of Students	Member
7	S. Mohamed Hamdhan	Representatives of Students	Member
8	Mr. S. Babu	Representatives of Non-Teaching	Member



Figure 10.1.3.1 A COMPREHENSIVE MEETING (21.09.2022) WITH THE INSPECTOR OF POLICE (MUTHAPUDUPET) REGARDING THE BEHAVIOUR OF THE STUDENTS IN PUBLIC PLACES AND THE ILL EFFECTS OF RAGGING

10.1.4 Delegation of financial powers (10)

Financial powers are delegated to the Principal, Heads of the department and the relevant in-charges.

Table 10.1.4.1 DELEGATION OF FINANCIAL POWER

Designation	Extent of Financial Power (Rs.)
Principal	50,000
Head of the departments	25,000
Co-ordinators like NSS, NCC, etc.	10,000

B. Demonstrate the utilization of financial powers for each of the assessment years.

- · Principal is empowered to approve the expenditures incurring academic procurements, Laboratory tools and books for Library
- · Head of Departments are empowered to spend the expenditures incurring academic procurements.
- Officers in charges of the extracurricular services such as NCC, NSS, YRC and Physical Education are delegated with the powers to meet the Organizational expenditure at their discretion.

10.1.5 Transparency and availability of correct/unambiguous information in public domain (5)

Institute Marks: 10.00

Institute Marks: 5.00

Transparency and availability of correct/unambiguous information in the public domain.

Aalim Muhammed Salegh College of Engineering website provides information about vision & mission of the Institution, Course details, Infrastructure, Faculty Members details, Students details, Placement activities, Training Programs, Alumni Association activities, Faculty and Students achievements, College admission brochure, Research activities, Journal Publication of Faculty Members and Social activities

The details of various activities in the college and achievements of faculty and students in various inter-college, national and international level events are posted in the college website and available in the following link

A. Information of the policies, Rules, processes is to be made available on website.

10.1.5.1 Website Link

S. No	Item/Article	Link
1	Code of Conduct	https://www.aalimec.ac.in/about-us/
2	HR Manual	(https://www.aalimec.ac.in/about-us/)

Transparency is also maintained and all information about the college, decisions taken, rules and regulations implemented, events organized etc, are disseminated through the college mail to all faculty members and students. Every faculty and student members are facilitated with an Email account for the sharing of information.

B. Dissemination of the Student and Staff Information:

Table 10.1.5.2 Website link for all programs

S. No	NAME OF THE DEPARTMENT	URLADDRESS
1	COMPUTER SCIENCE AND ENGINEERING	http://www.aalimec.ac.in/departments/cse/ (http://www.aalimec.ac.in/departments/cse/)
2	ELECTRONICS AND COMMUNICATION ENGINEERING	https://www.aalimec.ac.in/departments/ece file:///C:/Users/lib20/Desktop/C%2010%20All%20Metrics/%C2%A0https:/www.aalimec.ac.in/departments/ece)/
3	MECHANICAL ENGINEERING	https://www.aalimec.ac.in/departments/me/ (https://www.aalimec.ac.in/departments/me/)
4	CIVIL ENGINEERING	https://www.aalimec.ac.in/departments/ce/ (file:///C:/Users/lib20/Desktop/C%2010%20All%20Metrics/%20https:/www.aalimec.ac.in/departments/ce/)
5	INFORMATION AND TECHNOLOGY	https://www.aalimec.ac.in/departments/it/ (https://www.aalimec.ac.in/departments/it/)
6	ELECTRICAL AND ELECTRONICS ENGINEERING	https://www.aalimec.ac.in/departments/eee/ (https://www.aalimec.ac.in/departments/eee/)

Transparency in other curricular matters:

All the curricular matters are published in the website and the few liks are given below.

Events:

https://www.aalimec.ac.in/departments/me/events/ (https://www.aalimec.ac.in/departments/me/events/)

Club Activities:

http://www.aalimec.ac.in/club-activities/

Research:

https://www.aalimec.ac.in/research/funded-projects/ (https://www.aalimec.ac.in/research/funded-projects/)

Placements:

https://www.aalimec.ac.in/placement/placement-details/ (https://www.aalimec.ac.in/placement/placement-details/)

Admission:

https://www.aalimec.ac.in/admission/ (https://www.aalimec.ac.in/admission/%20)

Academic Details:

https://www.aalimec.ac.in/departments/ (https://www.aalimec.ac.in/departments/)

Mandatory Disclosure:

http://www.aalimec.ac.in mandatory-disclosure

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (30)

Total Marks 30.00

10.2.2 Utilization of allocated funds (15)

Institute Marks: 15.00

Utilization of Allocated Funds

The Institution needs to state how the budget was utilized during the assessment years.

Utilization of Allocated Funds

The Management approves the overall budget of the college at the end of each academic year. The whole year's budget including Recurring and non-recurring expenses will be taken into account. The Heads of the department will be intimated about the fund extent allocated beyond their earlier proposed budgets. Finance department of the trust takes care of the Preparation of purchase orders for the purchase of laboratory equipment, teaching aids, furniture, payment of bills along with the department budget allocations and expenditures. Major works like constructions, upgradation of the infrastructure, furniture replacement and maintenance of common utilities are controlled by the Management through the consultation of the IQAC.

Table 10.2.1 Utilization of Allocated Funds for the Past 4 Years for All Programs

CAY (2021-22)		CAY m	1 (2020-21)	CAY m2	(2019-20)	CAY m3 (2018-19)	
Budget (Rs)		Budget (Rs)		Budget (Rs)		Budget (Rs)	
Allocated	Utilized	Allocated	Utilized	Allocated	Utilized	Allocated	Utilized
6,38,70,000	6,13,73,349.46	5,60,00,000	4,97,11,704.44	10,20,00,000	9,36,15,516.1	9,10,00,000	9,02,35,880.74

- 1) Utilization of allocated funds for the year 2021-22: 96.09 %
- 2) Utilization of allocated funds for the year 2020-21: 88.77%
- 3) Utilization of allocated funds for the year 2019-20: 91.77 %
- 4) Utilization of allocated funds for the year 2018-19: 99.16 %

BUDGET UTILIZATION IN 2021-22

Infrastructure and Built-up

The institution underwent procedural cleansing, disinfection and refurbishment. The management ensures the legal obligations to be carried out along with the expenses under the accrual method.

Library

The total financial resources necessary for a library renovation were accomplished this year.

Maintenance and Spares

For the smooth running of the institution, the institutional assets have been rejuvenated periodically. The systems undergo preventive maintenance and based on the requirements, the servicing, repairing and refitting takes place.

Research and Development

A systematic investigation with the objective of introducing innovations for the current year project offerings were carried out across different industries and sectors.

Miscellaneous expenditure

The following are the necessary expenditures for the current financial year: graphic design software installation, computer depreciation, projectors, xerox machines etc.

BUDGET UTILIZATION IN 2020-21

Infrastructure and Built-up

The interior decorations and partitions were carried during this financial year. The SOLAR PV POWER PLANT was installed above the rooftop of the Electrical Engineering Department.

Library

Books were purchased for the library including journal subscriptions were undergone this year.

Maintenance and Spares

The maintenance of the department laboratories, UPS installation and other infrastructure enhancement was proposed and utilized during this academic year.

Research and Development

In this year a major quantum of funds was utilized for the self enhancement of the faculties for paper publishing. Also, funds were utilized based on the academic requirements of the departments.

Miscellaneous expenditure

The expenses such as sanitizers, thermal scanners, campus disinfectant and awareness programmes. Various departments also conducted In-house project competitions, seminars and workshops.

BUDGET UTILIZATION IN 2019-20

Library

The Institutional library has subscribed certain e-resources such as Delnet, IEEE Journals, seek digital library, IEI & IEDE for the stay-safe mode of utilization.

Maintenance and Spares

The maintenance of ACs, software upgradation, purchase of computer accessories (headsets,web cameras etc) and additional infrastructure enhancement was carried out during this year.

Research and Development

An essential component of Institution's Research and Development arm ranges with relatively minor costs for the focussed research operations.

Miscellaneous expenditure

The equipment needed for the classes, teaching aids, furniture, inventory supplies, goods and services, advertisement for Admissions, banners, brochures along with the department expenditures spent for the above mentioned year.

BUDGET UTILIZATION IN 2018-19

Library

The Additional books were purchased as there was a new set of regulations.

Maintenance and Spares

In order to retain the assets with sound quality, the institution requires the regular maintenance for an uninterrupted service.

Research and Development

The institute allocates a part of the budget to spend for stimulating the Students' active contribution which enroots the higher investment.

Miscellaneous expenditure

The various immediate and unplanned expenses such as accidental breakages, depreciation, Bank service charges etc and various other expenses were subordinated to this expenditure.

Summary of currentfinancial year's budget and actual expenditure incurred(for the institution exclusively)in the three previous financial years

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 0			Actual expenditure(till):	Total No. Of Students 0			
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
0	0	0	0	0	0	0	0

Table 2 - CFYm1 2021-22

Total Income 60522726.5			Actual expenditure(till)	Total No. Of Students 1016			
Fee	Govt.	Grants	Other sources(specify) By Interest from Bank, By Misc. Receipt, By Sale of Applications, By Rent from Bank, By excess of Expenditure over income	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
51273300	0	0	9249426.5	54080127.55	7293221.75	0	60406.84

Table 3 - CFYm2 2020-21

Total Income	Total Income 53484004.01			Actual expenditure(till)	Total No. Of Students 963		
Fee	Govt.	Grants	Other sources(specify) By Interest from Bank, By Misc. Receipts, by Sale of Applications, By Guest Lectures, workshop, softskill dpmt etc, By excess of Expenditure over income	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
50289802	0	0	3194202.01	45437785	4273918	0	51621.71

Table 4 - CFYm3 2019-20

Total Income 80265215.61			Actual expenditure(till)	Total No. Of Students 1207			
Fee	Govt.	Grants	Other sources(specify) By Interest from bank, By Misc. Receipts, By Sale of Applications, By rent from Bank, By Guest Lectures, workshop, softskill dpmt etc	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
62759400	0	0	17505815.61	72482590	21213426.5	0	77627.19

Items	Budgeted in 2022-23	Actual Expenses in 2022-23 till	Budgeted in 2021-22	Actual Expenses in 2021-22 till	Budgeted in 2020-21	Actual Expenses in 2020-21 till	Budgeted in 2019-20	Actual Expenses in 2019-20 till
Infrastructure Built-Up	0	0	1000000	1357106	900000	857793	15000000	14332241
Library	0	0	300000	304582	300000	297833.64	600000	567714
Laboratory equipment	0	0	70000	64900	50000	0	50000	34000
Laboratory consumables	0	0	100000	132713	300000	258420	100000	116370
Teaching and non-teaching staff salary	0	0	45000000	40758719	4000000	32926195	60000000	53270089
Maintenance and spares	0	0	5000000	5091173	3500000	3696796	7000000	6807733
R&D	0	0	200000	129186	500000	454351.3	700000	691061
Training and Travel	0	0	200000	307691.3	50000	0	50000	0
	0	0	6000000	7078270.16	400000	446383.5	1000000	948241.1
Others, specify	0	0	6000000	6149009	10000000	10773932	17500000	16848067
Total	0	0	63870000	61373349.46	56000000	49711704.44	102000000	93615516.1

10.2.3 Availability of the audited statements on the institute's website (5)

Availability of the audited statements on the institute's website

As of now, the audited statements of accounts of the institution are not made available on the institution's website. However, this can be done with the guidance of the IQAC.

10.2.1 Adequacy of budget allocation (10)

Institute Marks: 10.00

Institute Marks: 5.00

ADEQUACY OF BUDGET ALLOCATION

The Institution needs to justify that the budget allocated during assessment years was adequate

A. Quantum of Budget Allocation for 4 Years:

Details of budget allocated and utilized for the years 2021-22, 2020-21, 2019-20 and 2018-19 are provided as follows:

Table 10.2.1.1 Quantum of Budget Allocation

CAY (2021-22)	CAY m1 (2020-21)	CAY m2 (2019-20)	CAY m3 (2018-19)
Budget Allocated (Rs)	Budget Allocated (Rs)	Budget Allocated (Rs)	Budget Allocated (Rs)
63870000	5,60,00,000	10,20,00,000	9,10,00,000

B. Justification of Budget Allocated for 4 Years:

Budget requirements under Recurring and non-recurring estimation are collected from all the departments and units before the commencement of the financial year. Allocations are made as per the availability of funds. Spending is monitored by the accounts section. Supplementary allocations are made in special cases, if needed, to match the expenditures. The institution carefully monitors the expenses such that the prerequisites are met without any impediment to run the institution productively. The management has been working efficiently over the past several years such that the institution never had any serious budget crunch that affected the normal functioning of the institution.

Table 10.2.1.2 Budget Allocated and Utilized

CAY (2	2021-22)	CAY m1 (2020-21)		CAY m2 (2019-20)		CAY m3 (2018-19)	
Budg	et (Rs)	Budget (Rs)		Budget (Rs)		Budget (Rs)	
Allocated	Utilized	Allocated	Utilized	Allocated	Utilized	Allocated	Utilized
6,38,70,000	61373349.46	5,60,00,000	4,97,11,704.44	10,20,00,000	9,36,15,516.1	9,10,00,000	9,02,35,880.74

10.3 Program Specific Budget Allocation, Utilization (30)

Total Marks 30.00

Institute Marks:

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

0		Actual expenditure (till): 0		Total No. Of Students 0
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
0	0	0	0	0

Table 2 :: CFYm1 2021-22

220000		Actual expenditure (till): 165209		Total No. Of Students 95
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
45000	175000	38093	127116	1739.04

Table 3 :: CFYm2 2020-21

270000		Actual expenditure (till): 213962		Total No. Of Students 127
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
45000	225000	15745	198217	1684.74

Table 4 :: CFYm3 2019-20

2425000		Actual expenditure (till): 2275035		Total No. Of Students 165
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
2200000	225000	2083121	191914	13788.09

Items	Budgeted in 2022-23	Actual Expenses in 2022-23 till	Budgeted in 2021-22	Actual Expenses in 2021-22 till	Budgeted in 2020-21	Actual Expenses in 2020-21 till	Budgeted in 2019-20	Actual Expenses in 2019-20 till
Laboratory equipment	0	0	25000	28673	25000	10620	2000000	1845468
Software	0	0	0	0	0	0	0	0
Laboratory consumable	0	0	25000	2175	75000	49810	75000	52816
Maintenance and spares	0	0	20000	9145	20000	3591	200000	237653
R&D	0	0	0	0	0	0	0	0
Training and Travel	0	0	150000	124941	150000	148407	150000	139098
	0	0	0	275	0	1534	0	0
Total	0	0	220000	165209	270000	213962	2425000	2275035

10.3.1 Adequacy of budget allocation (10)

A. Quantum of Budget Allocation for 3 Years

Details of Budget allocated and utilized for the years 2020-2021, 2019-2020, 2018-2019 are provided as follows

CAY (2021-22)	CAY (2020-21)	CAYm1(2019-20)
Budget Allocation (Rs)	Budget Allocation (Rs)	Budget Allocation (Rs)
220000	270000	2425000

B. Justification of Budget Allocated for 3 years

The Heads of the Department seeks the letter of intent of budgetary proposals from the Laboratory In charges for upkeep the maintenance of Laboratories in conjunction with Academic Programmes of Affiliating University. In addition, the faculty members also required to propose the budget for various departmental activities such as Industrial Visits, Expert Lectures, Conferences, Maintenance of the department, etc. Based on the budget provided by lab in charges and Faculty Members, the final budget will be proposed. The Management is very conscious of the responsibility in managing the Institution and very responsive in allocating requisite funds adequately. Hence, the budget allocation for every year is adequate to meet all the requirements.

10.3.2 Utilization of allocated funds (20)

Institute Marks: 20.00

A. Budget Utilization for 3 years

Table 10.3.2.1 Budget Allocated and Utilized

CAY (2021-22)		CAY m1(20)20-21)	CAYm2(2019-20)	
Allocated	Utilized	Allocated	Utilized	Allocated	Utilized
220000	165209	270000	213962	2425000	2275035

Table 10.3.2.2 Utilization of allocated funds for past 3 years

	CAY (2020-21)	CAYm1(2019-20)	CAYm2(2018-19)
Utilization of allocated funds	75 %	79.2 %	93.8 %

10.4 Library and Internet (20) Total Marks 20.00

10.4.1 Quality of learning resources (hard/soft) (10)

Institute Marks: 10.00

Library and Internet

Quality of Learning resources:

Available learning resources

The Students and faculty members are facilitated with rich collection of Learning resources.

Table. 10.4.1.1 Details of Library Resource

Library Resources				
Number of Titles	Number of Volumes	Academic CD's	Journals	
11357	73959	2720	78	

e-learning Sources:

- 1. IIT(M)
- 2. Anna University (Affiliating University)
- 3. DELNET
- 4. AICTE e-Kumbh
- 5. IETE
- 6. IEI
- 7. Sleek

Accessibility to students:

The library will be kept open from 08.30 am to 06.00 pm. Each Student is provisioned with Library Access Card of 4. Library is adequately spaced, naturally ventilated with light and air leading to read friendly ambience.

Table 10.4.1.2 Library Infrastructure

Carpet area of library	430 m^2
Number of seats in reading space	130
Number of transactions per day	60
No. of Online Public Access Catalog (OPAC)	23 desktop computers with Internet Facilities.



Figure 10.4.1.1. Index of available Library Resources.



Figure 10.4.1.2. Receipt of DELNET Subscription

10.4.2 Internet (10) Institute Marks : 10.00

Name of the Internet provider	TATA Tele Business Services / Blue Lotus (Aeronet)
Available band width	50mbps 1:1 ILL / 500mbps BB Unlimited
WiFi availability	Yes, Wi-Fi facility available with desirable speed.
Internet access in labs, classrooms, library and offices of all Departments	14
Security arrangements	Yes, IS15 - K7 enterprise end point security

Annexure I (A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

- 1. **Engineering Knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

PSO1	To analyze, design and develop solutions by applying foundational concepts of electronics and communication engineering
PSO2	To apply design principles and best practices for developing quality products for scientific and business applications.
PSO3	To adapt to emerging information and communication technologies (ICT) to innovate ideas and solutions to existing/novel problems.

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute

Name : Prof. Dr. S. Sathish Designation : Principal

Signature :

\$001804 125.03.2023

Seal of The Institution :

Prof. Dr. S. SATHESH BELM E. Ph.D. PRINCIPAL AALIM MUHAMMAD SALEGH COLLEGE OF ENGINEERING MUTHAPUDPET, LAF-AVADI, CHENNAI - 600 055

Place: I.A.F Avadi, Chennai Date: 25-03-2023 16:55:59