ACADEMY OF MARITIME EDUCATION AND TRAINING DEEMED TO BE UNIVERSITY

SELF ASSESSMENT REPORT(TIER - I) FOR Marine Engg.

Part A : Institutional Information

1 Name and Address of the Institution

ACADEMY OF MARITIME EDUCATION AND TRAINING DEEMED TO BE UNIVERSITY,
NO,135, EAST COST ROAD, KANATHUR, REDDIKUPPAM CHENNAI. KANCHIPURAM

2 Name and Address of Affiliating University

3 Year of establishment of the Institution:

2007

4 Type of the Institution:

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

5 Ownership Status:

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

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

Name of Institutions	Year of Establishment	Programs of Study	Location

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

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
B.E MARINE ENGINEERING	UG	2001	2001	40	Yes	300	Applying first time	--	--	Yes	4

Sanctioned Intake for Last Five Years for the B.E MARINE ENGINEERING	
Academic Year	**Sanctioned Intake**
2022-23	300
2021-22	300
2020-21	300
2019-20	360
2018-19	360
2017-18	250

Naval Architecture and Offshore Engineering	UG	2007	2007	90	Yes	30	Applying first time	--	--	No	4

Sanctioned Intake for Last Five Years for the Naval Architecture and Offshore Engineering	
Academic Year	**Sanctioned Intake**
2022-23	30
2021-22	30
2020-21	54
2019-20	60
2018-19	120
2017-18	65

Naval Architecture and Offshore Engineering	PG	2018	2018	18	Yes	16	Eligible but not applied	--	--	0	2

Sanctioned Intake for Last Five Years for the Naval Architecture and Offshore Engineering	
Academic Year	**Sanctioned Intake**
2022-23	16
2021-22	16
2020-21	16
2019-20	18
2018-19	18
2017-18	0

Mechanical Engineering	UG	2014	2014	60	Yes	108	Granted accreditation for 3 years for the period (specify period)	2021	2024	0	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Sanctioned Intake for Last Five Years for the Mechanical Engineering											
Academic Year				**Sanctioned Intake**							
2022-23				108							
2021-22				108							
2020-21				108							
2019-20				120							
2018-19				120							
2017-18				70							
Power Systems	PG	2018	2018	18	Yes	16	Eligible but not applied	--	--	0	2
Sanctioned Intake for Last Five Years for the Power Systems											
Academic Year				**Sanctioned Intake**							
2022-23				16							
2021-22				16							
2020-21				16							
2019-20				18							
2018-19				18							
2017-18				0							
Petroleum Engineering	PG	2018	2018	18	Yes	16	Eligible but not applied	--	--	0	2
Sanctioned Intake for Last Five Years for the Petroleum Engineering											
Academic Year				**Sanctioned Intake**							
2022-23				16							
2021-22				16							
2020-21				16							
2019-20				18							
2018-19				18							
2017-18				0							
COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)	UG	2022	2022	30	No	30	Not eligible for accreditation	--	--	0	4
COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)	UG	2022	2022	30	No	30	Not eligible for accreditation	--	--	0	4
Food Processing Technology	UG	2016	2016	60	Yes	30	Not eligible for accreditation	--	--	0	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Sanctioned Intake for Last Five Years for the Food Processing Technology											
Academic Year				**Sanctioned Intake**							
2022-23				30							
2021-22				30							
2020-21				54							
2019-20				60							
2018-19				60							
2017-18				25							
Petroleum Engineering	UG	2008	2008	60	Yes	30	Not eligible for accreditation	--	--	0	4
Sanctioned Intake for Last Five Years for the Petroleum Engineering											
Academic Year				**Sanctioned Intake**							
2022-23				30							
2021-22				30							
2020-21				54							
2019-20				60							
2018-19				120							
2017-18				50							
Thermal and Fluid Engineering	PG	2018	2018	18	Yes	16	Eligible but not applied	--	--	0	2
Sanctioned Intake for Last Five Years for the Thermal and Fluid Engineering											
Academic Year				**Sanctioned Intake**							
2022-23				16							
2021-22				16							
2020-21				16							
2019-20				18							
2018-19				18							
2017-18				0							
Electrical and Electronics Engineering - Marine	UG	2008	2008	60	Yes	30	Granted accreditation for 3 years for the period (specify period)	2021	2024	No	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Sanctioned Intake for Last Five Years for the Electrical and Electronics Engineering - Marine											
Academic Year			**Sanctioned Intake**								
2022-23			30								
2021-22			30								
2020-21			54								
2019-20			60								
2018-19			60								
2017-18			45								
Mining Engineering	UG	2016	2016	60	Yes	30	Eligible but not applied	--	--	0	4
Sanctioned Intake for Last Five Years for the Mining Engineering											
Academic Year			**Sanctioned Intake**								
2022-23			30								
2021-22			30								
2020-21			54								
2019-20			60								
2018-19			60								
2017-18			25								
MBA(SHIPPING AND LOGISTICS MANAGEMENT)	PG	2007	2007	60	Yes	90	Granted accreditation for 3 years for the period (specify period)	2021	2024	No	2
Sanctioned Intake for Last Five Years for the MBA(SHIPPING AND LOGISTICS MANAGEMENT)											
Academic Year			**Sanctioned Intake**								
2022-23			90								
2021-22			90								
2020-21			90								
2019-20			120								
2018-19			120								
2017-18			75								

8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Under Graduate	Engineering & Technology	Marine Engg.
2	Under Graduate	Engineering & Technology	NAVAL ARCHITECTURE AND OFFSHORE ENGINEERING

9 Total number of employees

A. Regular* Employees (Faculty and Staff):

Items	2022-23		2021-22		2020-21	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	111	111	132	132	144	144
Faculty in Engineering (Female)	36	36	42	42	46	46
Faculty in Maths, Science & Humanities teaching in engineering program (Male)	23	23	24	24	28	28
Faculty in Maths, Science & Humanities teaching in engineering program (Female)	20	20	17	17	16	16
Non-teaching staff (Male)	226	226	329	329	71	71
Non-teaching staff (Female)	46	46	36	36	4	4

B. Contractual* Employees (Faculty and Staff):

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

10 Total number of Engineering students:

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

Engineering and Technology- UG Shift-1

Course Name	2022-23	2021-22	2020-21
Total no. of Boys	1456	1553	1773
Total no. of Girls	54	40	47
Total	**1510**	**1593**	**1820**

Engineering and Technology- PG Shift-1

Course Name	2022-23	2021-22	2020-21
Total no. of Boys	68	72	86
Total no. of Girls	6	8	6
Total	**74**	**80**	**92**

Engineering and Technology- MBA Shift-1

Course Name	2022-23	2021-22	2020-21
Total no. of Boys	153	132	125
Total no. of Girls	16	11	9
Total	**169**	**143**	**134**

11 Vision of the Institution:

Vision of the Institute
To sustain identity as a World Class Leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society.

12 Mission of the Institution:

Mission of the Institute
AMET will strive continuously to
1. Impart value-based higher education and technical knowledge with uncompromising strides of an outstanding quality.
2. Emerge as a Centre of Excellence inculcating skill development in recent technologies in accordance with industrial trends.
3. Create World class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education.
4. Nurture talent and entrepreneurship and enable all round personality development in students.
5. Empower students from across socio economic strata.
6. Make a positive difference to society through technical education.

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

Head of the Institution	
Name	Dr. T. Sasilatha
Designation	Principal
Mobile No.	9444752994
Email ID	deaneeem@ametuniv.ac.in

NBA Coordinator, If Designated

Name	Dr. T. Sasilatha
Designation	Principal
Mobile No.	9444752994
Email ID	deaneeem@ametuniv.ac.in

PART B: Criteria Summary

Critera No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	50	50.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	100	100.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	175	175.00
4	STUDENTS' PERFORMANCE	100	81.69
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	186.54
6	FACILITIES AND TECHNICAL SUPPORT	80	80.00
7	CONTINUOUS IMPROVEMENT	75	75.00
8	FIRST YEAR ACADEMICS	50	46.44
9	STUDENT SUPPORT SYSTEMS	50	50.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	120.00
	Total	**1000**	**965**

Part B : Criteria Summary

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (50) Total Marks 50.00

1.1 State the Vision and Mission of the Department and Institute (5) Total Marks 5.00

Institute Marks : 5.00

Vision of the institute	Vision of the Institute To sustain identity as a World Class Leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society.
Mission of the institute	Mission of the Institute AMET will strive continuously to 1. Impart value-based higher education and technical knowledge with uncompromising strides of an outstanding quality. 2. Emerge as a Centre of Excellence inculcating skill development in recent technologies in accordance with industrial trends. 3. Create World class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education. 4. Nurture talent and entrepreneurship and enable all round personality development in students. 5. Empower students from across socio economic strata. 6. Make a positive difference to society through technical education.
Vision of the Department	To establish a center of excellence in Marine Engineering, to foster quality education, to collaborate with the global Marine community and to promote innovation in Maritime studies using appropriate scientific and technological tools and methodologies.
Mission of the Department	

Mission No.	Mission Statements
M1	1. To develop the infra-structure and foster research facilities so as to achieve excellence in marine engineering and connected fields.
M2	2. To provide opportunities for the exchange of ideas and practices and upholding the status, standards and knowledge of essential to meet the local and global demands in Marine Engineering.
M3	3. To collaborate with other Institutions and Industries to take appropriate measures for promoting innovations in teaching-learning process, inter-disciplinary studies and research.
M4	4. To instill professional skills and ensure ethical behavior throughout their career by imparting value-based and skill-based education.

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

Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	Become successful Marine Engineers who can be competent, innovative, and productive in addressing the needs of the industry or pursue higher education and research in marine engineering and in other related disciplines.
PEO2	Develop professionally with their knowledge and be proficient in technical skills and modern tools throughout their career.
PEO3	Demonstrate high standards of ethical conduct, a positive attitude, and societal responsibilities by updating their breadth of knowledge through lifelong learning.

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

Total Marks 15.00

Institute Marks : 15.00

The Vision and Mission are published at

Table B. 1.3 (a) Sources of Vision and Mission Dissemination

Sl.No	Disseminating Source	Sl.No	Disseminating Source
1	University Website	8	Lab Manuals
2	Department Website & Notice Board	9	Course Files
3	Laboratories	10	Faculty Rooms
4	Curriculum	11	Brochures of National and International conferences
5	Dean & HoD Office	12	Brochures of Seminars
6	Departmental Notice Boards	13	Brochures of Workshops
7	Class Rooms	14	Department Newsletter & Magazines

Process of Dissemination

The vision, mission and PEO were disseminated among stake holders in the following ways

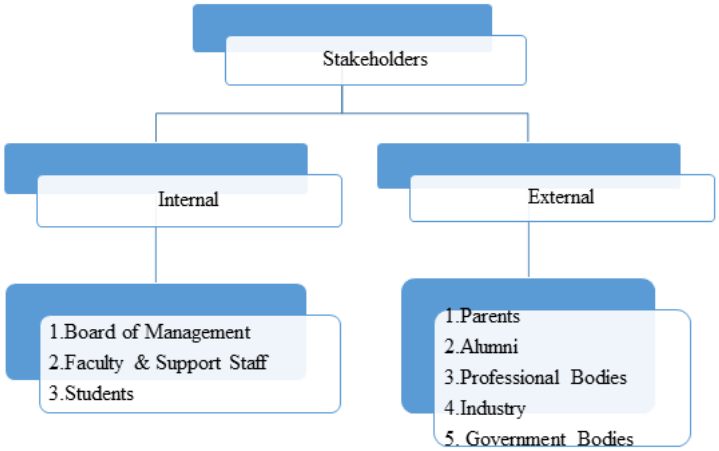


Fig: 1.3 (a) Process of Dissemination

The University/ Department ensures awareness among the stakeholders on the vision and mission of the Department by conducting various meetings, orientation programs and interactive sessions frequently throughout the academic year.

Table B. 1.3 (b) Process of dissemination among the various stakeholders

Sl.No	Stakeholders	Process of Dissemination	Frequency of Meeting	Responsibility
1	**Faculty**	Department Faculty meetings	First meeting of every semester	**HoD / Dean**
2	**Students**	Orientation Programs	Annual	**HoD /Dean**
3	**Parents**	Parent - Teacher Meetings	Biannual	**Faculty Members**
4	**Alumni**	Alumni Interaction	Annual	**Alumni Coordinator**
5	**Recruiters**	Placement drives	Annual	**Placement Director**
6	**University Management**	Management review meeting with all HoDs	Annual	**Vice Chancellor**
7	**Professional Bodies**	Interaction in Workshop/Seminar/ Conference	First meeting of every semester	**President of the Student Chapter**
8	**Governing Bodies**	Board of Management	Annual	**Vice Chancellor**

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

Institute Marks : 15.00

The process for defining the Vision and Mission of the Department, and PEOs of the program are as follows:

Step1: The Vision and Mission statement of the Institute are taken and inputs are gathered from the stakeholders (Students, Faculty, Parents, Employer, and Alumni). The views of the Internal Quality Assurance Cell (IQAC) and the Graduate Attributes are also considered and consolidated.

Step2: The consolidated data is refined to formulate the Vision and Mission of the Department by the Program Assessment Committee (PAC) keeping in mind the key issues.

Step3: The formulated statements are circulated to the faculty members of the Department. Acquiring their views, the statements are fine-tuned in accordance with the global trends.

Step4: The fine-tuned statements are sent to the Department Advisory Committee (DAC) for approval. Considering its consensus, the Vision and Mission statement of the Department are published and disseminated. If any modifications are suggested, the above process is repeated again.

Fig: 1.4 (a) Process for defining Vision and Mission of the Department

Process for defining Program Educational Objectives:

The Program Educational Objectives are established through a consultation process involving the core constituents such as Students, Alumni, Faculty, Employer and Professional body members.

The PEOs are established through the following steps:

Step1: Vision and Mission of the Department are considered along with the graduate attributes and inputs from various stakeholders.

Step2: The collective inputs are congregated and reviewed by the Program Assessment Committee (PAC) for refining the PEOs.

Step3: The refined PEOs are discussed with the faculty members of the Department. Their views are considered for fine tuning the objectives.

Step4: The fine-tuned statements are scrutinized by the Department Advisory Committee (DAC) and their consensus are considered to frame the PEOs.

Step5: Acquiring the output from the Department Advisory Committee (DAC), the framed PEOs are published and disseminated. If any modifications are suggested, the above process is repeated again.

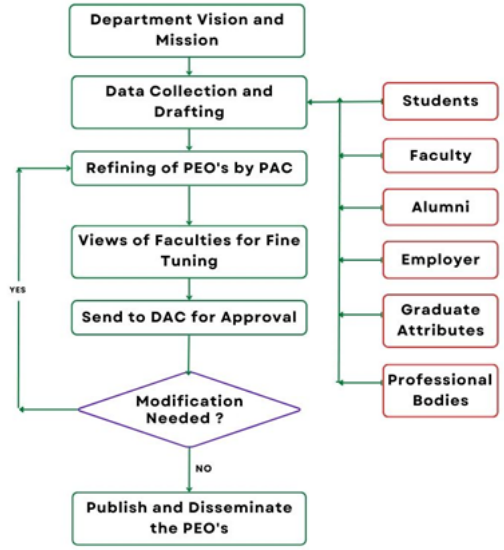


Fig: 1.4 (b) Process for formulating the PEO's of the Program

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

Institute Marks : 10.00

PEO STATEMENT		M1	M2	M3	M4
PEO1	Become successful Marine Engineers who can be competent, innovative, and productive in addressing the needs of the industry or pursue higher education and research in marine engineering and in other related disciplines.	3	3	3	2
PEO2	Develop professionally with their knowledge and be proficient in technical skills and modern tools throughout their career.	3	3	3	3
PEO3	Demonstrate high standards of ethical conduct, a positive attitude, and societal responsibilities by updating the breadth of knowledge through lifelong learning.	3	2	2	3

Justifications of PEO Statements are as follows:

PEO Statements	M1	M2	M3	M4	Justifications
PEO 1: **Become successful Marine Engineers who can be competent, innovative and productive in addressing the needs of the Industry or pursue higher education & research in Marine Engineering and in other related disciplines.**	3	3	3	2	M1: **Substantially** supports PEO1. Mission 1 focuses on quality education. A quality education and a strong foundation are essential to produce highly innovative marine engineers. They can solve their critical issues and manage all situations. M2: **Substantially** supports PEO1. Mission 2 clearly focuses on both knowledge and skills essential in the field of marine engineering. Students must have both technical knowledge and skills to face the challenges of the global maritime sectors. M3: **Substantially** supports PEO1. Mission 3 focuses on the upgrading of knowledge through industry-institute interaction activities. Interaction with industries and the real world helps the students upgrade their knowledge and skills. M4: **Moderately** supports PEO1. Knowledge, strong ethics, and a positive attitude will help in making decisions in all critical situations. This is inculcated by promoting world-class research and development to meet the challenging needs of society.

PEO 2: **Develop professionally with their knowledge and be proficient in technical skills and modern tools throughout their career.**	**3**	**3**	**3**	**3**	M1: **Substantially** supports PEO2. Quality education helps students acquire technical knowledge and skills in order to produce highly innovative engineers for the industry. M2: **Substantially** supports PEO2. Students are able to excel in their careers and research by applying their knowledge and innovative skills. M3: **Substantially** supports PEO2. Interaction with industries and the real world helps students become competent, productive, and more successful professionals. M4: **Substantially** supports PEO2. Apart from skills and knowledge, ethics and a positive attitude are also required to become an engineering professional with a good career.
PEO 3: **Demonstrate high standards of ethical conduct, positive attitude and societal responsibilities by updating the breadth of knowledge through lifelong learning.**	**3**	**2**	**2**	**3**	M1: **Substantially** supports PEO3. By acquiring a quality education, students will be able to adapt to any kind of environment and have good ethics in their professional careers. M2: **Moderately** supports to achieve PEO3 because it focuses on knowledge and skills to meet the local and global demands in specialized areas. M3: **Moderately** supports PEO3. Updating their knowledge through industry interaction activities is essential for practicing the ethics of their professional career. M4: **Substantially** supports PEO3 Since strong ethics and a positive attitude are required to become a successful professional in society.

Correlation levels 1, 2 or 3 as defined below:1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

PEO Statements	M1	M2	M3	M4
Become successful Marine Engineers who can be competent, innovative, and productive in addressing the needs of the industry or pursue higher education and research in marine engineering and in other related disciplines.	3	3	3	2
Develop professionally with their knowledge and be proficient in technical skills and modern tools throughout their career.	3	3	3	3
Demonstrate high standards of ethical conduct, a positive attitude, and societal responsibilities by updating their breadth of knowledge through lifelong learning.	3	2	2	3

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (100)

Total Marks 100.00

2.1 Program Curriculum (30)

Total Marks 30.00

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

Institute Marks : 10.00

Basic Science, Engineering Science, Humanities and Social Sciences, Professional Core, Professional Electives, Open Electives, Project work, Internships, and Employability improvement courses make up the program curriculum. The procedure is depicted in a flowchart as illustrated in Fig. 2.1.1 (a)

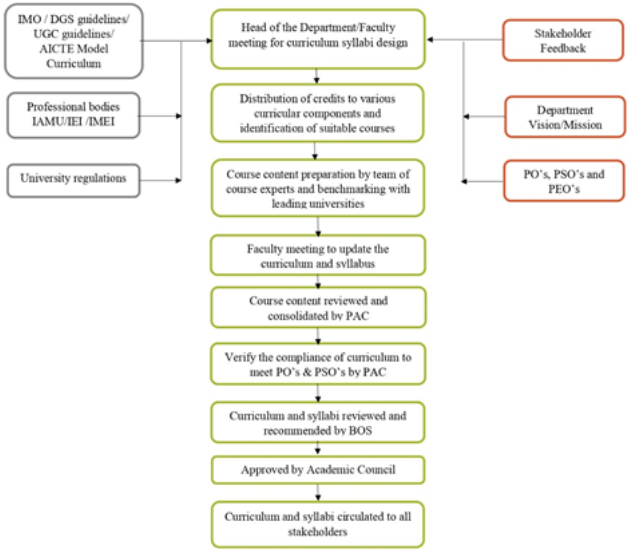


Fig 2.1.1 (a) Process for designing the program curriculum

A thorough multi-step process has been built at the Department of Marine Engineering to guarantee that the program curriculum is frequently updated and matches the rapid advancements in technology and industry needs. Periodic adjustments are performed in response to social requirements, employment market trends, technological advancements, and student's long-term professional development prospects.

Step 1: To frame the curriculum and syllabi, considerations from the IMO, Directorate General of Shipping (DGS), AICTE Model Curriculum, UGC, professional organizations, stakeholders, Department vision and mission, POs, PSOs, PEOs, and University Regulation are taken into account. All these suggestions are considered, and accepted by the Head of the department during a meeting held to develop the program curriculum.

Step 2: The distribution of credits to various curricular components and the identification of suitable courses are decided in the meeting convened for designing the curriculum and syllabi.

Step 3: Course content with course objectives and course outcomes, benchmarking with leading universities, is prepared by the team of course experts.

Step 4: The prepared Curriculum and syllabi are discussed and reviewed in the faculty meeting.

Step 5: The Program Assessment Committee (PAC) consists of domain experts from the department who update the reviewed document, consolidate, and verify the compliance of the curriculum to meet with POs and PSOs for the Board of Studies meeting.

Step 6: The BOS consists of faculty, experts from academic institutions, industry experts, university nominees, alumni, and students. The consolidated curriculum and syllabus are discussed, corrections and suggestions from BOS members are incorporated, and a final program curriculum and syllabus with a scheme of evaluation is recommended to the Academic Council.

Step 7: The Academic Council approves the recommendations of the BOS through the Academic Council Meeting (ACM). Suggestions from the members of the Academic Council are well received and incorporated into the curriculum and syllabi.

2.1.2 Structure of the Curriculum (5)

Institute Marks : 5.00

ID	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	Theory Credits	Practical Credits	Total Credits
1	C101	Technical English-1	2	0	0	2	2	0	2
2	C102	Engineering Mathematics-I	3	1	0	4	4	0	4
3	C103	Engineering Physics	3	0	0	3	3	0	3
4	C104	Basic Electrical Engineering	2	1	0	3	3	0	3
5	C105	Engineering Mechanics-I	2	1	0	3	3	0	3
6	C106	Computer applications	2	0	0	2	2	0	2
7	C107	Engineering Graphics Laboratory	0	0	4	4	0	2	2
8	C108	Basic Electrical Engineering Laboratory	0	0	2	2	0	1	1
9	C109	Engineering Physics Laboratory-II	0	0	2	2	0	1	1
10	C110	Engineering Practices Laboratory -I	0	0	4	4	0	2	2
11	C111	English Language Laboratory -I	0	0	2	2	0	1	1
12	C112	Induction program	0	0	0	0	0	0	0
13	C113	PT/Parade/Games-I	0	0	0	0	0	1	1
14	C114	Engineering Mathematics-II	2	1	0	3	3	0	3
15	C115	Engineering Chemistry	2	0	0	2	2	0	2
16	C116	Basic Electronic Engineering	3	0	0	3	3	0	3
17	C117	Electrical Machines	2	1	0	3	3	0	3
18	C118	Thermodynamics	2	1	0	3	3	0	3
19	C119	Material Science and Metallurgy	3	0	0	3	3	0	3
20	C120	Machine Drawing	0	0	4	4	0	2	2
21	C121	Electrical Machines Laboratory	0	0	2	2	0	1	1
22	C122	Basic Electronics Laboratory	0	0	2	2	0	1	1
23	C123	Communicative and Soft skills Laboratory	0	0	2	2	0	1	1

24	C124	Engineering Practices Laboratory-II	0	0	4	4	0	2	2
25	C125	PT/Parade/Games-II	0	0	0	0	0	1	1
26	C201	Marine Refrigeration and Air Conditioning	2	1	0	3	3	0	3
27	C202	Basic Marine Engineering	1	0	0	1	1	0	1
28	C203	Open Elective Course-I	3	0	0	3	3	0	3
29	C204	Integrated Circuit	3	0	0	3	3	0	3
30	C205	Marine Electrical Technology-I	3	0	0	3	3	0	3
31	C206	Thermal Engineering	2	1	0	3	3	0	3
32	C207	Professional Elective Course-I	3	0	0	3	3	0	3
33	C208	Integrated Circuit Laboratory	0	0	2	2	0	1	1
34	C209	Marine Electrical Technology Laboratory	0	0	2	2	0	1	1
35	C210	Marine Refrigeration and Air Conditioning Laboratory	0	0	2	2	0	1	1
36	C211	Engineering Practices Laboratory-III	0	0	4	4	0	2	2
37	C212	Interpersonal Communication	0	0	2	2	0	1	1
38	C213	PT/Parade/Games-III	0	0	0	0	0	1	1
39	C214	Industrial Visit-I	0	0	0	0	0	0	0
40	C215	Ship Construction	3	0	0	3	3	0	3
41	C216	Marine Boilers and Steam Engineering	3	1	0	4	4	0	4
42	C217	Open Elective Course-II	3	0	0	3	3	0	3
43	C218	Fluid Mechanics	2	1	0	3	3	0	3
44	C219	Marine Electrical Measurements	3	0	0	3	3	0	3
45	C220	Microprocessor and Microcontroller	3	0	0	3	3	0	3
46	C221	Microprocessor and Microcontroller Laboratory	0	0	2	2	0	1	1
47	C222	Thermal and Fluid Mechanics Laboratory	0	0	4	4	0	2	2
48	C223	Engineering Practices Laboratory-IV	0	0	4	4	0	2	2

49	C224	Fire Fighting Laboratory	0	0	2	2	0	1	1
50	C225	PT/Parade/Games-IV	0	0	0	0	0	1	1
51	C301	Marine Auxiliary Machinery-I	4	0	0	4	4	0	4
52	C302	Marine Electrical Technology-II	2	0	0	2	2	0	2
53	C303	Marine Internal Combustion Engines-I	4	0	0	4	4	0	4
54	C304	Naval Architecture-I	3	0	0	3	3	0	3
55	C305	Strength of Materials	2	1	0	3	3	0	3
56	C306	Professional Elective Course-II	3	0	0	3	3	0	3
57	C307	Open Elective Course-III	2	1	0	3	3	0	3
58	C308	Safety Emergency Measures and Practices-II	3	0	0	3	3	0	3
59	C309	Strength of Material Laboratory	0	0	2	2	0	1	1
60	C310	Marine Electrical Technology Laboratory	0	0	2	2	0	1	1
61	C311	Basic Fire Fighting Laboratory	0	0	2	2	0	1	1
62	c312	Marine Engineering Equipment Drawing-I	0	0	4	4	0	2	2
63	C313	PT/Parade/Games-V	0	0	0	0	0	1	1
64	C314	Marine Auxiliary Machinery-II	4	0	0	4	4	0	4
65	C315	Professional Elective Course-III	3	0	0	3	3	0	3
66	C316	Marine Internal Combustion Engines-II	4	0	0	4	4	0	4
67	C317	Marine Engineering Practice	4	0	0	4	4	0	4
68	C318	Power Electronics, High Voltage and Electric Propulsion	2	1	0	3	3	0	3
69	C319	Safety Emergency Measures and Practice-III	3	0	0	3	3	0	3
70	C320	Naval Architecture-II	3	0	0	3	3	0	3
71	C321	Advanced Electrical Engineering Laboratory	0	0	2	2	0	1	1
72	C322	Internal Combustion Engine Laboratory	0	0	4	4	0	2	2
73	C323	Power Electronics Laboratory	0	0	2	2	0	1	1

74	C324	PT/Parade/Games-VI	0	0	0	0	0	1	1
75	C401	Professional Elective Course-IV	3	0	0	3	3	0	3
76	C402	Marine Control Engineering and Automation	3	0	0	3	3	0	3
77	C403	Open Elective Course-IV	2	0	0	2	2	0	2
78	C404	Ship Construction, Stability and Marine Environment Protection	3	0	0	3	3	0	3
79	C405	Electro Technology	3	0	0	3	3	0	3
80	C406	Internship-I	0	0	0	0	0	1	1
81	C407	Viva Voce-I	0	0	6	6	0	3	3
82	C408	Automation Laboratory	0	0	2	2	0	1	1
83	C409	Project work	0	0	10	10	0	5	5
84	C410	PT/Parade/Games-VII	0	0	0	0	0	1	1
85	C411	Communication Training	2	0	0	2	1	0	1
86	C412	Professional Elective Course-V	0	0	4	4	0	2	2
87	C413	Safety Emergency Measures and Practices-IV	3	0	0	3	3	0	3
88	C414	Professional Elective Course-VI	2	1	0	3	3	0	3
89	C415	Instrumentation and Control	3	0	0	3	3	0	3
90	C416	Pneumatics, Hydraulics and Electrical Control System	2	0	0	2	2	0	2
91	C417	Engineering Knowledge (General and Motor)	3	0	0	3	3	0	3
92	C418	Shipboard Safety	3	0	0	3	3	0	3
93	C419	Internship-II	0	0	0	0	0	1	1
94	C420	Viva Voce-II	0	0	6	6	0	3	3
95	C421	Embedded System and Communication Laboratory	0	0	2	2	0	1	1
96	C422	PT/Parade/Games-VIII	0	0	0	0	0	1	1
		Total	**140**	**14**	**100**	**254**	**153**	**60**	**213**

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

Course Components	Curriculum Content (% of total number of credits of the program)	Total number of contact hours	Total number of credits
Basic Sciences	13	31.00	28
Engineering Sciences	20	61.00	43
Humanities and Social Scie	3	10.00	6
Program Core	41	100.00	87
Program Electives	8	19.00	17
Open Electives	5	11.00	11
Project(s)	5	22.00	11
Internships/Seminars	1	0.00	2
Any other (Please specify)	4	0.00	8
Total number of Credits			**213**

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

Institute Marks : 10.00

The syllabus for each course has been designed to meet compliance of the curriculum for attaining the POs and PSOs defined for the Program. The Program Outcomes and Program Specific Outcomes (PSOs) of B. E. Marine Engineering are shown in the Table 2.1.4 (a)

Table 2.1.4 (a) Program Outcomes (PO's) and Program Specific Outcomes (PSO's)

Program Outcomes (PO's)

PO 1	**Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems
PO 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
PO 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
PO 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.
PO 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
PO 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.
PO 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.
PO 8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
PO 9	**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings
PO 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
PO 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.
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 broadest context of technological change.

Program Specific Outcomes (PSO's)

PSO1	Apply the knowledge of Marine Engineering to solve the problems in on-board ships and to meet the needs of the maritime industries.
PSO2	Analyze complex engineering problems to formulate and develop solutions for the onshore and offshore shipping industries.

PSO3	Design, analyze and integrate electrical and mechanical systems in on-board ships and apply tools and techniques such as programmable logic controllers, SCADA and CAD in marine industries and create passion for lifelong learning.

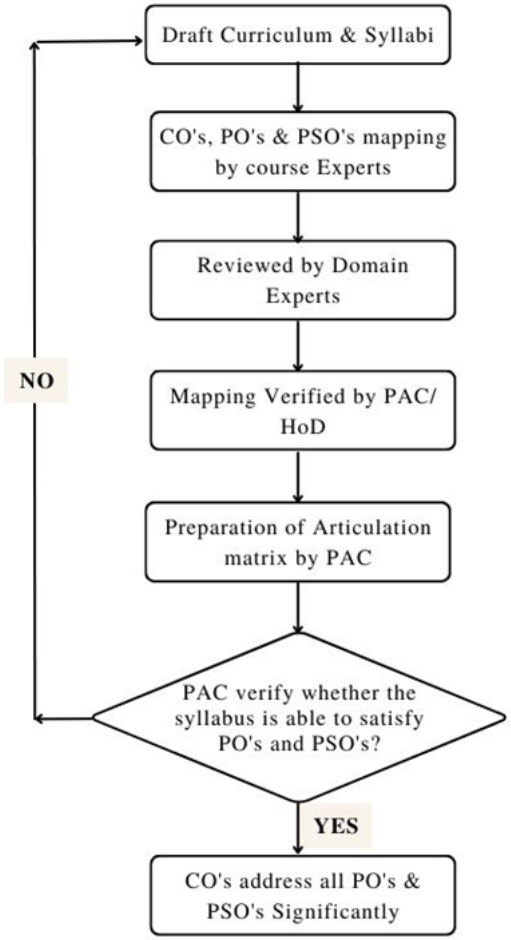


Fig: 2.1.4 (a) Process used to identify extent of compliance of the curriculum

Step 1: Course Content is prepared by course experts with CO-PO's and PSO's mapping.

Step 2: Course content with CO-PO mapping is reviewed by the Domain experts.

Step 3: The CO-PO's and PSO's mapping is verified by the PAC and HOD.

Step 4: PAC prepares the Program Articulation Matrix and verifies whether all courses are significantly mapped with the PO's and PSO's

Step 5: It is ensured that all POs/PSOs are adequately covered by the courses being taught and each course is mapped to high correlation level with at least one PO. It is also ensured that all POs/PSOs have high correlation with adequate number of courses.

Step 6: PAC verifies whether syllabus is able to contribute significantly the PO's and PSO's else suggestion given to course experts to enrich the course content to attain the PO's and PSO's.

The courses that are highly correlated with each of the POs and PSOs of regulation D (2018-19) are shown in Table 2.1.4 (b)

Table 2.1.4 (b): POs/PSOs Vs Courses Mapped with High Correlation

POs /PSOs	Courses Mapped with substationaly
PO1	C102, C105, C107, C110, C114, C118, C120, C124, C201, C208, C209, C210, C211, C215, C218, C219, C220, C221, C222, C223, C309, C310, C311, C312 C407, C409.
PO2	C107, C110, C120, C210, C215, C221, C222, C309, C310. C312, C314, C321, C322, C409
PO3	C107, C115, C201, C210, C216, C224, C311, C312.
PO4	C201, C210, C216, C224, C311, C316, C320, C406, C407.
PO5	C201, C202, C402, C409, C421.
PO6	C105, C117, C204, C205, C210, C216, C223, C224, C304, C308, C311, C314, C317, C318, C401, C405, C418, C419.
PO7	C116, C117, C202, C203, C205, C210, C217, C303, C304, C308, C314, C401, C419
PO8	C105, C106, C115, C117, C118, C120, C121, C201, C203, C204, C205, C209, C210, C211, C215, C216.C218, C219, C221, C222, C223, C224, C301, C302, C303, C304, C306, C308, C309, C311, C312, C403, C416, C418
PO9	C108, C110, C121, C122, C123, C124, C210, C305, C318, C407, C409, C420.
PO10	C107, C108, C109, C110, C111, C120, C121, C123, C124, C201, C209, C210, C211, C218, C222, C223, C305, C309, C310, C312, C318, C406, C411, C412, C416.
PO11	C211, C216, C405, C406, C407, C409, C418, C419, C420.
PO12	C104, C107, C111, C117, C121, C123, C203, C209, C211, C215, C216, C217, C218, C220, C223, C224, C303, C304, C306, C307, C308, C311, C3116, C317, C323, C406, C407, C411, C418. C420
PSO1	C201, C203, C204, C206, C210, C211, C215, C216, C217, C220, C221, C222, C223, C224, C301, C302, C303, C308, C310, C311, C312, C315, C317, C318, C319, C320, C322, C401, C404. C406, C407, C408, C409, C414, C420.
PSO2	C201, C202, C206, C207, C210, C215, C216, C217, C303, C310, C311, C406, C407, C409
PSO3	C204, C208 C209, C216, C409, C419, C420, C421.

2.2 Teaching-Learning Processes (70) Total Marks 70.00

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

Institute Marks : 15.00

The flowchart in Fig. 2.2.1(a), which depicts the teaching and learning process, provides a description of it. The PAC solicits the facultys course preferences. The courses are assigned, and a schedule is created and sent to the students based on the faculty members areas of expertise and their prior experience in teaching the course. The faculty carefully chooses Activity-Based Learning strategies for the lesson plans, which are then approved by PAC.

To strengthen the teaching-learning process, the following initiatives have been taken:

- Adherence to Academic Calendar
- Instruction methods and Pedagogical Initiatives
- Quality of class room teaching
- Conduct of laboratory experiments
- Continuous Assessment in the laboratory
- Methodologies to support Weak students/ Bright students
- Student Feedback and action taken

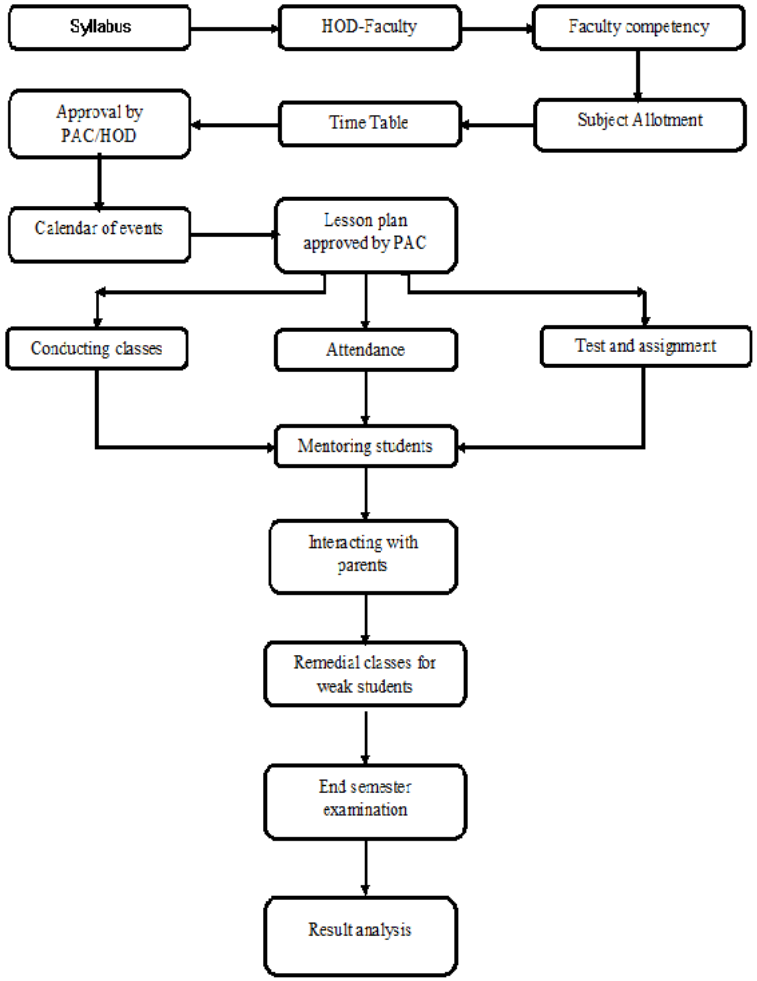


Fig: 2.2.1 (a) Teaching Learning Process

Adherence to the Academic Calendar:

The academic calendar is prepared by the Office of the Registrar and made available on the website. The departmental academic calendar is prepared by the department for every semester before reopening, displayed on the notice board, and provided to the students. It consists of the activities planned for the semester, which include the commencement of the classes, internal test dates, and commencement of end-of-semester exams. A sample of the departmental action plan in adherence to the university academic calendar is presented in Table 2.2.1(a) and (b)

Table 2.2.1 (a): University Academic Calendar for the Year 2021-2022

Date	Day	Events	No. of Working Day
February 2022			
25/02/2022	Friday	**Commencement of Even Semester**	1
26/02/2022	Saturday	Holiday	Holiday
27/02/2022	Sunday	Holiday	Holiday
28/02/2022	Monday		2
March 2022			
01/03/2022	Tuesday		3
02/03/2022	Wednesday		4
03/03/2022	Thursday		5
04/03/2022	Friday		6
05/03/2022	Saturday		7
06/03/2022	Sunday	Holiday	Holiday
07/03/2022	Monday		8
08/03/2022	Tuesday		9
09/03/2022	Wednesday		10
10/03/2022	Thursday		11
11/03/2022	Friday		12
12/03/2022	Saturday	Holiday	Holiday
13/03/2022	Sunday	Holiday	Holiday
14/03/2022	Monday		13
15/03/2022	Tuesday		14
16/03/2022	Wednesday		15
17/03/2022	Thursday		16
18/03/2022	Friday		17
19/03/2022	Saturday		18
20/03/2022	Sunday	Holiday	Holiday

21/03/2022	Monday		19
22/03/2022	Tuesday		20
23/03/2022	Wednesday		21
24/03/2022	Thursday		22
25/03/2022	Friday		23
26/03/2022	Saturday	Holiday	Holiday
27/03/2022	Sunday	Holiday	Holiday
28/03/2022	Monday		24
29/03/2022	Tuesday		25
30/03/2022	Wednesday		26
31/03/2022	Thursday		27
April 2022			
01/04/2022	Friday	**Commencement of CAT-I Exam**	28
02/04/2022	**Saturday**	**Telugu New year**	**Holiday**
03/04/2022	Sunday	Holiday	Holiday
04/04/2022	Monday		29
05/04/2022	Tuesday		30
06/04/2022	Wednesday		31
07/04/2022	Thursday		32
08/04/2022	Friday		33
09/04/2022	Saturday		34
10/04/2022	Sunday	Holiday	Holiday
11/04/2022	Monday		35
12/04/2022	Tuesday		36
13/04/2022	Wednesday		37
14/04/2022	**Thursday**	**Tamil New year**	**Holiday**
15/04/2022	**Friday**	**Good Friday**	**Holiday**
16/04/2022	Saturday	Holiday	Holiday
17/04/2022	Sunday	Holiday	Holiday
18/04/2022	Monday		38
19/04/2022	Tuesday		39
20/04/2022	Wednesday		40
21/04/2022	Thursday		41

22/04/2022	Friday		42
23/04/2022	Saturday		43
24/04/2022	Sunday	Holiday	Holiday
25/04/2022	Monday		44
26/04/2022	Tuesday		45
27/04/2022	Wednesday		46
28/04/2022	Thursday		47
29/04/2022	Friday		48
30/04/2022	Saturday		49
May 2022			
01/05/2022	**Sunday**	**May day**	**Holiday**
02/05/2022	Monday		50
03/05/2022	**Tuesday**	**Ramzan Festival**	**Holiday**
04/05/2022	Wednesday		51
05/05/2022	Thursday		52
06/05/2022	Friday		53
07/05/2022	Saturday	Holiday	Holiday
08/05/2022	Sunday	Holiday	Holiday
09/05/2022	Monday	**Commencement of CAT-II Exam**	54
10/05/2022	Tuesday		55
11/05/2022	Wednesday		56
12/05/2022	Thursday		57
13/05/2022	Friday		58
14/05/2022	Saturday		59
15/05/2022	Sunday	Holiday	Holiday
16/05/2022	Monday		60
17/05/2022	Tuesday		61
18/05/2022	Wednesday		62
19/05/2022	Thursday		63
20/05/2022	Friday		64
21/05/2022	Saturday	Holiday	Holiday
22/05/2022	Sunday	Holiday	Holiday
23/05/2022	Monday		65

24/05/2022	Tuesday		66
25/05/2022	Wednesday		67
26/05/2022	Thursday		68
27/05/2022	Friday		69
28/05/2022	Saturday		70
29/05/2022	Sunday	Holiday	Holiday
30/05/2022	Monday		71
31/05/2022	Tuesday		72
June 2022			
01/06/2022	Wednesday		73
02/06/2022	Thursday		74
03/06/2022	Friday		75
04/06/2022	Saturday	Holiday	Holiday
05/06/2022	Sunday	Holiday	Holiday
06/06/2022	Monday		76
07/06/2022	Tuesday	**Commencement of Model Exam/Practical Exam**	77
08/06/2022	Wednesday		78
09/06/2022	Thursday		79
10/06/2022	Friday		80
11/06/2022	Saturday		81
12/06/2022	Sunday	Holiday	Holiday
13/06/2022	Monday		82
14/06/2022	Tuesday		83
15/06/2022	Wednesday		84
16/06/2022	Thursday		85
17/06/2022	Friday		86
18/06/2022	Saturday	Holiday	Holiday
19/06/2022	Sunday	Holiday	Holiday
20/06/2022	Monday		87
21/06/2022	Tuesday		88
22/06/2022	Wednesday		89
23/06/2022	Thursday		90
24/06/2022	Friday		

25/06/2022	Saturday		
26/06/2022	Sunday		
27/06/2022	Monday	**Commencement of End Semester Exam**	
28/06/2022	Tuesday		
29/06/2022	Wednesday		
30/06/2022	Thursday		

Table 2.2.1 (b) Academic Calendar for the Department of Marine Engineering 2021-2022

Date	Event
15.07.2021	University reopens for ODD Semester
07.08.2021	Guest Lecture
25.08.2021	CAT I Question Paper submission
31.08.2021	Commencement of CAT I Examination
11.09.2021	Submission of CAT I Marks
12.09.2021	Submission of CAT II Question Papers
28.09.2022	Guest lecture
3 rd week of September	Guest Lecture
03.10.2021	Submission of CAT II Marks
13.10.2021	Parents & Teachers Meeting (Green Card Meeting)
18.10.2021	Commencement of CAT II Examination
2 nd week of October	Alumni Interaction with students
04.11.2021	Submission of Model Exam Question papers
22.11.2021	Submission of End semester Examination Question papers
26.11.2021	Commencement of University End Semester Practical Examinations
13.11.2021	Commencement of Model Examinations
27.11.2021	Issue of Hall Tickets for End Semester Examinations
4th week of November	Course choices from faculty for 2021-22 (Even Semester)
4th week of November	Selection of Elective Courses by the Students for 2021-22 (Even Semester)
27.11.2021	Submission of Model Exam Marks and Internal Marks
29.11.2021	Commencement of University End Semester Examinations

2nd week of December	Two days Faculty Development Program
1st week of January 2022	Work Load Distribution to the faculty for 2021-22 (Even Semester)
2nd week of January 2022	Time Table uploading
2nd week of January 2022	Course coordinator's Meeting
25.02.2022	Commencement of Even Semester
16.03.2022	Awareness on No Smoking day
28.03.2022	CAT I Question Paper submission
01.04.2022	Commencement of CAT-I Exam
21.04.2022	Submission of CAT I Marks
22.04.2022	National seminar
4th week of April 2022	National level Marine symposium
02.05.2022	Submission of CAT II Question Papers
09.05.2022	Commencement of CAT-II Exam
17.05.2022	Guest lecture
18.05.2022	Alumni guest lecture
20.05.2022	Submission of Model Exam Question papers
27.05.2022	Submission of End semester Examination Question papers
25.05.2022	Guest lecture
4th week of May 2022	International conference
4th week of May 2022	National level workshop
03.06.2022	International coastal cleanup and world Environmental day
07.06.2022	Commencement of Model Exam
15.06.2022	Submission of Model Exam Marks and Internal Marks
25.06.2022	Issue of Hall Tickets for End Semester Examinations
27.06.2022	Commencement of University End Semester Examinations

Table 2.2.1 (c) Adherence to Academic Schedule 21-22 (ODD semester)

S.No	Year of study	CAT I		CAT II		Model Examination		End Semester Examination	
		Scheduled date	Conducted date	Scheduled date	Conducted date	Scheduled date	Conducted date	Scheduled date	Conducted date
1	I	15.02.2022 to 21.02.2022	15.02.2022 to 21.02.2022	09.03.2022 to 16.03.2022	09.03.2022 to 16.03.2022	30.03.2022 to 05.04.2022	30.03.2022 to 05.04.2022	19.04.2022 to 26.04.2022	19.04.2022 to 26.04.2022
2	II/III/IV	31.08.2021 to 06.09.2021	31.08.2021 to 06.09.2021	18.10.2021 to 23.10.2021	18.10.2021 to 23.10.2021	13.11.2021 to 20.11.2021	24.01.2022 to 02.02.2022	29.11.2021 to 06.12.2021	07.02.2022 to 14.02.2022

Table 2.2.1 (d) Deviations in the Academic Schedule

S.No	Model Examination		End Semester Examination		Reason
	Scheduled date	Conducted date	Scheduled date	Conducted date	
1	13.11.2021 to 20.11.2021	24.01.2022 to 02.02.2022	29.11.2021 to 06.12.2021	07.02.2022 to 14.02.2022	Due to rain fall, Examinations have been postponed as per Government order.

Table 2.2.1 (e) Department Action Plan

Department Action Plan	Period	Remarks
Course choices from Faculty	2-3 weeks prior to the commencement of semester	Course choices are requested from faculty for the forthcoming semester.
Work Load Distribution	Work load Distribution 2-3 weeks prior to the commencement of semester	Allotment of courses are done by the HOD based on the specialization of faculty or based on the expertise on a particular Course

Time Table Uploading	2 weeks prior to the commencement of semester	The timetable committee creates the schedule, which is then approved by the PAC and HOD and uploaded to the CAMU. .
Course/ Lesson Plan	2 weeks prior to the commencement of semester	Course plans are collected from the faculty for their respective courses and reviewed by PAC.
CAT, Model exam and ESE question papers	2 weeks for CAT and 4 weeks for Model and ESE prior to the commencement of examination	Question papers have been collected from the faculty and reviewed at the department level by PAC.
Project (IV Year)	Two weeks prior to the commencement of the Final year.	Students are allowed to form their group and choose the guide based on their area of interest. They identify the project, which is then submitted to the project coordinator for record. The project coordinator prepares the schedules for review and presentation.

Instruction Methods and Pedagogical Initiatives:

The class in-charges/mentors develop, accept, and disseminate to students the class schedule, lesson plans, and study guides for each topic. The department places an emphasis on outcome-based learning and employs the OBE in a constructive and creative approach to satisfy the requirements of students in terms of learning.

Every Faculty must keep attendance registers in order to maintain students' presence. Every subjects corresponding Faculty creates the course files. Every semester, workshops, internships, and industrial visits are planned in as an effort to bridge the gap between the industries and academic institutions. A few of the instruction methodologies are listed below.

- ICT based learning: Use of LCD projectors, Smart Board and provision for interactive teaching learning
- Animated videos/ NPTEL/MOOC Courses
- LMS and Google class room for Quiz, Assignment, Notes, etc.
- Digital texts enable real time learning, monitoring, comprehension and online assessment
- Problem based Learning for Core Courses
- Workshops/ Value Added Courses by Core Industries
- Expert talk/ Guest Lectures
- Group discussions/ Seminars
- Laboratory/ video based demonstration: Demonstration of system or parts of a real-world system using modern tools.
- Group discussion/ presentation: Students learn through group discussion and are asked to deliver short presentation on a topic.
- Faculty undergo Faculty Development Program and learn various Pedagogical tools to improve their teaching learning process.

Table 2.2.1 (f) List of Training Program attended by Faculty

S.No	Name of the Faculty	Title of the Program	Duration	Conducted by	Reason for attending the training
1.	Mr.D.Kumaravel	Imparting Online Teaching-Learning Methodology	7 Days	E&ICT Academy IIT Guwahati	To improve the Teaching Learning process
2.	Dr.M.Rajavelan	Universal Human Values- Principles and Prospects	5 Days	AMET university	To understand the ethics in Human resource management
3.	Dr.R.Rajavel	NBA Accreditation and Teaching and Learning in Engineers	12 weeks	NPTEL-AICTE	Implement OBE in teaching learning and assessment process
4.	Mr.S.Amirtharaj	Digital Pedagogy - Exploring New Fronties PF Digital Transforamation of Teaching Learning Process	12 days	JIS College of Engineering	To improve the Teaching Learning process
5.	Mr.M.Ramamurthy	Vertical Integration Course for Trainers	10 days	AMET-City college	To enhance the teaching learning process
6.	Mr.D.Kumaravel	Imparting Online and Teaching - Learning Methodology	1 week	Electronics and ICT Academy	To improve the Teaching Learning process
7.	Dr.V.Sridevi	Accrediation and outcomr based pedagogic principles for effective teaching	6 days	ATAL-AICTE	Implement OBE in teaching learning and assessment process
8.	Mr. Rajesh chittam	NBA accreditation process	5 days	ATAL-AICTE	Implement OBE in teaching learning and assessment process
9.	Dr.K.Gowrishankar	NBA Accreditation and Teaching and Learning in Engineering (NATE)	12 weeks	NPTEL-AICTE	Implement OBE in teaching learning and assessment process
10.	Dr.K.Gowrishankar	Outcome Based Pedagogic Principles for Effective Teaching	12 weeks	NPTEL-AICTE	To improve the Teaching Learning process
11.	Dr.S.Satish Kumar	Digital Pedagogy - Exploring New Frontiers Of Digital Transformation for Teaching - Learning Process	2 weeks	JIS College of Engineering	To improve the Teaching Learning process
12.	Dr. A. Suresh	Effective Teaching Strategies	1 week	BET Sadathunisa Degree College	To enhance the teaching learning process
13.	Dr.M.Tamilarasi	Teach The Teacher	1 week	THE HEADWAY ACADEMY	To enhance the teaching learning process
14.	Mr.P.Sathish khanna	Academic Leadership in Higher Education	1 week	ATAL-AICTE	To understand the ethics in Human resource management
15.	Dr.A.Thanikasalam	Inculcating Universal Human Values in Technical Education	5 days	AICTE	To understand the ethics in Human resource management
16.	Mr.Rajesh chittam	Blender learning and flipped classroom	5 days	ATAL	To improve the Teaching Learning process
17.	Dr.D.S.Balaji	Accreditation and OBE	8 weeks	NPTEL	Implement OBE in teaching learning and assessment process
18.	Dr S Satish kumar	Vertical Integration Course for Trainers	10 days	CMC Maritime Academy	To enhance the teaching learning process

19.	Dr P Sivaperumal	Vertical Integration Course for Trainers	10 days	CMC Maritime Academy	To enhance the teaching learning process
20.	Dr A suresh	Vertical Integration Course for Trainers	10 days	AMET city campus	To enhance the teaching learning process
21.	Mr Bala kumaran	Vertical Integration Course for Trainers	10 days	AMET city campus	To enhance the teaching learning process
22.	Mr Krishna kumar	Vertical Integration Course for Trainers	10 days	AMET city campus	To enhance the teaching learning process
23.	Dr A.Thanikasalam	Vertical Integration Course for Trainers	10 days	CMC Maritime Academy	To enhance the teaching learning process
24.	Dr.E.Ravi Kumar	Vertical Integration Course for Trainers	10 days	CMC Maritime Academy	To enhance the teaching learning process

Table 2.2.1 (g) Sample Courses with Activity based Learning

S.No	Course Name	Topic Covered	Activity	Conducted Date	Course Incharge / Designation	Year	Relevance to PO"s, PSO"s
1	Marine Electrical Measurements	1Ø & 3Ø measurement of Power	Demo	02.02.2022	Dr.A Suresh / Professor	II	PO1,PO3, PO12, PSO1,PSO2,PSO3
2	Engineering mechanics	Ladder friction	AMET - LMS	04.09.2021	Mr.M.Ramamurthy	I	PO1,PO3, PO12, PSO1,PSO2,PSO3
3	Marine Internal Combustion Engines-II	Fuel Injection System Part 1)	AMEt - LMS	21.02.2022	Mr. Boopathy Baskaran,	III	PO1,PO3, PO12, PSO1,PSO2,PSO3
4	Mechanics of Machines	Basics of Mechanisms	AMET - LMS	16.07.2022	Mr.M.Ramamurthy	IV	PO1,PO3, PO12, PSO1,PSO2,PSO3
5	Strength of Materials	Strength of Materials	AMET - LMS	04.08.2022	Mr.K.Stalin	II	PO1,PO3, PO12, PSO1,PSO2,PSO3

6	Engineering Mechanics	Force and Force systems	AMET - LMS	04.08.2022	Dr.Thanikasalam.A	II	PO1,PO3, PO12, PSO1,PSO2,PSO3
7	Material Science and metallurgy	Heat Treatment	AMET - LMS	15.07.2022	D.Kumaravel	I	PO1,PO3, PO4,PO5, PO12, PSO1, PSO2,PSO3
8	Basic Electrical Electronics Engineering	Electric circuits	AMET - LMS	27.10.2022	Dr.S.Satish Kumar	I	PO1,PO3, PO4,PO12, PSO1,PSO2,
9	Basic Ship Structure	Types of ship	AMET - LMS	16.07.2022	Mr.U.N.Neela Prasad	II	PO1,PO3, PO11,PO12, PSO1,PSO3
10	Marine Electrical technology	Alternators onboardship	AMET - LMS	04.08.2022	Mrs Selva Rani	III	PO1,PO3, PO4,PO5, PO12, PSO1, PSO2,PSO3

Collaborative learning:

Collaborative learning is an educational approach to teaching and learning that involves groups of students working together to solve a problem, complete a task, or create a product. In collaborative learning, students are benefited from the development of higher-level thinking, better oral communication, self-management and leadership skills, and an increase in student retention, self-esteem, and responsibility. This type of learning promotes better student-faculty interaction. Students prepare themselves for real-life social and employment situations.

Problem Based Learning (PBL)

Problem-based learning (PBL) is one way to foster collaborative learning. It is significantly more effective than traditional instruction at training competent and skilled practitioners, and it promotes long-term retention of knowledge and skills. It is an innovative practice that is used to implement Outcome Based Education in AMET Deemed to be University.

Table 2.2.1(h) Problem Based Learning methods adopted in Teaching Learning Process

Course Name	Title of the Project	Name of the student	Relevance to PO's and PSO's
Marine control engineering	Prevention of Marine Growth In Ship's Piping System	Shobanesh M Stalin C Vetrivel J Sathyendran K	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
Marine Environmental Protection	Advanced Flood Alarming System Onboard to withstand the rigors of Marine Environment	Akshay Reji Abhiram B S Alok Chandra M Leo Augustine	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3

Marine auxillary machinery	Advances In Pipeline Monitoring And Oil Leakage Detection Technologies	Gowtham Metha P J Natheem Hussain J Porkuna Pandian R Ravi Raghuls Salman Baris M	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
Microprocessor and Microcontroller	Microcontroller Based Fire Fighting Device	Mohammed Fahiz S Naveen P Prathiv Kannan V Rakesh R Rudhra Moorthy P	PO1,PO2,PO3,PO4,PO5 PO7,PO8,PO11,PO12,PSO1, PSO2,PSO3
Strength of Materials	Effect Of Process Parameters in Friction Stir Welding Of Marine-Based Aluminum Alloys AA5052 And AA6061 Using Taguchi's Technique	Anandh V Anuishkumar P Dinesh C Sathya Narayanan K Viswa M	PO1,PO2,PO3,PO4,PO5, PO7,PO8,PO9,PO11,PO12 ,PSO1, PSO2,PSO3

Conduct of laboratory experiments

The student is learning through the following modes in the laboratory sessions

- Flowchart/Diagrams /Pictures
- Demo/ cut sectional model.
- Experimental equipment.

Continuous Assessment in the Laboratory

Student performance during the laboratory class is evaluated, and the students' records are maintained by the faculty. Continuous evaluation of each laboratory experiment is done based on the following parameters:

Table 2.2.1(i) Marks distribution for laboratory courses

Component of Evaluation	Internal/ external	Marks	Total Marks

Observation Note Book	Internal	15	40
Practical Performance during classes		15	
Record Note Book		10	
Practical Exam	External	30	60
Result		10	
Viva Voce		20	
Total			**100**

Table 2.2.1(j) Rubrics for Continuous Evaluation (Laboratory Courses)

Assessment Parameter	**Proficient (3 marks)**	**Acceptable (2 marks)**	**Needs Improvement (Less than 2)**
Familiarization with the components/ Equipment	Listed the components, / equipment's required to execute the given experiments with their specifications and type	Listed the components / equipment's required to execute the given experiments with incorrect specifications and type.	Listed partial list of components/ equipment's only
Designing Circuits/ writing Programs	Design the circuit diagram with components and equipment available in a proper sequence or order with power sources / written the programs to execute the experiments with proper algorithm or flow chart	Erroneous Design of circuit diagram with components and equipment available /written the programs with improper algorithms or flow chart	Improper design of circuits, which need lot of improvements / written programs with more errors and wrong algorithms or flow chart
Recording observation	Obtained the correct results, which are matched with the master record results/pre-determined values	Output results are not matched with master record values or pre-determined values. Up to 5 % deviations are there	Output results are much deviated from expected or completely wrong results

Result Interpretation	Acquired meaningful and usable information and to make the most informed decisions	Acquired meaningful information but not usable to make the most informed decisions	Not able to acquire meaningful and usable information
Viva-voce	Answers all questions with proper explanation	Answers all questions but with less relevance or explanation	Not able to answer most of the questions relevantly

Methodologies to Support Weak students and bright students

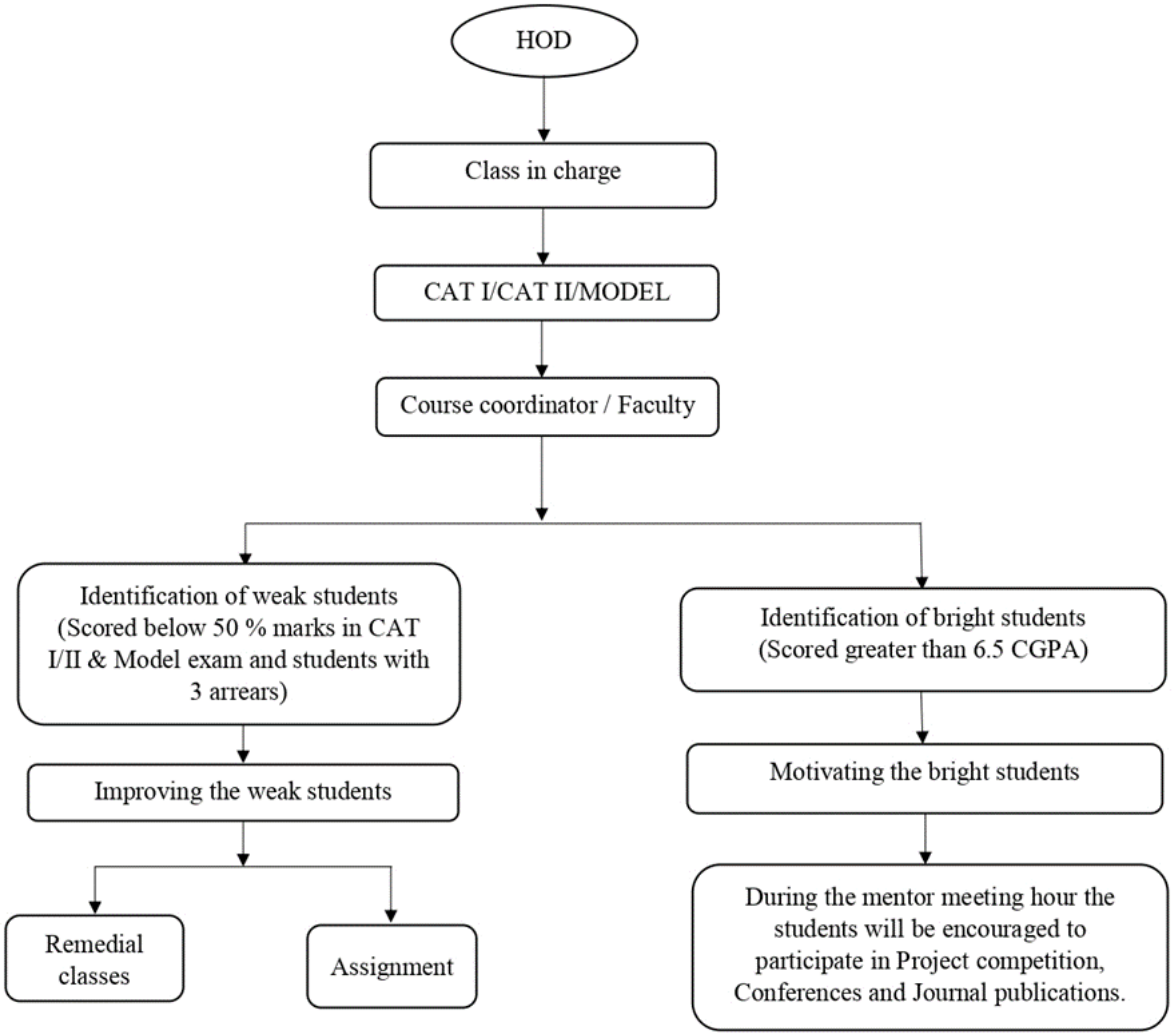


Fig: 2.2.1 (b) Methodologies to support Weak students and Bright Students

Weak students are identified and encouraged to attend additional classes to better comprehend the subject based on their academic performance. The mentors support the weak students in every way. The presentations of the seminars, group debates, and ideas in symposiums and national as well as international conferences are encouraged for bright students.

Feedback of Students Teaching and Learning Process and Action Taken

In our university, receiving feedback of students is a mandatory requirement. Every student is required to provide feedback once every semester on a variety of factors. The input relates to course coverage and other factors to enhance the methods of delivering the courses, etc.

The input of the student is compiled, and the weighted score for each parameter is determined. The parameters for which the weighted score is less than 3.5 are be recognized as the parameters in need of correction. To improve teaching and learning, the HOD will provide advice to the faculty and offer appropriate alternatives, such as attending workshops and faculty development training programs, for the selected criteria. The process is given in the table below.

Table 2.2.1(k) Feedback parameters

S.No.	Feedback parameters
1	Punctuality of the faculty to the class
2	Faculty communicates and interact effectively with the students
3	Faculty effectively addresses the course outcomes during teaching and covers the all COs in internal assessment and end semester examination
4	Faculty encourages the students to clarify the doubts
5	Usage of modern teaching aids such as smart board audio visuals multimedia LCD projector etc.
6	Faculty is enthusiastic, confident and dynamic enough to handle class without any hassle.
7	Faculty support weak students and encourages bright students for presenting paper projects etc. and provide necessary counselling based on academic performance
8	Faculty use students centric methods such as experimental learning participative and problem solving methodologies for enhancing learning experiences

Student Feedback on faculty for the subject name

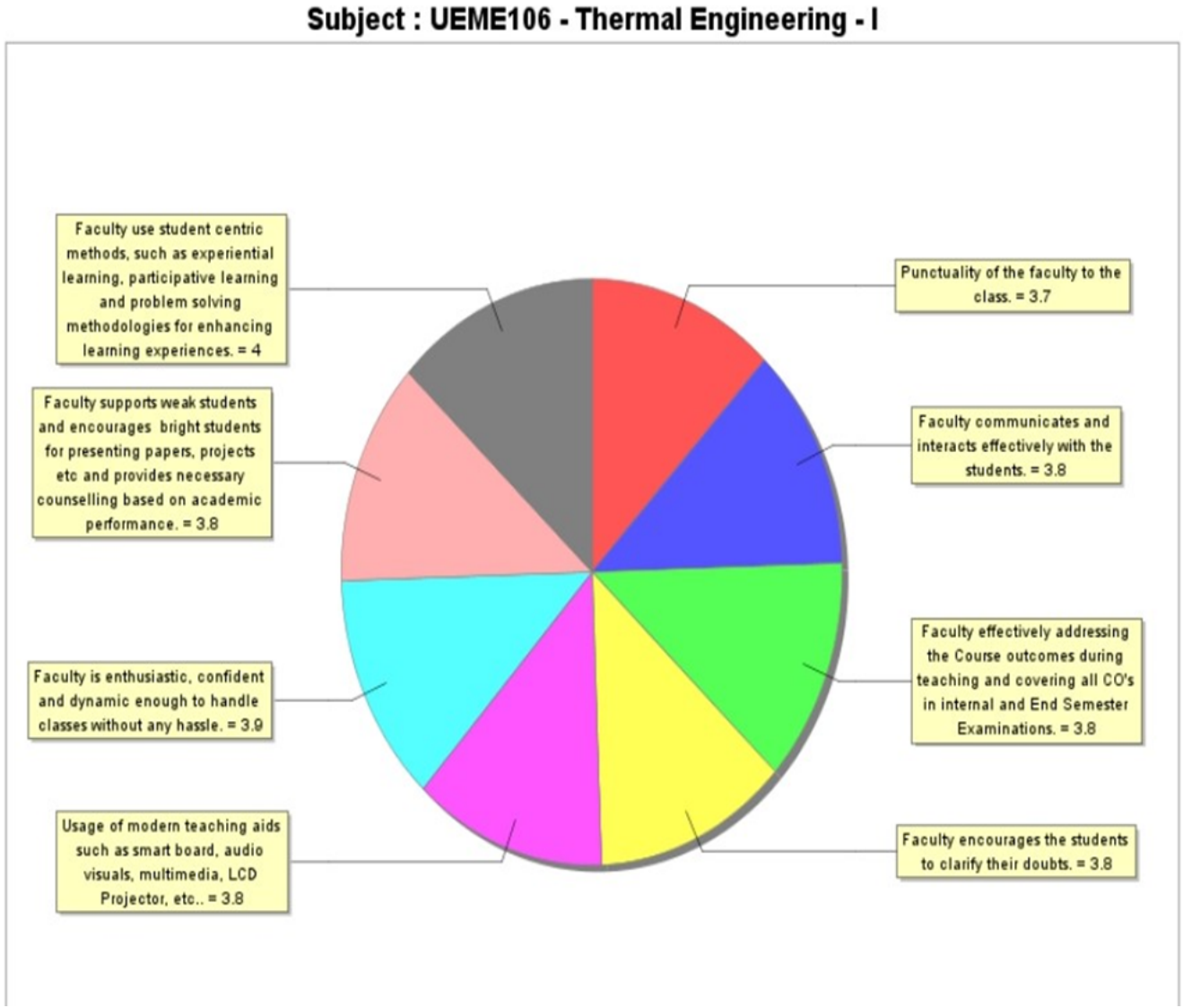


Fig. 2.2.1 (c)Student Feedback on faculty for the subject name

Student Feedback through Class Committee Meeting and Action Taken:

The Program Coordinator holds three Class Committee Meetings (CCM) each semester to discuss course coverage and other aspects like how to enhance course delivery methods, etc. Meeting Procedures for Class Committees

- **CIRCULAR**

It is proposed to conduct the first Class Committee meeting for second year marine Engineering(B.E-ME-21 batch) with Faculty members and student representatives for the academic year 2022-2023 (Even Semester) for II year as scheduled below.

Date and Time:

II Year Marine - All Groups (G1, G2, G3, G4, G5, G6) on 02.03.2023 (3.20 PM to 4.10 PM)

Venue: B block, 1 st floor, B3 Room

- **AGENDA**

1. Syllabus coverage as per TAR book competency

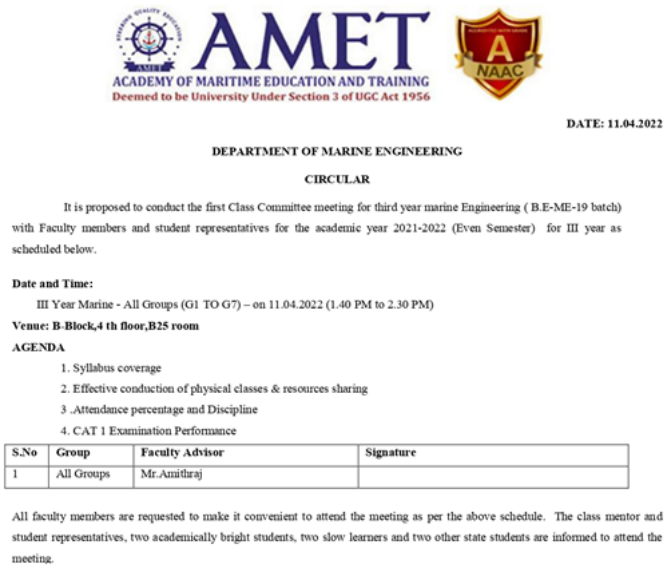
2. Effective conduction of physical classes & resources material sharing

3 .Attendance percentage and Discipline

4. CAT 1 Examination Performance

5.Any other matters

All faculty members are requested to make it convenient to attend the meeting as per the above schedule. The class mentor and student representatives, two academically bright students, two slow learners and two other state students are informed to attend the meeting.



AMET
ACADEMY OF MARITIME EDUCATION AND TRAINING
Deemed to be University Under Section 3 of UGC Act 1956

DATE: 11.04.2022

DEPARTMENT OF MARINE ENGINEERING

CIRCULAR

It is proposed to conduct the first Class Committee meeting for third year marine Engineering (B.E-ME-19 batch) with Faculty members and student representatives for the academic year 2021-2022 (Even Semester) for III year as scheduled below.

Date and Time:

III Year Marine - All Groups (G1 TO G7) – on 11.04.2022 (1.40 PM to 2.30 PM)

Venue: B-Block,4 th floor,B25 room

AGENDA

1. Syllabus coverage
2. Effective conduction of physical classes & resources sharing
3 .Attendance percentage and Discipline
4. CAT 1 Examination Performance

S.No	Group	Faculty Advisor	Signature
1	All Groups	Mr.Amithraj	

All faculty members are requested to make it convenient to attend the meeting as per the above schedule. The class mentor and student representatives, two academically bright students, two slow learners and two other state students are informed to attend the meeting.

Fig. 2.2.1 (d)Class Committee meeting Circular

2.2.2 Quality of end semester examination, internal semester question papers, assignments and evaluation (15) Institute Marks : 15.00

The Process for Internal Continuous Assessment Question Paper Setting and evaluation is described in the Fig: 2.2.2 (a)

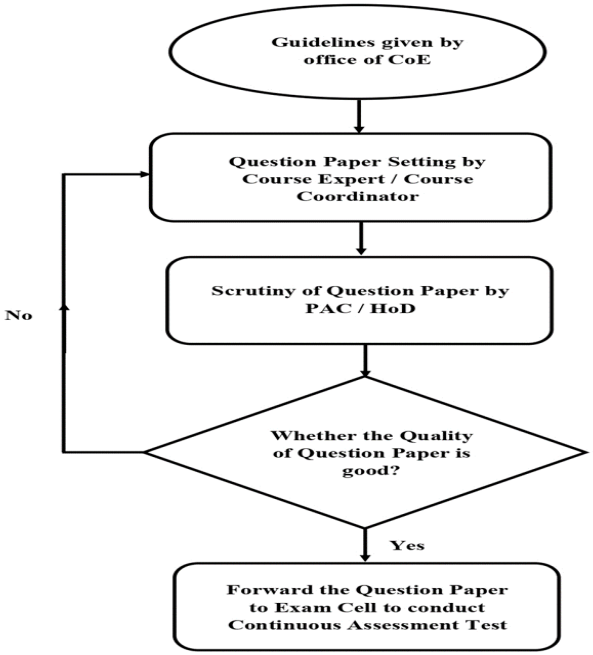


Fig.2.2.2. (a) Process for Continuous Assessment Question Paper Setting and evaluation

Process/Guidelines for the preparation of question paper

- The question papers are prepared based on course outcomes. Each question is mapped to the corresponding course outcome.
- The question papers are also prepared based on Bloom's taxonomy framework, which ensures quality in accordance with Program outcomes and program-specific outcomes.
- Two sets of question papers for CAT 1, CAT 2, and the model examination are prepared by the subject faculty.
- The question papers are verified by the PAC and the Head of the Department to ensure the incorporation of the above standards, and then the question papers are kept confidential.
- On the day of the exam, one set of question paper is selected by the HOD, and multiple copies are made for the conduct of the examination.

Continuous Assessment Test (CAT)

Question paper pattern:

(CAT I & II)

Part A: 6 x 2 = 12 Marks

Part B: 1 x10 = 10 Marks (Compulsory Question)

Part C: 2 x14 = 28 Marks (Either or choice Type)

Total = 50 Marks

Model Examination

Part A: 10 x 2 = 20 Marks

Part B: 1 x 10 = 10 Marks (Compulsory Question)

Part C: 5 x 14 = 70 Marks (Either or choice Type)

Total= 100 Marks



DEPARTMENT OF MARINE ENGINEERING

CONTINUOUS ASSESSMENT TEST-1(CAT-1)

Programme & Batch: **Year/Semester** :
Course code /name : Date of Exam :
Duration : 90 Minutes **Maximum Marks** : 50 Marks
:

Instructions:

1. Before attempting any question paper, be sure that you got the correct question paper.
2. The missing data, if any, may be assumed suitably
3. Use the sketches wherever necessary

CO1: **CO2:** **CO6**:

Q. No	Question	Mark	K Level (K1-K4)	(CO)
	SECTION A (6 * 2 = 12 Marks) **Answer all Questions**			
1		**2**		**CO1**
2		**2**		**CO1**
3		**2**		**CO1**
4		**2**		**CO2**
5		**2**		**CO2**
6		**2**		**CO2**
	SECTION B (1 * 10 = 10 Marks) **Compulsory Question**			
7		**10**		**CO6**
	SECTION C (2 * 14 = 28 Marks) **Answer All Questions**			
8(a)		**14**		**CO1**
	(Or)			
8(b)		**14**		**CO1**
9(a)		**14**		**CO2**

Fig.2.2.2 (b) Sample Question Paper format for CAT Examination

End Semester Examination

End Semester Examination questions are of three categories:

- One third of the questions are direct questions that could be answered by average students.
- One third of the questions are analytical. A certain amount of thinking, analysis and mathematical knowledge is required to solve this problem.
- Remaining one third of the questions are indirect questions. A certain amount of critical thinking is needed.

Table 2.2.2. (a) Distribution of question & marks among the Units of syllabus

Unit	Question Numbers	Total Marks
1	1,2,12	18
2	3,4,13	18
3	5,6,14	18
4	7,8,15	18
5	9,10,16	18
Unit 1 to 5	**11 (Compulsory Question)**	**10**

ACADEMY OF MARITIME EDUCATION AND TRAINING
Deemed to be University Under Section 3 of UGC Act 1956

END SEMESTER EXAMINATIONS – DECEMBER 2021

Programme & Batch: Semester :

Course Title: Course Code:

Duration: 3 hours Maximum Marks: 100 marks

Instructions:

1. Before attempting any question paper, be sure that you got the correct question paper.
2.. The missing data, if any, may be assumed suitably.
3. Use the sketches wherever necessary.

Question No	Question	Mark	BTL K1-K4	CO
part A (10×2 = 20 Marks) Answer all Questions				

1		2		CO1
2		2		CO1
3		2		CO2
4		2		CO2
5		2		CO3
6		2		CO3
7		2		CO4
8		2		CO4
9		2		CO5
10		2		CO5
Part B (1×10 = 10 Marks) Compulsory Question				
11		10		CO6
Part C (5×14 = 70 Marks) Answer All Questions				
12 (a)		14		CO1
(OR)				
12 (b)		14		CO1
13 (a)		14		CO2
(OR)				
13 (b)		14		CO2
14 (a)		14		CO3
(OR)				
14 (b)		14		CO3
15 (a)		14		CO4
(OR)				
15 (b)		14		CO4
16 (a)		14		CO5
(OR)				
16 (b)		14		CO5

Knowledge Level as per Bloom Taxonomy K1- Remember; K2- Understand; K3- Apply; K4- Analyse; K5- Evaluate; K6- Create

Fig. 2.2.2 (c) Sample Question Paper for End semester Examination

Mapping of questions with CO's

Table 2.2.2. (b): End semester question paper CO mapping

COs	Question Number			
	CAT I	CAT II	MODEL	End Semester
CO1	1,2,3 & 8		1,2 & 12	1,2 & 12
CO2	4,5,6 & 9		3,4 & 13	3,4 & 13
CO3		1,2,3 & 8	5,6 & 14	5,6 & 14
CO4		4,5,6 & 9	7,8 & 15	7,8 & 15
CO5			9,10 & 16	9,10 & 16
CO6	7,	7	11	11

Assessment Procedure – Tests and Examinations

For each theory course, the assessment pattern for CAT is illustrated in the following

Table2.2.2 (c) Internal Marks Assessment Pattern

S.No	Assessment	Syllabus Coverage	Marks	Weightage
1	CAT I	Unit 1, 2	50	**10**
2	CAT II	Unit 3, 4	50	**10**
3	Model Examination	All 5 Units	100	**10**
4	Assignment	-	20	**5**
5	Attendance	-	-	**5**
Total Internal Marks				**40**

Table 2.2.2(d) Course Assessment pattern

S.No	Assessment	Marks	Weightage
1	Continuous Assessment Test	40	40
2	End semester exam	100	60
Total Marks			**100**

Quality of Assignment and its relevance

For each course, assignments are given to the students to develop their analytical and problem-solving skills. Assignment submission deadlines are announced by the respective faculty. Similar to CAT, CAT II, Model Exam, and ESE Question Papers, the assignments are also in line with Bloom's Taxonomy Level, CO, and difficulty levels that have been predefined. All assignments are framed and mapped with COs and Bloom's taxonomy action verbs as per the format shown in Table 2.2.2 (f).

Table. 2.2.2 (e) Sample Assignment format

Department of Marine Engineering			
Assignment I,II,III			
Program & batch **Semester** **Course code & name** **Max marks**			
S.No.	**Assignment question**	**Mapped CO**	**BTL**
1			K4,K5,K6
2			
3			
4			
5			
Faculty in charge **PAC** **HOD**			

2.2.3 Quality of student projects (20)

Institute Marks : 20.00

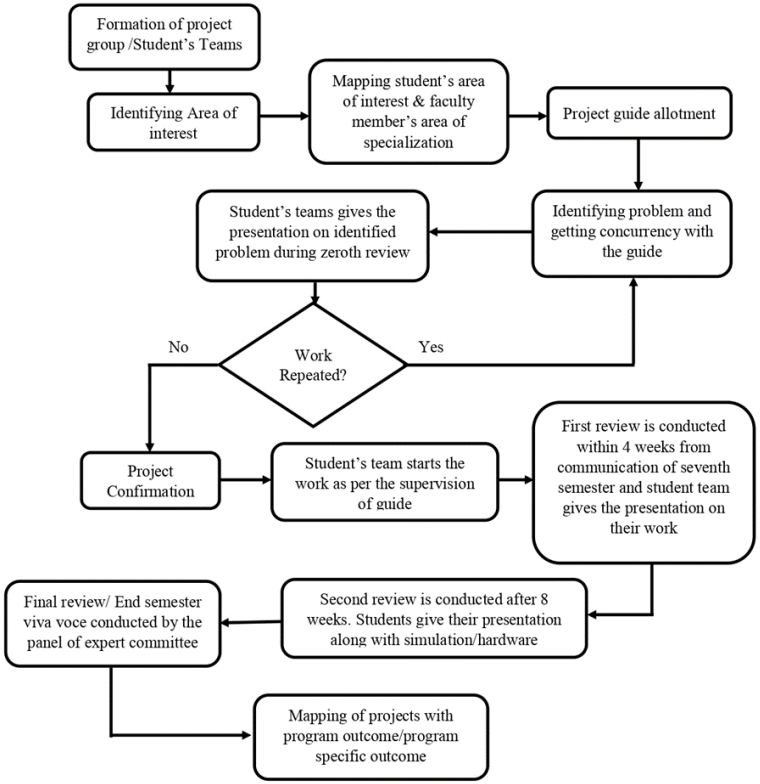


Fig: 2.2.3 (a) Process Flow for the Student Project

Step 1: The project coordinator gives the students the guidelines for selecting the project and the instructions to be followed. Students form groups among themselves based on their areas of interest.

Step 2: The project coordinator collects the title of the project based on the literature review done by the students and real-time problems identified in the industry.

Step 3: The head of the department finalizes the project title and project group.

Step 4: The head of the department allots the project guide to the project group based on the faculty's area of specialization.

Step 5: The head of the department nominates the panel members for conducting the zeroth review, first review, second review, and final reviews. Review dates are finalized based on the academic calendar.

Step 6: After getting guidance from the project guide, the student's team presents their work for zeroth review. If the performance is satisfactory, then the project title is confirmed by the panel members, who give their approval to proceed further.

Step 7: Students team start their work as per the guidelines given by the project guide and present their work progress in first review within 4 weeks from the commencement of the Final semester.

Step 8: Panel members review the work and suggest ideas for improving its quality.

Step 9:The project coordinator or guide informs the students to complete the simulation or hardware and present the output results in the second review

Step 10: Based on the guidelines given by the project guide, students present their completed project (hardware kit or simulation work) in the second review after 8 weeks.

Step 11: In the final review, students present their completed project to the external expert with a report and hardware kit or simulation work. External experts and Panel members review the project work and categorise it as "innovation," "research," and "implementation" projects.

Step 12: Mapping of the project with POs and PSOs is done by the project coordinator.

Table 2.2.3 (a): Area of Interest/Specialization of Faculty

S.No	Name of the Faculty	Research Groups
1.	Dr.M.Rajavelan	Marine Automation and Control
2.	Dr.V.Rajeshwari	
3.	Dr.S.Ramalingam	
4.	Dr.K.Gowrishankar	
5.	Mrs.T.Dhanya	
6.	Mrs.S.Swetha	
7.	Mr.B.Karkki	
8.	Mr Chidambaram	
9.	Mr Radha Krishnan R	
10.	Mr.S.Muthu Kumarasamy	Marine Electrical Technology
11.	Dr.M.Tamilarasi	
12.	Mr.S.Prabhu	
13.	Mrs.E.Abirami	
14.	Mr.S.Janarthanan	
15.	Dr.S.V.Saravanan	
16.	Dr. A. Suresh	
17.	Dr.P.Sivaperumal	
18.	Mrs.M.Selvarani	
19.	Mr.M.Manikandan	
20.	Mrs.R.Pushpavathy	
21.	Mr.R.Sundar	
22.	Dr.S.Satish Kumar	
23.	Dr.P.Shanthi	
24.	Mr Krishnan Ramesh	
25.	Mr Sridhar Konda	
26.	Mr.K.C.Balaji	

27.	Mr.Neela Prasad	Marine Manufacturing Engineering
28.	Dr.A.Thanikasalam	
29.	Mr.Chandrasekaran	
30.	Mr.G.Niresh Kumar	
31.	Dr.S.Thamizhmani	
32.	Mr.M.Santhanam	
33.	Mr.K.Sathish	
34.	Mr.M.Ramamurthy	
35.	Mr.D.Kumaravel	
36.	Mr.R.Praveen kumar	
37.	Mr.K.Jagatheesan	
38.	Mr.N.Vasantha Prasath	
39.	Mr.D.Premkumar	
40.	Dr. S. Prabhakaran	
41.	Mr.C.M.Mohanraj	
42.	Mr Muthuazagu M	
43.	Mr Ananth T	
44.	Mr.B.Muthu Kumar	
45.	Mr.G.Sekar	
46.	Mr.M.Bala kumaran	
47.	Mr.P.Sathish Khanna	Marine Power Systems
48.	Dr.V.Sridevi	
49.	Mr.S.Amirtharaj	
50.	Mr Chandra sekharan G	
51.	Mr. Yeshwanthra Ekambaram	

52.	Dr.D.S.Balaji	Marine Pollution and Control
53.	Mr.B.Loganathan	
54.	Mr.R.Arun Kumar	
55.	Mr.V.K.Srinivasan	
56.	Mr.V.R.Raman Barath	
57.	Mr.Arul Neshanth	
58.	Mr.K.Stalin	
59.	Dr.E.Ravikumar	
60.	Mr.S.Krishna Kumar	
61.	Mr.D.Mohan	
62.	Mr Rajan S S	
63.	Dr.S.Ranganathan	Marine Thermal Engineering
64.	Dr.R.Rajavel	
65.	Dr.D.Madesh	
66.	Dr.J.Ananth	
67.	Mr.V.Sivakumar	

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

Table 2.2.3 (b): List of student projects Batch 2017-2021(sample)

S.No	Reg No.	Student Name	Guide	Project Title	Supported PO's and PSO's
1	AME17007	Ajay kumar chennupathi	C/E Chidambaram	Marine Refrigiration System	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17004	Adhil siyad.P			
	AME17009	Ajay V			
	AME17028	Arun kumar V			
2	AME17198	Suresh.M	Mrs: Sindhuja	Automatic Rolling Shutter	PO1,PO2,PO3,PO4,PO5,PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17262L	Prasanth			
	AME17194	Suraboina Girindra			
	AME17186	Srikanth			

3	AME17085	John Aloysius	Dr. A Suresh	Trouble Shooting Of Star Delta Starter Panel	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17098	Keerthi vasan			
	AME17097	Kaviyarasan			
	AME17091	Zulhar Nayeen			
	AME17092	Karan			
4	AME17069	Hajamugayadeen	Prof:Jayachandran	Fire Detection System in Ship-In Campus	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17058	Gandhavarapu Sai kumar			
	AME17059	Ganish.S			
	AME17061	Gladwin Kingston.k			
	AME17064	Gokulnath.G			
5	AME17115	Mohamed Mydeen.s	Dr.Muthu Baskar	Pneumatic Metal Sheet Cutting Machine	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17083	Jinistus Antony.j			
	AME17114	Mohamed Farook.A			
	AME17116	Mohamed Yousuf.h			
6	AME17241	Samuel Joseph Paul A	C/E Chidambaram	Smart Watch SOS	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17236	Subash Chandr U S			
	AME17234	Balaji M			
	AME17233	Yuvraj Kumar M			
7	AME17171	Selvarasan p	Prof. Venkatesh	Dry Docking	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17172	Sethupathi k			
	AME17176	Shanmuga raj p			
	AME17178	Shiv Shankar Bn			

8	AME17207	Tharun Kumaar K	Dr. Shanthi P	Automatic Collision Avoidance Using Ultrasonic Sensor un Ship	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17153	Chavvakula Sai Sandeep			
	AME17227	Vuppalapati Vamsi			
	AME17112	Mohamed Asfaq T Z			
9	AME17041	Barath Kodi	Mr.Ramamurthy M	Water Monitoring RC Boat	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME17042	Benarji R L			
	AME17043	Bhrugesh Reddy			
	AME17044	Bhuvanesh A			

Table 2.2.3 (c): List of student projects Batch 2018-2022 (sample)

S.No	Reg No.	Student Name	Guide	Project Title	Supported PO's and PSO's
1	AME18121	Akula Om Sai Akash	C/E. K.R.Chidambaram	Safematic Design of Steering Gear	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME182601	Syed Shahnawaz Ali			
	AME18254L	Vaddepalli Saketh			
	AME18257L	Varma O			
2	AME18221L	Arun Kumar M	Mr. Aran Glenn J	A Cuk Integrated Sepic Converter with Hybrid Optimized PI Controller For EV Charging Application	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18236L	Maheshwara Aswajidh			
	AME18244L	Paneer Selvam D			
	AME18245L	Perumalraja G			
	AME18221L	Arun Kumar M			

3	AME18148	Raja Mohammed A	Dr.A.Suresh	Solar-Powered Shipboard Power System Using Hybrid Converter	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18029	Surya K			
	AME18157	Vijayakumar N			
	AME18131	Gokulnath N			
4	AME18088	Bejo Shyam P	Dr. M. Rajavelan	Automatic Manoverboard Wrist Band Sensor Using GPS Systems	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18091	Gideon D			
	AME18093	Govindhavasan N			
	AME18145	Naveen Kumar N			
5	AME18060	Manoj Prabhakar M	Dr.S.Muthu Baskaran	Design And Fabrication of A Scrubber System For Controlling Marine Pollution	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18139	Manoj S			
	AME18100	Mohamed Abith B			
	AME18067	Prasanna M			
6	AME18045	Anandh V	Mr.Ramamurthy M	Effect of Process Parameters in Friction Stir Welding Of Marine-Based Aluminum Alloys AA5052 And AA6061 Using Taguchi's Technique	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18003	Anuishkumar P			
	AME18214	Dinesh C			
	AME18022	Sathya Narayanan K			
	AME18039	Viswa M			
7	AME18004	Balaji B	Mr.R. Praveen Kumar	Morphological Characterization Of Friction Welded Aluminium Alloy	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18261L	Jayesh Sharma			
	AME18012	Manoj Aravindh R			
	AME18062	Muthuselvan S			

8	AME18168	Arnold G	Mr. D.Kumaravel	Optimizing The Corrosive Property of Corten Steel (Astm A242) Subjected to Various Heat Treatment	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18125	Balabharathi P			
	AME18135	Kavibalan S			
	AME18151	Selvabassam S			
	AME18156	Udhayakumar R J			
9	AME18218L	Ajay Raja	Dr.P. Shanthi	Control Of Inlet & Exhaust Valve Using DSP Digital Controller	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18224L	Devabalan T			
	AME18225L	Gokulsivapandi R			
	AME18090	Santhosh Kumar G			
10	AME18172	Gowtham Metha P J	Dr.Tamilarasi M	Advances In Pipeline Monitoring And Oil Leakage Detection Technologies	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18241L	Natheem Hussain J			
	AME18183	Porkuna Pandian R			
	AME18251L	Ravi Raghuls			
	AME18255L	Salman Baris M			
11	AME18044	Akshay Reji	Ms. Selva Rani M	Advanced Flood Alarming System Onboard to withstand the rigors of Marine Environment	PO1,PO2,PO3,PO4,PO5 PO6,PO8,PO11,PO12,PSO1, PSO2,PSO3
	AME18082	Abhiram B S			
	AME18002	Alok Chandra M			
	AME18096	Leo Augustine			

Table 2.2.3 (d): List of student projects Batch 2019-2023 (sample)

S.No	Reg No.	Student Name	Guide	Project Title	Supported PO's and PSO's

1	AME19032	Sreechand C	Dr.R. Rajavel	Oil Mist Detector	PO1,PO2,PO3,PO4,PO5, PO6,PO8,PO11,PO12 PSO1, PSO2,PSO3
	AME19026	Ridhwan			
	AME19016	Gautham Krishna C P			
	AME19025	Rithik V J			
2	AME19052	Krishnakanth J	Dr. M. Tamilarasi	Reefer Container	PO1,PO2,PO3,PO4,PO5,PO6,PO8,PO11,PO12 PSO1, PSO2,PSO3
	AME19065	Sabarivasan B			
	AME19074	Yokesh M			
	AME19053	Manikumar P			
3	AME19012	Dhanush R	C/E K R Chidambaram	Boiler Water Level Indication And Alarm	PO1,PO2,PO3,PO4,PO5,PO6,PO8,PO11,PO12 PSO1, PSO2,PSO3
	AME19070	Ugendiran N			
	AME19075	Akash P			
	AME19035	Vijay Krishna			
4	AME19055	Nandhagopal A P	Dr A Thanikachalam	Bow Thruster	PO1,PO2,PO3,PO4,PO5,PO6,PO8,PO11,PO12 PSO1, PSO2,PSO3
	AME19042	Anand Krishnan			
	AME19044	Arjun K R			
	AME19038	Adith Menon			
5	AME19105	Sathya Narayanan S	Dr.R. Rajavel	Two Stroke Transparent Lubrication	PO1,PO2,PO3,PO4,PO5,PO6,PO8,PO11,PO12 PSO1, PSO2,PSO3
	AME19129	Parthasarathy T			
	AME19121	Jagadeesh Kumar S			
	AME19144	Surya N			

6	AME19115	Dhivakaran T	Dr M Rajavelan	Sic Automatic Shuter Door	PO1,PO2,PO3,PO4,PO5,PO6,PO8,PO11,PO12 PSO1, PSO2,PSO3
	AME19117	Dinesh Kumar P			
	AME19120	Jagadeesh B			
	AME19124	Kishan R M			

Category Analysis of Projects

All projects proposed by the students are categorized on the basis of application, product and research. The summary of analysis is given in Table 2.2.3 (e).

Table 2.2.3 (e). Category Analysis of Projects

Academic Year	Type of Projects		
	Product	Application	Research
2019-2023	12	13	2
2018-2022	11	12	5
2017-2021	10	11	3

Scheme of Evaluation

Project work

Internal Review – 40 Marks

Based on the performance of the students, internal review (Zeroth review, First, Second review) marks are awarded by the project panel members.

External Review – 60 Marks

Expert Committee review the Project and award marks according to the rubrics.

Table 2.2.3 (f): Rubrics for Zeroth review (Project work)

S.No	Criteria	Mark	Excellent (100%)	Good (80% - 90%)	Not satisfactory (< 80%)
1	Identification of problem	5	Clear definition of the problem	insufficient clarity in defining the problem	No clarity in defining the problem
2	Novelty	5	Novel idea	Partially novel, Improvement in the existing design or set up	No novelty, replica of the existing design
3	Presentation	10	Able to present the idea clearly and audible, with necessary technical content	Presentation is clear but insufficient technical content	No clarity in presentation / presentation is without technical content

Table 2.2.3 (g): Rubrics for First / Second reviews

S.No	Criteria	Mark	Excellent (100%)	Good (80% - 90%)	Not satisfactory (< 80%)
1	Objective	5	Clarity and articulating	Stated Objective not specific	No clarity

2	Literature Survey	5	extensive survey related to the project work	Survey is general and not specific	survey insufficient / irrelevant
3	Methodology	5	Well defined modules and parameters	Defined modules with insufficient parameters	insufficient modules and parameters
4	Scheduling / Time Line Presentation	5	Proper scheduling and sufficient timeline for completion Able to present the idea clearly and audible, with necessary technical content	Scheduled the project work but not with extended time frame Presentation in clear but insufficient technical content	Improper Scheduling and insufficient time frame No clarity in presentation / presentation is without technical content

Table 2.2.3 (h): Rubrics for End semester Viva Voce

S.No	Criteria	Mark	Excellent (100%)	Good (80% - 90%)	Not satisfactory (< 80%)
1	Objective	5	Clarity and articulating	Stated Objective not specific	No clarity
2	Literature Survey	5	extensive survey related to the project work	Survey is general and not specific	survey insufficient / irrelevant
3	Methodology and usage of modern tools and technologies	20	Well defined modules and parameters	Defined modules with insufficient parameters	insufficient modules and parameters
4	Technical features, real time application.	20	Appropriate technical feature and proper justification	Technology feature not properly justified	Technology feature not justified properly
5	Model /Hardware design, fabrication / Simulation	20	Results of the proposed system are expected level. Hardware fabrication is excellent	Results of the proposed system are satisfactory Hardware fabrication is good	Results of the proposed system are not satisfactory Hardware fabrication is not up to the mark
6	Presentation	10	Able to present the idea clearly and audible, with necessary technical content	Presentation is clear but insufficient technical content	No clarity in presentation / presentation is without technical content
7	Report	20	Project report is according to the specified format. Reference and Citations are appropriate and well mentioned	Project report is according to the specified format. Reference and Citations are appropriate but not mentioned well.	Project report is according to the specified format but some mistakes and insufficient reference and citation

Continuous Monitoring and Evaluation of the Project

The progress of a project is monitored by the Project Coordinator.

- The continuous progress is assessed through periodic review by a panel (zero review, first review, and second review before final review) based on rubrics.
- The purpose of the review is to track progress in the project work and to ensure that the student takes the correct direction to achieve the goals of the project.
- An external examiner shall evaluate the final assessment. The findings are based on a variety of criteria that were applied to the entire study path. These kinds of scheduled reviews help the students develop their research, communication, and team management skills.

Student Projects Funded by AMET

Our students have innovative ideas and are very interested in doing projects. To encourage students to participate in various innovative projects, our university has launched a student project funding scheme and has invited proposals for the grant of financial support to carry out the projects. Students from our department whose project proposals have been chosen and sanctioned for financial assistance in the amount specified below.

Table 2.2.3 (i): Student Projects Funded by AMET (sample)

S.No	Name of the student	Title of the projects	Name of the supervisor	Seed money sanctioned by AMET (Rs.)
1	Vuppalapati Vamsi Mohamed Asfaq T Z Sanjayandhan R Darba Pranay Krishna	Automatic collision avoidance using ultrasonic sensor in ship	Dr. Shanthi P	9,000
2	Bejo Shyam P Gideon D Govindhavasan N Naveen Kumar N	Automatic Manoverboard Wrist Band Sensor Using GPS Systems	Dr. M. Rajavelan	7,000
3	Barath Kodi Benarji R L Bhrugesh Reddy Bhuvanesh A	Water Monitoring RC Boat	Mr.Ramamurthy M	9,000

Table 2.2.3 (j): Projects Published/ Awards Received by Students (2019-2020)

S.no	Name of the Students	Mentor name	Title of the project	Award
1	Anandh V Anuishkumar P Dinesh C Sathya Narayanan K Viswa M	Mr.Ramamurthy M	Effect of process parameters in friction stir welding of marine-based aluminum alloys AA5052 and AA6061 using taguchi's technique	Best Paper Award
2	Ajin M Karthickraja M Madesh M Ujjwal Rastogi Vinish Mathew V	Dr.Tamilarasi M	SOFC Based Self Propelled Barge	Best Paper Award
3	Patil Chaitanya Ojukwu Samuel Oduchukwu Shivamkumar Singh Anraj srichandan	Dr.Tamilarasi M	Thermo electric refrigeration	Best project award Marine Technology Society

Table 2.2.3 (k): Projects Funded by Government Agencies

S.No	Name of the Students	Mentor name	Title of the project	Scheme	Name of the Agency
1	Suraj Pandiyan S, Dhurva R Shetty, Ameer al safer	Dr.A.Suresh Professor, Marine Engineering AMET University Kanathur, Chennai 603112	Stand-Alone Photovoltaic Generation System For Efficient Electric Propulsion In Small Boats	Student projects scheme 2021-2022	Tamilnadu State Council for Science and Technology DOTE Campus, Chennai-600025 Id no. EEE-1705 Worth Rs 7500/-

Table 2.2.3 (l): Projects Presented/Published in National/ International Conferences by Students

S.No.	Name of the Students	Title of the Paper	Name of the Conference	Venue	Date
1	Akshay Reji Abhiram B S Alok Chandra M Leo Augustine Abdul Rahuman M	Advanced Flood Alarming System Onboard to withstand the rigors of Marine Environment	International Virtual conference on new technologies for greener shipping (ICNTGS 2022)	AMET university	26.05.2022 to 27.05.2022
2	Ajay Raja Devabalan T Gokulsivapandi R Santhosh Kumar G Gurusaran S	Control Of Inlet & Exhaust Valve Using DSP Digital Controller	International Virtual conference on new technologies for greener shipping (ICNTGS 2022)	AMET university	26.05.2022 to 27.05.2022
3	Arnold G Balabharathi P Kavibalan S Selvabassam S Udhayakumar R J	Optimizing The Corrosive Property of Corten Steel (Astm A242) Subjected to Various Heat Treatment	International Virtual conference on new technologies for greener shipping (ICNTGS 2022)	AMET university	26.05.2022 to 27.05.2022

4	Raja Mohammed A Surya K Vijayakumar N Gokulnath N	Solar-Powered Shipboard Power System Using Hybrid Converter	International Virtual conference on new technologies for greener shipping (ICNTGS 2022)	AMET university	26.05.2022 to 27.05.2022
5	Mohammed Fahiz S Naveen P Prathiv Kannan V Rakesh R Rudhra Moorthy P	Microcontroller Based Fire Fighting Device	International Virtual conference on new technologies for greener shipping (ICNTGS 2022)	AMET university	26.05.2022 to 27.05.2022
6	Manikandan P Neeraj A G Rajesh S Ram Prathap H A	Convolutional Neural Network Aided Fire Detection System	International Virtual conference on new technologies for greener shipping (ICNTGS 2022)	AMET university	26.05.2022 to 27.05.2022
7	Serman Vinish Kumar B Arnold G Balabharathi P Kavibalan S	Effective Water Ingress Detection And Alarm System (WIDAS) In Ships Using Arduino	International Virtual conference on new technologies for greener shipping (ICNTGS 2022)	AMET university	26.05.2022 to 27.05.2022

2.2.4 Initiatives related to industry interaction (10)

Institute Marks : 10.00

To strengthen interaction with industries and keep our students updated with the latest trends in core industries, the department entered into agreements with the following companies and organizations: Industry interactions helped the students acquire practical knowledge. As a result, various industry-institute collaborative activities are carried out in the Department to improve technical abilities.

MAERSK

Maersk has sponsored five reefer containers (refrigerated containers) to AMET deemed to be a university, for training the DG Program students, research and development, and back-end industry support.

Refrigerated containers, also called reefer containers, are used for goods that need to be temperature controlled during shipping. Reefer containers are equipped with a refrigeration unit that is connected to the power supply on board the ship.

A reefer container is a specialized container that carries temperature-sensitive goods at regulated cold temperatures. Built to work as a large refrigerator, this container type can usually maintain a temperature range of -30°C and +30°C. So, you can easily use a reefer container to transport frozen, chilled, or cold goods.

A reefer container comes with a refrigeration unit on one end. When connected to a power source, the unit fills the container with chilled air. The airflow maintains the desired temperature, making a reefer container perfect for storing food items, pharmaceuticals, plants, and other temperature-controlled goods.

Table 2.2.4 (a) Industry Supported Laboratories

S.No	Name of the Laboratory	Industry Collaboration	Activity	Title	Beneficiary
1	**Wallem Pneumatics, Hydraulics & Electrical Laboratory** List of equipment : 1.Hydro trainer kit 2.Pneumatic trainer kit 3.Air compressor 4.Refrigenator trainer kit 5.Electrical trainer kit	Wallem Shipping Management	For Conducting 8th Sem Practical Classes	Real time behavioral study of hydraulic components power pack operation of non-return valve (check valve) and sequence valve Operation of a single acting cylinder and double acting cylinder using 3/2 spring return DCV and solenoid valve	Final year Marine cadets
2	**MAERSK Cargo Reefer Container Laboratory** List of equipment : 1.Reefer container 2.Compressor unit 3.Controlling unit	MAERSK LINES	Training Program for final year Marine cadets	Real time operation and maintenance in Cargo shipping container	Final year Marine cadets
3	**Wilhelmsen Welding Laboratory** List of equipment : 1. UWW-301 TP wire welder 2.UPC-NEO NG Plasma cutter 3. Accessories kit F/UWW-901 TP 4. Onboard poster ver 2002	Wilhelmsen ships	Special welding course for maersk cadets	Basic welding	Final year Marine cadets

Table 2.2.4 (b) List of MoU's

S.No	Name of the MoU Partner	Company logo
1	A.P. MOLLER-MAERSK Singapore.	MAERSK

2	V Ships, Mumbai	
3	Indian Marritime University	
4	Sea Team Management India Private Limited	
5	ARKA Global Maritime Services LLC, Dubai	
6	Almighty Maritime Services Private Limited, Mumbai	
7	RK Maritime Services Private Limited, Mumbai	
8	M/s. Synergy Maritime Pvt Ltd Singapore	
9	TVS Training and Services Limited Nungambakkam Chennai	
10	GE-Tech Power Controls Pvt. Ltd. Korattur Chennai.	
11	National Institute of Technical Teachers Training and Research, Chennai	
12	Chennai Port Trust	

13	Scale Up Skill Development Centre	
14	IR CLASS	
15	DNV-GL Mumbai	
16	EBEK Language Laboratories Private Limited	
17	Maritime Montering Norinco India Private Ltd (MARINOR) kochi	

Table 2.2.4(c) Beneficiary Activities through MoU's

S.No	MoU partner	Activities through MoU	Topics	No of Students
1.	A.P. MOLLER-MAERSK	Cadets Requirement drive	Training & Placement	754
2.	National Institute of Technical Teachers Training and Research, Chennai	Workshop	Workshop on Outcome Based Education	194
3.	Chennai Port Trust	Internship	Internship	80
4.	GE-Tech Power Controls Pvt. Ltd.	Guest Lecture	Guest Lecture on Marine control & Marine Automation	195
5.	GE-Tech Power Controls Pvt. Ltd.	Internship	Internship	56
6.	Scale up skill development centre	Training for skill Enhancement sector	Skill Development	178

7.	IRCLASS	Special welding course for MAERSK cadets	Basic Welding Courses	182

Table 2.2.4 (d) Participation of Experts from Industry in Curriculum Development

S.No	Name of the expert from industry	Nature of Association
1	Capt. Aravind Shankar, Marine Training Manager - Asia MAERSK	Member of BOS
2	C/E Gormis Scorpio Maritime India (p) Ltd.	Member of BOS
3	C/E Govindasamy Ramalingam Disney Cruise Line	Member of BOS
4	C/E Govindarajalu Mohandass AP Moller Maersk	Member of BOS
5	C/E V S Seshadri Rajan Global Sourcing Solutions India supply management Haliburton	Member of BOS
6	C/E. Dhileepan IMA, Chennai	Member of BOS

Table 2.2.4 (e) Value Added Training Program in Collaboration with Industry

S.No	Semester	Value Added Training Program	Duration	No of Students
1	BE-ME(20), 3 semester	Fundamentals of CAD Modeling	30 hrs	216
2	BE-ME(19), 5 semester	CAD Modeling using AutoCAD	30 hrs	216
3	BE-ME (21), 2 semester	Skill Develoment on Effective Communication and Team works	30 hrs	221
4	BE-ME, Final year	Personal Survival Techniques(PST)	15 hrs	Final Year Students
5	BE-ME, Final year	Fire Prevention and Fire Fighting (FPFF)	15 hrs	Final Year Students
6	BE-ME, Final year	Personal Safety and Social responsibilities (PSSR)	15 hrs	Final Year Students

7	BE-ME, Final year	Security Training for seafarers with designated Security Duties (STSDSD)	15 hrs	Final Year Students

Table 2.2.4(f) Impact Analysis of Industry Institute Interaction

Initiative	Implementation	Impact Analysis
Industry-Institute Interaction	Arranging Guest Lectures, Workshop and Value added training to students inside the University with different industrial Experts. TVS Training and Services Limited, A.P. Moller-Maersk, GE-Tech Power Controls Pvt. Ltd., National Institute of Technical Teachers Training and Research, Chennai, Chennai Port Trust, Scale Up Skill Development Centre, DNV - GL	Industry-Institute Interaction is the most preferred activity for mutual benefit and growth of industries as well as institutions.
		It increases the research and development activities in both industries as well as institutions.
		Teaching-learning processes improves by integrating industrial training to the students which provides an exposure of the corporate world.
		To produce proficient graduate steady for the industry, it is necessary to know the requirements of the industries through industry-institute interaction.
		Hands on Training on Recent Technologies.

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

Institute Marks : 10.00

The students are encouraged to take up internship programs during their semester. Faculty give their guidelines, suggestions, and scope, as well as contact details for an internship. They also helped the students by interacting with the industrial experts, provide the students recommendation letters and other necessary supports. The alumni coordinator constantly interacts with alumni those who are working in the industries and request them to provide necessary guidelines and supports for their junior's internship.

Table 2.2.5 (a) Industrial Internship

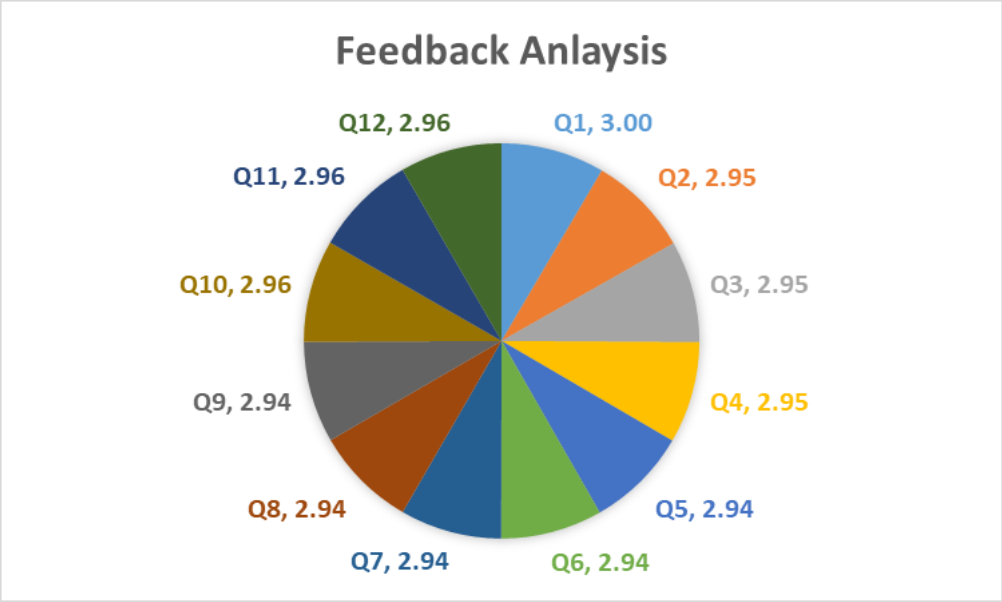
Academic Year 2021-22			
Academic Year	**Name of the Organisation**	**Duration**	**No of Students**
AY 2021-22	Cochin shipyard Ltd.	16-07-2021 to 31-07-2021	16
	Western coalfield Ltd.	17-07-2021to 31-07-2021	10
	Hindustan shipyard Ltd.	26-07-2021 to 04-08-2021 09-08-2021 to 18-08-2021 30-08-2021 to 08-09 -2021 10-09-2021 to 20-09-2021 20-09-2021 to 29-09-2021	63
	DUAND sugar Ltd.	30-08-2021to 04-09-2021	10
	Goa shipyard Ltd.	11-10-2021 to 25-10-2021	28
	Mangalore port trust	05-09-2021 to 15-09-2021	33
AY 2020-21	Hindustan shipyard Ltd.	12.02.2021 to 19-02-2021 08.03.2021 to 17.03.2021 15.03.2021 to 23.03.2021 22.03.2021 to 31.03.2021 01.04.2021 to 10.04.2021	65
	Meham Cooperative Sugar Mill Ltd	24.02.2021 to 10.03.2021	15
	Cochin shipyard Ltd.	22.03.2021 to 31.03.2021	56
AY 2019-20	Chennai Port Trust	23.12.2019 to 28.12.2019	54
	Cochin shipyard Ltd.	30.12.2019 to 03.01.2020	50
	Goa shipyard Ltd.	23.12.2019 to 06.01.2020	25
	Asian Alliance ship management	13.01.2020 to 20.01.2020	15

Table 2.2.5 (b) Questionnaires for industrial internship

Q1	**To what extent does the training help you to learn the recent advances in technology?**

Q2	How far the training does equip you with necessary technical skills to face the industry?
Q3	To what extent does the training encompass job oriented content that will help you in getting a job?
Q4	How far does the training provide the knowledge that you are expected to require?
Q5	To what extent does the training extend an opportunity to develop your personality, communication, leadership skills and critical thinking skills?
Q6	To what degree does the training facilitate you in improving your ability to formulate, analyse and solve problems?
Q7	How far did the training inculcate necessary values to have a concern for the society?
Q8	To what extent does the training expand your understanding on the ethical and environmental issues concerning engineering in society?
Q9	How far did laboratory enhance your understanding of the concepts?
Q10	To what extent does the laboratory enable you to apply the learnt theory practically?
Q11	Acceptance by fellow workers and coordination with them, opportunity to develop your human relations.
Q12	How far did the training provide, levels of responsibility consistent with your ability and growth?

Table 2.2.5 (c) Sample Students Feedback Analysis for Industrial Internship Feedback Analysis (2019-2020)



Impact Analysis of Industrial Internship

1. The technical abilities of the student have improved.
2. The student's placement has improved.
3. Students gain valuable hands-on experience.
4. Students participate in more technical events.
5. Students will explore the internship outcomes in terms of innovative projects.
6. The students had a good experience; it was helpful for the interview, and excellent training was given.
7. Exposure to advanced technologies

Industrial Visit

The Marine Department organizes industrial visits for students to relevant organizations and companies. To enable the students to experience the practical application of their knowledge of the marine industry in the real world. These visits also help the students learn about people management, which is essential in any organization.

Table 2.2.5 (d) Industrial Visit

2019-2020

S.No	Name of company	Batch/Year /Sem	No of students
1	Cochin Shipyard Ltd	18-22/II/IV	194
2	Chennai Port Trust	17-21/III/VI	205

2021-2022

S.No	Name of company	Year /Sem	No of students
1	Tata Motors	20-24/II/IV	191
2	Chennai Port Trust	19-23/III/VI	183

2022-2023

S.No	Name of company	Year /Sem	No of students
1	KSEB	21-25/II/IV	197
2	Hyundai Automobile	20-24/III/VI	184

Implementation and Impact Analysis of Industrial Visit:

- Exposure to the students workplace realities, challenges, and culture ensures that the students are industry- or corporate-ready upon completion of their program.
- Students understand the importance of ethical practises at work.
- It enables the students and faculty to analyze gaps in the knowledge and skill sets being imparted at the university, which are then supplemented by additional courses and trainings during the remaining duration of the Program.
- Select projects to find solutions to the problems faced by the industries.
- The students are able to identify emerging job opportunities and the corresponding skill sets required
- Students also develop a network of associations and relationships in the organizations, which translates into industry mentor-mentee relationships.
- Students learn to appreciate the inter-disciplinary nature of the work environment.
- Students gain an insight into managerial approaches and the importance of teamwork.
- Students who wish to pursue higher education are able to choose their future area of specialization in a more focused manner.

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

Define the Program specific outcomes

:

PSO3	Design, analyze and integrate electrical and mechanical systems in on-board ships and apply tools and techniques such as programmable logic controllers, SCADA and CAD in marine industries and create passion for lifelong learning.
PSO1	Apply the knowledge of Marine Engineering to solve the problems in on-board ships to meet the needs of the maritime industries.
PSO2	Analyze complex engineering problems to formulate and develop solutions for the onshore and offshore shipping industries.

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

Institute Marks : 25.00

No. of Core Courses : 6	**C2 :** 2	**C3 :** 2	**C4 :** 2

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

Course Name :	C2 01	Course Year :	2019-2020

Course Name	Statements
C2 01.1	Apply the fundamentals of Carnot and Reversed carnot principles to solve Refrigeration problems
C2 01.2	Discuss the salient features in the design construction of refrigeration plant equipment and components
C2 01.3	Discuss various psychrometric concepts to design various refrigeration and AC systems
C2 01.4	Analyze the marine AC and refrigeration systems.
C2 01.5	Explain the fundamentals of refrigerated cargos and containers
C2 01.6	Apply the fundamentals of Refrigeration to solve problems related to Marine refrigeration and air conditioning.

Course Name :	C2 16	Course Year :	2019-2020

Course Name	Statements
C2 16.1	Summarize various types of boilers for marine industries.
C2 16.2	Discuss various boiler mountings and combustion systems
C2 16.3	Elaborate the operation procedures for boiler and feed water systems
C2 16.4	Compare LP and HP Steam turbines for Marine applications
C2 16.5	Analyze the properties of steam turbine lubricants.
C2 16.6	Design a layout of modern steam turbine plant and its auxiliaries in marine use.

Course Name :	C3 01	Course Year :	2020-2021

Course Name	Statements
C3 01.1	Explain the construction and working of marine pumps
C3 01.2	Explain the construction, working and maintenance of Positive displacement pumps
C3 01.3	Analyze the working and performance of centrifugal pumps
C3 01.4	Explain various types of valves , inspection procedures its maintenance
C3 01.5	Categorize the prime movers for cargo pumps
C3 01.6	Apply the contextual knowledge to assess the performance of a marine pump

Course Name :	C3 16	Course Year :	2020-2021

Course Name	Statements
C3 16.1	Summarize various Marine Engine Fuel systems.
C3 16.2	Explain safe practices in marine engine operation
C3 16.3	Analyze marine engine, lubrication system performance
C3 16.4	Explain the inspection and maintenance procedure for marine diesel engine crank case and governor.
C3 16.5	Analyze the construction and design features of a Gas turbine plant in marine applications
C3 16.6	Summarize the developments in the design of marine engine exhaust valve.

Course Name :	C4 02	Course Year :	2021-2022

Course Name	Statements
C4 02.1	Explain various types of controllers, control modes and block diagrams
C4 02.2	Explain process control and simulation.
C4 02.3	Demonstrate computer based automation
C4 02.4	Classify actuators and transducers
C4 02.5	Categorize various automated controls in a vessel onshore
C4 02.6	Apply the knowledge of control and automation for various processes and operations in a vessel

Course Name :	C4 15	Course Year :	2021-2022

Course Name	Statements
C4 15.1	Explain the various elements of control system
C4 15.2	Summarize the flow charts and symbols used to study various processes involved in automation of marine propulsion systems
C4 15.3	Explain the automatic Marine control system
C4 15.4	Summarize the marine monitoring system and Emergency alarm circuits
C4 15.5	Describe the functioning of various protective equipments and devices
C4 15.6	Apply the knowledge of Instrumentation and control for safer marine operation

Course Articulation Matrix :

1 . course name : C201

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201.1	Apply the fu	3	3	3	2	-	-	-	-	-	-	-	-
C201.2	Discuss the	3	3	3	3	-	2	2	3	2	3	2	3
C201.3	Discuss var	3	3	3	3	2	2	3	3	-	3	2	3
C201.4	Analyze the	3	3	3	3	3	3	3	3	2	3	3	3
C201.5	Explain the	3	2	-	-	-	-	-	-	-	-	-	2
C201.6	Apply the fu	3	2	3	2	-	3	3	3	1	3	2	2
Average		**3.00**	**2.67**	**3.00**	**2.60**	**2.50**	**2.50**	**2.75**	**3.00**	**1.67**	**3.00**	**2.25**	**2.60**

2 . course name : C216

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C216.1	Summarize	2	2	2	2	-	3	2	3	-	-	3	3
C216.2	Discuss var	3	3	3	3	-	3	2	3	-	-	-	3
C216.3	Elaborate tl	3	3	3	3	-	3	2	3	-	-	3	3
C216.4	Compare L	3	3	3	3	-	3	2	3	-	-	-	3
C216.5	Analyze the	3	3	3	3	-	3	2	3	-	-	-	3
C216.6	Design a la	3	3	3	3	-	3	2	3	-	-	-	3
Average		**2.83**	**2.83**	**2.83**	**2.83**	**0.00**	**3.00**	**2.00**	**3.00**	**0.00**	**0.00**	**3.00**	**3.00**

3 . course name : C301

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C301.1	Explain the	3	3	2	-	-	-	2	3	-	-	-	2
C301.2	Explain the	2	2	-	-	-	-	2	3	-	-	-	2
C301.3	Analyze the	3	3	2	-	-	-	2	3	-	-	-	3
C301.4	Explain var	2	2	-	-	-	-	2	3	-	-	-	2
C301.5	Categorize	3	3	2	-	-	-	2	3	-	-	-	3
C301.6	Apply the c	3	2	2	2	-	1	2	3	1	1	-	3
Average		**2.67**	**2.50**	**2.00**	**2.00**	**0.00**	**1.00**	**2.00**	**3.00**	**1.00**	**1.00**	**0.00**	**2.50**

4 . course name : C316

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C316.1	Summarize	2	1	-	-	-	-	-	-	-	-	-	-
C316.2	Explain safe	2	1	-	-	-	2	-	2	-	-	-	3
C316.3	Analyze ma	3	3	2	2	-	-	-	3	1	2	2	-
C316.4	Explain the	2	2	-	-	-	2	-	-	-	-	-	3
C316.5	Analyze the	3	3	2	2	-	-	2	3	1	2	2	-
C316.6	Summarize	2	2	1	1	-	-	2	-	-	-	-	-
Average		**2.33**	**2.00**	**1.67**	**1.67**	**0.00**	**2.00**	**2.00**	**2.67**	**1.00**	**2.00**	**2.00**	**3.00**

5 . course name : C402

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C402.1	Explain var	2	2	2	1	-	-	-	-	-	-	-	-
C402.2	Explain pro	2	2	2	2	3	-	2	2	2	2	-	2
C402.3	Demonstrat	3	3	2	2	3	-	-	3	-	2	-	-
C402.4	Classify act	3	2	2	2	-	-	-	-	-	-	-	2
C402.5	Categorize	3	2	2	1	2	1	2	2	1	-	-	2
C402.6	Apply the k	3	2	2	2	3	2	2	3	1	1	-	2
Average		**2.67**	**2.17**	**2.00**	**1.67**	**2.75**	**1.50**	**2.00**	**2.50**	**1.33**	**1.67**	**0.00**	**2.00**

6 . course name : C415

Course	Statements	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C415.1	Explain the	2	2	-	-	2	3	2	3	-	-	-	3
C415.2	Summarize	2	2	1	-	-	2	-	2	-	2	-	2
C415.3	Explain the	2	1	1	-	-	2	3	3	-	-	-	2
C415.4	Summarize	2	2	-	1	-	3	-	3	-	-	-	2
C415.5	Describe th	2	-	-	-	-	3	2	3	-	-	-	3
C415.6	Apply the k	3	3	3	3	2	3	3	3	2	-	2	3
Average		**2.17**	**2.00**	**1.67**	**2.00**	**2.00**	**2.67**	**2.50**	**2.83**	**2.00**	**2.00**	**2.00**	**2.50**

1 . Course Name : C201

Course	PSO1	PSO2	PSO3
C201.1	3	3	-
C201.2	3	3	-
C201.3	3	3	-
C201.4	3	3	-
C201.5	3	-	-
C201.6	3	3	-
Average	**3.00**	**3.00**	**0.00**

2 . Course Name : C216

Course	PSO1	PSO2	PSO3
C216.1	3	3	3
C216.2	3	3	3
C216.3	3	3	3
C216.4	3	3	3
C216.5	3	3	3
C216.6	3	3	3
Average	**3.00**	**3.00**	**3.00**

3 . Course Name : C301

Course	PSO1	PSO2	PSO3
C301.1	3	1	-
C301.2	3	1	-
C301.3	3	2	-
C301.4	3	1	-
C301.5	3	3	-
C301.6	3	3	-
Average	**3.00**	**1.83**	**0.00**

4 . Course Name : C316

Course	PSO1	PSO2	PSO3
C316.1	2	-	-
C316.2	2	-	-
C316.3	3	2	-
C316.4	2	-	-
C316.5	3	2	-
C316.6	2	3	-
Average	**2.33**	**2.33**	**0.00**

5 . Course Name : C402

Course	PSO1	PSO2	PSO3
C402.1	3	-	-
C402.2	3	2	3
C402.3	3	2	3
C402.4	2	-	-
C402.5	3	1	2
C402.6	3	1	3
Average	**2.83**	**1.50**	**2.75**

6 . Course Name : C415

Course	PSO1	PSO2	PSO3
C415.1	3	2	-
C415.2	2	1	-
C415.3	3	-	-
C415.4	3	-	-
C415.5	3	2	-
C415.6	3	2	2
Average	**2.83**	**1.75**	**2.00**

Program Articulation Matrix :

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	PO1	PO2	PO3	PO4	PO5	2.5	2.5	PO8	PO9	2.67	PO11	2.8
C102	3	2.17	2	1.50	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1
C103	2.33	2.17	2.17	1.67	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2.2
C104	2.83	2.67	2	PO4	PO5	PO6	PO7	2.5	PO9	PO10	PO11	3
C105	3	2.17	1.5	1.5	PO5	2.67	2	3	PO9	PO10	PO11	2.25
C106	2.67	1.83	1.25	1.25	PO5	2.33	2	3	PO9	PO10	PO11	2
C107	3	3	3	PO4	PO5	PO6	PO7	PO8	PO9	3	PO11	3
C108	2.83	2.33	1.4	1.25	PO5	PO6	PO7	2	3	3	PO11	1.8
C109	2.33	2	1.5	1.5	PO5	PO6	PO7	PO8	2.5	3	PO11	2
C110	3	3	2	2	PO5	PO6	PO7	PO8	3	3	PO11	2
C111	PO1	PO2	PO3	PO4	PO5	2.5	2	2	2	3	PO11	3
C114	3	2	1	1	PO5	PO6	PO7	2	PO9	PO10	PO11	2
C115	2.33	2	3	PO4	PO5	PO6	2.83	3	PO9	PO10	PO11	1
C116	2.17	1.83	1	1	PO5	2	3	2.33	2	2.20	2.3	PO12
C117	2.33	2	1.33	1.20	3	3	3	PO8	PO9	PO10	PO11	2.8
C118	3	2.5	2	2	PO5	3	2	3	PO9	PO10	PO11	2
C119	2.83	2.67	1.8	1.8	PO5	2	2.17	2	PO9	PO10	PO11	2.2
C120	3	3	2	2	PO5	PO6	PO7	3	PO9	3	PO11	PO12
C121	3	2	1	PO4	PO5	2	2	3	3	3	PO11	2.8
C122	2.67	2.83	2.17	PO4	PO5	PO6	PO7	2	3	3	PO11	PO12
C123	PO1	PO2	PO3	PO4	PO5	2.5	2	2	3	3	PO11	3
C124	2.67	2.17	2.2	2.2	PO5	2	2	2	3	3	PO11	2
C201	3	2.67	3	2.60	2.5	2.5	2.75	3	1.67	3	2.25	2.6
C202	2.83	2.5	2.5	2.5	3	3	3	2.83	PO9	PO10	2	2.5
C203	2.83	2.83	1.83	1.83	PO5	2	3	3	PO9	PO10	PO11	2.8
C204	2.5	2.5	1.67	1.67	PO5	3	2	3	2.67	PO10	PO11	PO12
C205	2.67	2.5	2	1.83	PO5	2.5	2.8	3	2	PO10	PO11	2
C206	2.83	2.83	2.67	2.33	PO5	2.4	2.2	2.83	PO9	PO10	PO11	2.6
C207	2.5	2.5	1.5	1.5	PO5	2	2	2	1.5	PO10	PO11	2.8
C208	3	2.67	2	1.67	PO5	PO6	PO7	2	2.67	2	PO11	2
C209	3	2.5	1.5	1.5	PO5	2	2	3	2	3	PO11	3

C210	3	3	3	3	PO5	3	3	3	3	3	PO11	2.6
C211	3	2.67	2.33	2.17	2	2	2	3	2	3	3	3
C212	PO1	PO2	PO3	PO4	2	2.5	PO7	3	2.67	2.67	PO11	2.8
C215	3	3	2.5	2.5	PO5	2.75	2.67	3	2	PO10	2	3
C216	2.83	2.83	2.83	2.83	PO5	3	1.33	3	PO9	PO10	3	3
C217	2.83	2.83	2.33	2.33	PO5	2.83	3	2.83	PO9	2	PO11	3
C218	3	2.83	1.83	1.83	PO5	1.67	2.2	3	2.5	3	PO11	3
C219	3	2.67	1.83	2	PO5	2	2	3	2	2.80	PO11	2.8
C220	3	2.83	1.83	1.83	PO5	PO6	2	2.83	2	2.75	PO11	3
C221	3	3	2	PO4	PO5	3	PO7	3	2	3	PO11	PO12
C222	3	3	2.33	2.33	PO5	2.2	2	3	2	3	PO11	2.7
C223	3	2.5	2	2	PO5	3	2	3	2	3	PO11	3
C224	3	2.67	2.8	3	PO5	3	2	3	2	2	2.33	3
C301	2.67	2.5	2	2	PO5	1	2	3	1	1	PO11	2.5
C302	2.67	2.6	2.33	2	PO5	2.4	2.5	3	2	2	2	2
C303	2.33	2.4	1.5	1.50	PO5	2	3	3	PO9	PO10	PO11	3
C304	2.5	2.17	1.8	1.40	PO5	3	3	3	PO9	PO10	PO11	3
C305	2.33	1.33	2	PO4	PO5	PO6	PO7	2.5	3	3	PO11	2
C306	2.2	1.8	1.33	1	PO5	2.83	2	3	PO9	PO10	PO11	3
C307	2.67	2.17	1.75	1.50	PO5	PO6	PO7	2	PO9	2	PO11	3
C308	2.33	2.17	2	1	PO5	3	3	3	2	PO10	2	3
C309	3	3	2.6	PO4	PO5	2	PO7	3	2	3	PO11	PO12
C310	3	3	2	1.5	PO5	2	PO7	3	2	3	PO11	2
C311	3	2.67	2.8	3	PO5	3	2	3	2	2	2.33	3
C312	3	3	3	2	PO5	1	2	3	1	3	PO11	PO12
C314	3	3	1.8	1.83	PO5	3	3	3	2.4	PO10	PO11	2.3
C315	2.33	2.17	1.4	1.25	PO5	2.6	2.6	2.5	1	2	PO11	2.8
C316	2.33	2	1.67	1.67	PO5	2	2	2.67	1	2	2	3
C317	3	2.5	1.8	2.33	PO5	3	2.33	2.25	2	PO10	2	3
C318	2.83	2.67	1.75	2	PO5	3	2	2.8	3	3	2.5	2
C319	2.33	2.33	1.17	1.25	PO5	2.2	2.5	2.67	2	2	2	2.7
C320	3	2.5	2.5	2.5	PO5	1.67	2	2	2	2	2	2.5

C321	3	3	2.5	PO4	PO5	PO6	PO7	3	2	2	PO11	PO12
C322	3	3	PO3	PO4	PO5	PO6	2.2	2	2	2	1.5	2
C323	3	3	2.2	1.20	PO5	PO6	PO7	2	2	2	PO11	3
C401	PO1	PO2	PO3	PO4	PO5	3	3	3	2	PO10	PO11	2.8
C402	2.67	2.17	2	1.67	2.75	1.5	2	2.5	1.33	1.67	PO11	2
C403	2	PO2	PO3	PO4	PO5	2.5	2	3	PO9	PO10	2	1.8
C404	2.67	2.67	1.83	1.67	PO5	2	2.33	2.33	PO9	2	2	2.7
C405	2.67	2.67	1.8	1.75	PO5	3	2.25	2.67	2.33	2.50	3	2.5
C406	2.83	2.83	2	1.83	PO5	1.17	2.67	2.4	2.5	3	3	3
C407	3	2.83	2.5	2.5	PO5	2	2.67	2.33	3	2.50	3	3
C408	2.83	2.67	2	2	2	2	2	2	PO9	2	PO11	2.2
C409	3	3	2.17	2.17	3	2.33	PO7	2.75	3	2.83	3	2.8
C411	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	3.00	PO11	3.0
C412	3	PO2	PO3	PO4	PO5	PO6	2	2	PO9	3.00	PO11	PO12
C413	2.5	2.4	2.33	2	2	2.8	2.5	2.5	2	PO10	1	2.5
C414	2.83	2.67	2.2	2.33	PO5	2.2	2.25	2.25	2	PO10	PO11	2
C415	2.17	2	1.67	2	2	2.67	2.5	2.83	2	2	2	2.5
C416	2.83	2.67	2.4	2	1	2.83	2	3	2	3	2	2.8
C417	2	2	PO3	PO4	PO5	2	2	2	PO9	PO10	PO11	2
C418	2.5	2.5	2.25	2	PO5	3	2.5	3	2.33	2.33	3	3
C419	3	2.6	1.67	1.33	PO5	3	3	2.67	2.5	2.75	3	2.7
C420	3	2.83	2.17	2.33	PO5	3	2.67	2.33	3	2.50	3	3
C421	2.83	2	1	1	3	PO6	2	3	2	2	PO11	PO12

Course	PSO1	PSO2	PSO3
C101	PSO1	PSO2	PSO3
C102	PSO1	PSO2	PSO3
C103	2.25	2.67	PSO3
C104	PSO1	PSO2	PSO3
C105	2	1.80	PSO3
C106	PSO1	PSO2	PSO3
C107	PSO1	PSO2	PSO3
C108	PSO1	PSO2	PSO3

C109	PSO1	PSO2	PSO3
C110	PSO1	PSO2	PSO3
C111	PSO1	PSO2	PSO3
C114	2	1	PSO3
C115	PSO1	PSO2	PSO3
C116	PSO1	PSO2	PSO3
C117	2.5	2.5	PSO3
C118	2	2	PSO3
C119	PSO1	PSO2	PSO3
C120	PSO1	PSO2	PSO3
C121	PSO1	PSO2	PSO3
C122	PSO1	PSO2	PSO3
C123	PSO1	PSO2	PSO3
C124	PSO1	PSO2	PSO3
C201	3	3	PSO3
C202	2.83	3	2
C203	3	2.33	PSO3
C204	3	2.33	3
C205	2.83	2.25	PSO3
C206	3	3	PSO3
C207	2.67	3	PSO3
C208	2.67	2.17	3
C209	2.83	1.75	3
C210	3	3	PSO3
C211	3	3	PSO3
C212	1.17	1.17	PSO3
C215	3	3	PSO3
C216	3	3	3
C217	3	3	PSO3
C218	2.83	2	PSO3
C219	2.5	PSO2	PSO3
C220	3	PSO2	PSO3

C221	3	PSO2	PSO3
C222	3	3	PSO3
C223	3	2	PSO3
C224	3	3	PSO3
C301	3	1.83	PSO3
C302	3	2.33	PSO3
C303	3	3	PSO3
C304	2.5	2	PSO3
C305	2.67	2	PSO3
C306	2.17	2	PSO3
C307	2.67	2	PSO3
C308	3	2.17	PSO3
C309	2.67	2	PSO3
C310	3	3	PSO3
C311	3	3	PSO3
C312	3	2	PSO3
C314	2.25	1.60	PSO3
C315	3	1.40	PSO3
C316	2.33	2.33	PSO3
C317	3	2.20	PSO3
C318	3	2.20	PSO3
C319	3	2.33	PSO3
C320	3	2	PSO3
C321	2.83	2	PSO3
C322	3	1.67	PSO3
C323	3	PSO2	PSO3
C401	3	PSO2	PSO3
C402	2.83	1.5	2.75
C403	2.33	PSO2	PSO3
C404	3	2.50	PSO3
C405	2.67	2.67	PSO3
C406	3	3	PSO3

C407	3	3	PSO3
C408	3	2	2
C409	3	3	3
C411	2	PSO2	PSO3
C412	PSO1	3	2
C413	2.67	2	1.5
C414	3	2	2
C415	2.83	1.75	2
C416	2.83	3	2
C417	2	PSO2	PSO3
C418	2.5	2.67	2.5
C419	2.83	2.75	3
C420	3	3	3
C421	2.67	2	3

3.2 Attainment of Course Outcomes (75) Total Marks 75.00

Institute Marks : 10.00

3.2.1. Describe the assessment tools and processes used to gather the data upon which the evaluation of Course Outcome is based (10)

a.Assessment process

In the Outcome Based Education, evaluation of Course Outcome is done through internal and external assessment processes such as CAT1, CAT2, Model Examination, End Semester Examination, Assignments and Seminar or any Activity Learning Methods (ALM). Direct assessment includes evaluation of the student's knowledge and skills based on their performance in the internal and external assessments and indirect assessment is done through Course End Survey.

b.Assessment Tools: -

The direct assessment tools are used for evaluation is shown in Table B 3.3 and indirect assessment tools of evaluation is shown in Table B 3.4.

Table B 3.3: Direct Assessment Tools

Assessment Process	Frequency	Process
DIRECT ASSESSMENT TOOLS		
THEORY		
Continuous Assessment Test (CAT)	Two per semester	The internal assessments are carried out in a centralized manner in the Department level and are so designed to facilitate the assessment of the attainments of the outcome.
Model Exam	One per semester	The Model examinations is of three-hour duration and covers the entire syllabus of the course and satisfies all course outcomes for the particular course
End Semester Examination	As per the End semester exam schedule	The end semester examination is of three-hour duration and covers the entire syllabus of the course and satisfies all course outcomes for the particular course.
Assignments	Two / Three Assignments per course	Assignments are given to assess the critical and analytical skills of the students, and is taken as a tool to assess the attainment of COs
Seminar/ALM	One per Course	Seminar topics are given to the students to improve their communication skills, gaining thorough knowledge in the subject, networking with others, renewing motivation and confidence which is also taken as a method to assess the attainment of Cos
LABORATORY COURSES		
Performance Evaluation	Continuous monitoring	Continuous Evaluation of Laboratory courses as per the lab schedul
PROJECT WORK		
REVIEWS	1.Zeroth 2.First 3.Second 4. Project Evaluation	Student groups are mentored by a faculty and periodic reviews are conducted to monitor and evaluate the progress of the project in meeting the objectives, effectiveness, efficiency, impact and sustainability
Viva –Voce	As per the Practical Examination Schedule	Depending on the relevance, rubrics, level of achievement of project objectives, projects are evaluated and the students are graded
INTERNSHIPS		

Presentation	One per semester	Rubric based assessment.
PERSONALITY DEVELOPMENT PROGRAM		
Continuous evaluation process	Throughout the semester	Rubric based assessment based on the objectives of the program.
SOFT SKILLS		
Continuous evaluation process	Throughout the semester	Assessment process includes Interactions with questions structured properly and analyzing student's communication and writing abilities
INDUSTRIAL VISITS		
Review	A minimum of one Industrial visit per semester.	To achieve the learning outcome more qualitatively, industrial visits are organized and the students are assessed based on rubrics
PHYSICAL EDUCATION		
Performance Evaluation	Continuous monitoring	Continuous Evaluation of physical fitness and activities as per the schedule
Fitness assessment	One course per degree program	Student assessment is done in alignment with university standards and rubrics
VALUE ADDED COURSES		
Training module	One Course per Semester	To make the students industry fit, Value Added Courses are conducted. The students are certified after the completion of the course and are assessed based on rubrics.

Table B 3.4: Indirect Assessment Tools

S. No	Assessment Tool	Frequency	Method Description
1	Course End Survey	End of semester	To enhance the Teaching Learning Process, Students are provided with an opportunity to reflect and provide feedback based on their understanding level and is taken an indirect assessment tool for the attainment of COs.

The sample course end survey for the subject UDEE505 – Marine Electrical Technology – II (CODE : C302) (5 SEM – 2018 Regulation) is given below in Fig 3.1.

QUESTIONNAIRE PATTERN FOR COURSE END SURVEY

AMET
ACADEMY OF MARITIME EDUCATION AND TRAINING
DEEMED TO BE UNIVERSITY
(Under Section 3 of UGC Act 1956)

DEPARTMENT OF MARINE ENGINEERING

STUDENT COURSE END SURVEY

Academic Year:
Course Name:
Course Code:
Instructor Name:
Name:
Register No:
Mail ID:

VISION AND MISSION OF THE INSTITUTION

VISION
To sustain identity as a world class leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society

MISSION
AMET will strive continuously to
1. Impart value based higher education and technical knowledge with uncompromising strides of an outstanding quality.
2. Emerge as a Centre of Excellence including skill development in recent technologies in accordance with industrials trends.
3. Create a world class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education.
4. Nurture talent and entrepreneurship to enable all round personality development among student.
5. Empower students across socio economic strata.
6. Make a positive difference to society through technical education.
VISION AND MISSION OF THE DEPARTMENT
VISION
To establish a center of excellence in Marine Engineering, to foster quality education, to collaborate with the global Marine community and to promote innovation in Maritime studies using appropriate scientific and technological tools and methodologies.
MISSION
1.To develop the infra-structure and foster research facilities so as to achieve excellence in marine engineering and connected fields.

2.To provide opportunities for the exchange of ideas and practices and upholding the status, standards and knowledge of essential to meet the local and global demands in Marine Engineering.
3.To collaborate with other Institutions and Industries to take appropriate measures for promoting innovations in teaching-learning process, inter-disciplinary studies and research.
4.To instill professional skills and ensure ethical behavior throughout their career by imparting value-based and skill-based education.

- Kindly rate the following criteria on a scale of 1 – 3
- Your genuine response will be helpful for the continuous quality improvement of our UG programme in Marine AMET deemed to be University.
- 1 – Poor 2 – Good 3 – Excellent

1. Have you learnt about the protection features of typical marine electrical system?

   1. Disagree 2. Agree 3. Strongly agree

2. Have you gained the knowledge about the types of faults in main generator and emergency generator?

   1. Disagree 2. Agree 3. Strongly agree

3. Have you understood the fault-finding techniques in single phase and three phase motor?

   1. Disagree 2. Agree 3. Strongly agree

4. Did you get an idea about different testing methods in ships?

   1. Disagree 2. Agree 3. Strongly agree

5. Did you gain an idea about different alarm systems used in ships?

   1. Disagree 2. Agree 3. Strongly agree

6. Have you gained an idea about marine cables?

   1. Disagree 2. Agree 3. Strongly agree

COMMENTS ON STRENGTHS AND WAYS OF IMPROVEMENT

Comments (Teaching Approaches)

v. *Are you satisfied with the levels of a question paper?*

v. *Is the faculty of the court solving your queries to your fullest satisfaction?*

v. *Any further, constructive comments*

FACULTY IN CHARGE PAC DEAN/MARINE

Fig: 3.1 Questionnaire Pattern for Course End Survey

CO Assessment process for Theory, Laboratory courses and Project work are shown in Table B3.5, B3.6 and B3.7

Table B 3.5: CO Assessment Process for Theory Courses

		CO1	CO2	CO3	CO4	CO5	CO6
Assessment	**IA (CAT-I, CAT-II, Model Exam and Assignments/ALM)**	40%	40%	40%	40%	40%	40%
	ESE	60%	60%	60%	60%	60%	60%
	Total Direct assessment (DA)	100%	100%	100%	100%	100%	100%
DA (90%) = DA x 0.9		90%	90%	90%	90%	90%	90%
INDA = CES x 0.1		10%	10%	10%	10%	10%	10%
CO attainment % = DA + INDA		100%	100%	100%	100%	100%	100%
IA: Internal Assessment			ESE: End Semester Examination				
CAT I: Continuous Assessment Test – I			CAT II: Continuous Assessment Test – II				
DA: Direct Assessment			INDA: Indirect Assessment				
CES: Course End Survey							
ALM: Activity Learning Method							

Table B 3.6 CO Assessments for Laboratory Courses

		CO1	CO2	CO3	CO4	CO5	CO6
Assessment	**IA (Observation+ performance evaluation + Record)**	40%	40%	40%	40%	40%	40%
	ESE	60%	60%	60%	60%	60%	60%
	Total Direct Assessment (DA)	100%	100%	100%	100%	100%	100%
DA (90%) = TDA x 0.9		90%	90%	90%	90%	90%	90%
INDA = CES x 0.1		10%	10%	10%	10%	10%	10%
CO attainment % = DA + INDA		100%	100%	100%	100%	100%	100%

IA	: Internal Assessment		ESE	: End Semester Examination	
CES	: Course End Survey	DA	: Direct Assessment		
INDA	: Indirect Assessment	CES	: Course End Survey		

Table B 3.7: CO Assessment for Project Work

		CO1	CO2	CO3	CO4	CO5	CO6
Assessment	IA (Zeroth Review, First Review and Second Review)	50%	50%	50%	50%	50%	50%
	Viva voce/ ESE	50%	50%	50%	50%	50%	50%
	Total assessment	100%	100%	100%	100%	100%	100%
DA (90%) = TDA x 0.9		90%	80%	90%	80%	80%	80%
INDA = CES x 0.1		10%	10%	10%	10%	10%	10%
CO attainment % = DA + INDA		100%	100%	100%	100%	100%	100%

IA	: Internal Assessment	ESE : End Semester Examination	CES	: Course End Survey	
DA	: Direct Assessment	INDA : Indirect Assessment			

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

Institute Marks : 65.00

Table B 3.8 Methodology for Setting Attainment Level for Courses

Assessment Tools	Attainment Level	2018 - 2022
For theory, laboratory & Employment Opportunity courses	1	50 % to 60 % students scoring more than the set subject threshold for each course outcome
	2	>60 % to 70 % students scoring more than the set subject threshold for each course outcome
	3	>70% students scoring more than the set subject threshold for each course outcome

COURSE OUTCOMES

Based on the tools and process described in section 3.2.1, the assessment of Course Outcomes are carried out for all the courses. Table B 3.9 gives the attainment of COs for core courses for 2018 - 2022 Batch students.

Table B 3.9 Course Outcome for Core Courses of 2018-2022 Batch

Course Code	Course name	COs	Direct Attainment	Direct Attainment (90%)	Indirect Attainment	Indirect Attainment (10%)	90%DA+10 %IA	Attainment Level
First year course								
C101	Technical English I	CO1	86.28%	77.65%	69.15%	6.91%	84.56%	3
		CO2	90.32%	81.29%	67.55%	6.76%	88.04%	3
		CO3	80.11%	72.10%	69.68%	6.97%	79.06%	3
		CO4	94.79%	85.31%	70.21%	7.02%	92.33%	3
		CO5	86.38%	77.74%	67.02%	6.70%	84.45%	3
		CO6	83.94%	75.54%	70.21%	7.02%	82.56%	3
C102	Engineering Mathematics I	CO1	89.89%	80.90%	72.87%	7.29%	88.19%	3
		CO2	89.04%	80.14%	67.55%	6.76%	86.89%	3
		CO3	89.79%	80.81%	67.55%	6.76%	87.56%	3
		CO4	90.32%	81.29%	67.02%	6.70%	87.99%	3
		CO5	91.70%	82.53%	64.36%	6.44%	88.97%	3
		CO6	91.28%	82.15%	65.96%	6.60%	88.74%	3
C103	Engineering Physics	CO1	66.91%	60.22%	67.55%	6.76%	66.98%	2
		CO2	74.26%	66.83%	70.21%	7.02%	73.85%	3
		CO3	68.83%	61.95%	64.89%	6.49%	68.44%	2
		CO4	76.06%	68.46%	60.11%	6.01%	74.47%	3
		CO5	65.85%	59.27%	65.96%	6.60%	65.86%	2
		CO6	87.23%	78.51%	71.28%	7.13%	85.64%	3

C104	Basic Electrical Engineering	CO1	80.11%	72.10%	64.89%	6.49%	78.59%	3
		CO2	82.23%	74.01%	64.89%	6.49%	80.50%	3
		CO3	79.68%	71.71%	64.89%	6.49%	78.20%	3
		CO4	83.94%	75.54%	65.43%	6.54%	82.09%	3
		CO5	80.64%	72.57%	70.21%	7.02%	79.60%	3
		CO6	85.74%	77.17%	62.77%	6.28%	83.45%	3
C105	Engineering Mechanics I	CO1	80.43%	72.38%	66.49%	6.65%	79.03%	3
		CO2	87.87%	79.09%	64.89%	6.49%	85.57%	3
		CO3	84.15%	75.73%	70.21%	7.02%	82.76%	3
		CO4	86.06%	77.46%	64.89%	6.49%	83.95%	3
		CO5	86.28%	77.65%	65.43%	6.54%	84.19%	3
		CO6	84.15%	75.73%	65.43%	6.54%	82.28%	3
C106	Computer applications	CO1	67.77%	60.99%	64.89%	6.49%	67.48%	2
		CO2	65.43%	58.88%	64.89%	6.49%	65.37%	2
		CO3	61.28%	55.15%	64.89%	6.49%	61.64%	2
		CO4	69.57%	62.62%	65.43%	6.54%	69.16%	2
		CO5	63.83%	57.45%	70.21%	7.02%	64.47%	2
		CO6	72.98%	65.68%	62.77%	6.28%	71.96%	3
C107	Engineering Graphics Laboratory	CO1	97.66%	87.89%	100.00%	10.00%	97.89%	3
		CO2	97.45%	87.70%	100.00%	10.00%	97.70%	3
		CO3	71.91%	64.72%	100.00%	10.00%	74.72%	3
		CO4	69.89%	62.90%	98.67%	9.87%	72.77%	3
		CO5	66.17%	59.55%	100.00%	10.00%	69.55%	2
		CO6	67.02%	60.32%	100.00%	10.00%	70.32%	3
C108	Basic Electrical Engineering Laboratory	CO1	66.38%	59.74%	95.74%	9.57%	69.32%	2
		CO2	66.60%	59.94%	95.21%	9.52%	69.46%	2
		CO3	66.38%	59.74%	97.07%	9.71%	69.45%	2
		CO4	62.13%	55.91%	96.81%	9.68%	65.60%	2
		CO5	66.81%	60.13%	98.40%	9.84%	69.97%	2
		CO6	62.98%	56.68%	98.67%	9.87%	66.55%	2

C109	Engineering Physics Laboratory I	CO1	97.11%	87.40%	100.00%	10.00%	97.40%	3
		CO2	97.11%	87.40%	100.00%	10.00%	97.40%	3
		CO3	70.05%	63.05%	100.00%	10.00%	73.05%	3
		CO4	75.08%	67.57%	98.67%	9.87%	77.44%	3
		CO5	63.42%	57.08%	100.00%	10.00%	67.08%	2
		CO6	77.75%	69.98%	100.00%	10.00%	79.98%	3
C110	Engineering Practices Laboratory I	CO1	100.00%	90.00%	83.51%	8.35%	98.35%	3
		CO2	100.00%	90.00%	87.73%	8.77%	98.77%	3
		CO3	94.79%	85.31%	89.89%	8.99%	94.30%	3
		CO4	91.91%	82.72%	93.35%	9.34%	92.06%	3
		CO5	88.72%	79.85%	92.55%	9.26%	89.11%	3
		CO6	97.55%	87.80%	94.41%	9.44%	97.24%	3
C111	English Language Laboratory - I	CO1	99.47%	89.52%	97.06%	9.71%	99.22%	3
		CO2	99.47%	89.52%	97.86%	9.79%	99.30%	3
		CO3	99.47%	89.52%	100.00%	10.00%	99.52%	3
		CO4	99.47%	89.52%	100.00%	10.00%	99.52%	3
		CO5	99.47%	89.52%	100.00%	10.00%	99.52%	3
		CO6	99.47%	89.52%	100.00%	10.00%	99.52%	3
C114	Engineering Mathematics II	CO1	64.97%	58.48%	71.27%	7.13%	65.60%	2
		CO2	64.53%	58.08%	72.38%	7.24%	65.31%	2
		CO3	60.11%	54.10%	72.38%	7.24%	61.34%	2
		CO4	64.64%	58.18%	61.88%	6.19%	64.36%	2
		CO5	65.64%	59.07%	66.85%	6.69%	65.76%	2
		CO6	68.95%	62.06%	67.96%	6.80%	68.85%	2
C115	Engineering Chemistry	CO1	74.03%	66.63%	64.09%	6.41%	73.04%	3
		CO2	75.14%	67.62%	71.82%	7.18%	74.81%	3
		CO3	78.45%	70.61%	68.51%	6.85%	77.46%	3
		CO4	73.59%	66.23%	70.17%	7.02%	73.25%	3
		CO5	74.03%	66.63%	59.12%	5.91%	72.54%	3
		CO6	92.15%	82.94%	69.06%	6.91%	89.85%	3

C116	Basic Electronic Engineering	CO1	66.74%	60.07%	64.09%	6.41%	66.48%	2
		CO2	63.09%	56.78%	72.38%	7.24%	64.02%	2
		CO3	60.33%	54.30%	65.19%	6.52%	60.82%	2
		CO4	60.11%	54.10%	64.64%	6.46%	60.56%	2
		CO5	66.41%	59.77%	68.51%	6.85%	66.62%	2
		CO6	82.10%	73.89%	66.85%	6.69%	80.57%	3
C117	Electrical Machines	CO1	68.07%	61.26%	68.51%	6.85%	68.11%	2
		CO2	66.30%	59.67%	67.40%	6.74%	66.41%	2
		CO3	67.40%	60.66%	69.61%	6.96%	67.62%	2
		CO4	68.62%	61.76%	65.75%	6.57%	68.33%	2
		CO5	65.30%	58.77%	67.40%	6.74%	65.51%	2
		CO6	86.19%	77.57%	62.98%	6.30%	83.87%	3
C118	Thermodynamics	CO1	60.44%	54.40%	63.54%	6.35%	60.75%	2
		CO2	72.27%	65.04%	64.09%	6.41%	71.45%	3
		CO3	56.35%	50.72%	62.98%	6.30%	57.02%	1
		CO4	66.85%	60.17%	66.85%	6.69%	66.85%	2
		CO5	58.12%	52.31%	76.24%	7.62%	59.93%	1
		CO6	76.80%	69.12%	62.98%	6.30%	75.41%	3
C119	Material Science and Metallurgy	CO1	66.08%	59.47%	64.09%	6.41%	65.88%	2
		CO2	66.41%	59.77%	69.06%	6.91%	66.67%	2
		CO3	56.69%	51.02%	68.51%	6.85%	57.87%	1
		CO4	63.09%	56.78%	62.43%	6.24%	63.03%	2
		CO5	65.41%	58.87%	65.19%	6.52%	65.39%	2
		CO6	76.13%	68.52%	64.64%	6.46%	74.98%	3
C120	Machine Drawing	CO1	98.90%	89.01%	100.00%	10.00%	99.01%	3
		CO2	98.01%	88.21%	100.00%	10.00%	98.21%	3
		CO3	94.48%	85.03%	100.00%	10.00%	95.03%	3
		CO4	64.86%	58.38%	98.94%	9.89%	68.27%	2
		CO5	62.65%	56.39%	100.00%	10.00%	66.39%	2
		CO6	62.98%	56.69%	100.00%	10.00%	66.69%	2

C121	Electrical Machines Laboratory	CO1	81.99%	73.79%	100.00%	10.00%	83.79%	3
		CO2	81.99%	73.79%	100.00%	10.00%	83.79%	3
		CO3	81.99%	73.79%	100.00%	10.00%	83.79%	3
		CO4	81.99%	73.79%	100.00%	10.00%	83.79%	3
		CO5	81.99%	73.79%	100.00%	10.00%	83.79%	3
		CO6	81.99%	73.79%	100.00%	10.00%	83.79%	3
C122	Basic Electronics Laboratory	CO1	85.64%	77.07%	100.00%	10.00%	87.07%	3
		CO2	85.64%	77.07%	100.00%	10.00%	87.07%	3
		CO3	85.64%	77.07%	100.00%	10.00%	87.07%	3
		CO4	85.64%	77.07%	100.00%	10.00%	87.07%	3
		CO5	85.64%	77.07%	100.00%	10.00%	87.07%	3
		CO6	85.64%	77.07%	100.00%	10.00%	87.07%	3
C123	Communicative and Soft skills Laboratory	CO1	91.60%	82.44%	96.96%	9.70%	92.14%	3
		CO2	91.60%	82.44%	97.79%	9.78%	92.22%	3
		CO3	91.60%	82.44%	100.00%	10.00%	92.44%	3
		CO4	91.60%	82.44%	100.00%	10.00%	92.44%	3
		CO5	93.37%	84.03%	100.00%	10.00%	94.03%	3
		CO6	87.51%	78.76%	100.00%	10.00%	88.76%	3
C124	Engineering Practices Laboratory - II	CO1	98.07%	88.27%	100.00%	10.00%	98.27%	3
		CO2	98.07%	88.27%	100.00%	10.00%	98.27%	3
		CO3	82.35%	74.12%	100.00%	10.00%	84.12%	3
		CO4	88.45%	79.60%	100.00%	10.00%	89.60%	3
		CO5	87.91%	79.12%	100.00%	10.00%	89.12%	3
		CO6	92.62%	83.36%	100.00%	10.00%	93.36%	3
second year course								
C201	Marine Refrigeration & Air Conditioning	CO1	63.68%	57.31%	62.26%	6.23%	63.54%	2
		CO2	62.83%	56.55%	65.09%	6.51%	63.06%	2
		CO3	68.11%	61.30%	65.09%	6.51%	67.81%	2
		CO4	75.19%	67.67%	68.87%	6.89%	74.56%	3
		CO5	67.26%	60.54%	66.98%	6.70%	67.24%	2
		CO6	69.43%	62.49%	64.15%	6.42%	68.91%	2

C202	Basic Marine Engineering	CO1	90.00%	81.00%	64.62%	6.46%	87.46%	3
		CO2	81.04%	72.93%	67.92%	6.79%	79.73%	3
		CO3	77.83%	70.05%	66.98%	6.70%	76.75%	3
		CO4	75.75%	68.18%	64.15%	6.42%	74.59%	3
		CO5	75.00%	67.50%	66.04%	6.60%	74.10%	3
		CO6	55.94%	50.35%	66.51%	6.65%	57.00%	1
C203	OEC-1	CO1	71.23%	64.10%	69.81%	6.98%	71.08%	3
		CO2	62.08%	55.87%	68.40%	6.84%	62.71%	2
		CO3	64.53%	58.08%	62.26%	6.23%	64.30%	2
		CO4	67.17%	60.45%	70.75%	7.08%	67.53%	2
		CO5	63.21%	56.89%	71.23%	7.12%	64.01%	2
		CO6	65.66%	59.09%	72.17%	7.22%	66.31%	2
C204	Integrated Circuit	CO1	71.23%	64.10%	62.26%	6.23%	70.33%	3
		CO2	66.04%	59.43%	67.92%	6.79%	66.23%	2
		CO3	71.51%	64.36%	71.23%	7.12%	71.48%	3
		CO4	71.04%	63.93%	65.57%	6.56%	70.49%	3
		CO5	69.43%	62.49%	64.62%	6.46%	68.95%	2
		CO6	71.79%	64.61%	69.81%	6.98%	71.59%	3
C205	Marine Electrical Technology I	CO1	73.40%	66.06%	64.15%	6.42%	72.47%	3
		CO2	81.23%	73.10%	68.40%	6.84%	79.94%	3
		CO3	83.87%	75.48%	64.15%	6.42%	81.90%	3
		CO4	84.06%	75.65%	70.75%	7.08%	82.73%	3
		CO5	82.64%	74.38%	66.98%	6.70%	81.08%	3
		CO6	83.77%	75.40%	62.74%	6.27%	81.67%	3
C206	Thermal Engineering	CO1	69.25%	62.32%	70.13%	7.01%	69.33%	2
		CO2	68.58%	61.73%	63.64%	6.36%	68.09%	2
		CO3	63.40%	57.06%	66.23%	6.62%	63.68%	2
		CO4	64.53%	58.08%	67.10%	6.71%	64.79%	2
		CO5	65.47%	58.92%	67.53%	6.75%	65.68%	2
		CO6	56.98%	51.28%	63.20%	6.32%	57.60%	1

C207	PEC-1	CO1	77.26%	69.54%	70.28%	7.03%	76.57%	3
		CO2	80.38%	72.34%	64.62%	6.46%	78.80%	3
		CO3	74.81%	67.33%	63.68%	6.37%	73.70%	3
		CO4	65.28%	58.75%	72.17%	7.22%	65.97%	2
		CO5	77.45%	69.71%	59.43%	5.94%	75.65%	3
		CO6	65.47%	58.92%	60.85%	6.08%	65.01%	2
C208	Integrated Circuit Laboratory	CO1	87.62%	78.86%	100.00%	10.00%	88.86%	3
		CO2	87.10%	78.39%	100.00%	10.00%	88.39%	3
		CO3	87.62%	78.86%	100.00%	10.00%	88.86%	3
		CO4	87.10%	78.39%	100.00%	10.00%	88.39%	3
		CO5	87.62%	78.86%	100.00%	10.00%	88.86%	3
		CO6	87.10%	78.39%	100.00%	10.00%	88.39%	3
C209	Marine Electrical Technology Laboratory	CO1	80.85%	72.76%	96.19%	9.62%	82.38%	3
		CO2	77.29%	69.56%	96.82%	9.68%	79.24%	3
		CO3	80.85%	72.76%	95.55%	9.56%	82.32%	3
		CO4	77.29%	69.56%	97.46%	9.75%	79.31%	3
		CO5	80.85%	72.76%	93.43%	9.34%	82.11%	3
		CO6	77.29%	69.56%	95.97%	9.60%	79.16%	3
C210	Marine Refrigeration & Air Conditioning Laboratory	CO1	71.95%	64.75%	90.91%	9.09%	73.84%	3
		CO2	71.95%	64.75%	95.89%	9.59%	74.34%	3
		CO3	71.95%	64.75%	90.48%	9.05%	73.80%	3
		CO4	71.95%	64.75%	96.10%	9.61%	74.36%	3
		CO5	71.95%	64.75%	90.26%	9.03%	73.78%	3
		CO6	71.95%	64.75%	90.91%	9.09%	73.84%	3
C211	Engineering Practices Laboratory III	CO1	91.38%	82.24%	63.14%	6.31%	88.55%	3
		CO2	91.38%	82.24%	66.95%	6.69%	88.94%	3
		CO3	91.38%	82.24%	68.01%	6.80%	89.04%	3
		CO4	91.38%	82.24%	67.37%	6.74%	88.98%	3
		CO5	91.38%	82.24%	70.97%	7.10%	89.34%	3
		CO6	91.38%	82.24%	67.80%	6.78%	89.02%	3

C212	Interpersonal Communication	CO1	84.75%	76.27%	68.86%	6.89%	83.16%	3
		CO2	84.75%	76.27%	66.95%	6.69%	82.97%	3
		CO3	84.49%	76.04%	69.28%	6.93%	82.97%	3
		CO4	84.49%	76.04%	65.89%	6.59%	82.63%	3
		CO5	85.25%	76.73%	66.10%	6.61%	83.34%	3
		CO6	82.46%	74.21%	67.37%	6.74%	80.95%	3
C215	Ship Construction	CO1	94.56%	85.11%	68.66%	6.87%	91.97%	3
		CO2	93.00%	83.70%	63.59%	6.36%	90.06%	3
		CO3	96.59%	86.93%	66.82%	6.68%	93.61%	3
		CO4	95.76%	86.18%	69.12%	6.91%	93.10%	3
		CO5	93.55%	84.19%	67.28%	6.73%	90.92%	3
		CO6	94.47%	85.02%	62.21%	6.22%	91.24%	3
C216	Marine Boilers and Steam Engineering	CO1	90.05%	81.04%	66.51%	6.65%	87.69%	3
		CO2	94.33%	84.89%	73.02%	7.30%	92.20%	3
		CO3	89.12%	80.20%	64.65%	6.47%	86.67%	3
		CO4	83.53%	75.18%	72.56%	7.26%	82.44%	3
		CO5	93.49%	84.14%	71.63%	7.16%	91.30%	3
		CO6	90.23%	81.21%	58.60%	5.86%	87.07%	3
C217	OEC-2	CO1	98.05%	88.24%	71.16%	7.12%	95.36%	3
		CO2	97.30%	87.57%	67.44%	6.74%	94.32%	3
		CO3	97.12%	87.40%	61.40%	6.14%	93.54%	3
		CO4	96.93%	87.24%	67.44%	6.74%	93.98%	3
		CO5	97.30%	87.57%	66.05%	6.60%	94.18%	3
		CO6	87.53%	78.78%	61.40%	6.14%	84.92%	3
C218	Fluid Mechanics	CO1	88.37%	79.53%	69.77%	6.98%	86.51%	3
		CO2	80.28%	72.25%	74.42%	7.44%	79.69%	3
		CO3	89.02%	80.12%	64.19%	6.42%	86.54%	3
		CO4	91.53%	82.38%	65.58%	6.56%	88.94%	3
		CO5	95.63%	86.07%	68.37%	6.84%	92.90%	3
		CO6	49.12%	44.20%	72.56%	7.26%	51.46%	1

C219	Marine Electrical Measurements	CO1	73.67%	66.31%	68.84%	6.88%	73.19%	3
		CO2	70.14%	63.13%	66.51%	6.65%	69.78%	2
		CO3	79.91%	71.92%	68.84%	6.88%	78.80%	3
		CO4	71.26%	64.13%	67.44%	6.74%	70.87%	3
		CO5	89.02%	80.12%	63.72%	6.37%	86.49%	3
		CO6	87.16%	78.45%	64.65%	6.47%	84.91%	3
C220	Microprocessor and Microcontroller	CO1	93.49%	84.14%	67.44%	6.74%	90.88%	3
		CO2	92.56%	83.30%	68.84%	6.88%	90.19%	3
		CO3	93.21%	83.89%	69.77%	6.98%	90.87%	3
		CO4	90.42%	81.38%	70.23%	7.02%	88.40%	3
		CO5	86.05%	77.44%	64.19%	6.42%	83.86%	3
		CO6	88.74%	79.87%	66.51%	6.65%	86.52%	3
C221	Microprocessor and Microcontroller Laboratory	CO1	91.10%	81.99%	66.95%	6.69%	88.69%	3
		CO2	91.10%	81.99%	64.83%	6.48%	88.47%	3
		CO3	91.10%	81.99%	61.86%	6.19%	88.18%	3
		CO4	91.10%	81.99%	65.47%	6.55%	88.54%	3
		CO5	91.10%	81.99%	66.74%	6.67%	88.67%	3
		CO6	91.10%	81.99%	67.37%	6.74%	88.73%	3
C222	Thermal &Fluid Mechanics Laboratory	CO1	74.66%	67.19%	66.95%	6.69%	73.89%	3
		CO2	62.80%	56.52%	64.83%	6.48%	63.00%	2
		CO3	74.83%	67.35%	61.86%	6.19%	73.53%	3
		CO4	62.80%	56.52%	65.47%	6.55%	63.06%	2
		CO5	74.83%	67.35%	66.74%	6.67%	74.02%	3
		CO6	74.83%	67.35%	67.37%	6.74%	74.08%	3
C223	Engineering Practices Laboratory IV	CO1	91.10%	81.99%	66.95%	6.69%	88.69%	3
		CO2	91.10%	81.99%	64.83%	6.48%	88.47%	3
		CO3	91.10%	81.99%	61.86%	6.19%	88.18%	3
		CO4	91.10%	81.99%	65.47%	6.55%	88.54%	3
		CO5	91.10%	81.99%	66.74%	6.67%	88.67%	3
		CO6	91.10%	81.99%	67.37%	6.74%	88.73%	3

C224	Fire Fighting Laboratory	CO1	61.78%	55.60%	65.68%	6.57%	62.17%	2
		CO2	61.78%	55.60%	68.01%	6.80%	62.40%	2
		CO3	76.53%	68.87%	67.58%	6.76%	75.63%	3
		CO4	61.78%	55.60%	66.10%	6.61%	62.21%	2
		CO5	76.53%	68.87%	67.58%	6.76%	75.63%	3
		CO6	61.78%	55.60%	67.80%	6.78%	62.38%	2
Third year course								
C301	Marine Auxiliary Machinery I	CO1	62.53%	56.28%	68.12%	6.81%	63.09%	2
		CO2	73.28%	65.95%	66.81%	6.68%	72.63%	3
		CO3	72.58%	65.32%	61.14%	6.11%	71.43%	3
		CO4	68.30%	61.47%	63.76%	6.38%	67.84%	2
		CO5	73.71%	66.34%	66.81%	6.68%	73.02%	3
		CO6	93.80%	84.42%	64.63%	6.46%	90.88%	3
C302	Marine Electrical Technology II	CO1	77.90%	70.11%	60.70%	6.07%	76.18%	3
		CO2	79.74%	71.76%	63.76%	6.38%	78.14%	3
		CO3	75.55%	67.99%	70.31%	7.03%	75.02%	3
		CO4	85.68%	77.11%	63.32%	6.33%	83.44%	3
		CO5	82.53%	74.28%	68.56%	6.86%	81.14%	3
		CO6	94.32%	84.89%	64.63%	6.46%	91.35%	3
C303	Marine Internal Combustion Engines I	CO1	92.93%	83.63%	66.38%	6.64%	90.27%	3
		CO2	85.94%	77.34%	68.12%	6.81%	84.16%	3
		CO3	89.61%	80.65%	67.69%	6.77%	87.41%	3
		CO4	84.45%	76.01%	67.69%	6.77%	82.78%	3
		CO5	76.77%	69.09%	69.87%	6.99%	76.08%	3
		CO6	66.03%	59.42%	64.63%	6.46%	65.89%	2
C304	Naval Architecture I	CO1	78.43%	70.59%	69.87%	6.99%	77.57%	3
		CO2	80.70%	72.63%	67.25%	6.72%	79.35%	3
		CO3	67.86%	61.07%	61.57%	6.16%	67.23%	2
		CO4	66.03%	59.42%	66.38%	6.64%	66.06%	2
		CO5	80.17%	72.16%	73.36%	7.34%	79.49%	3
		CO6	80.87%	72.79%	69.00%	6.90%	79.69%	3

C305	Strength of Materials	CO1	72.93%	65.63%	68.12%	6.81%	72.45%	3
		CO2	75.98%	68.38%	67.25%	6.72%	75.11%	3
		CO3	68.73%	61.86%	64.19%	6.42%	68.28%	2
		CO4	86.55%	77.90%	62.88%	6.29%	84.18%	3
		CO5	72.31%	65.08%	64.63%	6.46%	71.55%	3
		CO6	88.38%	79.55%	65.07%	6.51%	86.05%	3
C306	PEC-2	CO1	78.25%	70.43%	68.56%	6.86%	77.28%	3
		CO2	78.08%	70.27%	60.70%	6.07%	76.34%	3
		CO3	76.51%	68.86%	68.56%	6.86%	75.71%	3
		CO4	71.35%	64.22%	64.63%	6.46%	70.68%	3
		CO5	79.39%	71.45%	63.32%	6.33%	77.78%	3
		CO6	84.10%	75.69%	65.50%	6.55%	82.24%	3
C307	Pumps and Pumping system	CO1	85.68%	77.11%	62.88%	6.29%	83.40%	3
		CO2	83.06%	74.75%	69.43%	6.94%	81.69%	3
		CO3	87.60%	78.84%	71.62%	7.16%	86.00%	3
		CO4	85.50%	76.95%	68.12%	6.81%	83.76%	3
		CO5	84.72%	76.24%	64.63%	6.46%	82.71%	3
		CO6	97.12%	87.41%	66.81%	6.68%	94.09%	3
C308	Safety Emergency Measures and Practices-II	CO1	77.47%	69.72%	62.01%	6.20%	75.92%	3
		CO2	69.96%	62.96%	64.63%	6.46%	69.42%	2
		CO3	73.45%	66.10%	69.00%	6.90%	73.00%	3
		CO4	75.20%	67.68%	65.07%	6.51%	74.18%	3
		CO5	86.11%	77.50%	65.94%	6.59%	84.10%	3
		CO6	97.21%	87.48%	63.76%	6.38%	93.86%	3
C309	Strength of Material Laboratory	CO1	75.37%	67.83%	96.07%	9.61%	77.44%	3
		CO2	75.37%	67.83%	96.72%	9.67%	77.51%	3
		CO3	82.36%	74.12%	95.41%	9.54%	83.66%	3
		CO4	75.37%	67.83%	97.38%	9.74%	77.57%	3
		CO5	82.36%	74.12%	93.23%	9.32%	83.45%	3
		CO6	75.37%	67.83%	95.85%	9.59%	77.42%	3

C310	Marine Electrical Technology Laboratory	CO1	97.84%	88.05%	66.88%	6.69%	94.74%	3
		CO2	85.02%	76.52%	65.80%	6.58%	83.10%	3
		CO3	97.84%	88.05%	67.75%	6.77%	94.83%	3
		CO4	85.02%	76.52%	69.05%	6.90%	83.42%	3
		CO5	97.84%	88.05%	63.42%	6.34%	94.39%	3
		CO6	97.84%	88.05%	68.40%	6.84%	94.89%	3
C311	Basic Fire Fighting Laboratory	CO1	67.19%	60.47%	66.23%	6.62%	67.09%	2
		CO2	67.19%	60.47%	62.12%	6.21%	66.68%	2
		CO3	83.29%	74.96%	67.10%	6.71%	81.67%	3
		CO4	67.19%	60.47%	68.18%	6.82%	67.29%	2
		CO5	83.29%	74.96%	61.47%	6.15%	81.11%	3
		CO6	67.19%	60.47%	66.45%	6.65%	67.11%	2
C312	Marine Engineering Equipment Drawing I	CO1	88.40%	79.56%	66.88%	6.69%	86.25%	3
		CO2	88.40%	79.56%	67.97%	6.80%	86.35%	3
		CO3	88.57%	79.71%	66.23%	6.62%	86.34%	3
		CO4	88.40%	79.56%	71.86%	7.19%	86.74%	3
		CO5	88.57%	79.71%	65.80%	6.58%	86.29%	3
		CO6	88.40%	79.56%	65.58%	6.56%	86.12%	3
C314	Marine Auxiliary Machinery II	CO1	86.55%	77.90%	67.25%	6.72%	84.62%	3
		CO2	79.13%	71.21%	63.76%	6.38%	77.59%	3
		CO3	64.63%	58.17%	68.12%	6.81%	64.98%	2
		CO4	63.93%	57.54%	67.69%	6.77%	64.31%	2
		CO5	89.08%	80.17%	64.63%	6.46%	86.64%	3
		CO6	91.62%	82.45%	67.69%	6.77%	89.22%	3
C315	PEC-3	CO1	82.36%	74.12%	69.00%	6.90%	81.02%	3
		CO2	86.55%	77.90%	64.19%	6.42%	84.31%	3
		CO3	80.70%	72.63%	72.05%	7.21%	79.83%	3
		CO4	85.50%	76.95%	66.38%	6.64%	83.59%	3
		CO5	88.30%	79.47%	70.74%	7.07%	86.54%	3
		CO6	94.76%	85.28%	67.69%	6.77%	92.05%	3

C316	Marine Internal Combustion Engines II	CO1	69.00%	62.10%	65.50%	6.55%	68.65%	2
		CO2	84.72%	76.24%	65.07%	6.51%	82.75%	3
		CO3	72.93%	65.63%	69.43%	6.94%	72.58%	3
		CO4	69.26%	62.33%	68.12%	6.81%	69.14%	2
		CO5	72.40%	65.16%	66.81%	6.68%	71.84%	3
		CO6	95.28%	85.76%	73.36%	7.34%	93.09%	3
C317	Marine Engineering Practice	CO1	87.77%	79.00%	63.76%	6.38%	85.37%	3
		CO2	73.97%	66.58%	66.38%	6.64%	73.21%	3
		CO3	95.63%	86.07%	64.63%	6.46%	92.53%	3
		CO4	97.03%	87.33%	63.32%	6.33%	93.66%	3
		CO5	95.11%	85.60%	63.32%	6.33%	91.93%	3
		CO6	97.73%	87.96%	63.32%	6.33%	94.29%	3
C318	*Power Electronics, High Voltage and Electric Propulsion*	*CO1*	83.49%	75.14%	63.32%	6.33%	81.48%	3
		CO2	81.83%	73.65%	68.56%	6.86%	80.51%	3
		CO3	84.98%	76.48%	69.43%	6.94%	83.42%	3
		CO4	87.51%	78.76%	65.50%	6.55%	85.31%	3
		CO5	84.28%	75.85%	67.25%	6.72%	82.58%	3
		CO6	91.27%	82.14%	65.50%	6.55%	88.69%	3
C319	Safety Emergency Measures and Practice-III	CO1	78.86%	70.98%	62.01%	6.20%	77.18%	3
		CO2	85.24%	76.72%	69.87%	6.99%	83.70%	3
		CO3	77.82%	70.03%	64.63%	6.46%	76.50%	3
		CO4	74.50%	67.05%	61.57%	6.16%	73.21%	3
		CO5	89.26%	80.33%	66.38%	6.64%	86.97%	3
		CO6	95.90%	86.31%	62.45%	6.24%	92.55%	3
C320	Naval Architecture II	CO1	95.81%	86.23%	61.57%	6.16%	92.38%	3
		CO2	95.37%	85.83%	63.76%	6.38%	92.21%	3
		CO3	96.77%	87.09%	69.00%	6.90%	93.99%	3
		CO4	97.21%	87.48%	68.56%	6.86%	94.34%	3
		CO5	96.77%	87.09%	67.69%	6.77%	93.86%	3
		CO6	97.90%	88.11%	59.83%	5.98%	94.10%	3

C321	Advanced Electrical Engineering Laboratory	CO1	97.59%	87.83%	64.87%	6.49%	94.31%	3
		CO2	97.59%	87.83%	65.52%	6.55%	94.38%	3
		CO3	97.59%	87.83%	64.87%	6.49%	94.31%	3
		CO4	97.59%	87.83%	65.73%	6.57%	94.40%	3
		CO5	97.59%	87.83%	65.95%	6.59%	94.42%	3
		CO6	97.59%	87.83%	69.83%	6.98%	94.81%	3
C322	Internal Combustion Engine Laboratory	CO1	98.97%	89.07%	68.32%	6.83%	95.90%	3
		CO2	90.86%	81.78%	65.52%	6.55%	88.33%	3
		CO3	98.97%	89.07%	68.75%	6.88%	95.94%	3
		CO4	90.86%	81.78%	67.67%	6.77%	88.54%	3
		CO5	98.97%	89.07%	65.95%	6.59%	95.66%	3
		CO6	98.97%	89.07%	65.95%	6.59%	95.66%	3
C323	Power Electronics Laboratory	CO1	77.36%	69.63%	96.12%	9.61%	79.24%	3
		CO2	77.36%	69.63%	96.77%	9.68%	79.30%	3
		CO3	79.63%	71.67%	95.47%	9.55%	81.22%	3
		CO4	77.36%	69.63%	97.41%	9.74%	79.37%	3
		CO5	79.63%	71.67%	93.32%	9.33%	81.00%	3
		CO6	77.36%	69.63%	95.91%	9.59%	79.22%	3
fourth year course								
C401	PEC4	CO1	81.48%	73.34%	99.56%	9.96%	83.29%	3
		CO2	74.85%	67.36%	99.56%	9.96%	77.32%	3
		CO3	78.69%	70.82%	99.56%	9.96%	80.78%	3
		CO4	71.97%	64.77%	99.56%	9.96%	74.72%	3
		CO5	86.64%	77.97%	99.56%	9.96%	87.93%	3
		CO6	66.29%	59.66%	99.56%	9.96%	69.62%	2
C402	Marine Control Engineering and Automation	CO1	96.07%	86.46%	99.56%	9.96%	96.42%	3
		CO2	94.15%	84.73%	99.56%	9.96%	94.69%	3
		CO3	96.07%	86.46%	99.56%	9.96%	96.42%	3
		CO4	95.72%	86.15%	99.56%	9.96%	96.10%	3
		CO5	95.81%	86.23%	99.56%	9.96%	96.18%	3
		CO6	78.34%	70.51%	99.56%	9.96%	80.46%	3

C403	OEC-4	CO1	69.87%	62.88%	68.12%	6.81%	69.69%	2
		CO2	69.52%	62.57%	62.88%	6.29%	68.86%	2
		CO3	79.48%	71.53%	65.50%	6.55%	78.08%	3
		CO4	82.18%	73.97%	63.32%	6.33%	80.30%	3
		CO5	79.04%	71.14%	66.81%	6.68%	77.82%	3
		CO6	66.29%	59.66%	65.07%	6.51%	66.17%	2
C404	Ship Construction,Stability and Marine Environment Protection	CO1	74.56%	67.11%	67.11%	6.71%	73.82%	3
		CO2	79.30%	71.37%	64.91%	6.49%	77.86%	3
		CO3	81.67%	73.50%	68.86%	6.89%	80.39%	3
		CO4	82.72%	74.45%	65.79%	6.58%	81.03%	3
		CO5	80.18%	72.16%	67.98%	6.80%	78.96%	3
		CO6	75.35%	67.82%	63.16%	6.32%	74.13%	3
C405	Electro Technology	CO1	76.51%	68.86%	68.12%	6.81%	75.67%	3
		CO2	74.06%	66.66%	65.50%	6.55%	73.21%	3
		CO3	77.47%	69.72%	65.07%	6.51%	76.23%	3
		CO4	83.93%	75.54%	62.88%	6.29%	81.83%	3
		CO5	81.92%	73.73%	66.81%	6.68%	80.41%	3
		CO6	82.18%	73.97%	64.63%	6.46%	80.43%	3
C406	Internship I	CO1	98.69%	88.82%	97.84%	9.78%	98.61%	3
		CO2	98.69%	88.82%	98.68%	9.87%	98.69%	3
		CO3	98.69%	88.82%	99.14%	9.91%	98.73%	3
		CO4	98.69%	88.82%	98.28%	9.83%	98.65%	3
		CO5	98.69%	88.82%	99.14%	9.91%	98.73%	3
		CO6	98.69%	88.82%	99.14%	9.91%	98.73%	3
C407	Viva Voce-I	CO1	93.45%	84.10%	66.16%	6.62%	90.72%	3
		CO2	93.45%	84.10%	65.95%	6.59%	90.70%	3
		CO3	93.45%	84.10%	64.22%	6.42%	90.53%	3
		CO4	93.45%	84.10%	63.15%	6.31%	90.42%	3
		CO5	93.45%	84.10%	67.24%	6.72%	90.83%	3
		CO6	93.45%	84.10%	65.09%	6.51%	90.61%	3

C408	Automation Laboratory	CO1	98.45%	88.60%	96.12%	9.61%	98.22%	3
		CO2	98.45%	88.60%	96.77%	9.68%	98.28%	3
		CO3	98.45%	88.60%	95.47%	9.55%	98.15%	3
		CO4	98.45%	88.60%	97.41%	9.74%	98.34%	3
		CO5	98.45%	88.60%	93.32%	9.33%	97.94%	3
		CO6	98.45%	88.60%	95.91%	9.59%	98.19%	3
C409	Project work	CO1	97.41%	87.67%	64.22%	6.42%	94.09%	3
		CO2	82.76%	74.48%	68.10%	6.81%	81.29%	3
		CO3	88.36%	79.53%	82.54%	8.25%	87.78%	3
		CO4	90.09%	81.08%	67.24%	6.72%	87.80%	3
		CO5	96.98%	87.28%	70.91%	7.09%	94.38%	3
		CO6	96.98%	87.28%	65.73%	6.57%	93.86%	3
C411	Communication Training	CO1	100.00%	90.00%	96.07%	9.61%	99.61%	3
		CO2	91.09%	81.98%	100.00%	10.00%	91.98%	3
		CO3	100.00%	90.00%	100.00%	10.00%	100.00%	3
		CO4	91.09%	81.98%	100.00%	10.00%	91.98%	3
		CO5	100.00%	90.00%	100.00%	10.00%	100.00%	3
		CO6	100.00%	90.00%	100.00%	10.00%	100.00%	3
C412	PEC-6	CO1	80.35%	72.31%	100.00%	10.00%	82.31%	3
		CO2	83.41%	75.07%	100.00%	10.00%	85.07%	3
		CO3	81.40%	73.26%	100.00%	10.00%	83.26%	3
		CO4	83.58%	75.22%	100.00%	10.00%	85.22%	3
		CO5	77.55%	69.80%	100.00%	10.00%	79.80%	3
		CO6	82.79%	74.52%	100.00%	10.00%	84.52%	3
C413	Safety Emergency Measures and Practices-IV	CO1	63.84%	57.46%	64.63%	6.46%	63.92%	2
		CO2	81.22%	73.10%	68.12%	6.81%	79.91%	3
		CO3	75.55%	67.99%	72.05%	7.21%	75.20%	3
		CO4	85.33%	76.79%	68.12%	6.81%	83.61%	3
		CO5	64.19%	57.77%	67.69%	6.77%	64.54%	2
		CO6	82.97%	74.67%	63.32%	6.33%	81.00%	3

C414	PEC-5	CO1	84.37%	75.93%	69.00%	6.90%	82.83%	3
		CO2	85.07%	76.56%	69.87%	6.99%	83.55%	3
		CO3	86.55%	77.90%	72.93%	7.29%	85.19%	3
		CO4	86.11%	77.50%	62.88%	6.29%	83.79%	3
		CO5	82.36%	74.12%	69.43%	6.94%	81.07%	3
		CO6	86.29%	77.66%	63.32%	6.33%	83.99%	3
C415	Instrumentation and Control	CO1	74.85%	67.36%	96.44%	9.64%	77.01%	3
		CO2	73.01%	65.71%	96.44%	9.64%	75.36%	3
		CO3	64.37%	57.93%	96.44%	9.64%	67.57%	2
		CO4	77.21%	69.48%	96.44%	9.64%	79.13%	3
		CO5	68.47%	61.62%	96.44%	9.64%	71.27%	3
		CO6	69.61%	62.65%	96.44%	9.64%	72.29%	3
C416	Pneumatics, Hydraulics and Electrical Control System	CO1	72.23%	65.00%	64.63%	6.46%	71.47%	3
		CO2	69.17%	62.25%	68.12%	6.81%	69.07%	2
		CO3	74.93%	67.44%	72.05%	7.21%	74.65%	3
		CO4	79.74%	71.76%	68.12%	6.81%	78.58%	3
		CO5	68.65%	61.78%	67.69%	6.77%	68.55%	2
		CO6	75.63%	68.07%	63.32%	6.33%	74.40%	3
C417	Engineering Knowledge (General and Motor)	CO1	66.29%	59.66%	100.00%	10.00%	69.66%	2
		CO2	79.04%	71.14%	100.00%	10.00%	81.14%	3
		CO3	76.42%	68.78%	100.00%	10.00%	78.78%	3
		CO4	66.90%	60.21%	100.00%	10.00%	70.21%	3
		CO5	77.73%	69.96%	100.00%	10.00%	79.96%	3
		CO6	73.19%	65.87%	100.00%	10.00%	75.87%	3
C418	Shipboard Safety	CO1	80.00%	72.00%	100.00%	10.00%	82.00%	3
		CO2	84.72%	76.24%	100.00%	10.00%	86.24%	3
		CO3	51.88%	46.69%	100.00%	10.00%	56.69%	1
		CO4	79.13%	71.21%	100.00%	10.00%	81.21%	3
		CO5	76.77%	69.09%	100.00%	10.00%	79.09%	3
		CO6	85.41%	76.87%	100.00%	10.00%	86.87%	3

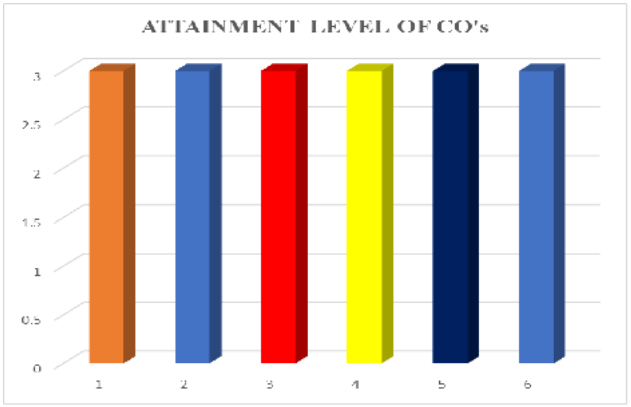
C419	Internship II	CO1	100.00%	90.00%	97.82%	9.78%	99.78%	3
		CO2	100.00%	90.00%	98.69%	9.87%	99.87%	3
		CO3	100.00%	90.00%	99.13%	9.91%	99.91%	3
		CO4	100.00%	90.00%	98.25%	9.83%	99.83%	3
		CO5	100.00%	90.00%	99.13%	9.91%	99.91%	3
		CO6	100.00%	90.00%	99.13%	9.91%	99.91%	3
C420	Viva Voce- II	CO1	98.71%	88.84%	66.16%	6.62%	95.45%	3
		CO2	98.71%	88.84%	65.95%	6.59%	95.43%	3
		CO3	98.71%	88.84%	64.22%	6.42%	95.26%	3
		CO4	98.71%	88.84%	63.15%	6.31%	95.15%	3
		CO5	98.71%	88.84%	67.24%	6.72%	95.56%	3
		CO6	98.71%	88.84%	65.09%	6.51%	95.34%	3
C421	Embedded System and Communication Lab	CO1	98.70%	88.83%	64.94%	6.49%	95.32%	3
		CO2	98.70%	88.83%	71.21%	7.12%	95.95%	3
		CO3	98.70%	88.83%	68.83%	6.88%	95.71%	3
		CO4	98.70%	88.83%	66.67%	6.67%	95.50%	3
		CO5	98.70%	88.83%	65.58%	6.56%	95.39%	3
		CO6	98.70%	88.83%	64.29%	6.43%	95.26%	3

The Assessment process for CO and PO attainment for a sample Course UDNA301 / Ship Construction (Code 215) (IV Sem / 2018 Regulation) is shown in table 3.10 and is graphically represented in Fig.3.2 and 3.3

Table B 3.10 CO Assessment Process for the Course UDNA301 / Ship Construction (Sample)

S.No	Process for CO attainment	CO attainment					
		CO1	CO2	CO3	CO4	CO5	CO6
1	% Of Direct Attainment Through Internal Exams (CAT I & II, Model Exam, Assignment III & ALM	96.77%	94.93%	96.31%	93.55%	93.55%	95.85%
2	40% From Direct Attainment Through Internal Exams	38.71%	37.97%	38.53%	37.42%	37.42%	38.34%
3	% Of Direct Attainment Through End Semester Exam	93.09%	91.71%	96.77%	97.24%	93.55%	93.55%
4	60% From Direct Attainment Through End Semester Exam	55.85%	55.02%	58.06%	58.34%	56.13%	56.13%
5	40% + 60% Of Direct Attainment	94.56%	93.00%	96.59%	95.76%	93.55%	94.47%
6	90% From Direct Attainment	85.11%	83.70%	86.93%	86.18%	84.19%	85.02%
7	% Of Indirect Attainment Through Course End Survey	68.66%	63.59%	66.82%	69.12%	67.28%	62.21%

8	10% From Indirect Attainment Through Course End Survey	6.87%	6.36%	6.68%	6.91%	6.73%	6.22%
9	90% From Direct + 10% From Indirect for Co Attainment	91.97%	90.06%	93.61%	93.10%	90.92%	91.24%
10	Attainment Level	3	3	3	3	3	3



Fig; 3.2 CO Attainment level for the course UDNA301 / Ship Construction (Code : C 215)

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

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

Institute Marks : 10.00

Direct assessment tools:

- Internal Assessment Examinations
- Assignments/Seminar/Active Learning Methods - Rubrics based Evaluation
- End Semester examinations
- Rubrics based Performance evaluation in Laboratory Classes
- End Semester Practical Examination
- Project – Rubrics based Evaluation

Indirect assessment tools:

- Employer Survey
- Student Exit survey
- Alumni Survey

The PO assessment process is elucidated in the Fig 3.4 and the same procedure is followed for calculating the attainment of PSOs. The direct and indirect assessment tools are tabulated in Table 3.11. which is used for the evaluation of POs and PSOs.

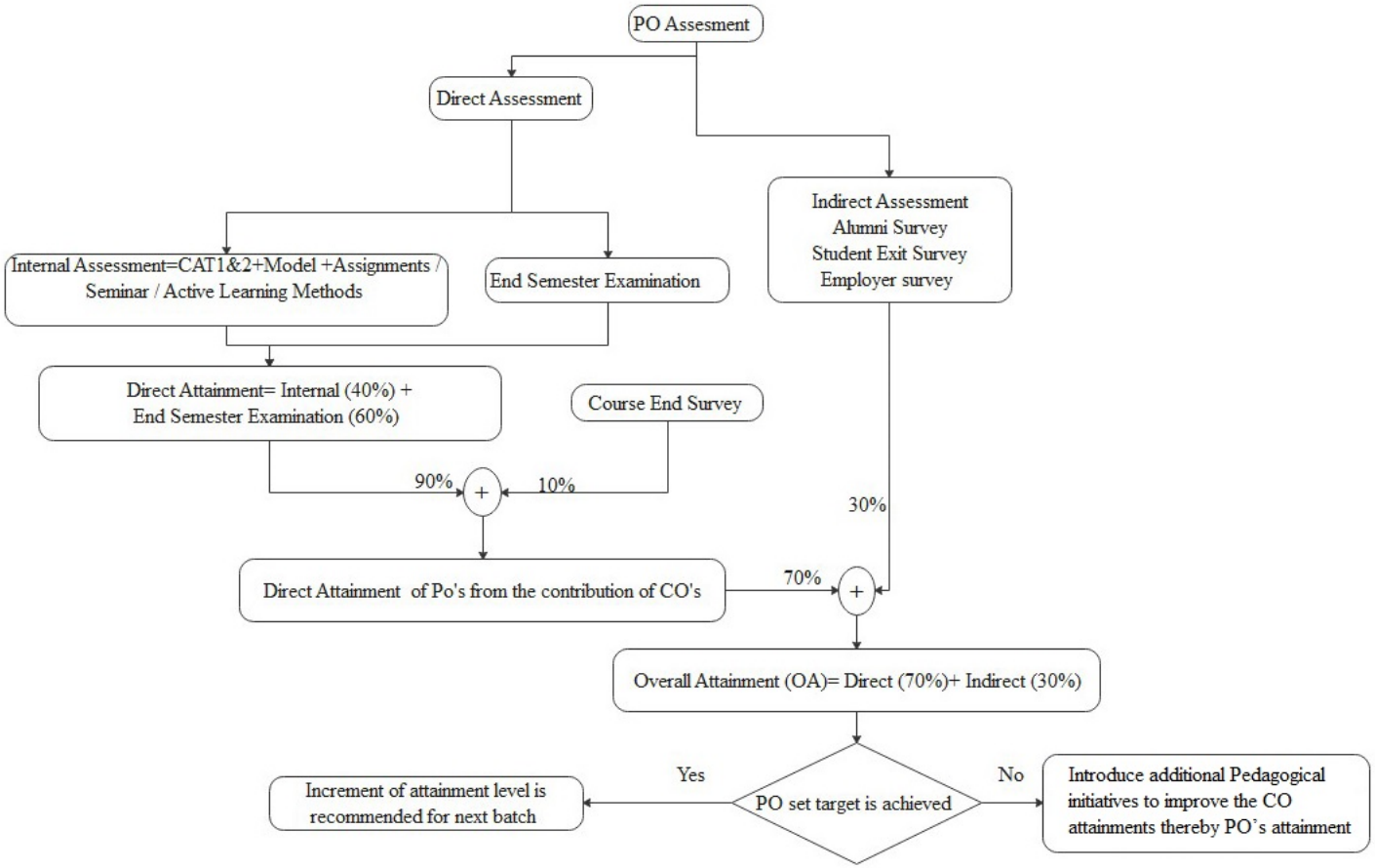


Fig 3.4 PO Assessment process

Table B 3.11. PO and PSO Attainments through Assessment

S.No	Assessment Tool/Activity	Assessment frequency	Responsibility	Program Outcomes												Program Specific Outcomes		
				PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12	PSO1	PSO2	PSO3
DIRECT ASSESSMENT TOOLS																		
1	Continuous Assessment Test (CAT)	Two per semester	Course Coordinator	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	Model Exam	One per semester		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	End Semester Examination	One per semester		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
4	Assignments	Two/ Three per semester		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5	Activity Learning Methods (ALM)	Throughout the semester		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
LABORATORY																		
6	Performance Evaluation	Throughout The semester	Course Coordinator	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
7	End Semester Exam	One per semester		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Project																		
8	Project	Two/ Three Reviews	Project Review Committee	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Internship																		
9	Internship report &Presentation	One per semester	Internship in-charge	-	-	-	-	-	√	√	√	√	√	√	√	√	√	√
Personality Development Program																		
10	Continuous evaluation	Throughout the semester	Concern In-charge	-	-	-	-	-	√	√	√	√	√	√	√	√	√	√

Soft skills																		
11	**Continuous evaluation**	**Throughout the semester**	**Concern In-charge**	**-**	**-**	**-**	**-**	√	√	√	√	√	√	√	√	√	√	√
Industrial visits																		
12	**Report &Review**	**One per semester**	**Concern In-charge**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	√	√	√	√	√	√	√	√
Physical education																		
13	**Fitness assessment**	**One course per the degree program**	**Physical Education Trainer**	**-**	**-**	**-**	**-**	**-**	**-**	√	√	√	**-**	**-**	√	**-**	**-**	**-**
Value Added courses																		
14	**Training module**	**One per semester**	**Project Review Committee**	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
INDIRECT ASSESSMENT TOOLS																		
15	**Employer Survey**	**Once in a year**	**Program Coordinator**	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
16	**Alumni Survey**	**Once in a year**		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
17	**Students Exit Survey**	**Once in a year**		√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

QUALITY/RELEVANCE OF ASSESSMENT TOOLS AND PROCESS DIRECT ASSESSMENT TOOL:

Direct assessment tools used are described in Table B 3.3. Initially the attainment of each course outcome is determined using internal assessment and External Assessment as described in section 3.2.1. The PO attainment for each course is determined from the attainment values obtained for each course outcome related to that PO and CO-PO mapping values. Similarly, the PSO attainment is also determined.

INDIRECT ASSESSMENT TOOL:

Indirect assessment is done through student exit survey, Alumni Survey and Employer Survey. Student Exit survey is given a weightage of 15%, Alumni survey a weightage of 10% and Employer survey of 5% during the assessment process.

STUDENT EXIT SURVEY:

An exit survey was conducted for each student, who has completed the programme of study. Relevant questionnaire of the student exit survey form to evaluate the attainment of PO and PSO is given below in fig 3.5.

Student Exit survey Questionnaire format

AMET
ACADEMY OF MARITIME EDUCATION AND TRAINING
DEEMED TO BE UNIVERSITY
(Under Section 3 of UGC Act 1956)

DEPARTMENT OF MARINE ENGINEERING

STUDENT EXIT SURVEY

Program	B.E. Marine Engineering
Student Name	

Roll No/Reg No.	

VISION AND MISSION OF THE INSTITUTION

VISION
To sustain identity as a world class leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society

MISSION
AMET will strive continuously to
1. Impart value based higher education and technical knowledge with uncompromising strides of an outstanding quality.
2. Emerge as a Center of Excellence including skill development in recent technologies in accordance with industrials trends.
3. Create a world class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education.
4. Nurture talent and entrepreneurship to enable all round personality development among student.
5. Empower students across socio economic strata.
6. Make a positive difference to society through technical education.

VISION AND MISSION OF THE DEPARTMENT

VISION
To establish a center of excellence in Marine Engineering, to foster quality education, to collaborate with the global Marine community and to promote innovation in Maritime studies using appropriate scientific and technological tools and methodologies.

MISSION
1. To develop the infra-structure and foster research facilities so as to achieve excellence in marine engineering and connected fields.
2. To provide opportunities for the exchange of ideas and practices and upholding the status, standards and knowledge of essential to meet the local and global demands in Marine Engineering.
3. To collaborate with other Institutions and Industries to take appropriate measures for promoting innovations in teaching-learning process, inter-disciplinary studies and research.
4. To instill professional skills and ensure ethical behavior throughout their career by providing value- and skill-based education.

- Kindly rate the following criteria on a scale of 1- 3
- Your genuine response will be helpful for the continuous quality improvement of our UG programme in Marine AMET deemed to be University.
- 1 – Poor 2 – Good 3 – Excellent

S.No	Criteria	Program outcomes (PO1-PO12) and Program specific outcomes (PSO1-PSO3)	Rating
1.	Rate your **basic engineering knowledge** to become a competent engineering after joining AMET	PO1	
2.	Rate the quality of teaching offered by the department to you to understand the **recent development in engineering**	PO2	
3.	How efficient are you **developing effective solutions to the problems?**	PO3	
4.	Rate your **ability to approach** and **analyze a problem** to arrive at concrete and effective results	PO4	
5.	Have you learned any **new skills** or **techniques** apart from those included in the curriculum?	PO5	
6.	How better are you in understanding the societal problems with your **core knowledge**?	PO6	
7.	Create the awareness that you have about the available resource and ensure judiciary use of them without affecting the environment for **sustainable progress.**	PO7	
8.	Are you satisfied with your development of **personal code of ethics**?	PO8	
9.	Are you satisfied with your **group activity** during their course of study?	PO9	
10.	Rate your comfort while **speaking in a large group** and do you think that you have acquired communication skills after joining to our college?	PO10	
11.	Are you satisfied with the training provided by the department to you to do think **interdisciplinary projects** and carry them out in the time and utilize fund in a meaningful way?	PO11	
12.	Rate the training provided by the institution to prepare your successful self-relevant engineer?	PO12	

13.	Are you pleased with the progress youve made in finding solutions to suit the demands of those aboard ships?	PSO1	
14.	How proficient are you at identifying and addressing complex problems to meet the demands of the marine industries?	PSO2	
15.	How effective was the institutions instruction in creating and integrating different ship systems with the use of contemporary tools and technologies?	PSO3	

Suggestion for Improvement: **Signature**

Fig: 3.5 Student Exit survey Questionnaire format

Feedbacks are taken from the Alumni to assess the long-term impact of the program. Relevant questionnaire of the Alumni survey form to evaluate the attainment of PO and PSO is given below in fig 3.6.

Alumni survey Questionnaire format

AMET
ACADEMY OF MARITIME EDUCATION AND TRAINING
DEEMED TO BE UNIVERSITY
(Under Section 3 of UGC Act 1956)

ALUMNI SURVEY FORM

1.	Name:		
2.	Academic Year:		
3.	Specialization and Period of Graduation:		
4.	Address for Communication:		
5.	City:	State:	Pin code:
6.	Employment Details		
7.	Email:		
8.	Company and Designation:		

VISION AND MISSION OF THE INSTITUTION

VISION
To sustain identity as a world class leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society

MISSION
AMET will strive continuously to
1. Impart value based higher education and technical knowledge with uncompromising strides of an outstanding quality.
2. Emerge as a Center of Excellence including skill development in recent technologies in accordance with industrials trends.
3. Create a world class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education.
4. Nurture talent and entrepreneurship to enable all round personality development among student.
5. Empower students across socio economic strata.
6. Make a positive difference to society through technical education.
VISION AND MISSION OF THE DEPARTMENT
VISION
To establish a center of excellence in marine engineering, to foster quality education, and to collaborate with the global marine community to promote innovation in maritime studies using appropriate scientific and technological tools and methodologies.
MISSION
1. To develop the infra-structure and foster research facilities so as to achieve excellence in marine engineering and connected fields.
2. To provide opportunities for the exchange of ideas and practices and upholding the status, standards and knowledge of essential to meet the local and global demands in Marine Engineering.
3. To collaborate with other Institutions and Industries to take appropriate measures for promoting innovations in teaching-learning process, inter-disciplinary studies and research.
4. To instill professional skills and ensure ethical behavior throughout their career by providing value- and skill-based education.

- Kindly rate the following criteria on a scale of 1- 3
- Your genuine response will be helpful for the continuous quality improvement of our UG programme in Marine AMET deemed to be University.
- 1 – Poor 2 – Good 3 – Excellent

S.No	Criteria	Program outcomes (PO1-PO12) and Program specific outcomes (PSO1-PSO3)	Rating
1.	Rate your **basic engineering knowledge** to become a competent engineering after joining AMET	PO1	

2.	Ability acquired to apply knowledge of mathematics science and engineering in real time for **problem solving**	PO2	
3.	Competence developed to analyze and interpret data and **design** complex electrical and electronic system or progress specific needs	PO3	
4.	Conduct investigation for **complex problems**	PO4	
5.	Skill gained to apply **modern engineering tools** and techniques for engineering practice	PO5	
6.	Skills gained to apply modern engineering tools relevant to your field and techniques **for engineering practice and help to meet societal needs**	PO6	
7.	Obligation level acquired to develop engineering solutions for **sustainable development**	PO7	
8.	Responsibility level acquired to develop in **ethically and economically.**	PO8	
9.	**Leadership qualities and team spirit** inculcated through various student?	PO9	
10.	Rate your level of **communication with peers**?	PO10	
11.	Rate your **project management skills** and accounting	PO11	
12.	Zeal to engage in to resolve **contemporary issues** and acquire lifelong learning in your career	PO12	
13.	Are you pleased with the progress youve made in finding solutions to suit the demands of those aboard ships?	PSO1	
14.	How proficient are you at identifying and addressing complex problems to meet the demands of the marine industries?	PSO2	

15.	How effective was the institutions instruction in creating and integrating different ship systems with the use of contemporary tools and technologies?	PSO3	

Any Suggestion:

Signature of the Alumni

EMPLOYER SURVEY:

A survey is conducted from the company where the graduates are working, after one or two years of their graduation. A questionnaire prepared containing all the aspects of the program attainment and the feedback is collected from the employers of various reputed industries/ organizations graduated from the University. Based on the feedback, the POs and PSOs assessments, the curriculum and syllabus for the Program are modified. Relevant questionnaire of the Employer survey form to evaluate the attainment of PO and PSO is given below in fig 3.7.

EMPLOYER FEEDBACK FORM

Name:
Organization:
Industry/Sector:
Designation of Employer:
Date:
Alumni Name:
Alumni Designation:
Please give your Feedback about Mr./Mrs:

VISION AND MISSION OF THE INSTITUTION

VISION
To sustain identity as a world class leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society

MISSION
AMET will strive continuously to
1. Impart value based higher education and technical knowledge with uncompromising strides of an outstanding quality.
2. Emerge as a Center of Excellence including skill development in recent technologies in accordance with industrials trends.
3. Create a world class research capabilities on par with the finest in the world and broaden student’s horizons beyond classroom education.

4. Nurture talent and entrepreneurship to enable all round personality development among student.
5. Empower students across socio economic strata.
6. Make a positive difference to society through technical education.
VISION AND MISSION OF THE DEPARTMENT **VISION**
To establish a center of excellence in marine engineering, to foster quality education, and to collaborate with the global marine community to promote innovation in maritime studies using appropriate scientific and technological tools and methodologies.
MISSION
1. To develop the infra-structure and foster research facilities so as to achieve excellence in marine engineering and connected fields.
2. To provide opportunities for the exchange of ideas and practices and upholding the status, standards and knowledge of essential to meet the local and global demands in Marine Engineering.
3. To collaborate with other Institutions and Industries to take appropriate measures for promoting innovations in teaching-learning process, inter-disciplinary studies and research.
4. To instill professional skills and ensure ethical behavior throughout their career by providing value- and skill-based education.

Signature

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

Institute Marks : 65.00

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	PO1	PO2	PO3	PO4	PO5	2.13	2.13	PO8	PO9	2.28	PO11	2.42
C102	2.64	1.91	1.76	1.32	PO5	PO6	PO7	PO8	PO9	PO10	PO11	0.88
C103	1.70	1.59	1.59	1.24	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.64
C104	2.28	2.15	1.62	PO4	PO5	PO6	PO7	2.02	PO9	PO10	PO11	2.50
C105	2.49	1.8	1.24	1.24	PO5	2.22	1.66	2.49	PO9	PO10	PO11	1.87
C106	1.79	1.24	0.86	0.86	PO5	1.61	1.33	2.06	PO9	PO10	PO11	1.33
C107	2.41	2.41	2.41	PO4	PO5	PO6	PO7	PO8	PO9	2.41	PO11	2.41
C108	1.94	1.6	0.96	0.87	PO5	PO6	PO7	1.37	2.05	2.05	PO11	1.25
C109	1.89	1.74	1.87	1.56	PO5	PO6	PO7	PO8	2.07	2.46	PO11	1.84
C111	PO1	PO2	PO3	PO4	PO5	2.49	1.99	1.99	1.99	2.98	PO11	2.98
C114	1.96	1.30	0.65	0.65	PO5	PO6	PO7	1.3	PO9	PO10	PO11	1.3
C115	1.81	1.54	2.7	PO4	PO5	PO6	2.18	2.30	PO9	PO10	PO11	0.77
C116	1.46	1.23	0.68	0.68	PO5	1.33	2.04	1.57	1.41	1.46	PO11	1.65
C117	1.65	1.40	0.95	0.88	2.52	2.10	2.10	PO8	PO9	PO10	PO11	1.99
C118	1.96	1.61	1.27	1.27	PO5	2.26	1.30	1.96	PO9	PO10	PO11	1.3
C119	1.87	1.75	1.19	1.19	PO5	1.31	1.44	1.35	PO9	PO10	PO11	1.44
C120	2.47	2.14	1.48	1.48	PO5	PO6	PO7	2.47	PO9	2.47	PO11	PO12
C121	2.51	1.68	0.84	PO4	PO5	1.68	1.68	2.51	2.51	2.51	PO11	2.37
C122	2.32	2.47	1.89	PO4	PO5	PO6	PO7	1.74	2.61	2.61	PO11	PO12
C123	PO1	PO2	PO3	PO4	PO5	2.3	1.84	1.84	2.76	2.76	PO11	2.76
C124	2.45	2	2	2	PO5	1.84	1.84	1.84	2.76	2.76	PO11	1.84
C201	2.03	1.8	2.02	1.76	1.8	1.73	1.9	2.06	1.15	2.06	1.56	1.78
C202	2.1	1.84	1.84	1.79	2.31	2.19	2.25	2.12	PO9	PO10	1.5	1.86
C203	1.86	1.86	1.20	1.20	PO5	1.33	1.99	1.98	PO9	PO10	PO11	1.82
C204	1.75	1.75	1.17	1.17	PO5	2.11	1.41	2.11	1.87	PO10	PO11	PO12
C205	2.14	2.01	1.6	1.47	PO5	2.01	2.28	2.44	1.6	PO10	PO11	1.63
C206	1.83	1.83	1.71	1.51	PO5	1.55	1.43	1.84	PO9	PO10	PO11	1.66
C207	1.81	1.81	1.08	1.08	PO5	1.41	1.46	1.48	0.98	PO10	PO11	2.05
C208	2.66	2.36	1.77	1.48	PO5	PO6	PO7	1.77	2.36	1.77	PO11	1.77
C209	2.42	2.02	1.21	1.21	PO5	1.62	1.62	2.41	1.62	2.42	PO11	2.42

C210	2.22	2.22	2.22	2.22	PO5	2.22	2.22	2.22	2.22	2.22	PO11	1.92
C211	2.67	2.37	2.08	1.93	1.78	1.78	1.78	2.67	1.78	2.67	2.67	2.67
C212	PO1	PO2	PO3	PO4	1.59	1.99	PO7	2.39	2.12	2.12	PO11	2.25
C215	2.75	2.75	2.30	2.30	PO5	2.54	2.45	2.75	1.84	PO10	1.81	2.76
C216	2.49	2.49	2.49	2.49	PO5	2.64	1.78	2.64	PO9	PO10	2.62	2.64
C217	2.62	2.62	2.15	2.15	PO5	2.62	2.78	2.62	PO9	1.78	PO11	2.69
C218	2.43	2.29	1.48	1.48	PO5	1.19	1.73	2.4	2.07	2.07	PO11	2.43
C219	2.32	2.06	1.40	1.52	PO5	1.55	1.55	2.32	1.55	2.17	PO11	2.19
C220	2.65	2.51	1.62	1.62	PO5	PO6	1.77	2.51	1.73	2.45	PO11	2.60
C221	2.66	2.66	1.77	PO4	PO5	2.66	PO7	2.66	1.77	2.66	PO11	PO12
C222	2.11	2.11	1.63	1.63	PO5	1.54	1.41	2.14	1.41	2.11	PO11	1.88
C223	2.66	2.21	1.77	1.77	PO5	2.65	1.77	2.65	1.77	2.66	PO11	2.66
C224	2	1.79	1.9	2.07	PO5	2	1.33	2	1.33	1.33	1.54	2
C301	1.96	1.81	1.49	1.82	PO5	0.91	1.46	2.19	0.91	0.91	PO11	1.86
C302	2.14	2.03	1.84	1.52	PO5	1.95	2.13	2.43	1.64	1.60	1.72	1.59
C303	1.87	1.91	1.07	1.07	PO5	1.56	2.36	2.23	PO9	PO10	PO11	1.98
C304	1.87	1.63	1.37	1.06	PO5	2.38	2.39	2.25	PO9	PO10	PO11	2.39
C305	1.79	1.03	1.43	PO4	PO5	PO6	PO7	1.9	2.36	2.36	PO11	1.52
C306	1.65	1.36	0.98	0.71	PO5	2.17	1.53	2.3	PO9	PO10	PO11	2.27
C307	2.28	1.85	1.52	1.31	PO5	PO6	PO7	1.72	PO9	1.88	PO11	2.58
C308	1.82	1.71	1.65	0.77	PO5	2.35	2.35	2.35	1.88	PO10	1.88	2.35
C309	2.39	2.39	2.09	PO4	PO5	1.59	PO7	2.39	1.59	2.39	PO11	PO12
C310	2.73	2.73	1.78	1.36	PO5	1.82	PO7	2.73	1.9	2.73	PO11	1.82
C311	2.15	1.93	2.05	2.22	PO5	2.15	1.44	2.15	1.44	1.44	1.66	2.15
C312	2.59	2.59	2.59	1.73	PO5	0.86	1.72	2.59	0.86	2.59	PO11	PO12
C314	2.34	2.34	1.42	1.42	PO5	2.4	2.41	2.34	1.84	PO10	PO11	1.81
C315	1.98	1.84	1.19	1.04	PO5	2.2	2.22	2.13	0.92	1.84	PO11	2.37
C316	1.77	1.52	1.27	1.27	PO5	1.52	1.65	2	0.72	1.44	1.44	2.28
C317	2.65	2.19	1.53	1.93	PO5	2.83	2.11	2	1.73	PO10	1.89	2.65
C318	2.4	2.26	1.48	1.68	PO5	2.56	1.7	2.38	2.54	2.54	2.19	1.7
C319	1.93	1.93	0.97	1.05	PO5	1.78	2.05	2.2	1.8	1.8	1.85	2.17
C110	2.85	2.85	1.90	1.90	PO5	PO6	PO7	PO8	2.85	2.85	PO11	1.90

C320	2.8	2.34	2.34	2.34	PO5	1.56	1.88	1.88	1.88	1.88	1.88	2.36
C321	2.83	2.83	2.36	PO4	PO5	PO6	PO7	2.83	1.89	1.89	PO11	PO12
C322	2.8	2.8	PO3	PO4	PO5	PO6	2.05	1.87	1.87	1.87	1.43	1.87
C323	2.4	2.4	1.75	0.96	PO5	PO6	PO7	1.6	1.6	1.6	PO11	2.4
C401	PO1	PO2	PO3	PO4	PO5	2.37	2.37	2.34	1.58	PO10	PO11	2.23
C402	2.48	2.03	1.87	1.55	2.52	1.29	1.81	2.28	1.22	1.54	PO11	1.84
C403	1.48	PO2	PO3	PO4	PO5	1.84	1.49	2.20	PO9	PO10	1.47	1.34
C404	2.08	2.08	1.44	1.30	PO5	1.55	1.81	1.81	PO9	1.48	1.48	2.08
C405	2.08	2.08	1.4	1.38	PO5	2.33	1.75	2.08	1.84	1.94	2.41	1.94
C406	2.8	2.8	1.97	1.81	PO5	1.15	2.63	2.37	2.47	2.96	2.96	2.96
C407	2.72	2.57	2.27	2.27	PO5	1.81	2.41	2.11	2.72	2.27	2.72	2.72
C408	2.78	2.62	1.96	1.96	1.96	1.96	1.96	1.97	PO9	1.96	PO11	2.13
C409	2.7	2.7	1.95	1.95	2.82	2.05	PO7	2.44	2.71	2.56	2.70	2.44
C411	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	2.92	PO11	2.92
C412	2.50	PO2	PO3	PO4	PO5	PO6	1.67	1.67	PO9	2.5	PO11	PO12
C413	1.88	1.84	1.81	1.53	1.57	2.15	2.01	1.89	1.46	PO10	0.8	1.89
C414	2.36	2.23	1.83	1.96	PO5	PO6	1.83	1.87	1.89	1.68	PO11	1.66
C415	1.6	1.49	1.2	1.48	1.49	1.97	1.79	2.09	1.45	1.51	1.45	1.84
C416	2.06	1.95	1.76	1.46	0.73	2.06	1.46	2.19	1.49	2.19	1.46	2.06
C417	1.52	1.52	PO3	PO4	PO5	1.52	1.52	1.52	PO9	PO10	PO11	1.52
C418	1.99	1.99	1.86	1.64	PO5	2.36	2.12	2.47	1.94	1.92	2.44	2.36
C419	3	2.6	1.66	1.33	PO5	2.99	3	2.66	2.5	2.75	3	2.66
C420	2.86	2.70	2.07	2.23	PO5	2.86	2.54	2.22	2.86	2.39	2.86	2.86
C421	2.71	1.91	0.96	0.96	2.87	PO6	1.91	2.87	1.91	1.91	PO11	PO12

PO Attainment Indirect

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Alumni Surv	2.84	2.74	2.78	2.80	2.82	2.75	2.73	2.85	2.85	2.74	2.45	2.59
Employer S	2.86	2.82	2.88	2.65	2.58	2.68	2.55	2.86	2.8	2.66	2.8	2.65
Student Exi	2.75	2.86	2.63	2.75	2.85	2.87	2.72	2.84	2.8	2.65	2.84	2.67

PO Attainment Level

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

InDirect Attainment	2.82	2.81	2.76	2.73	2.75	2.77	2.67	2.85	2.82	2.68	2.70	2.64
Direct Attainment	2.24	2.06	1.64	1.51	2.00	1.96	1.91	2.16	1.86	2.16	1.98	2.07

PSO Attainment

Course	PSO1	PSO2	PSO3
C101	PSO1	PSO2	PSO3
C102	PSO1	PSO2	PSO3
C103	1.66	1.96	PSO3
C104	PSO1	PSO2	PSO3
C105	1.66	1.49	PSO3
C106	PSO1	PSO2	PSO3
C107	PSO1	PSO2	PSO3
C108	PSO1	PSO2	PSO3
C109	PSO1	PSO2	PSO3
C110	PSO1	PSO2	PSO3
C111	PSO1	PSO2	PSO3
C114	1.31	0.63	PSO3
C115	PSO1	PSO2	PSO3
C116	PSO1	PSO2	PSO3
C117	1.76	1.76	PSO3
C118	1.28	1.28	PSO3
C119	PSO1	PSO2	PSO3
C120	PSO1	PSO2	PSO3
C121	PSO1	PSO2	PSO3
C122	PSO1	PSO2	PSO3
C123	PSO1	PSO2	PSO3
C124	PSO1	PSO2	PSO3
C201	2.03	2.03	PSO3
C202	2.1	2.17	1.49
C203	1.98	1.52	PSO3
C204	2.1	1.64	2.12
C205	2.26	1.83	PSO3
C206	1.95	1.92	PSO3
C207	1.93	2.14	PSO3

C208	2.36	1.92	2.66
C209	2.29	1.42	2.42
C210	2.22	2.22	PSO3
C211	2.67	2.67	PSO3
C212	0.93	0.93	PSO3
C215	2.75	2.76	PSO3
C216	2.64	2.64	2.64
C217	2.78	2.78	PSO3
C218	2.34	1.6	PSO3
C219	1.93	PSO2	PSO3
C220	2.65	PSO2	PSO3
C221	2.66	PSO2	PSO3
C222	2.11	2.11	PSO3
C223	2.66	1.77	PSO3
C224	2.0	2.03	PSO3
C301	2.19	1.4	PSO3
C302	2.43	1.91	PSO3
C303	2.43	1.98	PSO3
C304	1.9	1.46	PSO3
C305	2.04	1.58	PSO3
C306	1.65	1.48	PSO3
C307	2.28	1.72	PSO3
C308	2.35	1.71	PSO3
C309	2.12	1.59	PSO3
C310	2.73	2.85	PSO3
C311	2.15	2.18	PSO3
C312	2.59	1.73	PSO3
C314	1.75	1.29	PSO3
C315	2.54	1.19	PSO3
C316	1.77	1.89	PSO3
C317	2.65	1.93	PSO3
C318	2.54	1.87	PSO3
C319	2.45	1.93	PSO3
C320	2.8	1.87	PSO3

C321	2.68	1.89	PSO3
C322	2.8	1.55	PSO3
C323	2.40	PSO2	PSO3
C401	2.37	PSO2	PSO3
C402	2.64	1.40	2.52
C403	1.73	PSO2	PSO3
C404	2.33	1.94	PSO3
C405	2.07	2.07	PSO3
C406	2.96	2.96	PSO3
C407	2.72	2.72	PSO3
C408	2.95	1.96	1.96
C409	2.70	2.70	2.68
C411	2.92	PSO2	PSO3
C412	PSO1	2.54	1.67
C413	2	1.55	1.21
C414	2.50	1.66	1.68
C415	2.09	1.29	1.45
C416	2.06	2.19	1.46
C417	1.52	PSO2	PSO3
C418	2.03	2.21	2.09
C419	2.83	2.75	2.99
C420	2.86	2.86	2.86
C421	2.55	1.91	2.87

PSO Attainment Indirect

Survey	PSO1	PSO2	PSO3
Alumni Survey	2.74	2.86	2.64
Employer Survey	2.67	2.6	2.72
Student Exit Survey	2.73	2.68	2.83

PSO Attainment Level

Course	PSO1	PSO2	PSO3
Direct Attainment	2.27	1.92	2.16
InDirect Attainment	2.71	2.71	2.73

4 STUDENTS' PERFORMANCE (100) Total Marks 81.69

Institute Marks :

Table 4.1

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2022-23 (CAY)	2021-22 (CAYm1)	2020-21 (CAYm2)	2019-20 (CAYm3)	2018-19 (CAYm4)	2017-18 (CAYm5)	2016-17 (CAYm6)
Sanctioned intake of the program(N)	300	300	300	360	360	250	200
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)	177	218	192	237	205	238	193
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	19	29	21	28	10	7
Separate division students, If applicable (N3)	0	0	0	0	0	0	0
Total number of students admitted in the programme(N1 + N2 + N3)	177	237	221	258	233	248	200

Table 4.2

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated without backlogs in any semester/ year of study (Without Backlog means no compartment or failures in any semester/ year of study)			
		I year	II year	III year	IV year
2022-23 (CAY)	177				
2021-22 (CAYm1)	237	135			
2020-21 (CAYm2)	221	167	138		
2019-20 (CAYm3)	258	173	159	149	
2018-19 (LYG)	233	177	157	144	134
2017-18 (LYGm1)	248	151	132	125	109
2016-17 (LYGm2)	200	73	76	61	52

Table 4.3

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog]			
		I year	II year	III year	IV year
2022-23 (CAY)	177				
2021-22 (CAYm1)	237	169			
2020-21 (CAYm2)	221	176	173		
2019-20 (CAYm3)	258	222	210	207	
2018-19 (LYG)	233	198	219	215	213
2017-18 (LYGm1)	248	230	235	228	221
2016-17 (LYGm2)	200	192	198	194	190

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)	300	177	59.00
2021-22 (CAYm1)	300	218	72.67
2020-21 (CAYm2)	300	192	64.00

Average [(ER1 + ER2 + ER3) / 3] : 65.22

Assessment : 14.00

4.2 Success Rate in the stipulated period of the program (20) Total Marks 10.92

4.2.1 Success rate without backlogs in any semester / year of study (15) Institute Marks : 6.45

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	233.00	248.00	200.00
Y Number of students who have graduated without backlogs in the stipulated period	134.00	109.00	52.00
Success Index [SI = Y / X]	0.58	0.44	0.26

Average SI [(SI1 + SI2 + SI3) / 3] : 0.43

Assessment [15 * Average SI] : 6.45

4.2.2 Sucess rate in stipulated period (5) Institute Marks : 4.47

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	233.00	248.00	200.00
Y Number of students who have graduated in the stipulated period	213.00	221.00	177.00
Success Index [SI = Y / X]	0.91	0.89	0.88

Average SI[(SI1 + SI2 + SI3) / 3]: 0.89

Assessment [5 * Average SI] : 4.47

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

4.3 Academic Performance in Second Year (10)

Total Marks 7.27

Institute Marks : 7.27

Academic Performance	CAYm2 (2020-21)	CAYm3 (2019-20)	LYG (2018-19)
Mean of CGPA or mean percentage of all successful students(X)	8.10	8.20	8.12
Total number of successful students (Y)	173.00	210.00	219.00
Total number of students appeared in the examination (Z)	205.00	243.00	226.00
API [X * (Y/Z)]	6.84	7.09	7.87

Average API [(AP1 + AP2 + AP3)/3] : 7.27

Assessment [AverageAPI] : 7.27

4.4 Placement, Higher Studies and Entrepreneurship (30)

Total Marks 29.50

Institute Marks : 29.50

Item	LYG(2018-19)	LYGm1(2017-18)	LYGm2(2016-17)
Total No of Final Year Students(N)	215.00	228.00	194.00
No of students placed in the companies or goverment sector(X)	210.00	227.00	188.00
No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y)	0.00	0.00	0.00
No of students turned enterpreneur in engineering/technology (Z)	0.00	1.00	1.00
Placement Index [(X+Y+Z)/N] :	0.98	1.00	0.97

Average Placement [(P1 + P2 + P3)/3] : 0.98

Assessment [30 * Average Placement] : 29.50

Program Name : Marine Engg.
Assessment Year : 2021-22 (CAYm1)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Aakash . K	AME18041	BW MARITME Pte. Ltd.	06.06.2022
2	Abdul Rahuman . M	AME18081	Marlow navigation India Pvt Ltd	14.06.2022
3	Abhiram . B. S	AME18082	Bravo Ship Management Pvt Ltd.	16.03.2022
4	Abhishek R	AME18161	Sembcorp Marine	11.04.2022
5	Abinesh . A	AME18001	MMS Maritme (India) Pvt Ltd.	21.10.2021
6	Abishek . V	AME18042	Goodwood Marine Services Pvt Ltd	20.09.2021
7	Adham . M	AME18162	Marlow navigation India Pvt Ltd	14.06.2022
8	Adithya . K	AME18163	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
9	Aditya Gautam	AME18210	New shipping Kaisha Ltd, Chennai.	25.10.2022
10	Afil Mohammed Ismail	AME18217L	Bernhard Schulte Management	05.05.2022
11	Ajay Hosh . R. S	AME18083	MMS Maritme (India) Pvt Ltd.	21.10.2021
12	Ajay . R	AME18164	NYK Shipmangement (India) Pvt Ltd	21.03.2022
13	Ajay Saini	AME18208	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
14	Ajay . V	AME18084	Chevron Shipping	23.11.2022
15	Ajin . M	AME18219L	Oceanic Star Shipping Pvt Ltd	04.09.2022
16	Akash Agarwal	AME18043	BW MARITME Pte. Ltd.	06.06.2022
17	Akshay Kumar	AME18220L	Sembcorp Marine	11.04.2022
18	Akshay Regi	AME18044	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
19	Akula Om Sai Akash	AME18121	Bravo Ship Management Pvt Ltd.	16.03.2022
20	Alok Chandra . M	AME18002	MOL Maritime (India) Pvt. Ltd	24.12.2021
21	Amarnath . A	AME18165	MOL Maritime (India) Pvt. Ltd	24.12.2021
22	Ameer-Al-Safar	AME18166	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
23	Amiya Raj Anu	AME18193	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
24	Anandh . V	AME18045	MMS Maritme (India) Pvt Ltd.	21.10.2021
25	Ananyo Mishra	AME18211	Goodwood Marine Services Pvt Ltd.	20.09.2021
26	Anastraj . K	AME18046	THOME Ship India Pvt Ltd	12.07.2022
27	Anish Kumar . R	AME18085	PACC Ship Management	16.05.2022
28	Ankit Jha	AME18047	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
29	Anuishkumar . P	AME18003	Marlow navigation India Pvt Ltd	14.06.2022
30	Arjunan . A	AME18048	NYK Shipmangement (India) Pvt Ltd	21.03.2022
31	Arnold . G	AME18168	Goodwood Marine Services Pvt Ltd.	20.09.2021
32	Arun . B	AME18049	MOL Maritime (India) Pvt. Ltd	24.12.2021
33	Arunkumar . M	AME18221L	FLEET Management Ltd	17.11.2021

34	Arunkumar . V. R	AME18086	Chevron Shipping	23.11.2022
35	Arun Raj . S. R	AME18050	Nautic Fleet Private Limited	31.05.2022
36	Arunachallam . S. G	AME18124	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
37	Attada Anudeep Naidu	AME18087	Marlow navigation India Pvt Ltd	14.06.2022
38	Ayanava Choudhury	AME18222L	New shipping Kaisha Ltd, Chennai.	25.10.2022
39	Ayyanar . M	AME18051	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
40	Bade Praveen Kumar	AME18052	THOME Ship India Pvt Ltd	12.07.2022
41	Balabharathi . P	AME18125	PACC Ship Management	16.05.2022
42	Balaji Prasad . N	AME18142	BW MARITME Pte. Ltd.	06.06.2022
43	Balu Mahendra . A	AME18053	Chevron Shipping	23.11.2022
44	Baskar J	AME18169	NYK Shipmangement (India) Pvt Ltd	21.03.2022
45	Bathula Vidhyasagar	AME18079	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
46	Bejo Shyam . P	AME18088	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
47	Calvin Jairo . R	AME18223L	ASP Ship Management Pvt Ltd.	19.01.2022
48	Chetna Saini	AME18206	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
49	Dalvi Mandar Rajendra	AME18127	THOME Ship India Pvt Ltd	12.07.2022
50	Deva . R	AME18128	New shipping Kaisha Ltd, Chennai.	25.10.2022
51	Devaraj . S	AME18005	PIL Shipping	11.03.2022
52	Dhaneesh . S . Nair	AME18129	WALLEM Group	25.08.2022
53	Dhruva . R . Shetty	AME18170	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
54	Dinesh . C	AME18214	PACC Ship Management	16.05.2022
55	Esakkipandi . S	AME18089	New shipping Kaisha Ltd, Chennai.	25.10.2022
56	Gideon . D	AME18091	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
57	Gnana Francis Jerin . J	AME18171	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
58	Gokul Doss . K. S	AME18006	New shipping Kaisha Ltd, Chennai.	25.10.2022
59	Gokulakrishnan . T	AME18092	NORINCO Pvt Ltd	23.05.2022
60	Gorakala Sai Kumar	AME18194	Goodwood Marine Services Pvt Ltd.	20.09.2021
61	Govindhavasan . N	AME18093	Goodwood Marine Services Pvt Ltd.	20.09.2021
62	Gowshik . K	AME18054	PIL Shipping	11.03.2022
63	Gowthammetha . P. J	AME18172	Chevron Shipping	23.11.2022
64	Gurusaran . S	AME18226L	ASP Ship Management Pvt Ltd.	19.01.2022
65	Guttavelli Bala Prasanna Giri	AME18227L	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
66	Hamza Azmi	AME18228L	MAERSK Line Fleet Management and Technology India Private Limited Bernhard Schulte Management	05.05.2022
67	Hari krishna . P	AME18173	MOL Maritime (India) Pvt. Ltd	24.12.2021

68	Hariharan . R	AME18132	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
69	Harikrishnan . S	AME18174	THOME Ship India Pvt Ltd	12.07.2022
70	Harinivash . R	AME18133	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
71	Hemanth Pallapolu	AME18055	Nautic Fleet Private Limited	31.05.2022
72	Hrithik Oza	AME18212	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
73	Igene Antony Inna Saint . X	AME18094	Nautic Fleet Private Limited	31.05.2022
74	Jayasurya . T	AME18056	ASP Ship Management Pvt Ltd.	19.01.2022
75	Jeeva . P	AME18057	Nautic Fleet Private Limited	31.05.2022
76	Jetti Sushmanth	AME18010	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
77	Joseph Herbens . E	AME18177	Nautic Fleet Private Limited	31.05.2022
78	Kamaleshan . R	AME18058	Goodwood Marine Services Pvt Ltd.	20.09.2021
79	Kapilesh	AME18229L	WALLEM Group	25.08.2022
80	Karada Jeevan Kumar	AME18195	FUGRO Ltd.,	28.032022
81	Karikalcholan . R	AME18134	MSI Shipping Services	24.03.2022
82	Karthikeyan . E	AME18196	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
83	Karthikeyan . R	AME18178	Marlow navigation India Pvt Ltd	14.06.2022
84	KartikSIngh	AME18059	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
85	Kartik Tiwari	AME18232L	FLEET Management Ltd	17.11.2021
86	Khan Shoib Shafique	AME18233L	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
87	Kishore . B	AME18095	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
88	Krishnavadivel . R	AME18179	FUGRO Ltd.,	28.03.2022
89	Kunal kumar	AME18234L	WALLEM Group	25.08.2022
90	Leo Augustine	AME18096	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
91	Maadhesh . M	AME18207	SK Engineering Shipping & Trading Pvt Ltd.	11.10.2022
92	Madesh . M	AME18235L	Bernhard Schulte Management	05.05.2022
93	Madhavan . V	AME18011	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
94	Maheshwara Aswajidh	AME18236L	ASP Ship Management Pvt Ltd.	19.01.2022
95	Maniarasu . V	AME18180	MSI Shipping Services	24.03.2022
96	Manikandan . P	AME18098	Grinford Ship Management	14.09.2022
97	Manoj Aravindh . R	AME18012	Ocean Sparkle Limited	25.08.2022
98	Manoj kumar . K	AME18138	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
99	Manoj Prabhakar . M	AME18060	NYK Shipmangement (India) Pvt Ltd	21.03.2022
100	Manoj . S	AME18139	Chevron Shipping	23.11.2022
101	Manu Mohan	AME18099	BW MARITME Pte. Ltd.	06.06.2022

102	Maxwell . A	AME18238L	Bernhard Schulte Management	05.05.2022
103	Mekala Hari Krishna Yadav	AME18209	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
104	Mohamed Abith . B	AME18100	PIL Shipping	11.03.2022
105	Mohammed Fahiz . S	AME18239L	FLEET Management Ltd	17.11.2021
106	Mohammed Saahil . M . A	AME18013	MOL Maritime (India) Pvt. Ltd	24.12.2021
107	Mohammed Saif Ali . S	AME18240L	Bernhard Schulte Management	05.05.2022
108	Mohammed Saleem	AME18101	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
109	Mohankumar .R	AME18102	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
110	Muthukumar . A	AME18014	MSI Shipping Services	24.03.2022
111	Muthuselvan . S	AME18062	PACC Ship Management	16.05.2022
112	Muzhunilavan . P	AME18063	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
113	Nabu Nilafer . K	AME18143	PIL Shipping	11.03.2022
114	Nazam Aziz	AME18182	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
115	Narayanasamy . N	AME18144	New shipping Kaisha Ltd, Chennai	25.10.2022
116	Natheem Hussain . J	AME18241L	FLEET Management Ltd	17.11.2021
117	Naveenkumar . N	AME18145	Bravo Ship Management Pvt Ltd.	16.03.2022
118	Naveen . P	AME18242L	FLEET Management Ltd	17.11.2021
119	Navin . R	AME18064	THOME Ship India Pvt Ltd	12.07.2022
120	Neeraj . A . G	AME18103	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
121	Nitesh	AME18065	PIL Shipping	11.03.2022
122	Parvan Ashok	AME18066	New shipping Kaisha Ltd, Chennai.	25.10.2022
123	Peters Samuel Raju	AME18246L	Bernhard Schulte Management	05.05.2022
124	Porkunapandian . R	AME18183	NYK Shipmangement (India) Pvt Ltd	21.03.2022
125	Pradeep . M	AME18147	MOL Maritime (India) Pvt. Ltd	24.12.2021
126	Prakash . A	AME18017	MMS Maritme (India) Pvt Ltd.	21.10.2021
127	Prasanna . M	AME18067	Sembcorp Marine	11.04.2022
128	Pratheep raja . L	AME18247L	ASP Ship Management Pvt Ltd	19.01.2022
129	Praveen . R	AME18184	BW MARITME Pte. Ltd.	06.06.2022
130	Priyanshukumar	AME18249L	Bernhard Schulte Management	05.05.2022
131	Rajamohammed . A	AME18148	PACC Ship Management	16.05.2022
132	Rajesh . S	AME18185	PACC Ship Management	16.05.2022
133	Rajeshwaran . B	AME18070	THOME Ship India Pvt Ltd	12.07.2022
134	Ram Prasath . V	AME18071	Nautic Fleet Private Limited	31.05.2022
135	RamPrathap . H. A	AME18072	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020

136	Raviraghul . S	AME18251L	DESTAN Ship Management Pvt Ltd	23.11.2022
137	Ravin . E	AME18073	BW MARITME Pte. Ltd.	06.06.2022
138	Richaerd Raja Morais	AME18186	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
139	Richvin Raja Morais	AME18018	BW MARITME Pte. Ltd.	06.06.2022
140	Riteshkumar	AME18107	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
141	Ritvik Nair	AME18019	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
142	Rohith . R	AME18187	THOME Ship India Pvt Ltd	12.07.2022
143	Roshan G Lopez	AME18149	PACC Ship Management	16.05.2022
144	Gautam Vinayak . S	AME18130	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
145	Vignesh . S	AME18188	Chevron Shipping	23.11.2022
146	Sahil Chouhan	AME18150	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
147	Sahil Rana	AME18074	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
148	Sajin Thomas	AME18108	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
149	Salman Baris . M	AME18255L	FLEET Management Ltd	17.11.2021
150	Sam Roshan . S	AME18020	MSI Shipping Services	24.03.2022
151	Saravanakumar . K. P	AME18109	BW MARITME Pte. Ltd.	06.06.2022
152	Sathyanarayanan . K	AME18022	MOL Maritime (India) Pvt. Ltd	24.12.2021
153	Satheyndran . K	AME18023	Sembcorp Marine	11.04.2022
154	Serman Vinish Kumar . B	AME18190	MMS Maritme (India) Pvt Ltd.	21.10.2021
155	Shaik Hazi Alaham	AME18075	Bravo Ship Management Pvt Ltd	16.03.2022
156	Shanmuga Ganesan . P	AME18024	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
157	Sharan . K	AME18191	Goodwood Marine Services Pvt Ltd.	20.09.2021
158	Sharan . T	AME18110	PACC Ship Management	16.05.2022
159	Shashank . K	AME18025	PIL Shipping	11.03.2022
160	Shithesh	AME18262L	NORINCO Pvt Ltd	23.05.2022
161	Shiv Kumar Bobal	AME18199	WALLEM Group	25.08.2022
162	Shobanesh . M	AME18026	NYK Shipmangement (India) Pvt Ltd	21.03.2022
163	Shree Krishna	AME18200	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
164	ShreyasSrivastava	AME18192	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
165	Pantha Hasmi . SK	AME18154	THOME Ship India Pvt Ltd	12.07.2022
166	Soumyadip Maity	AME18201	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
167	Sourav . K	AME18115	New shipping Kaisha Ltd, Chennai.	25.10.2022
168	Srinath . B	AME18078	FUGRO Ltd.,	28.03.2022
169	Srinivasan . N	AME18112	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020

170	Stalin . C	AME18027	MMS Maritme (India) Pvt Ltd.	21.10.2021
171	Subham Jha	AME18113	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
172	Sudharsan . M	AME18114	MMS Maritme (India) Pvt Ltd.	21.10.2021
173	SurajPandiyan . S	AME18202	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
174	Surya . K	AME18029	MSI Shipping Services	24.03.2022
175	Syed Ansar . A	AME18030	WALLEM Group	25.08.2022
176	Syed Shahnawaz Ali	AME18260L	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
177	Tamada Arun Kumar	AME18203	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
178	Taushif Ekbal	AME18031	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
179	Tewar Manu Udayakumar Murugan	AME18032	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
180	Pranav . V	AME18118	NORINCO Pvt Ltd	23.05.2022
181	Vaddepalli Saketh	AME18254L	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
182	Varma . O	AME18257L	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
183	Venugopal . M	AME18034	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
184	Vetrivel . J	AME18035	NORINCO Pvt Ltd	23.05.2022
185	Vikraman . S	AME18116	Goodwood Marine Services Pvt Ltd.	20.09.2021
186	VInish Mathew . V	AME18037	MSI Shipping Services	24.03.2022
187	Vinoth Kumar . M	AME18158	THOME Ship India Pvt Ltd	12.07.2022
188	Vinoth . M	AME18117	Bravo Ship Management Pvt Ltd.	16.03.2022
189	Vishnu . K	AME18038	Chevron Shipping	23.11.2022
190	Vishnu . N	AME18159	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
191	Visveswaran . S	AME18080	MAERSK Line Fleet Management and Technology India Private Limited	06.02.2020
192	Viswa . M	AME18039	Nautic Fleet Private Limited	31.05.2022
193	Vysakh . B	AME18160	FUGRO Ltd.,	28.03.2022
194	Yedla Shyam Deepak	AME18205	Sembcorp Marine	11.04.2022
195	Balaji B	AME18004	Ocean one ship management	14.01.2023
196	Pradeep.T	AME18016	Apeejay Shipping	15.02.2023
197	Mohan Ram R	AME18061	V Ships	17.12.2022
198	G Santhosh Kumar	AME18090	Ocean one ship management	14.01.2023
199	Vignesh R	AME18119	Apeejay Shipping	15.02.2023
200	Anwar Ibrahim Y	AME18122	V Ships	17.12.2022
201	Aravinthan S	AME18123	Ocean one ship management	14.01.2023
202	Gokulnath N	AME18131	V Ships	17.12.2022
203	Kavibalan S	AME18135	Apeejay Shipping	15.02.2023

204	Selvabassam S	AME18151	Andromeda Shipping (India) Pvt. Ltd.	24.11.2022
205	Sitendra Chaudhary	AME18152	V Ships	17.12.2022
206	Subash Kannan M	AME18153	Ocean one ship management	14.01.2023
207	Jagadeeswaran V	AME18175	Apeejay Shipping	15.02.2023
208	Abhijeet Kumar	AME18216L	Andromeda Shipping (India) Pvt. Ltd.	24.11.2022
209	Ajay Raja	AME18218L	Apeejay Shipping	15.02.2023
210	Rajesh S	AME18253L	ASP Ship Management Pvt Ltd	19.01.2022

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S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Dinesh Babu M	AME17056	M.S, TW ship management Private Limited	23.08.2021
2	Dinesh P	AME17057	MOL Maritime (India) Pvt. Ltd.	15.02.2022
3	Ganish	AME17059	KNK Ship Management , Mumbai	10.10.2022
4	Georgy S John	AME17060	V Ships India Pvt Ltd.,	17.06.2022
5	Gladwin Kingston K	AME17061	HELiA Marine Services Pvt Ltd.,	23.02.2022
6	Gokul S	AME17062	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
7	Gokulnath	AME17064	MARLOW Navigation India Pvt Ltd., Mumbai	14.06.2022
8	Gokulpandi S	AME17065	Goodwood Marine Services Pvt Ltd.,	15.10.2021
9	Guru premnath	AME17067	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
10	Gurukeswar	AME17068	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
11	Hajamugayadeen S	AME17069	ASP ships India Private Limited	19.01.2022
12	Hari haran R	AME17070	NAUTAI Marine services and Trading Private Limited	15.11.2021
13	Hariharan J	AME17071	Bravo Ship Management Pvt Ltd	18.03.2022
14	Hariharan V	AME17072	NauticFleet Private Limited	04.03.2022
15	Harish Karthick S	AME17073	M/S. BW Maritime PTE Ltd., Mumbai	29.01.2021
16	Harish V	AME17074	MSI Shipping services India Pvt LTd.,	15.12.2021
17	Hemnath	AME17076	MOL Maritime (India) Pvt. Ltd.	15.02.2022
18	Hruday L	AME17077	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
19	Jagadeeshwaran K	AME17078	MMS Maritime Agency (India) Pvt Ltd.,	27.05.2021
20	Jamine Jaison	AME17080	Fleet Management Ltd	04.01.2021
21	Moulishwaran K	AME17247	M/S. BW Maritime PTE Ltd., Mumbai	29.01.2021
22	Surya K	AME17248	OSM Fleet Management India Private Limited	14.12.2022
23	Elamaran S R	AME17249	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
24	Shaurya Bangwal	AME17253	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
25	Jatin	AME17081	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
26	Jenish Raj M	AME17082	ASP ships India Private Limited	19.01.2022
27	Jinistus Antony	AME17083	M/S. SEASPEED Marine Services LLP	28.05.2022
28	Jithin John Mathew	AME17084	MSI Shipping services India Pvt LTd.	15.12.2021
29	John Aloysius J	AME17085	V Ships India Pvt Ltd.,	16.02.2022
30	John Paul A	AME17086	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
31	John V J	AME17087	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
32	Jyothish J S	AME17088	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
33	Kachaiah M	AME17089	APEEJAY Shipping	02.06.2022

34	Kalidass	AME17090	International Seafort Dredging Private Limited	02.08.2022
35	Karan	AME17092	SINASTA Maritime Private Limited	17.03.2022
36	Karthik Lal B	AME17093	MAERSK Line Fleet Management and Technology India Private Limited	08.12.2021
37	Kavi Raj K	AME17094	NYK Ship Management (India) Pvt Ltd.,	19.05.2021
38	Kavin M	AME17095	M/S. AD Ship Management Private Limited	04.07.2022
39	Kaviyan S	AME17096	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
40	Keerthivasan G	AME17098	MMS Maritime Agency (India) Pvt Ltd.,	27.05.2021
41	Kiran	AME17099	V Ships India Pvt Ltd.,	22.06.2022
42	Krijocious K Jacob	AME17100	APEEJAY Shipping	02.06.2022
43	Laksharam V	AME17101	SARWAMANGLA Marine Academy Pvt Ltd	30.07.2022
44	Likhith Sai Marupilla	AME17102	Fleet Management Ltd	04.01.2021
45	Logavarshanan S	AME17103	AURUM marine Management Services Pvt Ltd.,	14.09.2022
46	Logeshwaran N	AME17104	OSM Fleet Management India Private Limited	17.05.2019
47	Mahamani M	AME17105	MARLOW Navigation India Pvt Ltd., Mumbai	14.06.2022
48	Manish Kumar	AME17106	NauticFleet Private Limited	04.03.2022
49	Manoj Raj R	AME17107	ASP ships India Private Limited	22.12.2021
50	Manoj M	AME17108	MARLOW Navigation India Pvt Ltd., Mumbai	14.06.2022
51	Mathiselvan B	AME17110	NauticFleet Private Limited	04.03.2022
52	Mohamed Azharudeen N	AME17113	MOL Maritime (India) Pvt. Ltd.	15.02.2022
53	Mohamed Farook A	AME17114	Thome India Pvt Ltd.,	19.04.2021
54	Mohamed Mydeen S	AME17115	MSI Shipping services India Pvt LTd.,	15.12.2021
55	Mohamed Yousuf H	AME17116	M/S. AD Ship Management Private Limited	10.04.2022
56	Mohanraj U	AME17117	MOL Maritime (India) Pvt. Ltd.	15.02.2022
57	Mohit	AME17118	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
58	Mohit Gupta	AME17119	NauticFleet Private Limited	04.03.2022
59	Lokesh E	AME17250	OSM Fleet Management India Private Limited	25.02.2022
60	Mukesh bala S	AME17120	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
61	Muneet	AME17121	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
62	Muruganantham K	AME17122	SINASTA Maritime Private Limited	30.04.2022
63	Nandalal Kumar	AME17124	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
64	Nandu R	AME17125	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
65	Naresh Babu M	AME17126	OSM Fleet Management India Private Limited	17.05.2019
66	Naveen Kumar V	AME17127	V Ships India Pvt Ltd.,	21.04.2021
67	Nirmal R	AME17128	Thome India Pvt Ltd.,	19.04.2021

68	Nishanth	AME17129	BLACKHULL Maritime Services Private Limited	30.07.2022
69	Nithin M	AME17130	Goodwood Marine Services Pvt Ltd.,	06.10.2022
70	Nithish Kumar S	AME17131	M/S.BW Maritime PTE Ltd., Mumbai	29.01.2021
71	Niyaso	AME17132	APEEJAY Shipping	02.06.2022
72	Pagutharivan D	AME17133	Thome India Pvt Ltd.,	19.04.2021
73	Parasuraman B	AME17134	MOL Maritime (India) Pvt. Ltd.	15.02.2022
74	Pavan Kumar U	AME17135	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
75	Pon Chandru R	AME17136	Fleet Management Ltd	04.01.2021
76	Ponbalaji R	AME17137	M/S. BW Maritime PTE Ltd., Mumbai	29.01.2021
77	Prabhu Kiran	AME17138	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
78	Pradap A	AME17139	Bravo Ship Management Pvt Ltd	18.03.2022
79	Prajwal K J	AME17140	KNK Ship Management , Mumbai	29.04.2022
80	Pranay krishna	AME17141	Goodwood Marine Services Pvt Ltd.,	27.11.2021
81	Praveen T	AME17142	Melody Shipmangement Private Limited	24.03.2022
82	Praveen K	AME17143	Bravo Ship Management Pvt Ltd	18.03.2022
83	Ragulganesh R	AME17144	ASP ships India Private Limited	19.01.2022
84	Rahul	AME17145	Fleet Management Ltd	04.01.2021
85	Rajapandi L	AME17146	APEEJAY Shipping	02.06.2022
86	Ritesh Kumar	AME17148	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
87	Riyazur Rahman A	AME17149	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
88	Saahil	AME17150	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
89	Sai Lokesh	AME17152	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
90	Sairam Kumar N	AME17155	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
91	Sam X Joshva	AME17158	OGEM Ship Management Private Ltd.	04.06.2022
92	Sandhieep A P	AME17159	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
93	Sangeeth Kumar MR	AME17160	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
94	Saipavan Papineni	AME17154	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
95	Sanjayandhan R	AME17161	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
96	Sanjeev Yadav	AME17162	MMS Maritime Agency (India) Pvt Ltd.,	27.05.2021
97	Sankar	AME17163	OSM Fleet Management India Private Limited	17.05.2019
98	Santhoshragaven U R	AME17165	OSM Fleet Management India Private Limited	25.02.2022
99	Sathiyamoorthy	AME17168	APEEJAY Shipping	02.06.2022
100	Sathya	AME17169	Goodwood Marine Services Pvt Ltd.,	20.10.2021
101	Saurabh	AME17170	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018

102	Selvarasan P	AME17171	OSM Fleet Management India Private Limited	17.05.2019
103	Sethupathi K	AME17172	Bravo Ship Management Pvt Ltd	18.03.2022
104	Shahrukh	AME17174	Wallem Group	02.08.2021
105	Shaikfazilahamad	AME17175	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
106	Shanmuga Raj	AME17176	V Ships India Pvt Ltd.,	21.04.2021
107	Sharath M	AME17177	Fleet Management Ltd	04.01.2021
108	Siju	AME17179	The Shipping Corporation of India Ltd	18.02.2022
109	Sivakumar	AME17180	OCEANIC Star Shipping Private Limited	26.05.2022
110	Sooryaprakash D	AME17182	NAUTILUS Shipping Pvt Ltd	19.02.2022
111	Sourav	AME17183	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
112	Sriban D	AME17185	APEEJAY Shipping	02.06.2022
113	Srikanth M	AME17186	NAUTAI Marine services and Trading Private Limited	09.04.2022
114	Steve B Britto	AME17187	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
115	Subash S	AME17188	ASP ships India Private Limited	19.01.2022
116	Sujin D	AME17190	APEEJAY Shipping	02.06.2022
117	Sujith R	AME17191	MMS Maritime Agency (India) Pvt Ltd.,	27.05.2021
118	Sundar N	AME17192	Goodwood Marine Services Pvt Ltd.,	18.11.2021
119	Suresh Krishna	AME17195	OSM Fleet Management India Private Limited	17.05.2019
120	Suresh Kumar S	AME17196	MMS Maritime Agency (India) Pvt Ltd.,	27.05.2021
121	Suresh Kumar V	AME17197	NauticFleet Private Limited	24.08.2021
122	Suresh M	AME17198	OSM Fleet Management India Private Limited	17.05.2019
123	Sureshpandian	AME17199	Wallem Group	02.08.2021
124	Suryan Thomas	AME17200	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
125	Trilok Vardhan	AME17245	V Ships India Pvt Ltd.,	21.04.2021
126	Tamilazhagan P	AME17203	NauticFleet Private Limited	04.03.2022
127	Tamilvanan S	AME17205	Thome India Pvt Ltd.,	19.04.2021
128	Tejas M	AME17206	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
129	Tharunkumaar K	AME17207	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
130	Tirumala Vikas	AME17210	Goodwood Marine Services Pvt Ltd.,	20.10.2021
131	Udayashankar J	AME17211	M/S. BW Maritime PTE Ltd., Mumbai	29.01.2021
132	Vasantha kumar	AME17212	NYK Ship Management (India) Pvt Ltd.,	19.05.2021
133	Venkata Madhav	AME17215	NYK Ship Management (India) Pvt Ltd.,	19.05.2021
134	Venkateshwaran A	AME17217	Lighthouse marine services India Pvt Ltd.	02.07.2022
135	Vifil Vincy Bose A	AME17218	Bravo Ship Management Pvt Ltd	18.03.2022

136	Vijay	AME17220	ABS marine services Pvt Ltd.	31.03.2022
137	Vijayaprakash K S	AME17222	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
138	Vishal	AME17224	Thome India Pvt Ltd.,	19.04.2021
139	Vishnu Kumar K S	AME17225	MARLOW Navigation India Pvt Ltd., Mumbai	14.06.2022
140	Vittal	AME17226	ASP ships India Private Limited	20.07.2021
141	Vuppalapati Vamsi	AME17227	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
142	Yaseer S	AME17229	Chevron Shipping	04.02.2020
143	Yugendiran	AME17231	NYK Ship Management (India) Pvt Ltd.,	19.05.2021
144	Yugesh L	AME17232	Fleet Management Ltd	04.01.2021
145	Yuvarajkumar M	AME17233	Wallem Group	02.08.2021
146	Balaji M	AME17234	NauticFleet Private Limited	24.08.2021
147	Subashchandru S	AME17236	MSI Shipping services India Pvt LTd.,	15.12.2021
148	Suraj Kumar	AME17237	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
149	Rajesh M	AME17240	V Ships India Pvt Ltd.,	05.01.2022
150	Samuel Joseph Paul A	AME17241	MARLOW Navigation India Pvt Ltd., Mumbai	14.06.2022
151	Thamim Ansari K	AME17244	MSI Shipping services India Pvt LTd.,	15.12.2021
152	Vijay K	AME17221	Fleet Management Ltd	04.01.2021
153	Sanjay Kumar R	AME17242	MOL Maritime (India) Pvt. Ltd.	12.10.2021
154	Tamil Selvan P	AME17202	M/S. BW Maritime PTE Ltd., Mumbai	29.01.2021
155	Albin Raj Selvaraj	AME17255L	Wallem Group	02.08.2021
156	Jacob K Koshy	AME17256L	V Ships India Pvt Ltd.,	21.04.2021
157	Kamesh Saravanakumar	AME17257L	M/S. AD Ship Management Private Limited	04.07.2022
158	Madhusuadan Jayaram	AME17258L	Goodwood Marine Services Pvt Ltd.,	19.10.2021
159	Mahin Azeeb	AME17259L	MMS Maritime Agency (India) Pvt Ltd.,	27.05.2021
160	Mohamed Yusuf Tharick	AME17260L	MARLOW Navigation India Pvt Ltd., Mumbai	14.06.2022
161	Nevil	AME15108R	Greatship (India) Limited	10.12.2021
162	Purushothaman Raju	AME17263L	Chevron Shipping	04.02.2020
163	Vallarasu Selvamurugan	AME17266L	ASP ships India Private Limited	19.01.2022
164	Prasanth Sankar	AME17262L	Chevron Shipping	04.02.2020
165	Abinesh A	AME17002	Bernhard Schulte Ship management	17.06.2021
166	Arun Kumar V	AME17028	Seaspan Crew Management India Private Limited	19.01.2022
167	Bhrugeshreddy	AME17043	Seaspan Crew Management India Private Limited	19.01.2022
168	Harsh H	AME17075	Mohan Mutha Exports Pvt. Ltd	05.05.2022
169	Kalutla zulkhar nayeen E	AME17091	Bernhard Schulte Ship Management	17.06.2021

170	Mohamed Asfaq T Z	AME17112	Seaspan Crew Management India Private Limited	19.01.2022
171	Sachi Kumar Singh	AME17151	Seaspan Crew Management India Private Limited	19.01.2022
172	Shivshankar B N	AME17178	Mohan Mutha Exports Pvt. Ltd	05.05.2022
173	Suraboinagirindra	AME17194	Bernhard Schulte Ship Management	17.06.2021
174	Thilakgandhi S	AME17208	Bernhard Schulte Ship Management	17.06.2021
175	Thomas Oommen	AME17209	Mohan Mutha Exports Pvt. Ltd	05.05.2022
176	Vengatesh R	AME17214	Bernhard Schulte Ship Management	17.06.2021
177	Aakash . P	AME17001	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
178	Abishek . M	AME17003	Goodwood Marine Services Pvt Ltd.,	15.10.2021
179	Adhil Siyad . P	AME17004	ASP ships India Private Limited	19.01.2022
180	Aditya Verma	AME17005	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
181	Ajay	AME17006	SWARAJ Marine Private Limited	31.05.2022
182	Ajay Kumar	AME17007	NauticFleet Private Limited	02.07.2022
183	Ajay R Kumar	AME17008	MSI Shipping services India Pvt LTd.,	15.12.2021
184	Ajay V	AME17009	Pacific Star Navigation Private Limited	07.08.2022
185	Ajilu B	AME17010	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
186	Akash A	AME17011	OSM Fleet Management India Private Limited	17.05.2019
187	Albin Varghese	AME17012	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
188	Alok	AME17013	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
189	Alok Singh	AME17014	Thome India Pvt Ltd.,	19.04.2021
190	Anand Yadav	AME17015	V Ships India Pvt Ltd.,	21.04.2021
191	Anandh V	AME17016	APEEJAY Shipping	02.06.2022
192	Andrews	AME17017	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
193	Anish C	AME17018	APEEJAY Shipping	02.06.2022
194	Antony T James	AME17019	M/S. Alphard Maritime Private Limited	11.10.2021
195	Aprameya . K. P	AME17020	Goodwood Marine Services Pvt Ltd.,	14.12.2021
196	Apurv Raj	AME17021	OSM Fleet Management India Private Limited	17.05.2019
197	Aqib Khan	AME17022	MAERSK Line Fleet Management and Technology India Private Limited	22.02.2022
198	Aravind A	AME17023	NYK Ship Management (India) Pvt Ltd.,	19.05.2021
199	Arjun Jayanker	AME17024	Goodwood Marine Services Pvt Ltd.,	16.12.2021
200	Arjun P	AME17025	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
201	Arun A	AME17026	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
202	Arun Kumar M	AME17027	KNK Ship Management , Mumbai	26.03.2022
203	Arunkumar A	AME17029	Thome India Pvt Ltd.,	19.04.2021

204	Arunkumar G P	AME17030	Fleet Management Ltd	04.01.2021
205	Ashish R	AME17032	MAERSK Line Fleet Management and Technology	02.04.2018
206	Ashish S	AME17031	NauticFleet Private Limited	03.07.2022
207	Ashokkumar V	AME17033	MARLOW Navigation India Pvt Ltd., Mumbai	14.06.2022
208	Ashwanth Gandhi V	AME17034	Thome India Pvt Ltd.,	19.04.2021
209	Aswin Sakthivel R	AME17035	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
210	Ayush	AME17036	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
211	Balaguru V	AME17037	OCEAN SPARKLE Limited	18.10.2022
212	Balasubramanian G	AME17038	Fleet Management Ltd	04.01.2021
213	Balavignesh P	AME17040	OSM Fleet Management India Private Limited	17.05.2019
214	Abisanth P	AME17252	MOL Maritime (India) Pvt. Ltd.	15.02.2022
215	Barathkodi . M	AME17041	V Ships India Pvt Ltd.,	01.05.2022
216	Benarji R L	AME17042	NauticFleet Private Limited	04.03.2022
217	Bhuvanesh A	AME17044	OSM Fleet Management India Private Limited	17.05.2019
218	Brijesh	AME17045	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
219	Chandru R	AME17046	ASP ships India Private Limited	19.01.2022
220	Christy Cairns	AME17048	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018
221	Clindon A	AME17049	NYK Ship Management (India) Pvt Ltd.,	19.05.2021
222	Daniel M	AME17050	V Ships India Pvt Ltd.,	21.04.2021
223	Dawood Sulaiman A	AME17051	M/S. Suchna Marine services Private Limited	16.09.2021
224	Dhanagopal S	AME17052	M/S. Aurus Ship Management Private Limited	19.10.2021
225	Dhanarajan	AME17053	MSI Shipping services India Pvt LTd.,	15.12.2021
226	Dhanesh A	AME17054	M/S. BW Maritime PTE Ltd., Mumbai	29.01.2021
227	Dhruval Agarwal	AME17055	MAERSK Line Fleet Management and Technology India Private Limited	02.04.2018

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S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	Abhinesh Raj Rajakumar	AME16002	MAERSK Line Fleet Management and Technology India Private Limited	14.12.2020
2	Sai Vastalya Adhikarla	AME16004	GLORY ShipManagement Pvt. Ltd.,	22.10.2021
3	Afijith Dileep Kumar Sathi	AME16005	MAERSK Line Fleet Management and Technology India Private Limited	03.01.2021
4	Denish Aghara	AME16006	MAERSK Line Fleet Management and Technology India Private Limited	22.01.2021
5	Ajith Kumar Adaikkalan	AME16007	THOME India Private Limited	24.12.2020
6	Akash Kannan	AME16008	SBM Marine Services Private Limited	18.02.2022
7	Akash Sasikumar	AME16009	MMS Maritime Agency(India) Pvt. LTd.	10.02.2021
8	Akhil Bini Sunil Kumar	AME16010	SEA SPARKLE Harbour Services Pvt. Ltd.	23.02.2022
9	Akilan Jothi	AME16011	UNIGRO Shipping Private Limited	05.08.2021
10	Akshay Suresh	AME16012	MAERSK Line Fleet Management and Technology India Private Limited	26.12.2020
11	Amal Kuruthukulangara Jose	AME16013	MAERSK Line Fleet Management and Technology India Private Limited	16.12.2020
12	Amal Krishna	AME16014	MAERSK Line Fleet Management and Technology India Private Limited	27.01.2021
13	Amarnath Veerasamy	AME16015	M/S. CASABLANCA Shipping Private Limited	28.05.2022
14	Amitabh Arya	AME16016	Goodwood Marine Services Pvt Ltd.	12.05.2021
15	Anand Raj Thangaraj	AME16018	ARYA Offshore Services Pvt Ltd.	11.03.2022
16	Aneesh Jayakumar	AME16019	MAERSK Line Fleet Management and Technology India Private Limited	21.01.2021
17	Ankith Chinta	AME16020	Melody Shipmanagement Private Limited	12.05.2021
18	Anurag Parth	AME16021	Goodwood Marine Services Pvt Ltd.	12.05.2021
19	Aravind Raj Senthil	AME16022	MAERSK Line Fleet Management and Technology India Private Limited	19.12.2020
20	Aravinthasamy Singaram	AME16023	MAERSK Line Fleet Management and Technology India Private Limited	12.12.2020
21	Arjunan Lakshmanan	AME16024	Goodwood Marine Services Pvt Ltd.	12.05.2021
22	Arkadeep Chakraborty	AME16025	MAERSK Line Fleet Management and Technology India Private Limited	23.12.2020
23	Arun Govindasamy	AME16026	M/S. GURUKRIPA Marine	23.12.2020
24	Arun Kumar Lokesh	AME16027	TOMINI Shipping Pvt Ltd.	02.05.2021
25	Ashutosh Kumar	AME16028	PIL Shipping	24.11.2020
26	Ashwin Raj Mohan Raman	AME16029	MAERSK Line Fleet Management and Technology India Private Limited	27.01.2021
27	Athul Chanadikkal Jayendran	AME16030	HELENA Ship Management Services Pvt Ltd.	08.07.2021
28	Avinash Addagarla	AME16031	NEW HORIZONS Ship Management Private Limited	02.03.2022
29	Balaji Ganesh	AME16032	K.R. Marine Services Private Limited	19.03.2021
30	Balaji Murugan	AME16033	SAMSON Maritime Limited	01.01.2021
31	Balaji Jayaraman	AME16034	TOMINI Shipping Pvt Ltd.	02.05.2021
32	Balamurugan Bose	AME16035	K.R. Marine Services Private Limited	02.11.2021
33	Balasethu Subramanian	AME16036	MAERSK Line Fleet Management and Technology India Private Limited	03.01.2021

34	Bejin Joe Benjama Kumar Sarojini	AME16038	SYNERGY Maritme Recruitment Services Pvt. LTd.	24.06.2021
35	Bibin Maliakkal Biju B	AME16039	WEDGE BAY Marine Services Private Limited	12.10.2022
36	Bibin Binu	AME16040	MSC Crewing Services Private Limited	03.08.2022
37	VishnuPrasad Payyakkil Pushpakaran	AME16201	MAERSK Line Fleet Management and Technology India Private Limited	31.01.2021
38	Mohammed Thasleeq Chekrayaim Vallaapp	AME16202	MAERSK Line Fleet Management and Technology India Private Limited	21.12.2020
39	Bruno Febiyon Robert Alex Charles George	AME16041	PIL Shipping	24.11.2020
40	Charles George	AME16042	MAERSK Line Fleet Management and Technology India Private Limited	21.01.2021
41	Chintu Kumar	AME16043	MAERSK Line Fleet Management and Technology India Private Limited	21.12.2020
42	Deepak Francis Simidoss	AME16044	MMS Maritime Agency(India) Pvt. LTd.	10.02.2021
43	Dhanush Dileep	AME16045	MAERSK Line Fleet Management and Technology India Private Limited	21.12.2020
44	Dharmendran Rajendran	AME16046	MARSHAL Ship Management Pvt Ltd.	15.10.2022
45	Dhavan Poovaiah Periyana Shash	AME16047	MAERSK Line Fleet Management and Technology India Private Limited	21.12.2021
46	Dhivagar Baskar	AME16048	TOMINI Shipping Pvt Ltd.	02.05.2021
47	Dinakaran Subramani	AME16049	PIL Shipping	24.11.2020
48	Dinesh Kumar Raja	AME16050	KNK Ship management , MUMBAI	07.06.2022
49	Dinesh Kumar Udhaya	AME16052	MAERSK Line Fleet Management and Technology India Private Limited	02.02.2021
50	Dubakula Yugesh	AME16053	M/S. TW Ship Management Private Limited	05.05.2022
51	Edwin Pradeep Thankamony Rajam	AME16054	MAERSK Line Fleet Management and Technology India Private Limited	23.01.2021
52	Elsin Jacob Elias	AME16055	MSI Shipping services	19.02.2020
53	Fabir Mangadan	AME16056	SEA SPARKLE Harbour Services Pvt. Ltd.	09..02.2022
54	Francis Paul Mankadiyan	AME16057	MAERSK Line Fleet Management and Technology India Private Limited	02.02.2021
55	Govindraj Madan	AME16058	MAERSK Line Fleet Management and Technology India Private Limited	05.02.2021
56	Giridharan Veeraraghavan	AME16060	SBM Marine Services Private Limited	30.03.2022
57	Girinath Loganathan	AME16061	Chevron Shipping	04.04.2019
58	Padinjattayil Gopikrishna	AME16065	MAERSK Line Fleet Management and Technology India Private Limited	05.02.2021
59	Vengatesan Govind Shanthi Ram	AME16066	PENTACRYSTAL Ship Mangement Pvt. Ltd, Chennai	11.03.2020
60	Gowtham Kumar Rajapu	AME16067	MAERSK Line Fleet Management and Technology India Private Limited	04.01.2021
61	Gowtham Raj Pandian	AME16068	MMS Maritime Agency(India) Pvt. LTd.	10.02.2021
62	Kommu Hanoch Manohar	AME16069	MAERSK Line Fleet Management and Technology India Private Limited	26.12.2020
63	Hariharan Natarajan	AME16070	MAERSK Line Fleet Management and Technology India Private Limited	23.12.2020
64	Harshit Dhyani	AME16072	MAERSK Line Fleet Management and Technology India Private Limited	23.01.2021
65	Anga Hemasundara Rao	AME16073	GLORY ShipManagement Pvt. Ltd.,	03.11.2021
66	Jackcin John	AME16074	PACIFIC STAR Navigation Private Limited	31.08.2021
67	Jamie Andrews	AME16075	MAERSK Line Fleet Management and Technology India Private Limited	27.01.2021

68	Chidipilli Jeevan Prasanna Kumar	AME16077	MSI Shipping services	19.02.2020
69	Jayaprakash Jayakumar	AME16078	PENTACRYSTAL Ship Mangement Pvt. Ltd, Chennai	11.03.2020
70	Jibin Thomas	AME16079	Chevron Shipping	04.04.2019
71	Jishnu Geetha Sasikumar	AME16080	PENTACRYSTAL Ship Mangement Pvt. Ltd, Chennai	11.03.2020
72	Jotheeswaran Ramesh	AME16082	MSI Shipping services	19.02.2020
73	Jothinathan Kittusamy	AME16083	A.SREE Shipping and Trading Private Limited	17.09.2021
74	Kalyanasundaram Natarajan	AME16084	LEOMARIS Ship Management Private Limited	13.07.2022
75	Kamalesh Ayyanan	AME16085	MAERSK Line Fleet Management and Technology India Private Limited	01.02.2021
76	Karthik Chandra Sharma	AME16086	MAERSK Line Fleet Management and Technology India Private Limited	01.02.2021
77	Kolli Bala Krishna	AME16087	M/S. TW Ship Management Private Limited	06.07.2022
78	Krishna Kumar Ramakrishnan	AME16088	HELIA Marine Services Pvt. Ltd.	06.02.2022
79	Kuldeep Singh Rathore	AME16089	Chevron Shipping	04.04.2019
80	Kumar Prince	AME16090	YAK Marine Private Limited	12.11.2020
81	Kundan Kumar	AME16092	MAERSK Line Fleet Management and Technology India Private Limited	24.01.2021
82	Kunal Chiudhary B	AME16091	MAERSK Line Fleet Management and Technology India Private Limited	20.01.2021
83	Ligesh Varma Karnan Padmavati	AME16093	MAERSK Line Fleet Management and Technology India Private Limited	07.02.2021
84	Manikandan S Kulothungan	AME16094	Dockendale Ship Management (India) Pvt. Ltd	15.10.2020
85	Mathan Raj Tamilvanan	AME16095	MAERSK Line Fleet Management and Technology India Private Limited	19.01.2021
86	Maya Krishnan Asokan	AME16096	PIL Shipping	24.11.2020
87	Mohamed Thameem Abdul Azees	AME16097	MSI Shipping services	19.02.2020
88	Mohammed Shahir Kundody	AME16098	MAERSK Line Fleet Management and Technology India Private Limited	02.02.2021
89	Mohan Raj Pandiarajan	AME16099	MOL Maritme(India) Pvt Ltd.	23.01.2020
90	Mohit Kumar	AME16100	Yash Offshore Private Limited	29.08.2022
91	Mugesh Raja Ayyadurai	AME16101	Greatship (India) Limited	26.05.2022
92	Muhammed Hussain Basha	AME16102	MAERSK Line Fleet Management and Technology India Private Limited	31.01.2021
93	Mukesh Prashanth Thirumalairaj	AME16103	OCEAN SPARKLE Limited	08.02.2022
94	Muneeswaran Arimurugan	AME16104	SABLINK Shipmanagement Private Limited	01.05.2022
95	Murali Sankar	AME16105	MAERSK Line Fleet Management and Technology India Private Limited	11.01.2021
96	Murugaiyan Sekar	AME16106	7 Star Ship Management Pvt Ltd.	19.05.2022
97	Muthu Raj Kalayaperumal	AME16107	Goodwood Marine Services Pvt Ltd.	12.05.2021
98	Muthu Kumar Athimulam	AME16108	DESTAN Ship Management Private Limited	22.02.2022
99	Nallendiran Nadarajan	AME16109	MOL Maritme(India) Pvt Ltd.	23.01.2020
100	Narendra Singh Nirwan	AME16110	MAERSK Line Fleet Management and Technology India Private Limited	17.02.2021
101	Navaneethakrishnan Krishnamoorthy	AME16111	KNK Ship management , MUMBAI	15.08.2021

102	Naveen Kumar Ravi	AME16112	MAERSK Line Fleet Management and Technology India Private Limited	28.02.2021
103	Naveen Kmar Vijay	AME16113	DESTAN Ship Management Private Limited	25.08.2022
104	Nitesh Kumar Nithyanadan	AME16114	Greatship (India) Limited	08.04.2022
105	Pangaru Sowrirajan	AME16115	TOMINI Shipping Pvt Ltd.	02.05.2021
106	Patam Suneel Kumar	AME16116	Dockendale Ship Management (India) Pvt. Ltd	15.10.2020
107	Poovarasan vasu	AME16117	OCEAN SPARKLE Limited	19.05.2022
108	Prabath Elanchezhian	AME16118	MAERSK Line Fleet Management and Technology India Private Limited	23.01.2021
109	Prakash Radhakrishnan	AME16119	OCEAN SPARKLE Limited	04.01.2022
110	Praveen Kumar Angappan	AME16120	MAERSK Line Fleet Management and Technology India Private Limited	07.01.2021
111	Praveen Kumar Thandapani	AME16121	Chevron Shipping	04.04.2019
112	Praveen Prakash	AME16122	HELENA Ship Management Services Pvt Ltd.	12.07.2021
113	Praveen Mayavel	AME16123	HELIA Marine Services Pvt. Ltd.	26.12.2021
114	Preetham Janarthan	AME16124	Dockendale Ship Management (India) Pvt. Ltd	15.10.2020
115	Putcha Adinarayana	AME16126	NAUTI Marine Services and Trading Private Limited	24.08.2020
116	Rahul Kumar	AME16128	MAERSK Line Fleet Management and Technology India Private Limited	04.02.2021
117	Rajkumar ganesh kumar	AME16129	OCEAN SPARKLE Limited	10.10.2021
118	Raja Rathinam Kumaravel	AME16130	MMS Maritime Agency(India) Pvt. LTd.	10.02.2021
119	Rajesh Dhayanithi	AME16131	Melody Shipmanagement Private Limited	24.08.2021
120	Rajkumar Jayabalan	AME16132	Shraddha Maritime Services Private Limited	14.12.2021
121	Rajkumar Venkatesaperumal	AME16133	EKDANTA Shipping Services Private Limited	12.03.2022
122	Rama Krishnan Kothandaraman	AME16134	PENTACRYSTAL Ship Mangement Pvt. Ltd, Chennai	11.03.2020
123	Ranjith Kumar Rajak	AME16135	M/S. SHIPTECK marine Solutions Private Limited	27.02.2022
124	Ranjith Kumar Perumal	AME16136	MAERSK Line Fleet Management and Technology India Private Limited	02.02.2021
125	Rejet Prabhu	AME16137	Su.Nav Shipmangement Pvt Ltd.	25.12.2021
126	Rishabh Gupta	AME16138	MAERSK Line Fleet Management and Technology India Private Limited	21.01.2021
127	Rushman Dennis	AME16140	PRATISHTHA Marine Services Pvt Ltd.	06.11.2021
128	Sahaya Sham Deva Sahayam	AME16141	PACIFIC STAR Navigation Private Limited	31.08.2021
129	Sanjay Kathiiresan	AME16142	PRATISHTHA Marine Services Pvt Ltd.	02.11.2021
130	Sanjay Raji	AME16143	DESTAN Ship management , MUMBAI	11.09.2021
131	Sankar Dahrmaraj	AME16144	KNK Ship management , MUMBAI	15.08.2021
132	Santhosh Kumar Saravanavel	AME16145	THOME India Private Limited	24.12.2020
133	Sathya Prabu Senthil Kumar	AME16147	MOL Maritme(India) Pvt Ltd.	23.01.2020
134	Sathyamoorti	AME16148	S S Offshore Pvt. Ltd	13.09.2021
135	Savio Francis	AME16149	ARUNIMA Marine Services Private Limited	26.06.2022

136	Selva Gowtham	AME16150	MAERSK Line Fleet Management and Technology India Private Limited	02.02.2021
137	Selvan Selvaraj	AME16151	THOME India Private Limited	24.12.2020
138	Shaik Fazil	AME16152	Dockendale Ship Management (India) Pvt. Ltd	15.10.2020
139	Shashi Ranjan	AME16153	Chevron Shipping	04.04.2019
140	Shehbaaz Singh	AME16154	MAERSK Line Fleet Management and Technology India Private Limited	02.02.2021
141	Siluvai Antony	AME16156	BHUMI RISE LLP	22.12.2020
142	Snowberin Starlin Cardoza	AME16158	OLYMPIA Ship Management Private Limited	03.10.2021
143	Somesh Kumar Venkatesan	AME16159	EKDANTA Shipping Services Private Limited	03.04.2022
144	Sravan Kumar	AME16160	MAERSK Line Fleet Management and Technology India Private Limited	09.12.2020
145	Raushan Kumar	AME16161	Yash Offshore Private Limited	10.04.2022
146	Sreeram S J	AME16162	THOME India Private Limited	24.12.2020
147	Sreetharan M	AME16163	OCEAN SPARKLE Limited	03.08.2021
148	Sriman Reddy P	AME16164	Goodwood Marine Services Pvt Ltd.	12.05.2021
149	Srinath M	AME16165	MOL Maritme(India) Pvt Ltd.	23.01.2020
150	Sriram P	AME16166	ERUDITO Training Solutions Pvt Ltd.	28.11.2020
151	Stalin K	AME16167	OCEAN SPARKLE Limited	09.08.2022
152	Sudarsan P	AME16168	ALBATROSS Marine Services	06.01.2022
153	Sudarsanavenkatesh K	AME16169	OCEAN SPARKLE Limited	04.01.2022
154	Sugantahn S	AME16170	Ekalavya Ship and Crew Management (OPC) Private Limited	12.05.2022
155	Sujith N	AME16171	APEEJAY Shipping	02.06.2022
156	Suresh Karnam	AME16172	MMS Maritime Agency(India) Pvt. LTd.	10.02.2021
157	Suriyanarayan P	AME16173	PIL Shipping	24.11.2020
158	Syed Kaboor A	AME16174	MAERSK Line Fleet Management and Technology India Private Limited	28.01.2021
159	Tejas Singal	AME16175	MAERSK Line Fleet Management and Technology India Private Limited	18.12.2020
160	Thejas A Nair	AME16176	ERUDITO Training Solutions Pvt Ltd.	30.10.2020
161	Trinethra Reddy V	AME16177	THOME India Private Limited	24.12.2020
162	Tungana Anil Kumar	AME16178	B.G. SHIRKE Construction Technology Private Limited	07.04.2022
163	Udhaya G	AME16179	S S Offshore Pvt. Ltd	10.01.2021
164	Uthappa A G	AME16180	SIDDHI Ocean Services Pvt Ltd.	26.09.2022
165	Vasanth Kumar Y	AME16181	Chevron Shipping	04.04.2019
166	Vedhaburiswaran R	AME16182	MAERSK Line Fleet Management and Technology India Private Limited	27.12.2020
167	Veerangan K	AME16183	APAC Marine Services Pvt Ltd	15.03.2022
168	Venkatesh	AME16184	MAERSK Line Fleet Management and Technology India Private Limited	28.01.2021
169	Venkatesh	AME16185	SHIRAJ Shipping Private Limited	17.09.2022

170	Vigneshwar B	AME16186	MAERSK Line Fleet Management and Technology India Private Limited	05.01.2021
171	Vijay S	AME16187	OCEAN SPARKLE Limited	04.01.2022
172	Vijaypandi K	AME16188	Peninsular Maritime India Private Limited	22.02.2022
173	Vimalkanth X	AME16189	APEEjAY Shipping	02.06.2022
174	Vinod Kumar C. H	AME16190	Chevron Shipping	04.04.2019
175	Vinoth M	AME16191	Lilly Maritime Private Limited	20.04.2021
176	Vinoth Raja D	AME16192	APEEjAY Shipping	02.06.2022
177	Vishal Goyal	AME16193	Goodwood Marine Services Pvt Ltd.	12.05.2021
178	Vishal M	AME16194	APEEJAY Shipping	02.06.2022
179	Vishwa P	AME16195	MAERSK Line Fleet Management and Technology India Private Limited	29.12.2020
180	Viswanth K	AME16196	MAERSK Line Fleet Management and Technology India Private Limited	22.01.2021
181	Vinoth Babu S	AME16197	DESTAN Ship Management Private Limited	11.09.2021
182	Venkatesh B	AME16200	MOL Maritme(India) Pvt Ltd.	23.01.2020
183	Dhinesh M	AME15204L	SBM Marine Services Private Limited	18.02.2022
184	Geoffrey Fernando J	AME15205L	Yash Offshore Private Limited	29.08.2022
185	Ilayaraja R	AME15206L	MMS Maritime Agency(India) Pvt. LTd.	10.02.2021
186	Khaja Rafic B	AME15207L	APEEJAY Shipping	02.06.2022
187	Muralidaran S	AME15209L	THOME India Private Limited	24.12.2020
188	Rabusekar G	AME15210L	PRAGATI Marine Services Private limited	19.07.2022

4.5 Professional Activities (20) Total Marks 20.00

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

Institute Marks : 5.00

Table B.4.5a List of Professional Societies/ chapters

S. No	Professional Societies
1	Institution of Engineers India IE(I)
2	Institute of Marine Engineers (India) IME(I)
3	International Association of Ports and Harbors (IAPH)
4	International Association of Maritime Universities (IAMU)
5	International Association of Maritime and Inland Navigation Universities (IAMINU)
6	Asia Maritime and Fisheries Universities Forum (AMFUF)

Table B: 4.5.1a List of Events

S. No	Year	Title of the Professional Development Programme Organised	Dates (From - To)
2022 - 2023			
1.	2022 - 2023	A Guest Lecture on “Marine Control Engineering and Automation”	28.09.2022
2.	2022 - 2023	Orientation program me on “NSS Orientation Day”	14.10.2022
3.	2022 - 2023	A Faculty development programme on “Risk Assessment and Management of Marine Disaster”	19.11.2022
4.	2022 - 2023	Guest Lecture “Ship Electrical System – Safety and Maintenance”	22.11.2022
5.	2022 - 2023	Renewable Energy Utilization Onboard Ship	01.12.2022
6.	2022 - 2023	Workshop on “Automotive Bike Engines”	07.12.2022
2021 - 2022			
1.	2021 - 2022	A Guest Lecture on “Marine Control Engineering and Automation”	12.10.2021
2.	2021 - 2022	Faculty Development Programme on “Safety Emergency Measures and Practices”	06.12.2021
3.	2021 - 2022	Extension Activity on “Basic Firefighting, Safety and Emergency Response for local Shopkeepers”	10.03.2022
4.	2021 - 2022	No Smoking Day “Awareness programme on III effects of tobacco abuses and its consequences”	16.03.2022
5.	2021 - 2022	Extension Activity on “World Water Day”	22.03.2022
6.	2021 - 2022	National Maritime Day	05.04.2022
7.	2021 - 2022	The International Convention for “Prevention of Marine Pollution for Ships”	22.04.2022
8.	2021 - 2022	A National Level Symposium on “Marine Traffic 2022”	26.04.2022
9.	2021 - 2022	Alumni Meet	29.04.2022
10.	2021 - 2022	World Earth Day	22.04.2022
11.	2021 - 2022	International mother language day	21.02.2022
12.	2021 - 2022	Mega Blood Donation Camp	13.05.2022
13.	2021 - 2022	Guest Lecture on “Marine Engineering Practices”	17.05.2022

14.	2021 - 2022	International conference on " New Technologies for Greener Shipping 2022" (Virtual)	26.05.2022
15.	2021 - 2022	Woman in Sailing	18.05.2022
16.	2021 - 2022	Biodiversity Day & Outreach Programme "Tree Plantation.Building a Shared Future for all Life"	23.05.2022
17.	2021 - 2022	Workshop on "Assessment Method in Outcome Based Education"	24.05.2022
18.	2021 - 2022	A Guest Lecture "Artificial Intelligence and Machine Learning in Marine Electrical Technology"	25.05.2022
19.	2021 - 2022	International coastal cleanup activity "Social Awareness and Responsibility"	03.06.2022
20.	2021 - 2022	World Bicycle Day	03.06.2022
21.	2021 - 2022	International day "Against Drug Abuse & illicit Trafficking"	30.06.2022
		2020 - 2021	
1.	2020 - 2021	A Seminar on COVID 19 special yoga session	15.05.2021
2.	2020 - 2021	Promotion of Green Campus Activities on Online Drawing Competitions	21.05.2021
3.	2020 - 2021	Training Programme on "Laboratory Best Practices and Everyday Excellence"	20.05.2021
4.	2020 - 2021	National Seminar on "Seafarers : at the core of shippings future opportunities and challenges"	25.05.2021
5.	2020 - 2021	Cultural Event TALENTIA . 21	25.05.2021
6.	2020 - 2021	A Webinar on "Geospatial Software"	25.05.2021
7.	2020 - 2021	Research methodology	26.05.2021
8.	2020 - 2021	Webinar on "Campus to Corporate"	26.05.2021
9.	2020 - 2021	Career development programme on "Take Charge of Your Life Now"	27.05.2021
10.	2020 - 2021	A Guest lecture on "Future Fuels in shipping"	29.05.2021
11.	2020 - 2021	Alumni Guest Lecture	29.05.2021
12.	2020 - 2021	Awareness Programme for Covid.19	29.05.2021
13.	2020 - 2021	International Conference "Disruptive Technologies in Maritime Sector: Industry 4.0 "ICDTMS 2021" (Virtual)	28.06.2021
14.	2020 - 2021	A National Level webinar "Intellectual property rights for engineers"	28.05.2021
15.	2020 - 2021	ICT based teaching strategies in Maritime Education	30.05.2021
16	2020 - 2021	Personality development programme on "The best investment you can make in yourself"	30.05.2021
17.	2020 - 2021	Blood Donation Amid COVID Times	06.11.2021
18.	2020 - 2021	A webinar on "Entrepreneurship Development"	17.06.2021
19.	2020 - 2021	A career orientation event on "Go High With Higher Education"	18.06.2021
20.	2020 - 2021	A seminar on "Master Cognitive Biases and Improve Your Critical Thinking"	19.06.2021
21.	2020 - 2021	A National Level Symposium on "Technological Advances in Onboard Ship"	21.06.2021

22.	2020 - 2021	WHEN, WHERE and WHY	27.06.2021
23.	2020 - 2021	A faculty development programme on “Future Trends in Shipping”	01.06.2021
		2019 - 2020	
1.	2019 - 2020	Guest lecture on “Life at sea”	02.11.2019
2.	2019 - 2020	Guest lecture on “RT Flex and MAN ME Engines”	22.10.2019
3.	2019 - 2020	Guest lecture on “Latest automation onboard ship”	21.10.2019
		2018 - 2019	
1.	2018 - 2019	Guest lecture on duties of junior engineer and cadets onboard ship	11.09.2018
2.	2018 - 2019	Team building activities	19.01.2018

4.4.2 Publication of technical magazines, newsletters, etc. (5)

Institute Marks : 5.00

Table B: 4.5.2.a List of Newsletters published

S. No	Name of the Newsletter	Editorial Members	Periodicity	Year of publishing
1	Pearl of AMET	Prof. Bhoopathy Bhaskaran,Dr. R. Rajavel,Dr. M. Subha, Mr. U. N. Neela Prasad Mr. C. Sreechand, Mr. S. Devan, Mr. Guruprasanth, Mr. G. S. Sreejith, Mr. K. V. Pranesh	Biannual	Dec 2022
2	Pearl of AMET	Prof. Bhoopathy Bhaskaran , Dr. R. Rajavel ,Dr. M. Subha , Mr. U. N. Neela Prasad Mr. Parvan Ashok, Mr. N. Ugendiran, Mr. K. Keerthivaasan, Mr. Vishnu Panikar, Mr. M. Sasidharan	Biannual	June 2022
3	Pearl of AMET	Prof. Bhoopathy Bhaskaran , Dr. R. Rajavel , Dr. M. Subha, Mr. U. N. Neela Prasad Mr. Ritvik Nair, Mr. S. Sivabalan , Mr. T. Guruprasad, Mr. Jai Vishnu, Mr. George Sam	Biannual	Dec 2021
4	Pearl of AMET	Prof. Bhoopathy Bhaskaran , Dr. R. Rajavel, Dr. M. Subha, Mr. U. N. Neela Prasad Mr. Muneet Singh, Mr. P. Shanmuga Ganesan Mr. J. Krishnankanth, Mr. B. Sabarivasan, Mr. M. Mohamed Umar	Biannual	June 2021
5	Pearl of AMET	Prof. Bhoopathy Bhaskaran, Dr. M. Subha, Dr. S. Sangeetha Mr. S. Harish Karthick, Mr. Tewar Manu Udhayakumar, Mr. H A Ramprathap, Mr. V. Vijaykrishna, Mr. R. Niranjan	Biannual	Dec 2020
6	Pearl of AMET	Prof. Bhoopathy Bhaskaran, Dr. M. Subha , Dr. S. Sangeetha Mr.Thejas. A.Nair, Mr.Anand Yadav, Mr. Shashank, Mr. Dhanush, Mr.Tanush	Biannual	Jun 2020

Table B: 4.5.2.b List of Magazines published

S. No	Name of the magazine	Editorial Members	Periodicity	Year of publishing
1	Evergreen Voyager	Prof. Bhoopathy Bhaskaran Dr. R. Rajavel Dr. M. Subha Mr. U. N. Neela Prasad Mr. S. K. Krishnakumar Mr. C. Sreechand Mr. S. Devan Mr. Guruprasanth Mr. G. S. Sreejith Mr. K. V. Pranesh	Biannual	Dec 2022
2	Evergreen Voyager	Prof. Bhoopathy Bhaskaran Dr. R. Rajavel Dr. M. Subha Mr. U. N. Neela Prasad Mr. Parvan Ashok Mr. N. Ugendiran Mr. K. Keerthivaasan Mr. Vishnu Panikar Mr. M. Sasidharan	Biannual	June 2022
3	Evergreen Voyager	Prof. Bhoopathy Bhaskaran Dr. R. Rajavel Dr. M. Subha Mr. U. N. Neela Prasad Mr. Ritvik Nair Mr. S. Sivabalan Mr. T. Guruprasad Mr. Jai Vishnu Mr. George Sam	Biannual	Dec 2021
4	Evergreen Voyager	Prof. Bhoopathy Bhaskaran, Dr. M. Subha, Dr. S. Sangeetha	Biannual	June 2021
5	Evergreen Voyager	Prof. Bhoopathy Bhaskaran, Dr. M. Subha, Dr. S. Sangeetha	Biannual	Dec 2020

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

Institute Marks : 10.00

S. No	Name of the Student	Name of the Event	Place	Month & Year	Prize/ Participated/ Presented
		2022- 2023			
1	Mohameed Asif Ali M	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
2	Vimin V	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
3	Naresh N	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
4	Rajasurya R	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
5	Kunwar Mohith	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
6	Sutheekshan V	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
7	Akash Kumar R	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
8	Gaurav Choudhary P	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
9	Abdulla Adinan	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
10	Subramanian S	All India Inter University South Zone Cricket Tournament	REVA University, Bangalore.	Feb 2023	Participated
11	Naveen Kumar M	All India Inter University Best Physique (Men) Championship	Yenepoya University, Mangalore	Feb 2023	Participated
12	Nishanth I	All India Inter University Best Physique (Men) Championship	Yenepoya University, Mangalore	Feb 2023	Participated
13	Durai Ruban G	All India Inter University Best Physique (Men) Championship	Yenepoya University, Mangalore	Feb 2023	Participated
14	Madasamy S	All India Inter University South Zone VolleyBall Tournament	SRM Institute of Science and Technology, Chennai	Dec 2022	Participated
15	Fayz M	All India Inter University South Zone VolleyBall Tournament	SRM Institute of Science and Technology, Chennai	Dec 2022	Participated
16	Guru Prasad	All India Inter University South Zone VolleyBall Tournament	SRM Institute of Science and Technology, Chennai	Dec 2022	Participated
17	Krishnakanth J	All India Inter University South Zone VolleyBall Tournament	SRM Institute of Science and Technology, Chennai	Dec 2022	Participated
18	Mounikanth K S	All India Inter University South Zone VolleyBall Tournament	SRM Institute of Science and Technology, Chennai	Dec 2022	Participated
19	Kishor S	All India Inter University South Zone VolleyBall Tournament	SRM Institute of Science and Technology, Chennai	Dec 2022	Participated
20	Sivasubramanian C	All India Inter University South Zone Kabbadi Tournament	Bangalore city University	Dec 2022	Participated
21	Sajith S	All India Inter University South Zone Kabbadi Tournament	Bangalore city University	Dec 2022	Participated
22	Srikanth J	All India Inter University South Zone Kabbadi Tournament	Bangalore city University	Dec 2022	Participated
23	Ryvan P.S	All India Inter University South Zone Badminton Tournament	Jain University, Bangalore	Nov 2022	Participated
24	Mayur A M	All India Inter University South Zone Badminton Tournament	Jain University, Bangalore	Nov 2022	Participated
25	Hritick A	All India Inter University South Zone Badminton Tournament	Jain University, Bangalore	Nov 2022	Participated
26	AmanKashyap	All India Inter University South Zone Badminton Tournament	Jain University, Bangalore	Nov 2022	Participated
27	Soumya Ranjan Rout	National Defence Academy Inland Enterprise Championship	Khadakwasla Lake, Pune	June 2022	Participated

28	Soumya Ranjan Rout	National Defence Academy Inland Enterprise Championship	Royal Mysore Sailing Club, Mysore	July 2022	Participated
29	Soumya Ranjan Rout	Chancellor Award	AMET University	August2022	Prize
30	Shivam Kumar Singh	IQAC	AMET University	July 2022	Participated
31	Elton Vion Miranda	Blood Donation	Chennai	August 2022	Participated
32	I.Nishanth	Blood Donation	Chennai	August 2022	Participated
33	Elton Vion Miranda	NCC	Puducherry	August 2022	Participated
34	Srinivas Sathyamoorthy	Coastal Cleaning	Chennai	September 2022	Participated
35	Aswin S	Coastal Cleaning	Chennai	September 2022	Participated
36	Harshalagriya Singh	Coastal Cleaning	Chennai	September 2022	Participated
37	Saksham Jha	Coastal Cleaning	Chennai	September 2022	Participated
38	Sarthak Chowdhury	Coastal Cleaning	Chennai	September 2022	Participated
39	Surat Kumar	Coastal Cleaning	Chennai	September 2022	Participated
40	Elton Vion Miranda	NCC Navel Unit 2	Chennai	November 2022	Participated
41	Sai Rithvik A	Blood Donation	Chennai	December 2022	Participated
42	Jetti. Sushmanth	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
43	Jeeva. P	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
44	Yedla Shyam Deepak	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
45	Hemanth P	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology &Science, Chennai	June 2022	Participated
46	Serman Vinush Kumar B	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
47	Mohameed Asiff Ali	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
48	Vimin V	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
49	Devdharshan	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
50	Baskar P	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated

51	Raja Surya R	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
52	Sathya	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
53	Benjamin Garryston	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
54	Pradeep	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
55	Gaurav Choudhary P	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
56	Gokul	AIU- South Zone Inter University, Chennai Cricket	Hindustan Institute of Technology & Science, Chennai	June 2022	Participated
		2021-2022			
1	P Jai Vishnu	One Day National Webinar	AMET University, Chennai	June 2021	Participated
2	Shivam Kumar Singh	Data Privacy and Protection	AMET University, Chennai	June 2021	Participated
3	Shivam Kumar Singh	Feasibility of Deep Learning	AMET University, Chennai	October 2021	Participated
4	Soumya Ranjan Rout	Camp Certificate	Madurai	October 2021	Participated
5	Soumya Ranjan Rout	Guard of Honour in Prime Minister Rally	New Delhi	Dec 2021-Jan 2022	Prize
6	Soumya Ranjan Rout	Camp Certificate	Madurai	Dec 2021	Participated
7	Sudeep Alex Prem	South Zone Inter University, Chennai Basketball Tournament	Christ University, Chennai	December 2021	Participated
8	Yedla Shyam Deepak	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
9	Prasanna M	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
10	Punith kumar M	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
11	Aravinthan S	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
12	Madasamy S	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
13	Fayz M	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
14	Krishna C	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
15	Kishor B	South Zone Inter University, Chennai Volleyball Tournament	SRM University, Chennai	December 2022	Participated
16	Soumya Ranjan Rout	Camp Certificate	Madurai	Nov 2021	Participated
17	Soumya Ranjan Rout	Royal Madras Yatch club	Chennai	May 2022	Participated
18	Afil Mohammed Ismail	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
19	Ritvik Nair	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
20	Sajin Thomas	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
21	Shashank K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
22	Ayanava Choudhury	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
23	Bathula Vidhyasagar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented

24	Dhruva Shetty R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
25	Jetti Sushmanth	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
26	Mekala Hari Krishna Yadav	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
27	Mohammed Saleem	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
28	Richaerd Raja Morais	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
29	Richvin Raja Morais	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
30	Aditya Gautam	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
31	Ritesh Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
32	Shiv Kumar Bobal	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
33	Shree Krishna	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
34	Shreyas Srivastava	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
35	Ajay Saini	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
36	Akshay Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
37	Amiya Raj Anu	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
38	Ananyo Mishra	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
39	Hrithik Oza	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
40	Kartik Singh	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
41	Khan Shoib Shafique	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
42	Peters Samuel Raju	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
43	Akula Om Sai Akash	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
44	Syed Shahnawaz Ali	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
45	Vaddepalli Saketh	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
46	Varma O	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
47	Bade Praveen Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
48	Guttavelli Bala Prasannagiri	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
49	Hemanth Pallapolu	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
50	Kishore B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
51	Kunal Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
52	Om Prakash Singh	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
53	Priyanshu Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
54	Shithesh	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
55	Akash Agrawal	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
56	Subham Jha	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
57	Taushif Ekbal	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented

58	Ankit Jha	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
59	Dalvi Mandar Rajendra	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
60	Najam Aziz	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
61	Nitish	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
62	Pantha Hasmi S K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
63	Sahil Chouhan	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
64	Sahil Rana	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
65	Soumyadip Maity	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
66	Aakash K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
67	Narayanasamy N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
68	Rohith R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May2022	Presented
69	Vinoth Kumar M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
70	Vishnu N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
71	Vysakh B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
72	Ajay R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
73	Baskar J	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
74	Deva R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
75	Hamza Azmi	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
76	Harikrishnan S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
77	Harinivash R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
78	Karthikeyan E	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
79	Manoj Kumar K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
80	Chetna Saini	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
81	Suraj Pandiyan S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
82	Tamada Arun Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
83	Tewar Manu Udaykumar Murugan	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
84	Venugopal M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
85	Devaraj S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
86	Gokul Doss K S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
87	Gorakala Sai Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
88	Hariharan R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
89	Madhavan V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
90	Pradeep T	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
91	Shanmuga Ganesan P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented

92	Srinivasan N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
93	Abishek V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
94	Manu Mohan	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
95	Navin R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
96	Parvan Ashok	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
97	Rajesh S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
98	Rajeshwaran B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
99	Sourav K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
100	Vishnu K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
101	Anastraj K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
102	Arjunan A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
103	Arun B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
104	Arun Raj S R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
105	Balaji Prasad N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
106	Calvin Jairo R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
107	Dhaneesh Nair S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
108	Esakkipandi S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
109	Arunachallam S G	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
110	Muzhunilavan P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
111	Pradeep M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
112	Sam Roshan S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
113	Bharathi Raj J	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
114	Jayasurya T	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
115	Karikal Cholan R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
116	Maniarasu V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
117	Mohan Kumar R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
118	Mohan Kumar R S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
119	Mohan Ram R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
120	Muthu Kumar A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
121	Raja Mohammed A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
122	Surya K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
123	Vijayakumar N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
124	Gokulnath N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
125	Bejo Shyam P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented

126	Gideon D	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
127	Govindhavasan N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
128	Naveen Kumar N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
129	Ajay Hosh R S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
130	Gokulkrishnan T	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
131	Igene Antony Inna Saint X	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
132	Joseph Herbens E	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
133	Ajay Raja	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
134	Devabalan T	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
135	Gokulsivapandi R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
136	Santhosh Kumar G	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
137	Gurusaran S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
138	Maxwell A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
139	Pratheep Raja L	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
140	Sriram R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
141	Manoj Prabhakar M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
142	Manoj S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
143	Mohamed Abith B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
144	Prasanna M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
145	Ram Prasath V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
146	Ravin E	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
147	Vignesh S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
148	Visveswaran S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
149	Ayyanar M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
150	Vignesh R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
151	Vikraman S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
152	Vimal Raj N	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
153	Vinoth M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
154	Gowtham Metha P J	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
155	Natheem Hussain J	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
156	Porkuna Pandian R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
157	Ravi Raghuls	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
158	Salman Baris M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
159	Anwar Ibrahim Y	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented

160	Aravinthan S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
161	Jagadeeswaran V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
162	Sharan T	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
163	Subash Kannan M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
164	Ajin M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
165	Karthickraja M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
166	Madesh M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
167	Ujjwal Rastogi	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
168	Vinish Mathew V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
169	Abhijeet Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
170	Karthikeyan J S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
171	Kartik Tiwari	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
172	Mohammed Saif Ali S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
173	Sitendra Chaudhary	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
174	Anandh V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
175	Anuishkumar P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
176	Dinesh C	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
177	Sathya Narayanan K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
178	Viswa M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
179	Shobanesh M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
180	Stalin C	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
181	Vetrivel J	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
182	Sathyendran K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
183	Sudhakar A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
184	Sudharsan M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
185	Syed Ansar A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
186	Gautam Vinayak S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
187	Nabu Nilafer K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
188	Pranav V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
189	Roshan Lopez G	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
190	Arnold G	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
191	Balabharathi P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
192	Kavibalan S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
193	Selvabassam S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented

194	Udhayakumar R J	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
195	Attada Anudeep Naidu	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
196	Jeeva P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
197	Shaik Hazi Alaham	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
198	Srinath B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
199	Yedla Shyam Deepak	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
200	Karada Jeevan Kumar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
201	Serman Vinish Kumar B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
202	Arnold G	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
203	Balabharathi P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
204	Kavibalan S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
205	Ajay V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
206	Kapilesh	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
207	Prakash A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
208	Praveen R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
209	Hari Krishna P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
210	Gnana Francis Jerin J	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
211	Karthikeyan R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
212	Krishnavadivel R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
213	Arun Kumar M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
214	Maheshwara Aswajidh	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
215	Paneer Selvam D	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
216	Perumalraja G	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
217	Manikandan P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
218	Neeraj A G	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
219	Rajesh S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
220	Ram Prathap H A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
221	Mohammed Fahiz S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
222	Naveen P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
223	Prathiv Kannan V	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
224	Rakesh R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
225	Rudhra Moorthy P	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
226	Balaji B	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
227	Jayesh Sharma	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented

228	Manoj Aravindh R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
229	Muthuselvan S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
230	Balu Mahendra A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
231	Gowshik K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
232	Kamaleshan R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
233	Mohammed Saahil M A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
234	Abinesh A	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
235	Adham M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
236	Adithya K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
237	Ameer.Al. Safar	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
238	Akshay Reji	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
239	Abhiram B S	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
240	Alok Chandra M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
241	Leo Augustine	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
242	Abdul Rahuman M	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
243	Abhishek R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
244	Arun Kumar V R	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
245	Sharan K	International Virtual Conference on “New Technologies for Greener Shipping”	AMET Deemed to be University, Chennai	May 2022	Presented
246	Shivam Kumar Singh	Quiz Competition	AMET Deemed to be University	June 2021	Participated
247	Shivam Kumar Singh	Automobile Quiz	AMET Deemed to be University	June 2021	Participated
248	M. Sureshbalaji	Drawing Competition	AMET Deemed to be University	October 2021	Participated
249	Madasamy	Volley Ball	AMET University	October 2021	Winner
250	Sudeep Alex Prem	South Zone Inter University, Basketball Tournament	Christ University, Bangalore	December 2021	Participated
251	P. Jai Vishnu	Maths Quiz	AMET Deemed to be University	July 2021	Participated
252	Navin G	Blood Donation	Chennai	May 2022	Participated
253	Sarthak Chowdhury	Blood Donation	Chennai	May 2022	Participated
254	Amal Shaji	Blood Donation	Chennai	May 2022	Participated
255	Harshalagriya Singh	Eye Camp	AMET Deemed to be University	April 2022	Participated
256	Koushiq R	Volunteer	AMET Deemed to be University	March 2022	Participated
257	Mohan Raj R	Volunteer	AMET Deemed to be University	March 2022	Participated
258	Elton Vion Miranda	Blood Donation	Chennai	May 2022	Participated
259	Elton Vion Miranda	NCC Camp	Andaman and Nicobar	MAY 2022	Participated
260	Shivam Kumar Singh	E.Quiz	AMET Deemed to be University	APRIL 2022	Participated

261	Arunraj.K.K	Blood Donation	AMET Deemed to be University	MAY 2022	Participated
262	Naveen D	Entrepreneurship	AMET University	May 2022	Participated
263	A Pearson	Entrepreneurship	AMET University	May 2022	Participated
264	Prajin Raja	Entrepreneurship	AMET University	May 2022	Participated
265	Prashanth	Entrepreneurship	AMET University	May 2022	Participated
266	Raghul M	Entrepreneurship	AMET University	May 2022	Participated
267	Ram Kumar	Entrepreneurship	AMET University	May 2022	Participated
268	Ramar.T	Entrepreneurship	AMET University	May 2022	Participated
269	M.Ranjith	Entrepreneurship	AMET University	May 2022	Participated
270	Remigious Ricky A	Entrepreneurship	AMET University	May 2022	Participated
271	Salaikamalaneyan	Entrepreneurship	AMET University	May 2022	Participated
272	Hemanth	Handball Fest	AMET University	April 2022	Winner
273	Madasamy	Kabaddi League	AMET University	May 2022	Runner up
274	Madasamy	Cricket	AMET University	May 2022	Runner up
275	Madaswamy	Volley Ball	AMET University	April 2022	Runner up
276	Siva Subramanian	Kabaddi League	AMET University	May 2022	Runner up
277	Ignatious Antony	Volley Ball	AMET University	April 2022	Winner
278	Zanetti	Football League	AMET University	May 2022	Runner up
279	Vasanth	Handball Fest	AMET University	April 2022	Winner
280	Emmanuvel	Handball Fest	AMET University	April 2022	Winner
281	Deepak	Kabaddi League	AMET University	May 2022	Runner up
282	Gowtham Kumar	Handball Fest	AMET University	April 2022	Winner
283	Jetti Sushmanth	Cricket	AMET University	April 2022	Winner
284	Harsh Kumar Singh	Webinar. MARPOL	AMET University	April 2022	Participated
285	Gokulakanan	Webinar. MARPOL	AMET University	April 2022	Participated
286	R.Pradeep	Webinar. MARPOL	AMET University	April 2022	Participated
287	Shivam Kumar Singh	Webinar. MARPOL	AMET University	April 2022	Participated
288	Herson L	Webinar. MARPOL	AMET University	April 2022	Participated
289	J.Dhanus Mathavan	Webinar. MARPOL	AMET University	April 2022	Participated
290	Jaffrien S P	Webinar. MARPOL	AMET University	April 2022	Participated
291	Suresh Balaji	Webinar. MARPOL	AMET University	April 2022	Participated
292	Manigandaprabhu V	Webinar. MARPOL	AMET University	April 2022	Participated
293	Mohamed Fawaz	Webinar. MARPOL	AMET University	April 2022	Participated
294	Navin Kumar	Webinar. MARPOL	AMET University	April 2022	Participated

295	Omar Mukthar A S	Webinar. MARPOL	AMET University	April 2022	Participated
296	Pragadeeshwaran	Webinar. MARPOL	AMET University	April 2022	Participated
297	Sathiyamoorthy J	Webinar. MARPOL	AMET University	April 2022	Participated
298	Suresh Balaji	Webinar. MARPOL	AMET University	April 2022	Participated
299	Swayam Pawar	Webinar. MARPOL	AMET University	April 2022	Participated
300	Roshan Ajim.B	Webinar. MARPOL	AMET University	April 2022	Participated
301	Vimal P S	Webinar. MARPOL	AMET University	April 2022	Participated
302	Yogeshwaran.U	Webinar. MARPOL	AMET University	April 2022	Participated
303	Eswar B	Webinar. MARPOL	AMET University	April 2022	Participated
304	Harish E	Webinar. MARPOL	AMET University	April 2022	Participated
305	Hritik Ranjan	Webinar. MARPOL	AMET University	April 2022	Participated
306	P Jai Vishnu	Webinar. MARPOL	AMET University	April 2022	Participated
307	Kannan T	Webinar. MARPOL	AMET University	April 2022	Participated
308	M Prasanth	Webinar. MARPOL	AMET University	April 2022	Participated
309	Nikhil S	Webinar. MARPOL	AMET University	April 2022	Participated
310	Pratham C V	Webinar. MARPOL	AMET University	April 2022	Participated
311	Russel N Hasan	Webinar. MARPOL	AMET University	April 2022	Participated
312	Sachin R Nair	Webinar. MARPOL	AMET University	April 2022	Participated
313	Sanjay S	Webinar. MARPOL	AMET University	April 2022	Participated
314	Santu Kumar	Webinar. MARPOL	AMET University	April 2022	Participated
315	Subramanian V	Webinar. MARPOL	AMET University	April 2022	Participated
316	Sujay U M	Webinar. MARPOL	AMET University	April 2022	Participated
317	Shivam Kumar Singh	Workshop	CIET,Coimbatore	January 2022	Participated
		2020- 2021			
1	Soumya Ranjan Rout	Camp Certificate	Presidency College, Chennai	Jan 2021	Participated
2	Soumya Ranjan Rout	Camp Certificate	Foot Saint George, Chennai	Mar 2021	Participated
3	Hritik Ranjan	Seafarers Certificate	AMET University, Chennai	May 2021	Participated
4	P Jai Vishnu	Seafarers Certificate	AMET University, Chennai	May 2021	Participated
5	Shivam Kumar Singh	Workshop	AMET University, Chennai	May 2021	Participated
6	P Jai Vishnu	Workshop	AMET University, Chennai	May 2021	Participated
7	Hritik Ranjan	Workshop	AMET University, Chennai	May 2021	Participated
8	P Jai Vishnu	Workshop	AMET University, Chennai	May 2021	Participated
		2019 - 2020			
1	Subash	Body Building	Vellore Institute of Technology , Vellore	12th Feb 2020	1st Place

2	Subash	Body building	Thiruvallur	16th Feb 2020	2nd Place
3	Sathyaprabhu	Basketball	SSN College, Chennai	24th Feb 2020	4th Place
4	Thejas Krishnan K	Football	Vellore Institute of Technology	13th Feb 2020	3rd Place
5	Sathyaprabhu	Basketball	Prist University , Thanjavur	3rd Mar 2020	1st Place
6	Rajesh M	All India Inter University (Men & Women)	Sathyabama University	Dec 2019	Participated
7	Balasethu S	South Zone Inter University Handball Tournament	Bengaluru North University	Dec 2019	Participated
8	Ajay R	South Zone Inter University Handball Tournament	Bengaluru North University	Dec 2019	Participated
9	Lokesh E	South Zone Inter University Handball Tournament	Bengaluru North University	Dec 2019	Participated
10	Anuish Kumar P	South Zone Inter University Handball Tournament	Bengaluru North University	Dec 2019	Participated
11	Kiran A	South Zone Inter University Handball Tournament	Bengaluru North University	Dec 2019	Participated
12	Hemanth Pallapollu	South Zone Inter University Handball Tournament	Bengaluru North University	Dec 2019	Participated
13	Sathya Prabhu S	South Zone Inter University, basketball tournament	Hindustan university, Chennai	December 2019	Participated
14	Santhosh	South Zone Inter University, basketball tournament	Hindustan university, Chennai	December 2019	Participated
2018 - 2019					
1	Siddharthan	Body Building(50.60kg)	Vellore Institute of Technology	14th Feb 2019	1st Place
2	Ilaiyaraja	Body Building	Vellore Institute of Technology	14th Feb 2019	2nd Place
3	Richvin Raja	Swimming (100m Breast stroke)	Vellore Institute of Technology	14th Feb 2019	1st Place
4	Richvin Raja	Swimming(50m Breast stroke)	Vellore Institute of Technology	14th Feb 2019	1st Place
5	Richvin Raja	Swimming(50m Free style)	Vellore Institute of Technology	14th Feb 2019	3rd Place
6	Roshnan	Athletic (100m Dash)	Vellore Institute of Technology	14th Feb 2019	3rd Place
7	Naveen Prashanth,Praveen K, Ram Prasath , Praveen T	Kabaddi	AMET University, Chennai	21st March 2019	1st Place
8	Judsal John	Football	AMET University, Chennai	21st March 2019	1st Place
9	Ronaldo Antony ,Sathya prabhu, Santhosh Kumar ,Ajith Kumar	Basketball	AMET University, Chennai	21st March 2019	1st Place
10	Mohammed Fayazudeen Lokesh, Hemanth, Anuish P , BalaSethu	Handball	AMET University, Chennai	21st March 2019	1st Place
11	Aravind, Libin Varghese , Marshal, Girinath Vasanth Kumar , Sathya, Christy Crans , Guru Premnath Ragul, TejasSingal , Shusmanth	Cricket	AMET University, Chennai	21st March 2019	1st Place
12	Madhan Kumar	Badminton	AMET University, Chennai	21st March 2019	1st Place
13	Iayaraja, Akhin Joe	Body Building	AMET University, Chennai	21st March 2019	1st Place, 2nd Place
14	Richard Raja, Richvin Raja Lokesh	Swimming	AMET University, Chennai	21st March 2019	1st Place 2nd Place
15	Dhana Gopal KoliBalu	Volleyball	AMET University, Chennai	21st March 2019	1st Place

16	Antony Ruban, Ajith Kumar, Arif Ameer	Chess	AMET University, Chennai	21st March 2019	1st Place
17	Biswa Rai	Table Tennis	AMET University, Chennai	21st March 2019	1st Place
18	Chriag Sachdev A , Aman Deep Jaswal	Snooker	AMET University, Chennai	21st March 2019	1st Place

5 FACULTY INFORMATION AND CONTRIBUTIONS (200) Total Marks 186.54

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Sr. No	Name	PAN No.	University Degree	Date of Receiving Degree	Area of Specialization	Research Paper Publications	Ph.D Guidance	Faculty receiving Ph.D during the assessment year	Current Designation	Date (Designated as Prof / Assoc. Prof.)	Initial Date of Joining	Association Type	At present working with the Institution (Yes / No)	Date of Leaving	IS HOD?
1	Dr R RAJAVEL	AMUPR5761R	ME/M. Tech and PhD	14/10/2009	THERMAL ENGINEERING	22	7	0	Professor	08/07/2020	08/07/2020	Regular	Yes		Yes
2	Dr A SURESH	BDOPS7112T	ME/M. Tech and PhD	12/04/2012	POWER ELECTRONICS AND DRIVES	25	2	2	Professor	01/07/2019	01/07/2019	Regular	Yes		No
3	Dr S PRABHAKARAN	AJRPP6960E	ME/M. Tech and PhD	27/04/2015	ENGINEERING DESIGN	10	4	0	Professor	08/07/2020	08/07/2020	Regular	Yes		No
4	Dr D MADESH	AODPM1147F	ME/M. Tech and PhD	04/04/2012	THERMAL ENGINEERING	12	0	0	Professor	04/09/2019	04/09/2019	Regular	Yes		No
5	Dr S SANGEETHA	BHGPS1240E	ME/M. Tech and PhD	09/05/2018	POWER ELECTRONICS	7	0	0	Associate Professor	15/05/2019	15/05/2019	Regular	No	18/05/2022	No
6	Dr.S V SARAVANAN	DFWPS5718K	ME/M. Tech and PhD	16/08/2013	ELECTRICAL ELECTRONICS AND COMMUNICATIONS	6	2	0	Associate Professor	08/07/2020	08/07/2020	Regular	Yes		No
7	Dr M RAJAVELAN	AULPR2564D	ME/M. Tech and PhD	15/06/2016	ELECTRICAL ELECTRONICS AND INSTRUMENTATION	5	1	0	Associate Professor	08/07/2020	08/07/2020	Regular	Yes		No
8	Dr S MUTHUBASKARAN	BAAPM1989H	ME/M. Tech and PhD	23/07/2020	PRODUCTION ENGINEERING	11	0	0	Associate Professor	03/08/2020	08/07/2020	Regular	No	30/11/2022	No
9	Dr P SHANTHI	BCVPP9548J	ME/M. Tech and PhD	28/03/2018	POWER ELECTRONICS	9	0	0	Associate Professor	08/07/2020	08/07/2020	Regular	Yes		No
10	Dr M TAMILARASI	AIKPT1957F	ME/M. Tech and PhD	09/08/2019	APPLIED ELECTRONICS	15	0	0	Associate Professor	12/08/2019	12/08/2019	Regular	Yes		No
11	Dr A THANIKASALAM	AKCPA1685R	ME/M. Tech and PhD	19/06/2020	MANUFACTURING ENGINEERING	13	0	0	Associate Professor	03/08/2020	26/09/2019	Regular	Yes		No
12	Dr P SIVAPERUMAL	CGBPS5755H	ME/M. Tech and PhD	21/05/2021	POWER ELECTRONICS AND DRIVES	8	0	0	Associate Professor	05/07/2021	01/07/2019	Regular	Yes		No
13	Dr S SATISH KUMAR	BUMPS9820B	ME/M. Tech and PhD	21/04/2022	POWER ELECTRONICS AND INDUSTRIAL DRIVES	9	0	0	Assistant Professor		26/09/2019	Regular	Yes		No
14	Dr V YAMUNA DEVI	AFOPY3917M	ME/M. Tech and PhD	10/06/2019	MANUFACTURING ENGINEERING	6	1	0	Assistant Professor		02/03/2020	Regular	No	30/06/2022	No
15	Dr D S BALAJI	BFBPB1481B	ME/M. Tech and PhD	01/10/2021	MATERIAL SCIENCE AND ENGNINEERING	15	0	0	Assistant Professor		08/07/2020	Regular	Yes		No

16	Mr K STALIN	EYEPS0515J	M.E/M.Tech	11/04/2012	COMPUTER AIDED DESIGN	8	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
17	Mr R SUNDAR	BWFPS8652A	M.E/M.Tech	14/04/2017	POWER ELECTRONICS AND DRIVES	20	0	0	Assistant Professor		08/07/2020	Regular	Yes		No
18	Mr RAJESH CHITTAM	AUUPR1710J	M.E/M.Tech	08/04/2013	PRODUCTION ENGINEERING	4	0	0	Assistant Professor		08/07/2020	Regular	No	05/12/2022	No
19	Ms S SINTHUJA	JUNPS5834N	M.E/M.Tech	08/08/2013	VLSI DESIGN	8	0	0	Assistant Professor		02/07/2014	Regular	No	30/06/2022	No
20	Dr EDISON CHANDRASEELAN	AEJPC0901R	ME/M. Tech and PhD	02/08/2006	THERMAL ENGINEERING	12	0	0	Professor	26/02/2020	26/02/2020	Regular	No	28/02/2022	No
21	Ms K ANUPRIYA	BUTPA2600J	M.E/M.Tech	11/04/2016	APPLIED ELECTRONICS	1	0	0	Assistant Professor		20/05/2019	Regular	No	30/06/2021	No
22	Ms R DOROTHY	CNMPD1968B	M.E/M.Tech	18/04/2016	APPLIED ELECTRONICS	11	0	0	Assistant Professor		15/05/2019	Regular	No	30/06/2021	No
23	Mr D KUMARAVEL	DGRPK2775Q	M.E/M.Tech	20/06/2013	MANUFACTURING ENGINEERING	7	0	0	Assistant Professor		08/07/2020	Regular	Yes		No
24	Dr M SMILEE	ASIPS2535E	ME/M. Tech and PhD	14/08/2017	POWER ELECTRONICS	1	0	0	Associate Professor	24/02/2020	24/02/2020	Regular	No	31/08/2021	No
25	Ms G TAMIL PAVAI	BBCPG6377G	M.E/M.Tech	23/04/2013	POWER ELECTRONICS AND DRIVES	5	0	0	Assistant Professor		26/02/2020	Regular	No	22/04/2022	No
26	Mr P SATHISH KHANNA	BPIPS8887K	M.E/M.Tech	01/06/2012	ENERGY ENGINEERING	10	0	0	Assistant Professor		08/07/2020	Regular	Yes		No
27	Mr R PRAVEEN KUMAR	BHLPP1298Q	M.E/M.Tech	05/06/2020	MANUFACTURING ENGINEERING	7	0	0	Assistant Professor		08/07/2020	Regular	Yes		No
28	Mr J HARISH KUMAR	ADRPH0394L	M.E/M.Tech	24/04/2013	MANUFACTURING ENGINEERING	9	0	0	Assistant Professor		18/07/2014	Regular	No	30/06/2022	No
29	Mr ARAN GLENN	BCVPG7877F	M.E/M.Tech	04/06/2014	POWER SYSTEM	6	0	0	Assistant Professor		15/08/2019	Regular	No	30/06/2022	No
30	Mr M SELVARANI	COYPS2526B	M.E/M.Tech	08/08/2012	POWER ELECTRONICS AND DRIVES	4	0	0	Assistant Professor		01/07/2019	Regular	Yes		No
31	Mr S AMIRTHARAJ	ARPPA4998K	M.E/M.Tech	12/04/2006	POWER SYSTEM ENGINEERING	15	0	0	Assistant Professor		08/07/2020	Regular	Yes		No
32	Mr M RAMAMURTHY	BUGPR1995E	M.E/M.Tech	16/05/2011	MANUFACTURING ENGINEERING	11	0	0	Assistant Professor		24/02/2020	Regular	Yes		No
33	Mr NEELA PRASAD	AOEPN6210M	M.E/M.Tech	01/08/2014	MARINE ENGINEERING	1	0	0	Assistant Professor		15/02/2021	Regular	Yes		No
34	Mr S CHANDRASEKARAN	AIFPC0462M	M.E/M.Tech	18/11/2016	AUTOMOBILE ENGINEERING	0	0	0	Assistant Professor		11/11/2020	Regular	Yes		No

35	Mr B LOGANATHAN	ACGPL8727P	M.E/M.Tech	12/04/2013	CAD	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
36	Mr N VASANTHA PARSATH	AJYPV3666Q	M.E/M.Tech	09/04/2018	MANUFACTURING SYSTEM AND MANAGEMENT	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
37	Mr R ARUN KUMAR	AWGPA8334H	M.E/M.Tech	20/04/2012	CAD	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
38	Mr S MUTHU KUMARASAMY	DTAPM3150F	M.E/M.Tech	16/04/2014	COMMUNICATION SYSTEM	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
39	Mr S PRABHU	ATBPP4027E	M.E/M.Tech	17/04/2014	APPLIED ELECTRONICS	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
40	Mr C M MOHANRAJ	AYOPM6700D	M.E/M.Tech	16/04/2014	ENGINEERING DESIGN	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
41	Mr V K SRINIVASAN	AGQPV4608P	M.E/M.Tech	18/04/2012	CAD	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
42	Mr M SANTHANAM	EVAPS2924G	M.E/M.Tech	13/04/2015	MANUFACTURING ENGINEERING	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
43	Mr B KARKKI	CHSPK7549D	M.E/M.Tech	19/04/2012	VLSI DESIGN	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
44	Ms E ABIRAMI	BMEPA7389B	M.E/M.Tech	20/04/2012	APPLIED ELECTRONICS	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
45	Mr M MANIKANDAN	CVBTM3090G	M.E/M.Tech	11/04/2012	POWER ELECTRONICS AND DRIVES	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
46	Mr K SATHISH	EFNPS8112B	M.E/M.Tech	12/04/2017	MANUFACTURING ENGINEERING	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
47	Mr V ASHOK	ACSPV7953K	M.E/M.Tech	16/04/2014	CAD/CAM	2	0	0	Assistant Professor		24/02/2020	Regular	No	30/06/2022	No
48	Mr K C BALAJI	AWGPB2371K	M.E/M.Tech	18/04/2017	POWER ELECTRONICS AND INDUSTRIAL DRIVES	0	0	0	Assistant Professor		12/08/2019	Regular	Yes		No
49	Mr V R RAMAN BHARATH	BJYPR1192J	M.E/M.Tech	14/04/2016	CAD/CAM	0	0	0	Assistant Professor		24/02/2020	Regular	Yes		No
50	Mr S PALANI KUMAR	ATBPP0367P	M.E/M.Tech	14/04/2008	POWER ELECTRONICS AND DRIVES	0	0	0	Assistant Professor		24/02/2020	Regular	No	30/08/2022	No
51	Mr S K KRISHNA KUMAR	ESMPS5870J	M.E/M.Tech	16/04/2014	COMPUTER AIDED DESIGN	10	0	0	Assistant Professor		14/10/2022	Regular	Yes		No
52	Mr V SIVAKUMAR	IIUPS6675H	M.E/M.Tech	04/11/2020	THERMAL ENGINEERING	0	0	0	Assistant Professor		08/04/2022	Regular	Yes		No
53	Mr ARUL NESHANTH	BPWPA7906M	M.E/M.Tech	06/06/2018	CAD/CAM	0	0	0	Assistant Professor		08/04/2022	Regular	Yes		No

54	Mr M BALA KUMARAN	BUPPB5510G	M.E/M.Tech	22/04/2014	ENGINEERING DESIGN	8	0	0	Assistant Professor		14/10/2022	Regular	Yes		No
55	Dr E RAVIKUMAR	ASQPR8754E	ME/M. Tech and PhD	27/05/2019	COMPUTER AIDED DESIGN	0	0	0	Assistant Professor		01/10/2022	Regular	Yes		No
56	Dr V RAJESHWARI	AGKPR4296F	ME/M. Tech and PhD	20/10/2015	CONTROL SYSTEMS	0	0	0	Professor	12/10/2022	12/10/2022	Regular	Yes		No
57	Dr J ANANTH	AHOPA6033G	ME/M. Tech and PhD	19/11/2014	SOLAR THERMAL ENERGY	1	0	0	Professor	19/09/2022	19/09/2022	Regular	Yes		No
58	Dr S RANGANATHAN	AMEPR3648D	ME/M. Tech and PhD	30/06/2011	HARD AND HOT MACHINING	0	0	0	Professor	19/09/2022	19/09/2022	Regular	Yes		No
59	Dr S THAMIZHMANI	AAJPT2760P	ME/M. Tech and PhD	08/07/2010	MANUFACTURING ENGINEERING	0	0	0	Professor	19/09/2022	19/09/2022	Regular	Yes		No
60	Dr V SRIDEVI	CFIPS0971P	ME/M. Tech and PhD	28/09/2013	POWER SYSTEM	1	0	0	Professor	01/10/2022	01/10/2022	Regular	Yes		No
61	Dr K GOWRISHANKAR	ALAPG0374J	ME/M. Tech and PhD	03/08/2019	POWER SYSTEM STABILITY AND CONTROL	1	0	0	Associate Professor	03/11/2022	03/11/2022	Regular	Yes		No
62	Dr N B GEETHA	ANPPG9588F	ME/M. Tech and PhD	03/07/2012	THERMAL ENGINEERING	0	0	0	Professor	02/01/2023	02/01/2023	Regular	Yes		No
63	Mr B MUTHUKUMAR	AYJPM6581F	M.E/M.Tech	13/05/2015	ENGINEERING DESIGN	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
64	Mr G SEKAR	CHAPS6800F	M.E/M.Tech	18/06/2014	ENGINEERING DESIGN	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
65	Mr G NIRESH KUMAR	AWIPN9097L	M.E/M.Tech	13/11/2014	COMPUTER INTEGRATED MANUFACTURING	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
66	Mr D MOHAN	CPHPM6634L	M.E/M.Tech	19/06/2014	PRODUCTION ENGINEERING	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
67	Ms R PUSHPAVATHY	CCFPP9782F	M.E/M.Tech	17/06/2015	POWER ELECTRONICS AND DRIVES	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
68	Ms S SWETHA	EWTPS5186J	M.E/M.Tech	17/05/2012	EMBEDDED SYSTEM	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
69	Mr K JAGATHEESAN	BJOPK1935L	M.E/M.Tech	18/05/2006	MANUFACTURING ENGINEERING	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
70	Mr D PREMKUMAR	AYDPD3337L	M.E/M.Tech	28/04/2010	MANUFACTURING SYSTEMS AND MANAGEMENT	0	0	0	Assistant Professor		26/02/2020	Regular	Yes		No
71	Mr S JANARTHANAN	ANCPJ8451D	M.E/M.Tech	20/05/2010	ELECTRICAL DRIVES AND CONTROL	0	0	0	Assistant Professor		07/03/2016	Regular	Yes		No

72	Ms T DHANYA	ASXPT7228G	M.E/M.Tech	05/05/2016	INDUSTRIAL AUTOMATION AND ROBOTICS	1	0	0	Assistant Professor		13/10/2016	Regular	Yes		No
73	Mr R RADHAKRISHNAN	AAAPR8139B	B.E/B.Tech	10/08/2005	MARINE ENGINEERING OFFICER CLASS I	0	0	0	Associate Professor	16/07/2018	16/07/2018	Regular	Yes		No
74	Mr KRISHNAN RAMESH	AAAPR6086M	B.E/B.Tech	14/01/2011	MARINE ENGINEERING OFFICER CLASS I	0	0	0	Associate Professor	24/07/2019	24/07/2019	Regular	Yes		No
75	Mr SRIDHAR KONDA	AJDPK0065D	B.E/B.Tech	26/07/2008	MARINE ENGINEERING OFFICER CLASS I	0	0	0	Associate Professor	05/08/2019	05/08/2019	Regular	Yes		No
76	Mr M MUTHUAZAGU	AALPM4518L	B.E/B.Tech	20/05/2009	MARINE ENGINEERING OFFICER CLASS I	0	0	0	Associate Professor	13/02/2020	13/02/2020	Regular	Yes		No
77	Mr S JEYACHANDRAN	AEYPJ4404K	B.Com and DDGM	12/03/2013	MARINE ENGINEERING OFFICER CLASS II	0	0	0	Assistant Professor		30/12/2020	Regular	Yes		No
78	Mr T ANANTH	AQSPA7956K	B.E/B.Tech	04/03/2014	MARINE ENGINEERING OFFICER CLASS II	0	0	0	Assistant Professor		09/05/2022	Regular	Yes		No
79	Mr G CHANDRA SEKHARAN	ABSPS4414R	B.E/B.Tech	07/01/2002	MARINE ENGINEERING OFFICER CLASS I	0	0	0	Associate Professor	01/06/2021	01/06/2021	Regular	Yes		No
80	Dr S RAMALINGAM	AFIPR1249D	ME/M. Tech and PhD	21/09/2020	DYNAMICS AND ROBOTICS	0	0	0	Professor	19/10/2022	19/10/2022	Regular	Yes		No
81	Mr YASHWANTHRA EKAMBARAM	AAJPE5719K	B.E/B.Tech	13/01/2012	MARINE ENGINEERING OFFICER CLASS I	0	0	0	Assistant Professor		16/08/2022	Regular	Yes		No
82	Mr S S RAJAN	ABHPS1754P	B.E/B.Tech	16/04/1975	DESIGN OF PRODUCTION AND INTERNAL COMBUSTION ENGINE	0	0	0	Associate Professor	16/07/2018	16/07/2018	Regular	Yes		No

5.1 Student-Faculty Ratio (SFR) (20) Total Marks 16.00

Institute Marks : 16

UG

No. of UG Programs in the Department 1

B.E MARINE ENGINEERING						
Year of Study	**CAY**		**CAYm1**		**CAYm2**	
	(2022-23)		**(2021-22)**		**(2020-21)**	
	Sanction Intake	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**	**Sanction Intake**	**Actual admitted through lateral entry students**
2nd Year	300	19	300	29	360	21
3rd Year	300	29	360	21	360	28
4th Year	360	21	360	28	250	10
Sub-Total	**960**	**69**	**1020**	**78**	**970**	**59**
Total	**1029**		**1098**		**1029**	

Grand Total	1029	1098	1029

PG

No. of PG Programs in the Department 0

Grand Total			

SFR

No. of UG Programs in the Department 1

No. of PG Programs in the Department 0

Description	**CAY(2022-23)**	**CAYm1 (2021-22)**	**CAYm2 (2020-21)**
Total No. of Students in the Department(S)	1029 **Sum total of all (UG+PG) students**	1098 **Sum total of all (UG+PG) students**	1029 **Sum total of all (UG+PG) students**
No. of Faculty in the Department(F)	58 **F1**	55 **F2**	59 **F3**
Student Faculty Ratio(SFR)	17.74 **SFR1=S1/F1**	17.44 **SFR2=S2/F2**	19.96 **SFR3=S3/F3**
Average SFR	18.38 **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)	58	0
CAYm1(2021-22)	55	0
CAYm2(2020-21)	59	0

Average SFR for three assessment years : 18.38

Assessment SFR : 16

5.2 Faculty Cadre Proportion (20) Total Marks 20.00

Institute Marks : 20.00

Year	**Professors**		**Associate Professors**		**Assistant Professors**	
	Required F1	**Available**	**Required F2**	**Available**	**Required F3**	**Available**
CAY(2022-23)	5.00	10.00	11.00	7.00	34.00	41.00
CAYm1(2021-22)	6.00	4.00	12.00	8.00	36.00	43.00
CAYm2(2020-21)	5.00	5.00	11.00	8.00	34.00	46.00
Average Numbers	5.33	6.33	11.33	7.67	34.67	43.33

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

5.3 Faculty Qualification (20) Total Marks 12.54

Institute Marks : 12.54

	X	Y	F	FQ = 2 x [(10X + 4Y) / F)]
2022-23(CAY)	20	38	51.00	13.80
2021-22(CAYm1)	14	41	54.00	11.26
2020-21(CAYm2)	14	45	51.00	12.55

Average Assessment : 12.54

5.4 Faculty Retention (10) Total Marks 8.00

Institute Marks : 8.00

Description	2021-22 (CAYm1)	2022-23 (CAY)
No of Faculty Retained	54	45
Total No of Faculty	59	59
% of Faculty Retained	92	76

Average : 84.00

Assessment Marks : 8.00

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

Institute Marks : 10.00

The program specific criteria have been framed based on the input given by the professional bodies such as IME(I), IAMU, IAMINU, IAPH, AMFUF and IE(I). The professional bodies focus on developing the fundamentals in various concepts and field of discipline. The objective results in bringing out the quality publications which would enhance the research activities. Given below, the list of program specific criteria and its compliance with faculty members and their competencies.

Program Specific Criteria Research Groups:

1. Marine Automation and Control
2. Marine Electrical Technology
3. Marine Manufacturing Engineering
4. Marine Power Systems
5. Marine Pollution and Control
6. Marine Thermal Engineering

S.No	Research Groups	Name of the Faculty	No. of Publication in referred journals	No. of Books Published	Relevant courses in the curriculum
1	Marine Automation and Control	Dr.M.Rajavelan	3		Marine electrical Measurements, Instrumentation & Control, Marine Control Engineering & Automation
2		Dr.V.Rajeshwari			Marine Control Engineering & Automation, Instrumentation & Control, Integrated Circuit.
3		Dr.S.Ramalingam			Mechanics of Machine, Engineering Graphics, Engineering Mechanics
4		Dr.K.Gowrishankar	1	1	Marine electrical Measurements, Electrical Machines, Power Electronics, High Voltage & Electrical Propulsion, Instrumentation & Control, Marine Electrical Technology I.
5		Mrs.T.Dhanya			Marine electrical Measurements, Instrumentation & Control, Marine Control Engineering & Automation
6		Mrs.S.Swetha			Embedded System & Communication Lab
7		Mr.B.Karkki			Basic Electrical Electronics engineering, Marine Electrical Technology, Electrical Machines, Basic Electronics, Integrated Circuit

8	Marine Electrical Technology	Mr.S.Muthu Kumarasamy			Electrical machines, marine electrical technology, Microprocessor& Microcontroller, Integrated Circuit.
9		Dr.M.Tamilarasi	1	2	Power Electronics, High Voltage & Electric propulsion, Marine Electrical Technology I, Marine Electrical Technology II.
10		Mr.S.Prabhu			Basic Electrical Electronics engineering, Marine Electrical Technology, Electrical Machines, Basic Electronics, Integrated Circuit .
11		Mrs.E.Abirami			Basic Electrical Electronics engineering, Marine Electrical Technology, Electrical Machines, Basic Electronics, Integrated Circuit
12		Mr.S.Janarthanan			Electrical Machines, Basic Electronics, Integrated Circuit, Power Electronics, High Voltage & Electrical Propulsion
13		Dr.S.V.Saravanan	1		Electrical machines, marine electrical technology, Microprocessor& Microcontroller, Integrated Circuit
14		Dr. A. Suresh	16	2	Electrical Machines, Marine Engineering Measurement, Instrumentation & Control, Marine Electrical Technology II
15		Dr.P.Sivaperumal	5	2	Basic Electrical and Electronics engineering, Marine electrical Measurements, Electrical Machines, Basic Electronics, Integrated Circuit.
16		Mrs.M.Selvarani			Marine Electrical Technology, Basic Electricals Engineering, Electrical Machines, Integrated Circuits
17		Mr.M.Manikandan			Microprocessor & Microcontroller, Basic Electrical Electronics engineering, Marine Electrical Technology, Electrical Machines
18		Mrs.R.Pushpavathy			Power Electronics, High Voltage & Electrical Propulsion
19		Mr.R.Sundar	12		Marine Control Engineering & Automation
20		Dr.S.Satish Kumar	2	3	Basic Electrical Electronics engineering, Marine Electrical Technology, Electrical Machines, Basic Electronics, Integrated Circuit
21		Dr.P.Shanthi	2	1	Power Electronics, High Voltage & Electrical Propulsion, Marine Electrical Technology I, Marine Electrical Technology II.
22		Mr.K.C.Balaji			Microprocessor & Microcontroller, Basic Electrical Electronics engineering, Marine Electrical Technology, Electrical Machines

23	Marine Manufacturing Engineering	Mr.Neela Prasad			Naval Architecture, Ship Construction, Offshore Technology, Marine advanced drawing
24		Dr.A.Thanikasalam	11	2	Engineering Mechanics, Material science and metallurgy, Strength of Materials, Mechanics of machines
25		Mr.Chandrasekaran			Marine Equipment, Drawing I & II, Marine Environmental Protection, Pumps and Pumping system, Marine Boilers & Steam Engineering
26		Mr.G.Niresh Kumar			Strength of Materials, Mechanics of machines, Pneumatics, Hydraulics & Electrical Control System
27		Dr.S.Thamizhmani			Marine Internal Combustion Engines I, Strength of Materials, Marine Internal Combustion Engines II.
28		Mr.M.Santhanam			Marine Thermal Engineering, Strength of Materials, Marine Auxiliary Machinery I, Marine Auxiliary Machinery II
29		Mr.K.Sathish			Strength of Materials, Mechanics of machines, Pumps and Pumping system
30		Mr.M.Ramamurthy	4		Engineering drawing and computer graphics, Engineering Mechanics, Material science and metallurgy, Marine Thermal Engineering, Strength of Materials, Mechanics of machines
31		Mr.D.Kumaravel	3	1	Material Science Engineering, Marine Environmental Protection, Marine Boilers & Steam Engineering
32		Mr.R.Praveenkumar	4		Engineering Graphics, Material Science, Marine Environmental Protection, Marine Boilers & Steam Engineering
33		Mr.K.Jagatheesan			Strength of Materials, Pneumatics, Hydraulics Control System, Marine Internal Combustion Engines
34		Mr.N.Vasantha Prasath			Marine Internal Combustion Engines I, Strength of Materials, Marine Internal Combustion Engines II.
35		Mr.D.Premkumar			Marine Boilers & Steam Engineering, Marine Environmental Protection, Marine Internal Combustion Engines
36		Dr. S. Prabhakaran	9		Marine Refrigeration & Air Conditioning, Marine Boilers & Steam Engineering, Mechanics of Machines
37		Mr.C.M.Mohanraj			Marine Engineering Equipment Drawing-II, Safety Emergency Measures & Practices-IV, Marine Engineering Practice.
38		Mr.B.Muthu Kumar			Marine Thermal Engineering, Strength of Materials, Pumps and Pumping system
39		Mr.G.Sekar			Strength of Materials, Pneumatics, Hydraulics Control System, Marine Internal Combustion Engines.

40		Mr.M.Balakumaran	4		Materials, Manufacturing Technology, Fluid Marine Power Systemss, Marine Environmental Protection, Marine Internal Combustion Engines
41		Mr.P.Sathish Khanna	4		Power Electronics, High Voltage & Electrical Propulsion
42	Marine Power Systems	Dr.V.Sridevi	1		Power Electronics, High Voltage & Electrical Propulsion, Instrumentation & Control, Marine Electrical Technology I.
43		Mr.S.Amirtharaj	8	1	Power Electronics, High Voltage & Electrical Propulsion, Instrumentation & Control, Marine Electrical Technology I.
44		Dr.D.S.Balaji	8		Strength of materials, Pumps and Pumping system, Marine Boilers & Steam Engineering
45		Mr.B.Loganathan			Engineering Mechanics, Material science and metallurgy, Strength of Materials, Mechanics of machines.
46		Mr.R.Arun Kumar			Engineering Mechanics, Material science and metallurgy, Strength of Materials, Mechanics of machines.
47		Mr.V.K.Srinivasan			Safety Emergency Measures & Practices-III, Marine Engineering Equipment Drawing-II
48		Mr.V.R.Raman Barath			Safety Emergency Measures & Practices-III, Marine Engineering Equipment Drawing-II
49	Marine Pollution and Control	Mr.Arul Neshanth			Engineering Mechanics , Material Science, Safety Emergency Measures & Practices, Marine Internal Combustion Engines
50		Mr.K.Stalin	5		Strength of materials, Finite element analysis, Industrial robotics, Marine Boilers & Steam Engineering
51		Dr.E.Ravikumar			Engineering Graphics, Material Science, Finite Element, Safety Emergency Measures & Practices
52		Mr.S.Krishna Kumar	6		Engineering Mechanics, Material science and metallurgy, Strength of Materials, Mechanics of machines, Non Destructive testing
53		Mr.D.Mohan			Strength of Materials, Pneumatics, Hydraulics Control System, Marine Internal Combustion Engines.

54	Marine Thermal Engineering	Dr.S.Ranganathan			Fuels and Lubrication Technology, Engineering Mechanics, Engineering Theory of Machines.
55		Dr.R.Rajavel	15		Marine Thermal Engineering, Strength of Materials, Mechanics of Machines, Fluid Mechanics
56		Dr.D.Madesh	10		Marine Thermal Engineering, Pumps and Pumping system, Marine Boilers & Steam Engineering, Marine Refrigeration & Air Conditioning
57		Dr.J.Anandh	1		Marine Thermal Engineering, Strength of Materials, Mechanics of Machines, Fluid Mechanics
58		Mr.V.Sivakumar			Pneumatics, Hydraulics & Electrical Control System, Safety Emergency Measures & Practices

Course Development:

The following Faculty members have involved in the course content development.

S.No	Name of the Faculty	Name of the Courses
1	Dr.R.Rajavel	Marine Refrigeration & Air Conditioning Marine Boilers & Steam Engineering Fluid Mechanics
2	Dr.A.Suresh	Marine Electrical Measurements Microprocessor & Microcontroller
3	Dr.M.Rajavelan	Marine Control Engineering & Automation Marine Electrical Technology II Power Electronics, High Voltage & Electrical Propulsion
4	Dr.S.V.Saravanan	Integrated Circuit Marine Control Engineering & Automation Instrumentation & Control
5	Dr.S.Muthu Baskaran	OE3 (Pumps and Pumping system) Strength of Materials Marine Internal Combustion Engines I Marine Internal Combustion Engines II
6	C/E Mohan Dass	Safety Emergency Measures & Practices-II Safety Emergency Measures & Practices-IV Safety Emergency Measures & Practices-III
7	Dr.D.Madesh	Mechanics of Machines Pneumatics, Hydraulics & Electrical Control System

8	C/E Akhilan Natarajan	PEC1 (Marine Resource Management) Basic Ship Structure Ship Construction
9	C/E. Devadoss Rajasekar	Marine Auxiliary Machinery I PEC3 (Marine Environmental Protection) PEC4 (International Maritime Organization And International Convention) Shipboard Leadership & Management)
10	Mr.K.Stalin	Introduction to Internet of Things
11	Dr.Thanikasalam.A	Automotive Bike Engines
12	Mr.S.K.Krishnakumar	Engineering Mechanics Mechanics of machines Non Destructive testing
13	Mr.U.N.Neela Prasad	Marine Refrigeration & Air Conditioning Basic ship structure
14	Mr.R.Sundar	Electrical Machines – I Electrical Machines – II
15	Dr.S.V.Saravanan	Digital System Design
16	Dr.P.Shanthi	Transmission and Distribution Power System Analysis
17	Dr.S.V.Saravanan Mr.P.Sathish Khanna	Microprocessors & Microcontrollers

5.6 Innovations by the Faculty in Teaching and Learning (10) Total Marks 10.00

Institute Marks : 10.00

Table B 5.6.1. Instructional Materials Developed by Faculty

S.No.	Topics Covered	Name of the Faculty	Link	Number of Views	Number of Likes
1	Heat Exchanger	Mr.Sridhar Konda	https:// (https://www.youtube.com/watch?v=oQ8CxL1_z_U)www.youtube.com/watch?v=oQ8CxL1_z_U (http://www.youtube.com/watch?v=oQ8CxL1_z_U)	73	4
2	Training in Ship In Campus	Mr.S.Venkataganesh	https://www.youtube.com/watch?v=D-F2iR-4-xI (http://https://www.youtube.com/watch?v=D-F2iR-4-xI)	66	1
3	Training in Ship In Campus	Mr.Ananthakumar	https://www.youtube.com/watch?v=6RRtg86vpzs (https://www.youtube.com/watch?v=6RRtg86vpzs)	62	2
4	Seamanship Lab	Mr.Sampathkumar	https://www.youtube.com/watch?v=kne6TBhAGhU (http://https://www.youtube.com/watch?v=kne6TBhAGhU)	126	5
5	Training in Ship In Campus	Mr.Vignesh Sharma	https://www.youtube.com/watch?v=9xDIGvdNAO8 (https://www.youtube.com/watch?v=9xDIGvdNAO8)	53	0
6	Super Charging and Turbochargers	Mr.Mani G R	https://www.youtube.com/watch?v=c5LGLmKWUPE (https://www.youtube.com/watch?v=c5LGLmKWUPE)	122	5
7	Dry Docking - (I) Preparation of Dry Dock (II) Repair Specifications	Mr.Sridhar P S	https://www.youtube.com/watch?v=9_QrQry_3l8 (https://www.youtube.com/watch?v=9_QrQry_3l8)	8900	178
8	Introduction to Mechanisms	Mr.Rajesh Chittam	https://www.youtube.com/watch?v=2Y9pd0zloJg (http://https://www.youtube.com/watch?v=2Y9pd0zloJg)	78	0
9	Fire Detection Systems	Mr.Venugopal S P	https://www.youtube.com/watch?v=xLP5IDZdmtc (https://www.youtube.com/watch?v=xLP5IDZdmtc)	53	0
10	Work And Rest Hours on Board Ship	Mr.Venkataganesh S	https://www.youtube.com/watch?v=DBcZk0L97jw (https://www.youtube.com/watch?v=DBcZk0L97jw)	3300	34
11	Electrical Energy Generation Utilization & Conservation Power Generation	Mr.Aran Glenn J	https://www.youtube.com/watch?v=M7Uqc-EnO9M (http://https://www.youtube.com/watch?v=M7Uqc-EnO9M)	869	28
12	Gear Pump	Mr.Kumaravel D	https://www.youtube.com/watch?v=CxOC5_I1stg (http://https://www.youtube.com/watch?v=CxOC5_I1stg)	163	4
13	Types of Pressure Sensor in Shipping Applications	Dr Shanthi P	https://www.youtube.com/watch?v=u3rnSJGC96o (https://www.youtube.com/watch?v=u3rnSJGC96o)	119	3
14	Refrigeration & Air Conditioning System	Mr.Vignesh Sharma R	https://www.youtube.com/watch?v=T_WpdO3DtIA (https://www.youtube.com/watch?v=T_WpdO3DtIA)	111	2
15	Oily Water Separator	Mr.Rajesh Chittam	https://www.youtube.com/watch?v=2Y9pd0zloJg (http://https://www.youtube.com/watch?v=2Y9pd0zloJg)	43	0
16	Mesh Analysis - Basic Electrical Engineering	Dr Suresh	https://www.youtube.com/watch?v=jL_nxmVFWcw (http://https://www.youtube.com/watch?v=jL_nxmVFWcw)	51	2
17	Refrigeration & Air Conditioning	Mr.Krishnan Ramesh	https://www.youtube.com/watch?v=SDCn4WsIefk (http://https://www.youtube.com/watch?v=SDCn4WsIefk)	183	7
18	Emergency Generator on Ships	Mr.Sathis Khanna P	https://www.youtube.com/watch?v=mXD8rxuGRTA (http://https://www.youtube.com/watch?v=mXD8rxuGRTA)	1000	27

19	Main Engine	Mr.Rajan S S	https://www.youtube.com/watch?v=fzuVF0Xna4A (https://www.youtube.com/watch?v=fzuVF0Xna4A)	1300	35
20	Calculation of Voltage gain in amplifiers	Dr.S.Satish Kumar	https://www.youtube.com/watch?v=lL2Z0lnZ9aA (https://www.youtube.com/watch?v=lL2Z0lnZ9aA)	177	100
21	BiCMOS Amplifier	Dr.S.Satish Kumar	https://www.youtube.com/watch?v=N3anyCbQs08 (https://www.youtube.com/watch?v=N3anyCbQs08)	306	150
22	Solar Thermal Collector	Dr.P.Sivaperumal	https://www.youtube.com/watch?v=-_HTUlgGrkk (https://www.youtube.com/watch?v=-_HTUlgGrkk)	252	120
23	Basic Electronics	Dr.P.Sivaperumal	https://www.youtube.com/watch?v=uLcB6PWlv-s (https://www.youtube.com/watch?v=uLcB6PWlv-s)	156	85
24	Network Theorems	R.Sundar	https://www.youtube.com/watch?v=QwM5jfO_we8 (https://www.youtube.com/watch?v=QwM5jfO_we8)	47	1
25	Transmission Line	Dr.P.Shanthi	https://www.youtube.com/watch?v=QB2nlsMNwTo (http://https://www.youtube.com/watch?v=QB2nlsMNwTo)	40	1
26	Fabrication of Monolithic Integrated Circuits	Ms.S.Sinthuja	https://www.youtube.com/watch?v=WEndYflkksY (http://https://www.youtube.com/watch?v=WEndYflkksY)	11000	172
27	AC Synchronous Generator	Mr.P.Sathish Khanna	https://www.youtube.com/watch?v=kWnfeBl5isU (http://https://www.youtube.com/watch?v=kWnfeBl5isU)	35	0
28	Centre of Gravity	Mr.S.Amirtharaj	https://www.youtube.com/watch?v=ZbwTDT2Igik (http://https://www.youtube.com/watch?v=ZbwTDT2Igik)	92	9
29	Microcontroller	Dr. M. Rajavelan	https://www.youtube.com/watch?v=xYeQNfHSmBM (http://https://www.youtube.com/watch?v=xYeQNfHSmBM)	23	1
30	Air Compressor	Mr.Rajan S S	https://www.youtube.com/watch?v=awUC8qxEsxw (http://https://www.youtube.com/watch?v=awUC8qxEsxw)	469	6

Table B 5.6.2. Video Lectures prepared by the faculty

S.No.	Name of the Faculty	Name of the Module	Platform on which module is developed
1	Mr. Boopathy Baskaran,	Fuel Injection System (Part 1)	EMRDC
2	Mr. Boopathy Baskaran,	Fuel Injection System (Part 2)	EMRDC
3	Mr.M.Ramamurthy	Basics of Mechanisms	EMRDC
4	Mr.K.Stalin	Strength of Materials	AMET - LMS
5	Dr.Thanikasalam.A	Welding Technology	AMET - LMS
6	Dr.M.Tamiarasi	Power Electronics	AMET - LMS
7	Dr.P.Sivaperumal	FACTS	AMET - LMS
8	Dr.S.Satish Kumar	circuit theory	AMET - LMS
9	Mr.U.N.Neela Prasad	Types of ship	AMET - LMS

Table B.5.6.3. Details of blog developed by the faculty

Blog developed by the faculty	
Name of the Faculty	**Blogspot link**

Dr. S.V.Saravanan	https://www.svsaravanan.blogspot.com (https://www.svsaravanan.blogspot.com/)
Mr.M.Ramamurthy	https://ramamurthy1976.blogspot.com/ (https://ramamurthy1976.blogspot.com/)
Mr.K.Stalin	https://stalinbdx.blogspot.com/ (https://stalinbdx.blogspot.com/)
Dr.P.Sivaperumal	https://www.sivaperumal17.blogspot.com (https://www.sivaperumal17.blogspot.com/)
Dr.S.Satish Kumar	https://www.satishkumarseee.blogspot.com (https://www.satishkumarseee.blogspot.com/)

Table B 5.6.4. Lab Manuals Prepared by faculty

S.No.	Name of the Lab manual	Name of the Faculty developed
1	Basics Electrical Engineering Laboratory	Dr.A.Suresh
2	Engineering Practices Laboratory I	Dr.D.S.Balaji
3	Machine Drawing	Dr.S.Prabhakaran
4	Electrical Machines Laboratory	Dr.S.Satish Kumar
5	Basic Electronics Laboratory	Dr.P.Sivaperumal
6	Engineering Practices Laboratory- II	Mr.K.Sathish
7	Integrated Circuit Laboratory	Dr.S.V.Saravanan
8	Marine Electrical Technology Laboratory	Dr.S.Sangeetha
9	Marine Refrigeration & Air Conditioning Laboratory	Dr.D.Madesh
10	Engineering Practices Laboratory III	Dr.Edison Chandraseelan
11	Microprocessor & Microcontroller Laboratory	Dr.M.Rajavelan
12	Thermal &Fluid Mechanics Laboratory	Mr.P.Sathish Kanna
13	Engineering Practices Laboratory IV	Mr.J.Harish Kumar
14	Fire Fighting Laboratory	Dr.A.Thanikasalam
15	Marine Electrical Technology Laboratory	Dr.Smilee Mathuram
16	Strength of Material Laboratory	Dr.Edison Chandraseelan
17	Marine Engineering Equipment Drawing- I	Dr.V.Yamuna Devi
18	Advanced Electrical Engineering Laboratory	Dr.P.Shanthi
19	Internal Combustion Engine Laboratory	Dr.S.Muthu Baskaran
20	Power Electronics Laboratory	Dr.M.Tamilarasi
21	Automation Laboratory	Mr.K.Stalin
22	Electro Technology	Mr.S.Amirtharaj
23	Embedded System & Communication Lab	Mr.D.Kumaravel

The Department of Marine Engineering has good laboratory which is equipped with latest machines like Main Engine, Steering Gear Unit, Emergency Generator, Yanmar Diesel Engine, Oily Water Separator and Refrigeration compressor to provide the awareness among the students about the latest technology in Shipping Industries. This facility helps in getting knowledge to meet the Shipping Industry demand courses, and also helps in developing the practical knowledge for better understanding and analysing complex engineering problems.

Flipped classroom was introduced to the students undergoing design, analytical subjects for enabling their higher order cognitive skills. AMET offers a restricted and secured platform for faculty and students for planning, monitoring and conduction of online classes.

CAMU software, a cloud-based platform, which is integrated with Microsoft Teams, is used for delivering online lecturers.

Video Lectures, study materials and other digital contents are available in LMS such as uLektz, CAMU and Google Classroom.

Teachers and students can be access the contents 24x7 from anywhere from any device.

The details of online platform which is used by the Faculty and students are as follows,

Online Platform Details	Web Link
"MyCAMU" Digital campus tool – Data Management System for course planning and monitoring.	https://camu.in/ (https://camu.in/)
"Microsoft Teams" – For conduction of online classes, Project review meetings and meeting with students and parents in online.	https://www.office.com/ (https://www.office.com/)

5.7 Faculty as participants in Faculty development/training activities/STTPs (15) Total Marks 15.00

Institute Marks : 15.00

Name of the faculty	Max 5 Per Faculty		
	2021-22(CAYm1)	2020-21(CAYm2)	2019-20(CAYm3)
Dr R Rajavel	5.00	5.00	0.00
Dr A Suresh	5.00	5.00	5.00
Dr S Prabhakaran	5.00	5.00	0.00
Dr D Madesh	5.00	5.00	5.00
Dr S Sangeetha	5.00	5.00	5.00
Dr S V Saravanan	5.00	5.00	0.00
Dr M Rajavelan	5.00	5.00	0.00
Dr S Muthubaskaran	5.00	5.00	0.00
Dr P Shanthi	5.00	5.00	0.00
Dr M Tamilarasi	5.00	5.00	5.00
Dr A Thanikasalam	5.00	5.00	5.00
Dr P Sivaperumal	5.00	5.00	5.00
Dr S Satish Kumar	5.00	5.00	5.00
Dr.M. Smilee	0.00	5.00	0.00
Dr V Yamuna Devi	5.00	5.00	0.00
Dr D S Balaji	5.00	5.00	0.00
Mr K Stalin	5.00	5.00	0.00
Mr R Sundar	5.00	5.00	0.00
Mr Rajesh Chittam	5.00	5.00	0.00
Ms S Sinthuja	5.00	5.00	5.00
Dr Edison Chandraseelan	5.00	5.00	0.00
Mr D Kumaravel	5.00	5.00	0.00
Ms G Tamil Pavai	5.00	5.00	0.00

Mr P Sathish Khanna	5.00	5.00	0.00
Mr R Praveen Kumar	5.00	5.00	0.00
Mr J Harish Kumar	5.00	5.00	5.00
Mr Aran Glenn	5.00	5.00	5.00
Mr M Selvarani	5.00	5.00	5.00
Mr S Amirtharaj	5.00	5.00	0.00
Mr M Ramamurthy	5.00	5.00	0.00
Mr Neela Prasad	5.00	0.00	0.00
Mr S Janarthanan	0.00	0.00	5.00
Ms T Dhanya	0.00	0.00	5.00
Mr B Loganathan	0.00	0.00	5.00
Mr N Vasantha Parsath	0.00	0.00	5.00
Mr R Arun Kumar	0.00	0.00	5.00
Mr S Muthu Kumarasamy	0.00	0.00	5.00
Mr S Prabhu	0.00	0.00	5.00
Mr C M Mohanraj	0.00	0.00	5.00
Mr V K Srinivasan	0.00	0.00	5.00
Mr M Santhanam	0.00	0.00	5.00
Mr B Karkki	0.00	0.00	5.00
Ms E Abirami	0.00	0.00	5.00
Mr M Manikandan	0.00	0.00	5.00
Mr K Sathish	0.00	0.00	5.00
Mr K C Balaji	0.00	0.00	5.00
Sum	150.00	150.00	130.00

RF = Number of Faculty required to comply with 20:1 Student Faculty Ratioas per 5.1	51.00	54.00	51.00
Assessment [3*(Sum / 0.5RF)]	17.65	16.67	15.29

Average assessment over 3 years: 15.00

5.8 Research and Development (75) Total Marks 75.00

5.8.1 Academic Research (20)

Institute Marks : 20.00

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

Table B.5.8.1.1 Details of Articles/ Books/ Patents Published

Academic Year	CAY (2022-2023)	CAYm1 (2021-2022)	CAYm2 (2020-2021)	CAYm3 (2019-2020)
No .of Publications	33	89	110	111
Books published / Chapters authored	3	4	-	8
No. of Patent Publications	6	5	1	-

Table 5.8.1.2. Details of books published

Name of the Book/Chapter	Author Details	Details of Publication	Year
Smart Grid For Advanced Power System	Dr.P.Shanthi	Emerald Publishers ISBN: 978-9-3890- 8053-7	2020
Diminishing Energy Demand in Pandemic Energy Crisis During Pandemic Improvement Of Energy Demand After Pandemic	Dr.S.Satish Kumar	ISBN: 978-81-947019-5-8	2020
Impact of COVID 19 on Electricity in Power Sector	Mrs.Tamilpavai	ISBN: 978-81-947019-0-3	2020
Internet of Things	Dr.A.Suresh	L Ordine Nuovo Pub ISBN: 939008404-0	2020
Basic Electrical and Electronics Engineering	Dr.A.Suresh	L Ordine Nuovo Pub ISBN: 939008404-0	2020
Book Chapter titled “Nanotechnology in the Beverage Industry - Fundamentals and Applications”	Mrs.Dorothy	ISBN: 978-0-12-819941-1	2020
Fundamentals of Drives	Mr.S.Amirtharaj	ESN Publications, ISBN: 978-81-945156-6-1	2020
Book Chapter titled “Energy and Power”	Mrs.G.Tamil Pavai	ESN Publications ISBN: 978-81-947019-0-3	2020
Book Chapter titled “Materials Engineering and Technology – Mechanical Properties and Deformation Mechanisms”	Dr.A.Thanikasalam	Tech Press Publications ISBN: 9789391697044	2021
Book Chapter titled “Fundamentals of Design Process”	Dr.A.Thanikasalam	Tech Press Publications ISBN: 9789391697044	2022
Electromagnetic Theory and its Application	Dr.S.Satishkumar, Dr.M.Sasikumar, Dr.P.Sivaperumal	Scientific International Publishing House (SIPH), ISBN: 978-93-5625-258-5	2022
Basic Electrical, Electronics and Instrumentation Engineering	Dr.M.Tamilarasi, Mr.Vimalraj, Dr.P.Sivaperumal, Dr.S Satishkumar	Evincepub Publishing, ISBN: 978-93-5673-085-4	2022
Introduction to Abrasive Machining and Finishing Process	Mr.D.Kumaravel	Notion Press Publication ISBN:9798887729336	2022

Linear Integrated Circuits	Dr.M.Tamilarasi	Scientific International Publishing House ISBN: 9789392992957	2022
Medical Image Processing	Dr. K. Gowrishankar	Deccan Academic International Publishers ISBN: 9789395191166	2022

Table 5.8.1.4. Details of patents published

Topic	Author Name	CBR Number/ Patent Number	Date of Publication
Development of a Web platform for Wireless Sensor Management	Mr.K.Stalin	202341008938 A	24.02.2023
AI and IoT based method for regenerative medicine for the treatment of life-threatening diseases and Method thereof	Dr.K. Gowrishankar	202241063344	11.11.2022
An IoT based wind energy generation system and method	Dr.K. Gowrishankar	202241070477	09.12.2022
Design And Development of an Integrated PV Grid Connected DC Fast Electric Vehicle Charging System	Dr.P.Sivaperumal	202241000339	14.01.2022
Automatic Irrigation System by Use of Waste Water for Small Irrigation Fields	Mr.D.Kumaravel	202241031191	17.06.2022
Controller for Neutral Point Clamped Multilevel Inverter in Autonomous ships.	Ms.G.Tamil Pavai	202241000336	04.01.2022
Controller for Neutral Point Clamped Multilevel Inverter in Autonomous ships.	Mr.S.Satish kumar	202241000336	04.01.2022
Design of Solar Thermal Power Integration Systems to increase the efficiency of Renewable Energy Sources	Dr. M. Tamiarasi	202241025379A	13.05.2022
IOT based Height Adjustable Wheel Chair	Dr.V.Rajeswari	374745001	28.11.2022
Automatic Electric Cooling Fan System; a device and thereof	Dr.S.Satish kumar	2021104519	2022
Reduction of Heat Flux Al Water Nano fluids Used To Cool The Electronic Panels	Mr.K.Stalin	2020104017	25.03.2021
Optimization of heat transfer in PIN-FIN using screw thread	Dr.Edison Chandraseelan	201741006870	2020

Table B.5.8.1.5 (a). Details of Articles published during the assessment period

Table B.5.8.1.5 (b). Details of Conference Papers Presented / Published during the assessment period

Google Drive Link for Journals and conference publications **5.8.1.5 (a) & (b)** : https://drive.google.com/file/d/1dlzxgz8VOlNd7bt8bEJ-Kp2X-y3AqIrA/view?usp=share_link (https://drive.google.com/file/d/1dlzxgz8VOlNd7bt8bEJ-Kp2X-y3AqIrA/view?usp=share_link)

Table B.5.8.1.6 Details of Citation index of the faculty

Citations and h-index details of faculty in SCOPUS/ Google Scholar

Name of the Faculty	No of Citations	h-index	SCOPUS Author ID	SCOPUS Author page link
Dr.R.Rajavel	239	9	*35111657100*	https://www.scopus.com/authid/detail.uri?authorId=35111657100 (https://www.scopus.com/authid/detail.uri?authorId=35111657100)
Dr.A.Suresh	226	6	36810602500	https://www.scopus.com/authid/detail.uri?authorId=36810602500 (https://www.scopus.com/authid/detail.uri?authorId=36810602500)
Dr.S.V.Saravanan	127	6	57215650204	https://www.scopus.com/authid/detail.uri?authorId=57215650204 (https://www.scopus.com/authid/detail.uri?authorId=57215650204)
Dr.P.Sivaperumal	9	2	57202540633	https://www.scopus.com/authid/detail.uri?authorId=57202540633 (https://www.scopus.com/authid/detail.uri?authorId=57202540633)
Mr.M.Ramamurthy	22	1	57218898809	https://www.scopus.com/authid/detail.uri?authorId=57218898809 (https://www.scopus.com/authid/detail.uri?authorId=57218898809)
Dr S.Satish kumar	35	4	57188970323	https://www.scopus.com/authid/detail.uri?authorId=57188970323 (https://www.scopus.com/authid/detail.uri?authorId=57188970323)
Dr.Tamilarasi	7	2	57224489449	https://www.scopus.com/authid/detail.uri?authorId=57224489449 (https://www.scopus.com/authid/detail.uri?authorId=57224489449)
Dr.A.Thanikasalam	20	2	57202091718	https://www.scopus.com/authid/detail.uri?authorId= (https://www.scopus.com/authid/detail.uri?authorId=57224489449)57202091718 (http://https://www.scopus.com/authid/detail.uri?authorId=57202091718)
Dr.Shanthi	57	2	57052626100	https://www.scopus.com/authid/detail.uri?authorId=57052626100 (https://www.scopus.com/authid/detail.uri?authorId=57052626100)
Dr.J.Ananth	205	4	39862704800	https://www.scopus.com/authid/detail.uri?authorId=39862704800 (https://www.scopus.com/authid/detail.uri?authorId=39862704800)
Dr.E. Ravikumar	1	1	56826235100	https://www.scopus.com/authid/detail.uri?authorId=56826235100 (https://www.scopus.com/authid/detail.uri?authorId=56826235100)

Mr.D.Kumaravel	5	1	57194579922	https://www.scopus.com/authid/detail.uri?authorId=(https://www.scopus.com/authid/detail.uri?authorId=39862704800)57194579922(https://www.scopus.com/authid/detail.uri?authorId=57194579922)
Mr.K.Stalin	2	1	57699354000	https://www.scopus.com/authid/detail.uri?authorId=(https://www.scopus.com/authid/detail.uri?authorId=39862704800)57699354000(http://https://www.scopus.com/authid/detail.uri?authorId=57699354000)
Dr.S.Muthu baskaran	4	2	57200600827	https://www.scopus.com/authid/detail.uri?authorId=57200600827(http://https://www.scopus.com/authid/detail.uri?authorId=57200600827)
S.K.Krishnakumar	24	2	57197901268	https://www.scopus.com/authid/detail.uri?authorId=(https://www.scopus.com/authid/detail.uri?authorId=39862704800)57197901268(http://https://www.scopus.com/authid/detail.uri?authorId=57197901268)
Mr.P.Sathish khanna	80	2	56580421100	https://www.scopus.com/authid/detail.uri?authorId=56580421100(http://https://www.scopus.com/authid/detail.uri?authorId=56580421100)
Mr.M.Bala kumaran	0	0	57207985747	https://www.scopus.com/authid/detail.uri?authorId=57207985747(http://https://www.scopus.com/authid/detail.uri?authorId=57207985747)
Dr.K.Gowrishankar	131	7	55812078500	https://www.scopus.com/authid/detail.uri?authorId=55812078500(http://https://www.scopus.com/authid/detail.uri?authorId=55812078500)
Mr.R.Sundar	10	2	57215872006	https://www.scopus.com/authid/detail.uri?authorId=57215872006(http://https://www.scopus.com/authid/detail.uri?authorId=57215872006)
Dr.D.S.Balaji	38	4	56433712900	https://www.scopus.com/authid/detail.uri?authorId=56433712900(https://www.scopus.com/authid/detail.uri?authorId=56433712900)
Dr.D.Madesh	515	7	55865691900	https://www.scopus.com/authid/detail.uri?authorId=55865691900(http://https://www.scopus.com/authid/detail.uri?authorId=55865691900)
Dr.V.Yamuna Devi	64	4	57210387311	https://www.scopus.com/authid/detail.uri?authorId=57210387311(https://www.scopus.com/authid/detail.uri?authorId=57210387311)

Dr.Edison Chandraseelan	7	1	57202969482	https://www.scopus.com/authid/detail.uri?authorId=57202969482 (http://https://www.scopus.com/authid/detail.uri?authorId=57202969482)
Mr.S.Ranganathan	753	11	55184571600	https://www.scopus.com/authid/detail.uri?authorId=55184571600 (https://www.scopus.com/authid/detail.uri?authorId=55184571600)
Dr.K. Komathy	224	9	6506189773	https://www.scopus.com/authid/detail.uri?authorId=6506189773 (http://https://www.scopus.com/authid/detail.uri?authorId=6506189773)
Dr.S.Prabhakaran	49	4	55849560000	https://www.scopus.com/authid/detail.uri?authorId=55849560000 (http://https://www.scopus.com/authid/detail.uri?authorId=55849560000)
Dr.M.Rajavelan	17	3	57203859744	https://www.scopus.com/authid/detail.uri?authorId=57203859744 (http://https://www.scopus.com/authid/detail.uri?authorId=57203859744)
Dr.S.Sangeetha	14	2	57209619144	https://www.scopus.com/authid/detail.uri?authorId=57209619144 (http://https://www.scopus.com/authid/detail.uri?authorId=57209619144)
Ms.S.Sinthuja	52	3	56500676300	https://www.scopus.com/authid/detail.uri?authorId=56500676300 (http://https://www.scopus.com/authid/detail.uri?authorId=56500676300)
Mr.R.Dorothy	66	5	57199998311	https://www.scopus.com/authid/detail.uri?authorId=57199998311 (https://www.scopus.com/authid/detail.uri?authorId=57199998311)
Mr.R.Praveenkumar	144	5	57201368074	https://www.scopus.com/authid/detail.uri?authorId=57201368074 (http://https://www.scopus.com/authid/detail.uri?authorId=57201368074)
Mr.S.Amirtharaj	20	3	57215442934	https://www.scopus.com/authid/detail.uri?authorId=57215442934 (https://www.scopus.com/authid/detail.uri?authorId=57215442934)
Mr.S.Janarthanan	2	1	57194457976	https://www.scopus.com/authid/detail.uri?authorId=57194457976 (http://https://www.scopus.com/authid/detail.uri?authorId=57194457976)

Ms.T.Dhanya	7	1	57194432351	https://www.scopus.com/authid/detail.uri?authorId=57194432351 (https://www.scopus.com/authid/detail.uri?authorId=57194432351)
Ms.K.Anupriya	26	2	57204172227	https://www.scopus.com/authid/detail.uri?authorId=57204172227 (http://https://www.scopus.com/authid/detail.uri?authorId=57204172227)
Dr.S.Ramalingam	5	2	57205342464	https://www.scopus.com/authid/detail.uri?authorId=57205342464 (https://www.scopus.com/authid/detail.uri?authorId=57205342464)
Mr.J.Harish Kumar	2	1	57197854247	https://www.scopus.com/authid/detail.uri?authorId=57197854247 (https://www.scopus.com/authid/detail.uri?authorId=57197854247)
Dr.V. Rajeshwari	24	3	15751773600	https://www.scopus.com/authid/detail.uri?authorId=15751773600 (https://www.scopus.com/authid/detail.uri?authorId=15751773600)
Dr.V.Sridevi	29	2	57133230800	https://www.scopus.com/authid/detail.uri?authorId=57133230800 (http://https://www.scopus.com/authid/detail.uri?authorId=57133230800)
Dr. M. Smilee	3	1	56103503300	https://www.scopus.com/authid/detail.uri?authorId=56103503300 (http://https://www.scopus.com/authid/detail.uri?authorId=56103503300)
Ms.G. Tamilpavai	12	2		https://scholar.google.co.in/citations?user=0lVhPQkAAAAJ&hl=en (https://scholar.google.co.in/citations?user=0lVhPQkAAAAJ&hl=en)
Mr. Aran Glenn	62	4		https://scholar.google.com/citations?user=QRVdXLoAAAAJ&hl=tl (https://scholar.google.com/citations?user=QRVdXLoAAAAJ&hl=tl)

Table B.5.8.1.7. List of faculty awarded Ph. D during the assessment period

S.No.	Name of the Faculty	Institute/University	Year of Award
1	Mr.A Thanikasalam	Anna University	2020
2	Mr.S.Muthu baskaran	Anna University	2020
3	Mr.P.Sivaperumal	SRM Institute of Science and Technology	2021
4	Mr.D S Balaji	Hindustan University	2021

5	Mr.S.Satish kumar	Sathyabama Institute of Science and Technology	2022
6	Mr. Devadoss Rajasekar	AMET University	2022
7	Mr.G.Sekar	Anna University	2022

Table B.5.8.1.8. List of Faculty Pursuing PhD

S.No	Name of the Faculty	Ph.D Scholar	Registration Number	Year of Registration	Area of Research	University	Progress Status
1	Mr.R.Praveen Kumar	Part Time Scholar	2015195204	2015	Investigation of Mechanical Properties of Mg alloys	AMET University	2nd DC Meeting Completed
2	Mr.M.Ramamurthy	Part Time Scholar	17142591160	2017	Friction stir welding	Anna University	Thesis Submitted
3	Mr.S.K.Krishnakumar	Part Time Scholar	17142597363	2017	Composite Materials	Anna University	Course Work Completed
4	Mr.J.Harish Kumar	Part Time Scholar	A2017295613	2017	Friction Stir Welding	AMET University	2nd DC Meeting Completed
5	Mr.P.Sathish Khanna	Part Time Scholar	A2019392381	2019	Electrical Engineering	AMET University	Course Work Completed
6	Mr.M.Bala Kumaran	Part Time Scholar	2019392581	2019	Laser Welding	AMET University	Course Work Completed
7	Mrs.M.Selvarani	Part Time Scholar	1422319708	2015	Power Converters	Anna University	Course Work Completed
8	Mr.S.Amirtharaj	Part Time Scholar	1212399751	2015	Power Converters	Anna University	Synopsis Submitted
9	Mr.R.Sundar	Part Time Scholar	20122493117	2021	Renewable Energy System	AMET University	Synopsis Submitted

Table B.5.8.1.9. Details of Research Scholars awarded Ph. D Degree during the assessment period

S. No	Name of the Supervisor	Name of the Research Scholar	Institute/University	Year of Award
1	Dr.A.Suresh	Mr.Ashok Kumar	Anna University	2020
2	Dr.A.Suresh	Ms.M.Monisha	Anna University	2020

Table B.5.8.1.10. Details of Ph.D Guidance - Faculty as Supervisor

S. No	Name of the Supervisor	Name of the Research Scholar	Institute/ University	Part Time/ Full Time	Year of Registration

1	Dr.S.V.Saravanan	Dheepak.M	AMET	P.T	2017
2		G.Pragash	AMET	P.T	2019
3	Dr.A.Suresh	Praveen Talari	Anna University	P.T	2017
4		V.Mythili	Anna University	F.T	2018
5	Dr.R.Rajavel	Madhuchandrika	AMET	P.T	2014
6		Ponshanmugakumar	AMET	P.T	2014
7		R.Praveen Kumar	AMET	P.T	2015
8		A.R.Sivaram	AMET	P.T	2017
9		P.Ramanathan	AMET	P.T	2017
10		M.Balakumaran	AMET	P.T	2019
11		M.Gopi Shankar	AMET	P.T	2022
12	Dr.M.Rajavelan	Mr.P.Sathish Khanna	AMET	P.T	2019
13	Dr.V.Yamuna Devi	Mr Dhanya Prakash	AMET	P.T	2021
14	Dr. S.Prabhakaran	Mr. R. Sundara Ganesan	AMET	F.T	2017
15		Mr. S.Vijay	AMET	F.T	2017
16		Mr.J. Harish Kumar	AMET	P.T	2017
17		Mr.V.Kurinji	AMET	P.T	2018

5.8.2 Sponsored Research (20)

Institute Marks : 20.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount(in Rupees)
IoT enabled Marine Cargo r	1 Year	SKM Ship Care. Chennai.	432000.00
			Total Amount(X): 432000.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Energy braking for Marine \	1 Year	SKM Ship Care, Chennai.	474000.00
Design of Solar Photovoltai	1 Year	Maaya Solar Powertech So	360000.00
Expermental Investigation c	1 Year	Balsam Creative Technolog	300000.00
			Total Amount(Y): 1134000.00

2019-20 (CAYm3)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Visible Light Photo catalysis	2 Years	DST - Optimum Water Use	6022040.00
			Total Amount(Z): 6022040.00

Cumulative Amount(X + Y + Z) = 7588040.00

5.8.3 Development activities (15) Institute Marks : 15.00

A. Product Development

Table 5.8.3.A.1 List of Products Developed by the Faculty

Name of the Faculty	Name of the Product	Impact
Dr. R.Rajavel	Design of Fuel Injection Valve Actuation System	Students were able to present this concept in Conference.
Dr. M. Tamilarasi	A prototype development of Thermoelectric based refrigeration system	Received Best Scientist Award - International Multidisciplinary Research Foundation
Dr.S.Satishkumar	Auto Tension - Mooring Wich - A Prototype Design	Students able to exhibit the prototype model of this project

Seed Money Projects sanctioned for the faculty

The faculty members are requested to submit the research proposals for seed money projects funded by AMET. The following proposals have been examined and considered to sanction the project money to the individual faculty.

Table 5.8.3.A.2 List of Seed Money Projects Sanctioned by AMET

S.NO	Project Title	Name of the Faculty	Duration	Amount (in Rs.)
1	Design and implementation of TBDC Converter Integrated with Fuzzy controller in Marine Incinerator Applications	Dr.S.Satishkumar	6 Months	45,000
2	Design and development of Bio Impedance Measurement Instrument	Dr.M.Rajavelan	6 Months	48,000
3	Developing a prototype to detect the Oil Mist in Cargo Container	Dr.R.Rajavel	6 Months	55,000
4	Mechanical Control Pitch Propeller	Dr.A.Thanikachalam	6 Months	60,000
5	A prototype model of Reefer Container for Cargo Ships	Dr.M.Tamilarasi	6 Months	53,000
6	An idea of developing a Hydrophobic Paint	Dr.A.Suresh	6 Months	50,000
7	Development of Salinometer with Three Way Valve	Dr.P.Shanthi	6 Months	56,000
8	An Automatic machine for Safe Load Indicator	Dr.S.Satishkumar	6 Months	55,000
9	Switch Board Safeties	Dr.P.Shanthi	6 Months	50,000
10	Reduction Gear With Shaft Generator	Dr.M.Rajavelan	6 Months	55,000

11	A model of Shell and Tube Heat Exchanger	Mr.R.Sundar	6 Months	60,000
12	Design and Development of Solar Powered Autonomous Electric Bi Cycle	Dr.A.Suresh	6 Months	1,00,000
13	Optimal Utilization of Renewable Energy Sources in MG Connected System with Integrated Converters AGONN approach	Dr.P.Shanthi	6 Months	1,00,000
14	MPPT based Solar Charge Controller using IoT	Mr.P. Satishkhanna	6 Months	37,500
15	Partial Discharge detection technique for high voltage equipment	Mr.J.Aran Glenn	6 Months	1,10,000
16	Design and development of radio frequency cautery Instrument for Surgical Applications	Mr.R. Sundar	6 Months	1,20,000
17	Applications of ship engine room simulators in Maritime Education and Training	Dr. Boopathy Bhaskaran	6 Months	67,000

Design Projects completed by faculty

Table 5.8.3.A.3 Design Projects completed by Faculty along with students

Name of the Student	Name of the Faculty Coordinator	Project Title	Impact
1. Abhijeet 2. Samuel 3. Sulthan Baasha 4. Muthamizh	Dr.M.Tamilarasi	A prototype development of Thermoelectric based refrigeration system	• Skill set of the students are improved. • Acquire knowledge on various aspects of project management. • Confidence level of the students is increased
1. Jerin James 2. Roshan Buu Thomas 3. Sidarth Biju 4. Aswin Raj S	Dr.M.Rajavelan	Prototype design of Cargo Hold Smoke Detector System	• Innovative solutions for the problems in shipping industry was developed. • Skill set of the students are improved. • Confidence level of the students is increased.
1. Arvind 2. Diwakar S 3. Vasantha Kumar 4. Mohammed Asif 5. Rahul Karipaiah	Dr.R.Rajavel	Emergency Alert System On-board Ship	• Skill set of the students are improved. • More tendencies to showcase their project work in project exhibition were observed. • Products/prototypes are developed

1. Dhivakaran T 2. Dinesh Kumar P 3. Jagadeesh B 4. Kishan R M	Dr.M.Rajavelan	Development of SIC Automatic Shutter Door	• Innovative solutions for the problems in shipping industry was developed. • Skill set of the students are improved.
1. Reganath 2. Mourya 3. Alen Joe 4. Prasad	Dr.A.Suresh	Oily Water Separator	• Innovative solutions for the problems in shipping industry was developed. • Enhanced team spirit. • More tendencies to showcase their project work in project exhibition were observed.
1. Vinothkumar 2. Pavan Kumar 3. Rajesh S 4. Vasanth 5. Shiyam Sundar	Dr.S.Satishkumar	Auto Tension - Mooring Wich - A Prototype Design	• Skill set of the students are improved. • Acquire knowledge on various aspects of project management. • Enhanced team spirit. • Document preparation and presentation.
1. Vikram K 2. Dathin D 3. Akash S 4. Santhosh N B 5. Sanjay Krishna	Dr.A.Thanikachalam	Design and development of Cargo Hold Water Ingress Detection System	• Innovative solutions for the problems in shipping industry was developed. • Skill set of the students are improved. • Products/prototypes are developed

B. Research Laboratories

Research laboratories were set up in order to enhance the knowledge and skill set of staffs and students.

Table 5.8.3.B.1 Details of Research Lab

Sl. No	Research Laboratories	Facilities Available	Outcomes

1	Engine Room Simulator Lab	**Simulation Software:** Neptune Simulator ERS MC 90-V **(1 User)** **Simulator Lab I:** **Hardware:** **Personal Computers:** 5 No's **Configuration:** Intel Core i3 processors • Engine Control Room Maneuvering Panel • Synchronizing Panel • Diesel Generator 1 Panel • Shaft Generator Panel • Turbo Generator Panel • Diesel Generator 2 Panel • Feeder Panel • Starter Panel **Simulator Lab II:** • Steering Gear System Panel • Oil Fired Boiler Panel • Diesel Oil Purifier Control Panel • Lubricating Oil Purifier Control Panel • Heavy Fuel Oil Separator Panel • Diesel Generator Local Control Panel • Fuel Oil Viscosity System • Main Engine Fuel Oil Supply System • Emergency Generator Operating and Distribution Panel	• Faculty members will utilize this lab to enhance their research activities and to carry out research publications. • Students able to acquire hands on experience in the operation of Engine room machinery and watch keeping in the Engine Control room of Vessel with a high level of automation. • Using this infrastructure, research articles were published in the reputed journals.

2	Marine Simulation Lab	**Hardware:** **Personal Computers:** 28 Nos **Configuration:** Intel Core i3 processors **Softwares:** • **Platform:** Ocean Learning Platform • Solidworks – 60 Users • ANSYS – 50 Users • Mastercam (Milling -10 Users, Lathe - 10 Users, Wire Cut 10 Users) • Fusion 360 • SCILAB • Proteus Software	• Facilities will be utilized by Faculty and Students of Marine Engineering. • Research articles were published in the reputed journals and conferences. • Facility to provide Core placement training. • Skill Development training such as soft skills, Personality development program. • Value added training for Students, Faculty Development Program, Consultancy Project etc.
		Software: • **Platform:** Ocean Learning Platform	• Platform provides the blended learning, assessment and competency management solutions that completely connect e-Learning and hands-on activity to improve knowledge, skills and behavioural development of the student. • Facility to enrich the knowledge in core areas.

C. Instructional Materials

Table 5.8.3.C.1 Instructional Materials developed by Faculty

S.No	Topic Covered	Name of the Faculty	Link
1	Heat Exchanger	Mr.Sridhar Konda	https://www.youtube.com/watch?v=oQ8CxL1_z_U (https://www.youtube.com/watch?v=oQ8CxL1_z_U)
2	Training in Ship In Campus	Mr.S.Venkataganesh	https://www.youtube.com/watch?v=D-F2iR-4-xI (https://www.youtube.com/watch?v=D-F2iR-4-xI)
3	Training in Ship In Campus	Mr.Ananthakumar	https://www.youtube.com/watch?v=6RRtg86vpzs (https://www.youtube.com/watch?v=6RRtg86vpzs)
4	Seamanship Lab	Mr.Sampathkumar	https://www.youtube.com/watch?v=kne6TBhAGhU (http://https://www.youtube.com/watch?v=kne6TBhAGhU)
5	Training in Ship In Campus	Mr.Vignesh Sharma	https://www.youtube.com/watch?v=9xDIGvdNAO8 (https://www.youtube.com/watch?v=9xDIGvdNAO8)

6	Super Charging and Turbochargers	Mr.G.R.Mani	https://www.youtube.com/watch?v=c5LGLmKWUPE (https://www.youtube.com/watch?v=c5LGLmKWUPE)
7	Dry Docking - (I) Preparation of Dry Dock (II) Repair Specifications	Mr.Sridhar P S	https://www.youtube.com/watch?v=9_QrQry_3l8 (http://https://www.youtube.com/watch?v=9_QrQry_3l8)
8	Introduction to Mechanisms	Mr.Rajesh Chittam	https://www.youtube.com/watch?v=2Y9pd0zloJg (http://https://www.youtube.com/watch?v=2Y9pd0zloJg)
9	Fire Detection Systems	Mr.S.P.Venugopal	https://www.youtube.com/watch?v=xLP5IDZdmtc (http://https://www.youtube.com/watch?v=xLP5IDZdmtc)
10	Work And Rest Hours on Board Ship	Mr.S.Venkataganesh	https://www.youtube.com/watch?v=DBcZk0L97jw (http://https://www.youtube.com/watch?v=DBcZk0L97jw)
11	Electrical Energy Generation Utilization & Conservation Power Generation	Mr.J.Aran Glenn	https://www.youtube.com/watch?v=M7Uqc-EnO9M (https://www.youtube.com/watch?v=M7Uqc-EnO9M)
12	Gear Pump	Mr.D.Kumaravel	https://www.youtube.com/watch?v=CxOC5_I1stg (http://https://www.youtube.com/watch?v=CxOC5_I1stg)
13	Types of Pressure Sensor in Shipping Applications	Dr.P.Shanthi	https://www.youtube.com/watch?v=u3rnSJGC96o (https://www.youtube.com/watch?v=u3rnSJGC96o)
14	Refrigeration & Air Conditioning System	Mr.R.Vignesh Sharma	https://www.youtube.com/watch?v=T_WpdO3DtIA (http://https://www.youtube.com/watch?v=T_WpdO3DtIA)
15	Oily Water Separator	Mr.Rajesh Chittam	https://www.youtube.com/watch?v=2Y9pd0zloJg (https://www.youtube.com/watch?v=2Y9pd0zloJg)
16	Mesh Analysis - Basic Electrical Engineering	Dr.A.Suresh	https://www.youtube.com/watch?v=jL_nxmVFWcw (http://https://www.youtube.com/watch?v=jL_nxmVFWcw)
17	Refrigeration & Air Conditioning	Mr.Krishnan Ramesh	https://www.youtube.com/watch?v=SDCn4WsIefk (https://www.youtube.com/watch?v=SDCn4WsIefk)

18	Emergency Generator on Ships	Mr.Sathis Khanna P	https://www.youtube.com/watch?v=mXD8rxuGRTA (https://www.youtube.com/watch?v=mXD8rxuGRTA)
19	Main Engine	Mr.S.S.Rajan	https://www.youtube.com/watch?v=fzuVF0Xna4A (http://https://www.youtube.com/watch?v=fzuVF0Xna4A)
20	Calculation of Voltage gain in amplifiers	Dr.S.Satishkumar	https://www.youtube.com/watch?v=lL2Z0lnZ9aA (https://www.youtube.com/watch?v=lL2Z0lnZ9aA)
21	BiCMOS Amplifier	Dr.S.Satishkumar	https://www.youtube.com/watch?v=N3anyCbQs08 (https://www.youtube.com/watch?v=N3anyCbQs08)
22	Solar Thermal Collector	Dr.P.Sivaperumal	https://www.youtube.com/watch?v=-_HTUlgGrkk (https://www.youtube.com/watch?v=-_HTUlgGrkk)
23	Basic Electronics	Dr.P.Sivaperumal	https://www.youtube.com/watch?v=uLcB6PWlv-s (https://www.youtube.com/watch?v=uLcB6PWlv-s)
24	Network Theorems	Mr.R.Sundar	https://www.youtube.com/watch?v=QwM5jfO_we8 (http://https://www.youtube.com/watch?v=QwM5jfO_we8)
25	Transmission Line	Dr.P.Shanthi	https://www.youtube.com/watch?v=QB2nlsMNwTo (http://https://www.youtube.com/watch?v=QB2nlsMNwTo)
26	Fabrication of Monolithic Integrated Circuits	Ms.S.Sinthuja	https://www.youtube.com/watch?v=WEndYflkksY (https://www.youtube.com/watch?v=WEndYflkksY)
27	AC Synchronous Generator	Mr.P.Sathish Khanna	https://www.youtube.com/watch?v=kWnfeBl5isU (http://https://www.youtube.com/watch?v=kWnfeBl5isU)
28	Centre of Gravity	Mr.S.Amirtharaj	https://www.youtube.com/watch?v=ZbwTDT2Igik (http://https://www.youtube.com/watch?v=ZbwTDT2Igik)

29	Microcontroller	Dr.M.Rajavelan	https://www.youtube.com/watch?v=xYeQNfHSmBM (http://https://www.youtube.com/watch?v=xYeQNfHSmBM)
30	Air Compressor	Mr.S.S.Rajan	https://www.youtube.com/watch?v=awUC8qxEsxw (https://www.youtube.com/watch?v=awUC8qxEsxw)

Table 5.8.3.C.2 Video Lectures prepared by the faculty

S. No	Name of the Faculty	Name of the Module	Platform on which module is developed
1	Mr.Boopathy Baskaran	Fuel Injection System (Part 1)	EMRDC
2	Mr.Boopathy Baskaran	Fuel Injection System (Part 2)	EMRDC
3	Mr.M.Ramamurthy	Basics of Mechanisms	EMRDC
4	Mr.K.Stalin	Strength of Materials	AMET - LMS
5	Dr.Thanikasalam.A	Engineering Mechanics	AMET - LMS
6	Dr.M.Tamilarasi	Applications of Logic Gates	AMET - LMS
6	Dr.P.Sivaperumal	FACTS	AMET - LMS
7	Dr.S.Satish Kumar	Circuit Theory	AMET - LMS
8	Mr.U.N.Neela Prasad	Types of Ship	AMET - LMS

Table 5.8.3.C.3 Details of blog developed by the faculty

Blog developed by the faculty	
Name of the Faculty	**Blogspot link**
Dr. S. V. Saravanan	https://www.svsaravanan.blogspot.com (https://www.svsaravanan.blogspot.com/)
Mr.M.Ramamurthy	https://ramamurthy1976.blogspot.com/ (https://ramamurthy1976.blogspot.com/)
Mr.K.Stalin	https://stalinbdx.blogspot.com/ (https://stalinbdx.blogspot.com/)
Dr.P.Sivaperumal	https://www.sivaperumal17.blogspot.com (https://www.sivaperumal17.blogspot.com/)
Dr.S.Satish Kumar	https://www.satishkumarseee.blogspot.com (https://www.satishkumarseee.blogspot.com/)

Table 5.8.3.C.3 Details of Book Published

Name of the Book/Chapter	Author Details	Details of Publication	Year

Smart Grid For Advanced Power System	Dr.P.Shanthi	Emerald Publishers ISBN: 978-9-3890- 8053-7	2020
Diminishing Energy Demand in Pandemic Energy Crisis During Pandemic Improvement Of Energy Demand After Pandemic	Dr.S.Satish Kumar	ISBN: 978-81-947019-5-8	2020
Impact of COVID 19 on Electricity in Power Sector	Mrs.Tamilpavai	ISBN: 978-81-947019-0-3	2020
Internet of Things	Dr.A.Suresh	L Ordine Nuovo Pub ISBN: 939008404-0	2020
Basic Electrical and Electronics Engineering	Dr.A.Suresh	L Ordine Nuovo Pub ISBN: 939008404-0	2020
Book Chapter titled “Nanotechnology in the Beverage Industry - Fundamentals and Applications”	Mrs.Dorothy	ISBN: 978-0-12-819941-1	2020
Fundamentals of Drives	Mr.S.Amirtharaj	ESN Publications, ISBN: 978-81-945156-6-1	2020
Book Chapter titled “Energy and Power”	Mrs.G.Tamil Pavai	ESN Publications ISBN: 978-81-947019-0-3	2020
Book Chapter titled “Materials Engineering and Technology – Mechanical Properties and Deformation Mechanisms”	Dr.A.Thanikasalam	Tech Press Publications ISBN: 9789391697044	2021
Book Chapter titled “Fundamentals of Design Process”	Dr.A.Thanikasalam	Tech Press Publications ISBN: 9789391697044	2022
Electromagnetic Theory and its Application	Dr.S.Satishkumar, Dr.M.Sasikumar, Dr.P.Sivaperumal	Scientific International Publishing House (SIPH), ISBN: 978-93-5625-258-5	2022
Basic Electrical, Electronics and Instrumentation Engineering	Dr.M.Tamilarasi, Mr.Vimalraj, Dr.P.Sivaperumal, Dr.S Satishkumar	Evincepub Publishing, ISBN: 978-93-5673-085-4	2022
Introduction to Abrasive Machining and Finishing Process	Mr.D.Kumaravel	Notion Press Publication ISBN:9798887729336	2022
Linear Integrated Circuits	Dr.M.Tamilarasi	Scientific International Publishing House ISBN: 9789392992957	2022
Medical Image Processing	Dr. K. Gowrishankar	Deccan Academic International Publishers ISBN: 9789395191166	2022

D. Working Models / Charts / Monograms etc.

Table 5.8.3.D.1 Working Models developed by the faculty

S. No	Name of the Model	Name of the Faculty developed
1	Two Stroke Transparent Lubrication	Dr. R. Rajavel
2	Pneumatic Steering Gear	Dr. A. Suresh

3	Bow Thruster	Dr. A. Thanikachalam
4	Reduction Gear with Shaft Generator	Dr. M. Rajavelan
5	Autotension – Mooring wich	Dr.S. Satishkumar
6	Switch board Safeties	Dr. P. Shanthi
7	Automatic Safe Load Indicator	Dr.S. Satishkumar

Table 5.8.3.D.2 Lab Manual prepared by the faculty

S. No	Name of the Lab Manual	Name of Faculty Developed
1	Basics Electrical Engineering Laboratory	Dr.A.Suresh
2	Engineering Practices Laboratory I	Dr.D.S.Balaji
3	Machine Drawing	Dr.S.Prabhakaran
4	Electrical Machines Laboratory	Dr.S.Satish Kumar
5	Basic Electronics Laboratory	Dr.P.Sivaperumal
6	Engineering Practices Laboratory- II	Dr.D.S. Balaji
7	Integrated Circuit Laboratory	Dr.S.V. Saravanan
8	Marine Electrical Technology Laboratory	Dr.S.Sangeetha
9	Marine Refrigeration & Air Conditioning Laboratory	Dr.D.Madesh
10	Engineering Practices Laboratory III	Dr.Edison Chandraseelan
11	Microprocessor & Microcontroller Laboratory	Dr.M.Rajavelan
12	Thermal &Fluid Mechanics Laboratory	Mr.S.K.Krishnakumar
13	Engineering Practices Laboratory IV	M.P.Satish Khanna
14	Fire Fighting Laboratory	Dr.S.Ranganathan
15	Marine Electrical Technology Laboratory	Dr.Smilee Mathuram
16	Strength of Material Laboratory	Dr. Edison Chandraseelan
17	Marine Engineering Equipment Drawing- I	Dr.V.Yamuna Devi
18	Advanced Electrical Engineering Laboratory	Dr.P.Shanthi
19	Internal Combustion Engine Laboratory	Dr.S.Muthu Baskaran
20	Power Electronics Laboratory	Dr.Tamilarasi
21	Automation Laboratory	Mr.K.Stalin
22	Electro Technology	Mr.S.Amirtharaj

23	Embedded System & Communication Lab	Mr.D.Kumaravel

Table 5.8.3.D.3 Monograms / Charts/ Stickers

S.No	Machine	Workshop 1	Workshop 2	Workshop 3
1.	Centre Lathe Machine	10	8	11
2.	Milling Machine	2	2	2
3.	Shaping Machine	3	2	2
4.	Power Hacksaw Machine	1	1	1
5.	Pillar Drilling Machine	1	2	2
6.	Radial Drilling Machine	0	2	1
7.	Bench Grinding Machine	3	4	4
8.	Transformer	9	10	7
9.	Gas welding point	9	9	7
10.	Hand Shearing Machine	0	1	1
11.	Auto Lathe Unitech Machine	2	2	2
12.	Cylindrical Grinding Machine	1	0	0
13.	Transformer Invertor Type	0	9	0

S.No	Machine	Description		
		Workshop 1	Workshop 2	Workshop 3
1	Lathe	AMET/ME/WS-1/CL/01	AMET/ME/WS-2/CL/01	AMET/ME/WS-3/CL/01
2		AMET/ME/WS-1/CL/02	AMET/ME/WS-2/CL/02	AMET/ME/WS-3/CL/02
3		AMET/ME/WS-1/CL/03	AMET/ME/WS-2/CL/03	AMET/ME/WS-3/CL/03
4		AMET/ME/WS-1/CL/04	AMET/ME/WS-2/CL/04	AMET/ME/WS-3/CL/04
5		AMET/ME/WS-1/CL/05	AMET/ME/WS-2/CL/05	AMET/ME/WS-3/CL/05
6		AMET/ME/WS-1/CL/06	AMET/ME/WS-2/CL/06	AMET/ME/WS-3/CL/06
7		AMET/ME/WS-1/CL/07	AMET/ME/WS-2/CL/07	AMET/ME/WS-3/CL/07
8		AMET/ME/WS-1/CL/08	AMET/ME/WS-2/CL/08	AMET/ME/WS-3/CL/08
9		AMET/ME/WS-1/CL/09	-	AMET/ME/WS-3/CL/09
10		AMET/ME/WS-1/CL/10	-	AMET/ME/WS-3/CL/10
11		-	-	AMET/ME/WS-3/CL/11
1	Milling Machine	AMET/ME/WS-1/MM/01	AMET/ME/WS-2/MM/01	AMET/ME/WS-3/MM/01
2		AMET/ME/WS-1/MM/02	AMET/ME/WS-2/MM/02	AMET/ME/WS-3/MM/02

1	Shaping Machine	AMET/ME/WS-1/SM/01	AMET/ME/WS-2/SM/01	AMET/ME/WS-3/SM/01
2		AMET/ME/WS-1/SM/02	AMET/ME/WS-2/SM/02	AMET/ME/WS-3/SM/02
3		AMET/ME/WS-1/SM/03	-	-
1	Power Hacksaw Cutting Machine	AMET/ME/WS-1/PHCM/01	AMET/ME/WS-2/PHCM/01	AMET/ME/WS-3/PHCM/01
1	Pillar Drilling Machine	AMET/ME/WS-1/PDM/01	AMET/ME/WS-2/PDM/01	AMET/ME/WS-3/PDM/01
1	Radial Drilling Machine	-	AMET/ME/WS-2/RDM/01	AMET/ME/WS-3/PDM/01
2		-	AMET/ME/WS-2/RDM/02	-
1	Bench Grinding Machine	AMET/ME/WS-1/BG/01	AMET/ME/WS-2/BG/01	AMET/ME/WS-3/BG/01
2		AMET/ME/WS-1/BG/02	AMET/ME/WS-2/BG/02	AMET/ME/WS-3/BG/02
3		AMET/ME/WS-1/BG/03	AMET/ME/WS-2/BG/03	AMET/ME/WS-3/BG/03
4		-	AMET/ME/WS-2/BG/04	AMET/ME/WS-3/BG/04
1	Hand Shearing Machine	-	AMET/ME/WS-2/HSM/01	AMET/ME/WS-3/HSM/01
1	Auto Lathe Machine	AMET/ME/WS-1/GL/01	AMET/ME/WS-2/GL/01	AMET/ME/WS-3/GL/01
2		AMET/ME/WS-1/GL/02	AMET/ME/WS-2/GL/02	AMET/ME/WS-3/GL/02
1	Cylindrical Grinding Machine	AMET/ME/WS-1/CGM/01	-	-
1	Transformer Invertor Type	-	AMET/ME/WS-2/WR/01	-
2		-	AMET/ME/WS-2/WR/02	-
3		-	AMET/ME/WS-2/WR/03	-
4		-	AMET/ME/WS-2/WR/04	-
5		-	AMET/ME/WS-2/WR/05	-
6		-	AMET/ME/WS-2/WR/06	-
7		-	AMET/ME/WS-2/WR/07	-
8		-	AMET/ME/WS-2/WR/08	-
9		-	AMET/ME/WS-2/WR/09	-

5.8.4 Consultancy (from Industry) (20)

Institute Marks : 20.00

2021-22 (CAYm1)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Report on the F	6 Months	Power Projects	130000.00
Hybrid Fed Inte	6 Months	Power Projects	115000.00
A prototype dev	1 Year	RR Prompt Ass	90000.00
Design of Fuel	1 Year	TEZZNOVA, C	75000.00
Developing a P	1 Year	RECON Group	110000.00
Prototype desig	1 Year	Balsam Creativ	90000.00
			Total Amount(X): 610000.00

2020-21 (CAYm2)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Short Circuit ar	1 Year	Power Projects	120000.00
Emergency Ale	1 Year	RECON Group	80000.00
Auto Tension -	6 Months	CDCE Automat	115000.00
Design and dev	1 Year	TEZZNOVA, C	110000.00
Development o	6 Months	SKarduino labs	90000.00
			Total Amount(Y): 515000.00

2019-20 (CAYm3)

Project Title	Duration	Funding Agency	Amount(in Rupees)
Development of Mobile Car	9 Months	New Bee Techr	52500.00
Bilge Holding Tank with Oil	1 Year	EPR Labs, Che	90000.00
Electro Magnetic Breaking S	1 Year	SMM Industries	85000.00
			Total Amount(Z): 227500.00

Cumulative Amount(X + Y + Z) = 1352500.00

5.9 Faculty Performance Appraisal and Development System (FPADS) (10) Total Marks 10.00

Institute Marks : 10.00

The university follows the performance based assessment system as prescribed by the UGC. The system is adopted after a thorough discussion and review. The performance review gives a great opportunity to the concerned faculty and the department to look into the areas for improvement and take necessary remedial steps.

The purpose of the evaluation is hereunder:

a) Assess and promote excellence in the teaching/learning process.

b) Meet the educational needs of students and community by continually.

Faculty appraisal is organized at the end of each academic year. Evaluation is based on three major parameters as follows. The weightage for each parameter will be different for different category of faculty viz Professor, Associate Professor and Assistant Professor. At the end of each semester, the self-assessment Proforma is collected from the faculty and is evaluated. Awards, Rewards/Incentives are given to the Faculty based on their performance in academics, funded projects from Govt. or Industries, publications in national/international journals and conferences etc.

Parameter1: Teaching Learning and Evaluation Activities: In this area, the faculty's foremost duty is on teaching courses, conducting labs and guiding projects. Due importance is also given to responsibilities such as lab-in-charge, contribution towards PAC, Conduction of examination, development of study/instructional material etc.

Parameter2: Co-Curricular, Extension and Professional Development Activities: This area is for evaluating the faculty's administrative duties undertaken at institution/department level. The duties like arranging field/industrial visits, organizing extension/community activities, academic and administrative responsibilities, seminar and/or conference organized, memberships in professional bodies, student mentoring and external paper evaluation and/or question paper setting are included.

Parameter3: Research and Academic Contributions: In this area, the faculty's research aptitude is evaluated. The criteria for evaluation includes publication in conferences, journals and books/chapters, citations of publications, patents, research proposals undertaken, consultancy, organizing workshops and conferences. It is also based on the laurels brought to the University by making significant contribution in technical, research, societal events held in national or international level.

Table 5.9.1. Weightage for each Parameter for different category of faculty

	Professor	Associate Professor	Assistant Professor
Teaching Learning and Evaluation	30	40	50
Co-Curricular, Extension and Professional Development	30	30	30
Research and Academic Contributions	40	30	20

Proforma for appraisal is collected from each faculty at the end of every academic year and is consolidated by the Head of the Department, suitable actions are taken based on the outcome of the report. The faculty those who are performed low, will be counselled by the Head of the Department and motivated to attend Faculty development programmes to improve their Research and academic contribution etc.

AMET
ACADEMY OF MARITIME EDUCATION AND TRAINING
DEEMED TO BE UNIVERSITY
(Under Section 3 of UGC Act 1956)

SELF ASSESMENT PROFORMA BASED ON ACADEMIC PERFORMANCE

Name of the Applicant	
Designation	
Name of the Department	
Present Pay-band with Annual Grade Pay	
Date of joining at AMET	
Period of appraisal	

Note: Details to be filled in with the details of the past one semester

A. **PERFORMANCE IN TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES**

Sl. No.	**Nature of Activity**	**Particulars**	**Details of documents enclosed**
1	Teaching workload (hours per week)		
	a. Lecture		
	b. Tutorials		
	c. Practicals		
	Total		
2	i. Number of study materials prepared and posted in LMS/Google Classroom		
	ii. Number of Video Lectures prepared and posted in Youtube/LMS/EMRDC		
	iii. Number of online classes conducted		
	iv. Syllabus enrichment by providing additional resources to students		
	Total		

3	Use of participatory and innovative teaching –learning methodologies; updating of subject content, course improvement etc		
4	Number of additional/special classes conducted for weaker students per week		
5	Number of examination duties undertaken		

B. **CO-CURRICULAR, EXTENSION AND PROFESSIONAL DEVELOPMENT RELATED ACTIVITIES**

Sl. No.	**Nature of Activity**	**Particulars**	**Details of documents enclosed**
1	Number of field visits/other visits coordinated		
2	Number of co-curricular and extension activities coordinated such as,		
	Extension work through NSS/NCC and other		
	Education related programmes in Media		
	Cultural activities		
	Advertisement		
	Counseling		
	Total		
3	Number of other administrative responsibilities		
4	Number of other academic responsibilities		
5	Number of seminars/conferences/workshops attended, organized.		
6	Number of Faculty/Career Development Programmes attended		
7	Number of memberships in professional bodies		
8	Number of library accessions made (average per month)		

C. **RESEARCH AND ACADEMIC CONTRIBUTIONS**

Sl. No.	Nature of Activity	Particulars	Details of documents enclosed
1	Number of papers in SCOPUS indexed journals		
2	Number of papers in SCI indexed journals-other than SCOPUS		
3	Number of papers in indexed in Google Scholar-Other than SCOPUS and SCI		
4	Number of papers in other Journals		
5	Number of papers presented in conferences/seminars-National		
6	Number of papers presented in conferences/seminars-International		
7	Number of books published –with ISBN number		
8	Number of books published – without ISBN number		
9	Number of book chapters authored		
10	Number of projects received		
11	Number of projects sent to funding agencies		
12	Number of patents filed		
13	Number of PhDs guided		
14	Number of M.Sc.,/ME/BE/MBA projects guided		
15	Invited lectures/lead lectures/chief guest addresses delivered in academic events-National		
16	Invited lectures/lead lectures/chief guest addresses delivered in academic events-International		
17	Number of awards/recognitions received		
18	Number of research articles reviewed for professional journals		
19	Number of consultancy works undertaken		
20	Number of collaborations established		

Any other relevant information

Certified that the details mentioned under all categories above are true and are supported by relevant documentary evidences.

Signature of the Faculty **Signature and seal of the HOD/Dean/Director**

Place :

Date :

Table 5.9.2 Details of promotion received by the faculty

S.No	Name of the Faculty	Designated as Prof. / Asso. Prof	Date of Promotion
1	Dr.A.Thanikasalam	Associate Professor	03.08.2020
2	Dr.P.Sivaperumal	Associate Professor	05.07.2021

5.9.3 Faculty members are eligible for attractive incentives for the following achievements/ activities.

Publication in SCOPUS indexed journals:

Well-designed staff incentive schemes have positive and powerful effects on the productivity, efficiency and quality of Research. In addition, it is essential that the incentive scheme be perceived as being fair, and thus the goals set out by the scheme are attainable, and better performing staff members are rewarded. So, AMET framed the rule that all the publications in SCOPUS, SCI, and Web of science will be given incentive provided the proper affiliation is mentioned and proof of indexed in appropriate peer reviewed literature database. Our Faculty received the incentive amount of Rs.3, 00,000/- towards publication for the academic year 2021-22. Similarly, an amount of Rs.1, 10,000/- and Rs.2, 90,000/- was received as an incentive for the academic years 2020-21 and 2019-20 respectively.

Participations in International conferences:

Faculties are encouraged to publish papers in IEEE, Elsevier, Springer lecture notes conference proceeding with quality works, and also encouraged to convert their UG/PG project students works as articles in the above said conferences. The registration fees, on-duty, TA/DA to attend the conference was provided to the faculty.

Professional Body Membership :

The university bears the registration fee for faculties enrolling in professional body membership.

Table 5.9.3 Incentive Received by the Faculty for Publication (Sample)

S.No	Name of the Faculty	Amount Received (in Rs.)
2021-2022		
1	Dr.A.Suresh	50,000
2	Dr.D.Madesh	20,000
3	Dr.V.Yamuna Devi	20,000
4	Dr.A.Thanikasalam	50,.000
5	Dr.M.Rajavelan	10,000
6	Mr.M.Ramamurthy	10,000

7	Dr.P.Sivaperumal	20,000
8	Dr.S.Satish kumar	20,000
9	Mr.K.Stalin	20,000
10	Mr.S.Amirtharaj	10,000
11	Mr.S.K.Krishnakumar	20,000
12	Ms.Dorothy	10,000
13	Ms.Tamil Pavai	10,000
14	Mr.R.Sundar	10,000
15	M.P.Satish khanna	10,000
16	Dr.P.Shanthi	10,000
Total		**3,00,000**
2020-2021		
1	Dr.A.Suresh	10,000
2	Dr.D.Madesh	20,000
3	Dr.M.Tamilarasi	10,000
4	Dr.S.Satish kumar	20,000
5	Mr.R.Sundar	10,000
6	Mr.S.Amirtharaj	10,000
7	Dr.M.Rajavelan	10,000
8	Dr.P.Shanthi	10,000
9	Ms.G.Tamil Pavai	10,000
Total		**1,10,000**
2019-2020		
1	Dr.R.Rajavel	80,000
2	Dr.A.Suresh	50,000
3	Dr.D.Madesh	20,000
4	Dr.S.Prabakaran	50,000
5	Dr.V.Yamuna Devi	10,000
6	Dr.S.V. Saravanan	10,000
7	Dr.M.Rajavelan	10,000
8	Dr.A.Thanikasalam	20,000
9	Dr.S.Sangeetha	10,000
10	Dr.Smilee mathuram	10,000

11	Dr.S.Muthu baskaran	40,000
Total		**2,90,000**

Table 5.9.4 Awards/Recognition Received by the Faculty

Title of the Award	Name of the Awardee	Name of the Awarding Agency	Year of Award
Outstanding Educator Award	Mr.P.Sathish Khanna	Khanna International Institute of Organized Research Awards	2019
Outstanding Researcher Award	Mr.R.Sundar	International Institute of Organized Research Awards	2019
Distinguished Professor	Mr.J.Aran Glenn	Gurukul Race India Award	2019
Certificate of Recognition - Reviewer	Mr.J. Aran Glenn	ISRD Allied International Journals	2019
Best Designer Award	Dr.S. Prabhakaran	Jayashree Constructions, Chennai	2019
Best Research Consultant	Dr.S. Prabhakaran	Enterprising Enterprises, Chennai	2019
Best Designer Award	Dr.A.Suresh	New Bee Technologies, Chennai	2019
Best Project Consultant	Mr.Amirtharaj	RRC Medi – Tech, Chennai	2019
Best Project Consultant	Dr.M. Deva Brinda	Shrsiti Power Technologies Pvt. Ltd	2019
Best Paper Award	Dr.M. Deva Brinda	IEEE Conference	2019
Preeminent researcher Award	Dr.M. Deva Brinda	Green Thinkerz Awards	2019
Best Technical Researcher	Dr.P.Shanthi	GE tech Power Controls	2019
Outstanding Educator Award	Mr.S.Muthubaskaran	International Institute of Organized Research 2019	2019
Best Technical Consultant	Dr.M. Rajavelan	EPR Labs, Chennai	2019
Member of Editorial Board	Dr.M.Rajavelan	IJERT	2019
ELITE - Silver	Dr.D.S.Balaji	NPTEL	2019

Certificate of Reviewing	Dr.R.Rajavel	Engineering Failure Analysis	2020
Best Research Consultant	Dr. R.Rajavel	CDCE Automation, Chennai	2020
Best Paper Award	Dr.D.S.Balaji	Gojan School of Business and Technology	2020
Best Young Faculty Award 2019-2020	Mr.S.K. Krishnakumar	Novel Research Academy	2020
Researcher Award	Dr.S. Muthubaskaran	International Institute of Organized Research 2020-2021	2020
Certificate of Recognition - Reviewer	Dr.M. Rajavelan	International Journal of Engineering Research and Technology	2020
Top 100 International Distinguished Educator	Mr.S.Amirtharaj	Green Thinkerz Awards	2020
Innovator Award	Dr. R.Rajavel	RECON Group of Companies, Tamilnadu	2021
Best Research Consultant	Dr.S. Satishkumar	CDCE Automation, Chennai	2021
Best Scientist Award	Dr.M. Tamilarasi	International Multidisciplinary Research Foundation	2021
Best Paper Award	Mr.R.Sundar	AMET	2021
Preeminent researcher Award	Dr.A. Suresh	Power Projects Training & Technology Consultant, Tiruppur	2022
Best Technical Researcher	Dr. R.Rajavel	EPR Labs, Chennai	2022
Best Technical Consultant	Dr. M. Rajavelan	Wearresist Technologies Pvt. Ltd, Gujarat	2022
Best Research Consultant	Dr.P. Shanthi	ECON Group of Companies, Tamilnadu	2022
Best Paper Award	Ms.M.Selvarani	AMET	2022
Best Paper Award	Mr.M.Ramamurthy	AMET	2022
Global Iconic Education Award – Best Researcher	Dr.S.Satish Kumar	ESN Publications	2022

Chair Person for Virtual International Conference	Dr.S.Satish Kumar	JP College of Engineering	2022
Member of Editorial Board	Dr.S.Satish Kumar	World Journal of Modern Innovation Research and Review	2022
Member of Editorial Board	Dr.P.Sivaperumal	World Journal of Modern Innovation Research and Review	2022

Table 5.9.5 Membership in Professional Body

Faculty Name	Professional Society	Membership Fee (Rs)
Dr.R.Rajavel	The Institution of Engineers (India)	8,260
Mr.K.Stalin	The Institution of Engineers (India)	8,260
Mr.K.Stalin	SAE INDIA	1,200

5.10 Visiting/Adjunct/Emeritus Faculty etc. (10) Total Marks 10.00

Institute Marks : 10.00

Visiting/Adjunct/Emeritus Faculty etc. (10)

Table 5.10.1 List of Visiting Faculties (sample)

CAY (2022-2023)

S. No.	Name of the Visiting Faculty	Subjects	Semester	No. of Hours
1	C/E Govindarajalu Mohandass	Marine Auxiliary Machinery II	6	60

CAYm1 (2021-2022)

S. No.	Name of the Visiting Faculty	Subjects	Semester	No. of Hours
1	C/E Majendrian Gopinath	International Maritime Organization and International Convention	7	60
2	C/E Akhilan Natarajan	Shipboard Leadership and Management	7	60
3	C/E Siva Narayanan	Marine Auxiliary Machinery I	5	60
4	C/E A.Visweswaran	Safety Emergency Measures and Practices II	5	60

CAYm2 (2020-2021)

S. No.	Name of the Visiting Faculty	Subjects	Semester	No. of Hours
1	C/E A.Visweswaran	Safety Emergency Measures and Practices IV	8	60
2	C/E Siva Narayanan	Marine Auxiliary Machinery II	6	60

6 FACILITIES AND TECHNICAL SUPPORT (80)

Total Marks 80.00

6.1 Adequate and well equipped laboratories, and technical manpower (40)

Total Marks 40.00

Institute Marks : 40.00

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Diesel Engine I	4	1) Main Engine	35	Mr. Karthikeyar	Instructor	BE
2	Diesel Engine I	4	1) Emergency	35	Prem Kumar .T	Instructor	BE
3	Diesel Engine I	4	1) Yanmar Dies	35	Muvendhan .T	Instructor	BE
4	Pump and Pum	4	1) Pumps 2) Va	35	Manikandan .M	Instructor	BE
5	Pump and Pum	4	1) Heat Exchar	35	D. Rajesh	Instructor	DME
6	Pump and Pum	4	1) Oily Water S	35	B.Naveen Gun	Instructor	BE
7	Static Model D	4	Refrigeration C	35	S. Arunkumar	Instructor	BE
8	Static Model D	4	Main Air Comp	35	C Sriman	Instructor	HND Sailing 4t
9	Static Model D	4	Auxiliary Air Cc	35	Akash Yadev	Instructor	BE
10	Fire-Fighting La	4	1)Portable Foa	8	S. Jayachandra	Instructor	Served in the I
11	Fire-Fighting La	4	1)Fire Man's O	8	Malcolm Geils	Instructor	ITI
12	Fire-Fighting La	4	1)Mobile Foam	8	Mr. Jayakumar	Instructor	DME
13	Welding Techn	4	1) Welding Ma	35	Mr. Rajendran	Workshop- Incl	DME, CTTI
14	Welding Techn	4	1) Welding Ma	35	Mr. K.Sampath	Head- worksho	B.Sc., CTTI
15	Welding Techn	4	1) Welding Ma	35	Mr. M. John Sa	Head- worksho	DME, CTTI
16	SimulatorLab-1	4	1)Main Switch	35	Mr. Vijay	Instructor	BE(Mech)
17	SimulatorLab-2	4	1)Heavy Fuel C	35	Mr. Vigneshwa	Instructor	GME

6.2 Laboratories maintenance and overall ambiance (10) Total Marks 10.00

Institute Marks : 10.00

NAME OF THE LABORATRY	TIME INTERVAL OF MAINTENANCE	MAINTENANCE CARRIED OUT
Diesel Engine Lab-1 Main Engine	Weekly	• Main Engine-indicator cock opened, started Lube Oil priming pump, engaged turning Gear and turned the engine by using turning gear, disengaged turning gear and put off the power for the turning gear. • In Main Engine, all fuel linkages greased up and the air bottles out let valve to be checked. • Engine blown through and tried out engine. • Main Engine attached Lube Oil pump running to be checked for pump pressure. • Main Engine Jacket cooling water pump running to be checked for pump pressure. • Lube Oil pressure to be maintained to avoid engine shut down. • Unit firing to be checked, RPM to be checked. • Main Engine running to be checked for any abnormal sound and vibration. • Lube Oil level of turbocharger to be checked. • The Lube Oil for thrust bearing to be checked. • Fuel Oil pump pressure to be checked.
Diesel Engine Lab-1 Steering Gear Unit	Monthly	• Hydraulic oil tank level to be checked and top up done if needed • All linkages to be lubricated. • Steering gear motor running condition to be checked. • Any oil leakages in the system, abnormal sound, steering gear tried out and turning movement to be checked.
Diesel Engine Lab-1 Fresh Water Generator	Monthly	• Fresh water generator vacuum breaker to be checked. • All valves to be checked. • Ejector pump started and to check vacuum building up in the system, ensure no air leakages.
Diesel Engine Lab-1 Propeller and Rudder	Weekly	• Rudder & propeller to be checked. • Pintle bearing, Rudder carrier bearing to be checked, • Rudder inspection door opened and checked. • Sacrificial anode condition to be checked, • Rudder turning and swing motion to be checked, • Propeller to be polished, • Blade condition, for bend and corrosion to be checked, • Rope guard to be checked.
Diesel Engine Lab-2 Emergency Generator	Weekly	• Battery charging level to be checked, • Lube Oil sump level to be checked, • Fuel Oil level to be checked, • Power to be checked and engine started manually, generator tried out manually.
Diesel Engine Lab-2 Marine Incinerator	Monthly	• Oil leakages to be checked • Power supply to be checked. • Waste oil tank, Diesel oil tank level to be checked. • Burner door and ash removing door interlock to be checked. • Incinerator firing operation to be checked, • Emergency shut down to be checked.
Diesel Engine Lab-2 Main Engine	Monthly	• Fuel Oil filter to be cleaned and blown with air and fuel line is primed. • All greasing points to be checked and greased up. Air filter cleaned.

Diesel Engine Lab-2 Windlass	Monthly	• Gear case oil level to be checked, • Windlass motor power to be checked, • Windlass chain to be checked to ensure there is no twist • Motor running to be checked, • Anchor chain cable to be cleaned. • Anchor linkages to be checked and windlass tried out.
Diesel Engine Lab-3 Auxiliary Engine (v type).	Weekly	• Turn on engine manually and primed by hand lube oil pump. • All linkages lubricated. Air bottles valves to be checked. • Engine running condition to be checked. • Lube Oil pressure to be checked. • Jacked water flow to be checked. • RPM, Volt, Amps and Frequency to be checked • Fuel filter to be cleaned and boxed up
Diesel Engine Lab-3 Engine Room Crane Maintenance	Monthly	• Crane Rails and rollers to be checked • Operation of the crane in port and starboard are to be verified. • Smooth running of roller is to be verified. • Crane Rails to be lubricated. • All crane limits are to be monitored. • Safe working load to be analysed. • Lubricating oil level to be checked
Pumps and Pumping System Lab-1 Oil purifier	Monthly	• Purifier operating water tank level to be inspected. • Brake and clutch release to be checked • Gear case oil level to be checked, • Purifier motor power supply to be checked • Purifier running to be verified. • Ensure there is no abnormal sound and vibration • De sludging operation to be checked, • Motor Amps to be noted.
Pumps and Pumping System Lab-1 Self-priming centrifugal pump	Monthly	• All suction and discharge to be checked. • Self-priming unit to be checked. • Air ejector system to be verified. • Power supply to be checked. • Pump running to be checked, pump suction and discharge pressure to be monitored.
Pumps and Pumping System Lab-2 Heat Exchanger	Monthly	• Ensure there is no leakage in the Shell and Tube heat exchanger pipe line. • Ensure there is no water leakage in Lube Oil cooler pipeline of Yanmar Engine..
Pumps and Pumping System Lab-3 Oily water separator	Monthly	• Oily Water Separator pipeline is to be checked for any leakages and alarms tried out. • The satisfactory level of working condition is to be ensured.

Static Model Demonstration Lab-1 Reefer Compressor	Monthly	• Ensure there is no gas leakages. • Check Reefer compressor motor power supply. • All valve need to be opened before starting the compressor. • Compressor belt tension to be checked, • Receiver gas level to be checked. • Compressor crankcase oil level to be checked. • Compressor suction and discharge pressure, Lube Oil pressure to be checked. • Ensure no gas leakages.
Static Model Demonstration Lab-2 Main Air Compressor	Monthly	• Air bottle filling valve to be checked • Compressor sump level to be checked. • Compressor inlet and outlet pressure and temperature to be checked. • Need to check air filling time. • HP cut out to be checked • Main air compressor tried out and all parameter checked to ensure no abnormal sound.
Static Model Demonstration Lab-3 Auxiliary Air Compressor.	Monthly	• Sump oil level to be checked. • Air filter to be checked. • Power supply for air compressor to be checked. • Compressor running condition to be checked. • Air bottle filling time to be checked. • HP and LP alarm to be checked.
Firefighting Laboratory	Monthly	• CO_2 room exhaust blower running to be checked, • Air compressor running to be checked, • Air filled in bottles and any air leakages from bottle to be checked, • Pilot gas bottles to be filled with gas , • Master valve, servo cylinder operation to be checked, • CO_2 alarm to be checked, • All CO_2 nozzles to be checked after release
MACHINE SHOP	Daily	• Lubricate all points. • Ensure there is no abnormal sound.
	Weekly	• Check oil level in gear box and head stock top up if necessary.
	Monthly	• Check oil level, belt condition and all movement. • Top up oil and adjust tension of belt if required. • Replace oil and belt based on their condition.
ARC WELDING	Daily	• Clean the welding transformer • Check welding cable • Check condition of electrode holders and earth clamps. • Check regulators for proper function. • Check environment for flammable materials.
	Weekly	• Check function of ampere control movement.
	Monthly	• Check function of air-cooling fan. • Check the moving and stationary core. • Check and tighten all wiring connections.

GAS WELDING	Daily	• Check all the welding points for gas leakage. • Check gas hoses and connections. • Check functions of control valves. • Check regulators for proper power function • Check environment for flammable materials • Clean gas cylinder's storage room.
	Weekly	• Clean nozzle (with soap water) • Check control valves
	Monthly	• Check all gas pipelines and hoses for leakage. • Check flash back arrestor. • Check main control valve and regulators. • Inspect gas cylinders securing arrangements.
Engine Room Simulator lab	Yearly	• Simulator maintenance typically involves regular inspections and repairs of the simulator components, such as the sensors, actuators and software. • Inspections may include checking for any signs of physical damage, verifying that all connections are working, and ensuring that all components are functioning correctly. • In addition to regular inspections, repairs may need to be carried out to address any issues that are identified. This could include replacing any faulty parts, updating or replacing software or reset any settings that have been changed.

6.3 Safety measures in laboratories (10) Total Marks 10.00

Institute Marks : 10.00

Sr. No	Laboratory Name	Safety Measures
1	DIESEL ENGINE LAB - 1	• Students are advised to wear safety helmets in the Diesel Engine Lab 1. • Everyone should wear boiler suit in the Diesel Engine Lab 1. • Safety shoes must be worn by everyone inside the Diesel Engine Lab 1. • Ear muffs are fixed with helmets to withstand heavy noise caused by working machinery. • Alarm systems are provided inside the Diesel Engine Lab 1. • Safety detectors are installed inside the Diesel Engine Lab 1. • Fire extinguishers are provided inside the Diesel Engine Lab 1 • Live wires to be insulated. • All the tools should be kept in allotted place after usage. • Check for oil spill and clean the surface
2	DIESEL ENGINE LAB - 2	• Safety shoes must be worn by everyone inside the Diesel Engine Lab 2. • Alarm systems are provided inside the Diesel Engine Lab 2. • Fire extinguishers are provided inside the Diesel Engine Lab 2 • Check for oil spill and clean the surface. • Live wires to be insulated. • Everyone should wear boiler suit in the Diesel Engine Lab 2. • Sensors and detectors are installed inside the Diesel Engine Lab 2. • Students are advised to wear safety helmets in the Diesel Engine Lab 2. • Ear muffs are fixed with helmets to withstand heavy noise caused by working machinery. • All the tools should be kept in allotted place after usage.
3	DIESEL ENGINE LAB - 3	• All the tools should be kept in allotted place after usage. • Check for oil spill and clean the surface. • Everyone should wear boiler suit in the Diesel Engine Lab 3. • Safety shoes must be worn by everyone inside the Diesel Engine Lab 3. • Ear muffs are fixed with helmets to withstand heavy noise caused by the working machinery. • Sensors and detectors are installed inside the Diesel Engine Lab 3. • Students are advised to wear safety helmets in the Diesel Engine Lab 3. • Live wires to be insulated. • Fire extinguishers are provided inside the Diesel Engine Lab 3. • Alarm systems are provided inside the Diesel Engine Lab 3.
4	PUMP AND PUMPING SYSTEM LAB - 1	• Students are to be advised to pick up all the necessary tools, instruments, equipment and references for work before carrying out the work. • Students are advised to wear Personal Protective Equipments (PPE) such as safety shoes, safety clothing, Helmets etc. • Ear muffs are fixed with helmets to withstand heavy noise caused by working machines. • Sensors and detectors are installed inside the Pump and Pumping System Lab 1. • Alarm systems are provided inside the Pump and Pumping System Lab 1. • All the tools should be kept in allotted place after usage. • Portable Fire extinguishers are provided inside the Pump and Pumping System Lab 1. • Live wires should be handled with proper safety procedures. • Check for leakage of oil from machinery. • All the tools should be kept in allotted place after usage.
5	PUMP AND PUMPING SYSTEM LAB - 2	• Ear muffs are fixed with helmets to withstand heavy noise caused by working machinery. • Safety shoes must be worn by everyone inside the Pump and Pumping System Lab 2. • Students are advised to wear safety clothing and helmets. • Live wires should be handled with proper safety procedures. • Check for leakage of oil from machinery • Sensors and detectors are installed inside the Pump and Pumping System Lab 2. • All the tools should be kept in allotted place after usage. • Students are advised to wear Personal Protective Equipments (PPEs) such as safety clothing and Helmets etc. • Portable Fire extinguishers are provided inside the Pump and Pumping System Lab 2 • Alarm systems are provided inside the Pump and Pumping System Lab 2.
6	PUMP AND PUMPING SYSTEM LAB - 3	• Fire extinguishers are provided inside the Pump and Pumping System Lab 3. • Live wires should be handled with proper safety procedures. • Everyone should wear boiler suit in the Pump and Pumping System Lab 3. • Safety shoes must be worn by everyone inside the Pump and Pumping System Lab 3. • Ear muffs are fixed with helmets to withstand heavy noise caused by working machinery. • Alarm systems are provided inside the Pump and Pumping System Lab 3. • Check for oil spill and clean the surface. • All the tools should be kept in allotted place after usage. • Safety detectors are installed inside the Pump and Pumping System Lab 3.
7	STATIC MODEL DEMONSTRATION LAB - 1	• Alarm systems are provided inside the Static Model Demonstration lab 1. • Safety detectors are installed inside the Static Model Demonstration lab 1. • Fire extinguishers are provided inside the Static Model Demonstration lab 1. • Live wires to be insulated. • All the tools should be kept in allotted place after usage. • Check for oil spill and clean the surface. • Students are advised to wear safety helmets in the Static Model Demonstration lab 1. • Everyone should wear boiler suit in the Static Model Demonstration lab 1. • Safety shoes must be worn by everyone inside the Static Model Demonstration lab 1. • Ear muffs are fixed with helmets to withstand heavy noise caused by working machinery.

8	STATIC MODEL DEMONSTRATION LAB - 2	• Live wires to be insulated sufficiently. • Alarm systems are provided inside the Static Model Demonstration lab 2. • All the tools should be kept in allotted place after usage. • Check for oil spill and clean the surface. • Students are advised to wear safety helmets in the Static Model Demonstration lab 2. • Students are to be advised to pick up all the necessary tools, instruments, equipments and references for work before carrying out the work. • Fire extinguishers are provided inside the Static Model Demonstration lab 2. • Ear muffs are fixed with helmets to withstand heavy noise caused by the working machinery. • Cadets are prohibited to wear ornaments inside the lab. (Watches, Rings, Chains, etc.). • Long hair should be covered under the Helmets.
9	STATIC MODEL DEMONSTRATION LAB - 3	• Safety posters are provided in the prominent places of the Static Model Demonstration lab 3. • Details of task and maintenance carried out in the Static Model Demonstration lab 3 are recorded daily. • Students must wear safety helmets and earmuffs while entering the Static Model Demonstration lab 3. • Portable extinguishers and fixed firefighting extinguishers are placed inside the Static Model Demonstration lab 3 and maintained. • Fire alarms, indicators, sensors and detectors are provided in Static Model Demonstration lab 3 to protect the machinery from fire. • All the tools should be kept in allotted place after usage. • Students must avoid touching any kind of live wires. • Students must wear boiler suit and safety shoes inside the Static Model Demonstration lab 3. • Leakage of machinery should be identified and rectified immediately.
10	FIRE FIGHTING LAB	• Students are advised to wear thermal protective clothing during firefighting. • Students should wear only electrically insulated safety shoes. • Maintain the extinguisher properly before and after the usage. • Make sure all the valves in proper condition before opening the fire line. • Check for proper power supply before starting the pump. • Breathing mask should be sanitized properly before and after use. • SCBA and EEBD should be used under proper guidance as per the instruction. • Firefighting appliances are well maintained and kept under good working condition for immediate use.
11	WELDING TECHNOLOGY LAB - 1	• Students are advised to wear Personal Protective Equipments (PPE) such as safety shoes, safety clothing, Helmets, Gloves, Goggles, Apron and other safety gears. • Loose clothing to be avoided inside the lab. • No ornaments are allowed to wear (Watches, Rings, Chains, etc.). • Long hair should be covered under Helmets. • Use a pair of tongs to hold hot metals during work. • Pay attention to the instructor’s instruction before doing work. • Use proper thermal protective gloves to safeguard hands while doing welding works. • Unfold your sleeves to protect arm from sparks and heat during hot work. • Fire extinguishers are kept ready to use during emergency condition. • All the machines should be unplugged after use.
12	WELDING TECHNOLOGY LAB - 2	• Students are to be advised to pick up all the necessary tools, instruments, equipments and references for work before carrying out the work. • Students are advised to wear Personal Protective Equipments (PPE) such as safety shoes, safety clothing, Helmets, Gloves, Goggles, Apron and other safety gears. • Blowers are provided to remove the fumes from hot work space. • Roll-up your sleeves while doing grinding work,. • Clean the workspace once your work is over. • Be careful with live electrical wires. • Children are not allowed near the machineries and workshop. • Gas cylinders should be handled with care and kept outside the workshop. • Dust mask must be worn by students while doing work. • Sufficient lighting must be provided in every dedicated workspace
13	WELDING TECHNOLOGY LAB - 3	• Watches, Rings, Chains, and other ornaments are prohibited inside the lab. • Don’t wear gloves while doing grinding work. • Students are advised to wear Personal Protective Equipment (PPE) such as safety shoes, safety clothing, Helmets, Gloves, Goggles, Apron and other safety gears. • Loose clothing should be avoided. • Avoid gloves during drilling work. • Use goggles during lathe machine work. • Avoid touching hot metals with bare hands. • Use face shield during arc welding to protect your eyes. • Avoid work with wet hands. • Don’t consume alcohol before working in Welding Technology Lab-3. • Avoid mobile phone while working.
14	ENGINE ROOM SIMULATION LAB	• Do handle the computers and panel boards with utmost care. • Do the experiment carefully by following the correct procedure. Do the experiment with the aid of instructor or faculty. • Do call the concern faculty or instructor in case of any trouble. • Switch off the main switch immediately in case of electric shock • Shut down the computers properly before leaving the lab. Switch off all the equipment and lights before leaving the lab. • Do not install or download any software or modify or delete any system files on any lab computers. Do not use the USB in computers inside the lab. • Don't lean on the equipment or walls. Don't disturb or distract others while they are doing the experiments. • Don't bring any other thing other than record, observation, pen and calculator into the lab.

6.4 Project laboratory (20) Total Marks 20.00

Institute Marks : 20.00

FACILITIES:

- Discussion and implementation of innovative ideas for project expo and final year projects are carried out in the project lab.
- Project lab is utilized exclusively for the student project work with the facilities listed below.

Table B 6.4.a. HARDWARE FACILITIES

S.NO	NAME OF THE EQUIPMENT	SPECIFICATIONS
1	Lathe machine	530 mm, MT-3, (35- 950) RPM.
2	Arc welding machine	400 A, 415 V, 2/3 phase, O/P voltage.
3	Gear train simple	-
4	Multimeter	-
5	Megger	1000 V, 1 Mega Ohm.
6	Ammeter	(0 - 30) A
7	Voltmeter	(0 - 500) V
8	Galvanometer	-
9	Rheostat	50 Ohm, 4 Amps.
10	Tachometer	Digital
11	Breadboard	-
12	Connecting wires	-
13	Cathode ray oscilloscope	TC, 30 Mega Ohm.
14	Contactors	TC Make, 230 V
15	Relay	TC Make, 230 V
16	Transformers	230/110V
17	Transistors	BF10, BF 11
18	Indicating lamps	230 V, 0.5 A
19	Push button- limit switches	TC Make
20	Thermocouple	K Type.
21	Thermometer	-
22	Transparent glasses	-
23	Switchgear panels	High Voltage

Table 6.4.b. SOFTWARE FACILITIES

S.NO	NAME OF THE SOFTWARE
1	Kongsberg ERS Neptune – MC90-V (Norway)
2	SOLIDWORKS- 60 Users

3	Ansys- 50 Users
4	Mastercam- 30 Users
5	MATLAB-
6	Scilab
7	PLC
8	SCADA
9	Auto CAD
10	Xilab(2D,3D)
11	GIMP
12	Shortcut

UTILIZATION

- The project lab is utilized by the cadets, research scholars and faculty members for their project and research activities.
- The timing of the utilization of project lab starts from 09:00 AM to 04:00 PM.
- Based on the request from Dean/HOD, the students can access the facility during non-working days as well.
- The students can utilize the project lab for final year projects, projects competition or Project expo.
- Marine museum is utilized by the students to study about ancient ships, navigation instruments, gradual development of the shipping models, harbours and engine driven ships. The important components of marine museum are listed out as follows.

Table 6.4.c MARINE MUSEUM

S.NO	MODELS AND COMPONENTS OF MARINE MUSEUM
1.	Model of Ships using sail (1800-1900 years).
2.	Instruments used in navigation (like Binaculars, Magnetic compass and Telescope).
3.	Different types of Anchors.
4.	Sailor’s Personal Protective Equipment (PPE).
5.	Seaman hand tools
5.	Seaman different knots
6.	Gradual development of Shipping models from 1800-1950 years.
7.	History of major Indian harbours (Calcutta, Bombay and Madras).
8.	Model of engine driven ships.
9.	Steering wheel.
10.	Lube Oil Purifier

7 CONTINUOUS IMPROVEMENT (75) Total Marks 75.00

7.1 Actions taken based on the results of evaluation of each of the COs, POs & PSOs (30) Total Marks 30.00

Institute Marks : 30.00

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

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	2.1	2.41	Target has been achieved. But some courses have scope for further improvements. These courses are: Engineering Chemistry 1.81 Basic Electronic Engineering 1.46 Electrical Machines 1.65 Integrated Circuit 1.75
Action 1: Concepts will be explained with the help of demo and practical sessions. Action 2: Extra tutorial classes will be conducted to clarify their doubts. Action 3: Students will be given more assignments for better understanding.			
PO 2 : Problem Analysis			
PO 2	2.1	2.29	Although students are mostly capable of understanding and analysing text, book literature, but slightly lag in their knowledge of state-of-the-art research. Hence, few courses are listed to meet the target level in the near future. Engineering Mathematics II 1.3 Engineering Chemistry 1.54 Basic Electronic Engineering 1.23 Electrical Machines 1.4 Thermodynamics 1.61 Electrical Machines Laboratory 1.68 Naval Architecture I 1.63
Action 1: Industrial visits will be arranged to the students to gain knowledge on complex engineering problems. Action 2: More practice will be given to the students by conducting extra classes for solving problems. Action 3: Assignments will be given to the students for more practice, and 3D models will be shown for better understanding.			
PO 3 : Design/development of Solutions			
PO 3	2.1	1.98	Target is not achieved. Some of the projects developed by students as minor or major projects (final year) are not very industry compatible in terms of economy or footprint. Due to actions and measures taken, target levels will be improved in the latest assessment year. Engineering Mathematics II 0.65 Basic Electronic Engineering 0.68 Electrical Machines 0.95 Material Science and Metallurgy 1.19 Electrical Machines Laboratory 0.84
Action 1: Concepts will be explained with the help of demos and practical sessions. Action 2: PCB based converter designs will be provided to the students. Action 3:Students will be motivated to include all standard parameters and constraints according to national and international safety norms and to address environmental concerns while focusing on innovative designs for their projects.			
PO 4 : Conduct Investigations of Complex Problems			
PO 4	2.1	1.88	Target is not achieved. It is observed that most of the project abstract and literature survey are addressing the research based approach but does not end with valid conclusions. Due to actions and measures, the target level will be improved. Some of the listed courses have scope for further improvements. These courses are: Engineering Mathematics II .65 Basic Electronic Engineering 0.68 Electrical Machines 0.88 Marine Internal Combustion Engines I 1.07 Naval Architecture I 1.06
Action 1: Students will be motivated to participate in building small experimental models which can be used to teach them more practical knowledge. This gives them an initial exposure to hardware implementation and experimentation, thereby enabling better productivity during final year. Action 2: Concepts will be explained with the help of demo/practical sessions. Action 3:: Guest lecture will be arranged for giving more exposure to Marine latest trends.			
PO 5 : Modern Tool Usage			
PO 5	2.1	2.23	It is observed that up-gradations of tools and resources are necessary to meet the industry standards and research. In spite of measures some courses have scope for further improvements. These courses are: Marine Refrigeration & Air Conditioning 1.80 Engineering Practices Laboratory III 1.78 Interpersonal Communication 1.59 Safety Emergency Measures and Practices-IV 1.57 Instrumentation and Control 1.49 Pneumatics hydraulics and Electrical Control Systems 0.73
Action 1: More practice will be given in modern tool usage by conducting value added courses to solve the complex engineering problems. Action 2: Projects using latest modeling and control techniques, such as machine learning, predictive control, and optimization techniques will be encouraged.			

PO 6 : The Engineer and Society

PO 6	2.1	2.20	The courses floated in the department are addressing the needs of, health, safety and social concerns regarding engineering practices in real life and some courses have scope for further improvements. These courses are: Basic Electronic Engineering 1.33 Material Science and Metallurgy 1.31 OEC-1 (Basic Ship Structure) 1.33 Thermal Engineering 1.55 PEC-1 (Marine Resource Management) 1.41 Fluid Mechanics 1.19 Marine Electrical Measurements 1.55
Action 1: To understand the safety concerns and social aspects, student industry visits will be encouraged to expand their practical knowledge with the effect of improved practices in engineering. Action 2: Some mandatory Humanities Courses will be added to ensure the students are repeatedly reminded of their social responsibilities as Marine Engineers.			

PO 7 : Environment and Sustainability

PO 7	2.1	2.14	The issues of global and environmental awareness among the student should be improved, and they should be made more aware of their responsibilities towards energy efficiency and pollution control. Target has been achieved but some courses have scope for further improvements. These courses are: Thermodynamics 1.3, Material Science and Metallurgy 1.44 Thermal Engineering 1.43 Fire Fighting Laboratory 1.33
Action 1: Students will be encouraged to indulge in projects, in which global and environmental issues are improved, with respect to consumption of energy and utilization of renewable energy resources.			

PO 8 : Ethics

PO 8	2.1	2.37	The students are doing better in improving their overall expertise in the field of marine engineering, but due to lack of communication and other ethical and moral knowledge, that few are lagging in real life situations. Target is achieved but some courses have scope for further improvements. These courses are: Basic Electrical Engineering Laboratory 1.37 Communicative and Soft skills Laboratory 1.84 Ship Construction,Stability and Marine Environment Protection 1.81 Safety Emergency Measures and Practices-IV 1.89
Action 1: Students will be motivated to include all standard parameters and constraints according to national and international safety norms and to address environmental concerns while focusing on innovative designs for their projects. Action 2:Guest Lectures will be arranged to help students become self-reliant.			

PO 9 : Individual and Team Work

PO 9	2.1	2.15	Though measures are taken, still few courses have scope for further improvements. These courses are: Marine Refrigeration & Air Conditioning 1.15 Marine Electrical Technology I 1.6 Marine Electrical Technology II 1.64 PEC-3 (Marine Environmental Protection) 0.92
Action 1: Symposium, Technical Seminars and Conferences will be conducted where students are encouraged to volunteer as organizers. This provides them with a platform to work as individuals as well as in groups, helping students groom their skills like leadership and team spirit. Action 2: Final Year projects will be aligned in such a way that students learn to work and operate as a team.			

PO 10 : Communication

PO 10	2.1	2.32	The communication, presentation and report writing skills are to be further improved among the students.With more concentrated efforts, it is expected that the target level will be met in future. some courses have scope for further improvements. These courses are: Fire Fighting Laboratory 1.33 Safety Emergency Measures and Practice-III 1.8 Embedded System and Communication Lab 1.91
Action 1: Soft skills training will be imparted to students to enhance various aspects of communication/technical talks by group discussions, presentations and new learning outcomes.Regular seminars and presentations are held to help students communicate technical ideas well. Action 2 : Students will be encouraged to present their innovative ideas through Paper Presentation, Project Proposal and Patents.			

PO 11 : Project Management and Finance

PO 11	2.1	2.20	Few humanities based courses of the curriculum are directed towards teaching management principles, implications and multidisciplinary environments. Target is achieved but some courses have scope for further improvements. These courses are: Marine Internal Combustion Engines II 1.44 Naval Architecture II 1.88 Safety Emergency Measures and Practices-IV 0.8 Pneumatic Hydraulics and Electrical Control System 1.46
Action 1: Students will be educated to aware the various Government Funding Agencies and Schemes. Action 2: Group discussion will be conducted to the students for more practice. Action 3: Awareness will be created among the students regarding the management principles and managing projects. Also, with many management based recruiters offering placements at the campus, students are expected to realize the importance of management in engineering.			

PO 12 : Life-long Learning

PO 12	2.1	2.24	Few courses of the programme are demonstrating resources for contemporary issues and lifelong learning. Target is achieved but some courses have scope for further improvements. These courses are: OEC-1 (Basic Ship Structure) 1.82 Thermodynamics 1.3 Material Science and Metallurgy 1.44, Marine Refrigeration & Air Conditioning 1.78
Action 1: Students will be educated to aware the various advanced level courses that are expected to hold relevance throughout their careers, students are eased into learning skills that have long term benefits. Action 2: Students will be instructed about further courses for their continuous development in cadre levels in Marine Field through Professionals.			

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

PSOs	Target Level	Attainment Level	Observations
PSO 1 : Design, analyze and integrate electrical and mechanical systems in on-board ships and apply tools and techniques such as programmable logic controllers, SCADA and CAD in marine industries and create passion for lifelong learning.			
PSO 1	2.1	2.33	Target has been achieved, but few courses have scope for further improvements. These courses are: Engineering Mechanics I 1.66 Electrical Machines 1.76 Thermodynamics 1.28 Marine Refrigeration & Air Conditioning 2.03
Action 1: Value added training will be provided to the students with the help of industrial experts to investigate about the integration of electrical and mechanical systems in on-board ships. Action 2: Students will be encouraged to undertake internships and projects in Marine field to understand the real-time applications with appropriate considerations for the society.			
PSO 2 : Apply the knowledge of Marine Engineering to solve the problems in on-board ships to meet the needs of the maritime industries.			
PSO 2	2.1	2.40	Target has been achieved, but few courses have scope for further improvements. These courses are: Engineering Mechanics I 1.49 Thermodynamics 1.28 Fluid Mechanics 1.6 Strength of Materials 1.58
Action 1: Students will be encouraged to undertake internships and projects in marine field to understand the real-time applications with appropriate considerations for the society. Action 2: Value added courses and skill based training's will be provided to the students with the help of industrial experts to improve their problem solving skills..			
PSO 3 : Analyze complex engineering problems to formulate and develop solutions for the onshore and offshore shipping industries.			
PSO 3	2.1	2.16	Target has been achieved, but few courses have scope for further improvements. These courses are: Pneumatics, Hydraulics and Electrical Control System 1.46 PEC-5 (Mechanics of Machines) 1.68 Automation Laboratory 1.96 Safety Emergency Measures and Practices-IV 1.21
Action 1: Concepts will be explained with the help of demo/practical sessions which uses modern tools. Action 2: Students will be encouraged to organize and participate in technical events to know about latest technology.			

7.2 Academic Audit and actions taken thereof during the period of Assessment (15) Total Marks 15.00

Institute Marks : 15.00

Academy of Maritime Education and Training (AMET) consider the quality as its prime focus and continuously upgrading its quality system. The quality system was first certified by ISO 9001:1994 in the year 1998. AMET was upgraded its quality management system and was certified by ISO 9001:2000 version in the year 2001 and was re-certified in the years 2004 and 2007. AMET's quality Management System was revised in line with its upgraded status as University and got a revised certificate in December 2008. During 2016, AMET had been re- certified with latest ISO 9001:2015 standards by an exclusive maritime industry classification society, the DNV GL.

Academic audits are being carried on periodical basis to ensure academic liability. The scheme of the audit basically comprises audit by both Internal and External committee once in an academic year. The committee functions to monitor whether the teaching- learning process is carried out effectively, thus ensuring improvement in the COs, POs and PSOs attainment.

The internal audit takes place within the department for the verification of documents maintained by the faculty. The internal audit team comprises of representative faculty from other departments. The internal audit is usually conducted at the end of the odd semester (November/December).The audit team generates their audit findings which are submitted to the Head of the Department. Corrective and preventive measures are taken on the basis of the report. External Audit is conducted by an external member during the end of the even semester (March/April) to reassure the quality of the program. This audit process encourage the culture of continuous self-improvement through the best practices of program

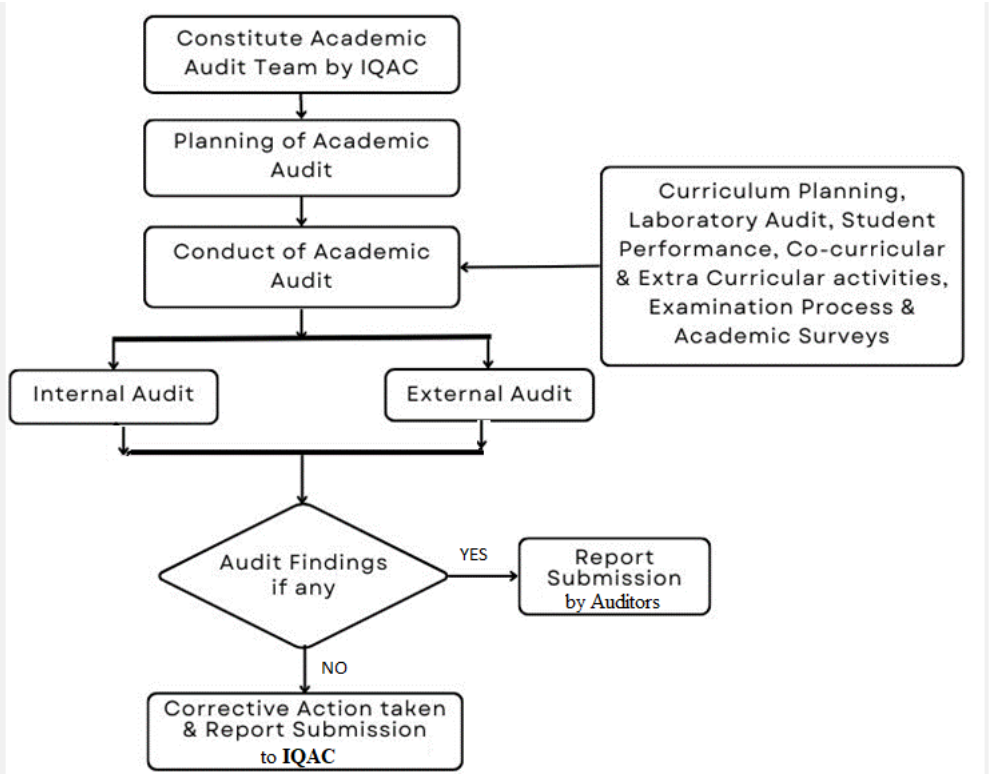


Figure 7.1 Flow Chart for Academic audit

The following Table B 7.1 shows the Academic and Administrative Audit conducted in the Department for the three academic years.

Table B.7.1: External Experts audited AAA activities of Department of Marine Engineering

Academic Year	Internal Auditee	External Auditor

2019-2020 (24.04.2019)	C/E Mr.Bhoopathy Bhaskaran Principal DGS Courses Department of Marine Engineering AMET Deemed to be University	Dr.K.A. Simon Director Kunjali Marakar School of Marine Engineering Cochin University of Science and Technology
2020-2021 (04.06.2021)	C/E Mr.Bhoopathy Bhaskaran Principal DGS Courses Department of Marine Engineering AMET Deemed to be University	C/E Ravindran, Faculty, MAASA Maritime Academy, Chennai
2021-2022 (10.09.2022)	C/E Mr.Bhoopathy Bhaskaran Principal DGS Courses Department of Marine Engineering AMET Deemed to be University	C/E Jasjeet Suri, Marine Faculty Chitkara University

Table B.7.1(a): External Experts audited CIP of Department of Marine Engineering

Academic Year	Internal Auditee	External Auditor	Grade
2019-2020 (31-10-019)	C/E Mr.Bhoopathy Bhaskaran Principal DGS Courses Department of Marine Engineering AMET Deemed to be University	G.Natarajan IRS	A1 (Outstanding)
2021-2022 (4.11.2022)	Capt K.Karthik Principal-DGS courses AMET Deemed to be University	Ajithkumar Das Surveyor to Lioyds's Register Marine and Offshore India LLP & member of Lioyds's Register Group	A1

Table B.7.1(b): External Experts audited ISO activities of Department of Marine Engineering

Academic Year	Internal Auditee	External Auditor
2019-2020 (06-05-2019)	C/E Mr.Bhoopathy Bhaskaran Principal DGS Courses Department of Marine Engineering AMET Deemed to be University	Sivaramakrishnan venkataraman DNV GL Auditor

2021-2022 (2.09.2022)	Capt K.Karthik Principal-DGS courses AMET Deemed to be University	Anantha Subramaniam Ganesan DNV GL Auditor

Outcome of the audit shall be placed before the Internal Quality Assurance Cell (IQAC) and the Governing Bodies of the institution. Plan of action will be prepared to implement the suggestions accepted by IQAC and Governing Bodies.

The following guidelines for practicing Academic Audit for continuous monitoring of all activities is given in the below Table 7.2.

Table B 7.2 (a) List of Audit elements

S. No	Academic Activities	Associated practices	Frequency of Audit
1	Curriculum planning and execution	• Adherence to academic Calendar • Deviations if any and corrective measures • Lesson Plan and Execution • Lecture materials • List of assignments / Tutorial sessions/Seminar Topics/Active Learning Methods	Once in a semester
2	Course Files	• Attendance Register • Question Papers • Sample assignments / tutorials • Samples of answer scripts for internal Examination • CO-PO Attainment Document • Overall result analysis for Internal and External Examinations • Identification of slow and advance learners. • Activities for slow and advance learners.	Once in a Semester
3	Teaching learning pedagogy	• Industrial Visit • Model demonstration • Simulation • Project based learning for laboratory course	Once in a Semester
4	Laboratory Audit	• Laboratory manual manuals • Functioning Status of Equipment • Working Status of the Software • Students laboratory Records	Once in a Semester
5	Outcome based practices	• Question papers as per Cos with Blooms Taxonomy Level. • Timely conduct of Class Committee meeting. • Timely conduct of PAC meeting.	Once in a Semester

6	Student's performance	• Performance analysis of students in Continuous Assessment Test • Performance analysis and Attendance Reports of each student	Twice in a Semester
7	Student Counselling	• Mentoring the students. • Counselling sessions	Twice in a semester
8	Feedback system	• Collection of feedbacks from the students. • Analysis of the feedback and corrective actions.	Once in a Semester

Table B 7.2(b) List of Audit Reports and Corrective actions

S. No	Academic Activities	Associated practices	Audit Reports	Corrective Actions
1	Curriculum planning and execution	Adherence to academic calendar and Course File preparation. All these files are verified and approved by the Head of the Department.	Course files and lesson plans are prepared before the commencement of the new semester by the respective subject faculty. Quality of assignment, tutorials and quiz programs are checked by PAC.	Necessary action is taken and re-auditing will be done within a weak time for the faculty members who are not able to comply with standards.
2	Laboratory audit	Lab manuals and Evaluation scheme	Laboratory manuals and rubrics based evaluation scheme are prepared prior to the commencement of the semester by respective faculty. All these files are verified PAC and approved by the Head of the Department	--
		Student lab records	Sample records are checked by Audit members	It is suggested by Audit members to ensure the faculty to maintain the quality in the lab records.
		Status of Equipment and Software	Laboratory audit is done once in a semester by Audit Team Members and check whether the regular maintenance is done by Lab in-charges and lab technicians periodically and verify any shortfall in equipment/ up gradation of software and also verify the working status of the equipment/software	Based on the audit report, if shortage of equipment or components are found, audit team members recommend the department to initiate the procurement process. Lab in-charge prepares the list and submit the shortage list for purchasing the components and equipment. Equipment not working properly must be serviced by lab technicians or by service persons from vendors after approval

3	Student performance	Mark statements are collected from the faculty members and the results are analyzed.	Audit team checks the result analysis CO-PO attainment and checks the corrective measures taken	Any deviations found, that will be brought to the attention of Head of the Department and PAC members to monitor effectively
		Identify the students learning capacity based on previous semester results/assessment test/class performance.	Audit team checks the list of slow learners and advance learners and also checks whether the selection criterion is followed properly and also verify whether the remedial classes are conducted properly	
		Improve the performance of slow learners and encourage Advanced learners	Audit team checks the performance of slow learners and advanced learners in the End Semester Examination	If the performance of slow learners and advanced learners are not up to the expected level, suggest to introduce new pedagogical initiatives and approaches for the forthcoming semester
4	Examination Process	After the internal examinations, answer sheets are evaluated and marks are submitted to the Head of the Department by the respective subject faculty. Results are analyzed	Audit team checks the continuous improvement in the performance of the students by comparing the previous academic year results	In the event of any deviation in the improvement, the particular faculty will be suggested by the Head of the Department and the performance of the particular faculty will be monitored.
		University results are reviewed by Head of the Department		
5	Academic Surveys	Student exit survey, Alumni survey and Employer survey forms are collected and aggregated by the Head of the Department for PO attainment	The audit team verifies the collected survey and analyze for attainment of PO.	Corrective measures are taken for the improvement of PO attainment analysis for forthcoming batch.

7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10) Total Marks 10.00

Institute Marks : 10.00

Training and Placement:

Intensive placement training is offered only to those who have opted for campus recruitment. The campus recruitment comes under the purview of the placement director. The placement director is assisted by a faculty member from the department who act as placement coordinator. Placement coordinators plans and coordinates the activities related to placement training and other activities related to career guidance. The intensive training for campus recruitment covers the following aspects.

- General and math aptitude tests.
- Communication Skills Enhancement (mandatory in the First & Second year).
- Technical aptitude tests during the III year.
- Soft skills training including group discussions and mock interviews.

The student statistics for employment, higher studies and entrepreneur:

Table B 7.3.1 astudent statistics for employment, higher studies and entrepreneur

Item	CAYm1 2021-22	CAYm2 2020-21	CAYm3 2019-20
Total No. of Final Year Students (N)	215	228	194
No. of students placed in companies or Government Sector (x)	210	227	188
No. of students admitted to higher studies with valid qualifying scores (GATE or equivalent State or National Level Tests, GRE, GMAT etc.) (y)	0	0	0
No. of students turned entrepreneur in engineering/technology (z)	0	1	1
x + y + z =	210	228	189
Placement Index : (x + y+ z) / N	**0.98**	**1**	**0.97**
Average placement= (P1 + P2 + P3)/3	**0.98**		
Assessment Points = 30 × average placement	**29.50**		

Assessment is based on improvement in:

- Placement: number, quality placement, core industry, pay packages etc.
- Higher studies: performance in GATE, GRE, GMAT, CAT etc., and admissions in premier institutions.
- Entrepreneurs.

Table B 7.3.2.a Cadets placed in Shipping Company **during 2019-2020**

ACADEMIC YEAR 2019-2020			
Sl.No	**COMPANY NAME**	**TOTAL NO OF CADETS PLACED**	**PACKAGE / MONTH**
1	MAERSK LINE FLEET MANAGEMENT AND TECHNOLOGY INDIA PRIVATE LIMITED	54	450$
2	OCEAN SPARKLE LIMITED	8	370$
3	CHEVRON SHIPPING	7	600$

4	GOODWOOD MARINE SERVICES PVT LTD.	6	350$
5	MMS MARITIME AGENCY (INDIA) PVT. LTD.	5	400$
6	MOL MARITME(INDIA) PVT LTD.	5	400$
7	PIL SHIPPING	5	350$
8	THOME INDIA PRIVATE LIMITED	5	690$
9	APEEJAY SHIPPING	4	400$
10	DESTAN SHIP MANAGEMENT PRIVATE LIMITED	4	370$
11	DOCKENDALE SHIP MANAGEMENT (INDIA) PVT. LTD	4	360$
12	MSI SHIPPING SERVICES	4	350$
13	PENTACRYSTAL SHIP MANGEMENT PVT. LTD, CHENNAI	4	400$
14	TOMINI SHIPPING PVT LTD.	4	420$
15	KNK SHIP MANAGEMENT , MUMBAI	3	350$
16	EKDANTA SHIPPING SERVICES PRIVATE LIMITED	2	420$
17	ERUDITO TRAINING SOLUTIONS PVT LTD.	2	400$
18	GLORY SHIPMANAGEMENT PVT. LTD.,	2	420$
19	GREATSHIP (INDIA) LIMITED	2	400$
20	HELENA SHIP MANAGEMENT SERVICES PVT LTD.	2	400$
21	HELIA MARINE SERVICES PVT. LTD.	2	370$
22	K.R. MARINE SERVICES PRIVATE LIMITED	2	400$
23	M/S. TW SHIP MANAGEMENT PRIVATE LIMITED	2	380$
24	MELODY SHIPMANAGEMENT PRIVATE LIMITED	2	390$
25	PACIFIC STAR NAVIGATION PRIVATE LIMITED	2	390$
26	PRATISHTHA MARINE SERVICES PVT LTD.	2	400$
27	S S OFFSHORE PVT. LTD	2	350$
28	SBM MARINE SERVICES PRIVATE LIMITED	2	350$

29	SEA SPARKLE HARBOUR SERVICES PVT. LTD.	2	400$
30	YASH OFFSHORE PRIVATE LIMITED	2	350$
31	ALBATROSS MARINE SERVICES	3	400$
32	APAC MARINE SERVICES PVT LTD	2	420$
33	ARUNIMA MARINE SERVICES PRIVATE LIMITED	2	400$
34	ARYA OFFSHORE SERVICES PVT LTD.	2	400$
35	A-SREE SHIPPING AND TRADING PRIVATE LIMITED	2	410$
36	B.G. SHIRKE CONSTRUCTION TECHNOLOGY PRIVATE LIMITED	1	450$
37	BHUMI RISE LLP	1	400$
38	EKALAVYA SHIP AND CREW MANAGEMENT (OPC) PRIVATE LIMITED	1	420$
39	LEOMARIS SHIP MANAGEMENT PRIVATE LIMITED	1	420$
40	LILLY MARITIME PRIVATE LIMITED	1	400$
41	M/S. CASABLANCA SHIPPING PRIVATE LIMITED	1	420$
42	M/S. GURUKRIPA MARINE SERVICES PRIVATE LIMITED	1	390$
43	M/S. SHIPTECK MARINE SOLUTIONS PRIVATE LIMITED	1	390$
44	MARSHAL SHIP MANAGEMENT PVT LTD.	1	370$
45	MSC CREWING SERVICES PRIVATE LIMITED	1	350$
46	NAUTI MARINE SERVICES AND TRADING PRIVATE LIMITED	1	400$
47	NEW HORIZONS SHIP MANAGEMENT PRIVATE LIMITED	1	400$
48	OLYMPIA SHIP MANAGEMENT PRIVATE LIMITED	1	400$
49	PENINSULAR MARITIME INDIA PRIVATE LIMITED	1	420$
50	SABLINK SHIPMANAGEMENT PRIVATE LIMITED	1	420$
51	SAMSON MARITIME LIMITED	1	380$
52	SHIRAJ SHIPPING PRIVATE LIMITED	1	400$

53	SHRADDHA MARITIME SERVICES PRIVATE LIMITED	1	400$
54	SIDDHI OCEAN SERVICES PVT LTD.	1	400$
55	SU-NAV SHIPMANGEMENT PVT LTD.	1	400$
56	SYNERGY MARITME RECRUITMENT SERVICES PVT. LTD.	1	500$
57	UNIGRO SHIPPING PRIVATE LIMITED	1	400$
58	WEDGE BAY MARINE SERVICES PRIVATE LIMITED	1	400$
59	YAK MARINE PRIVATE LIMITED	1	400$
60	7 STAR SHIP MANAGEMENT PVT LTD.	1	390$
	Total No. of Cadets	**188**	

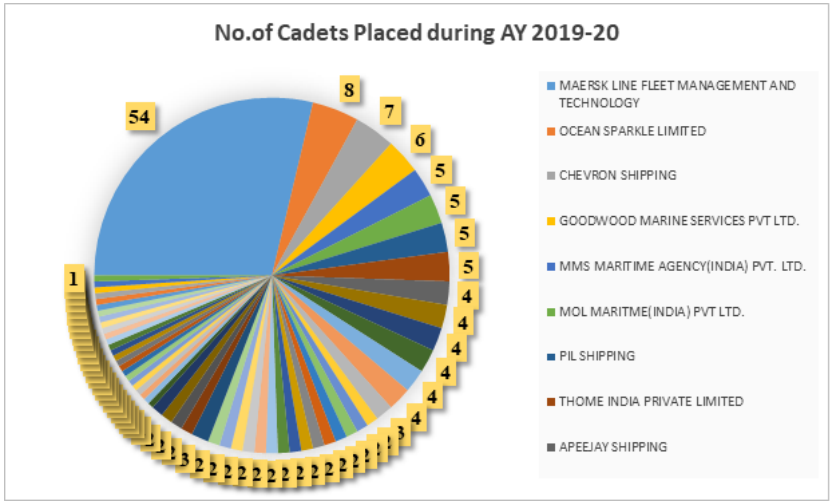


Fig 7.3.2.a No. of cadets placed during AY 2019-2020

Table B 7.3.2.b Cadets placed in Shipping Company during 2020-2021

ACADEMIC YEAR 2020-2021			
Sl.No	**Name of Shipping `Company**	**No.of Cadets Placed**	**Monthly Salary**
1	MAERSK LINE FLEET MANAGEMENT AND TECHNOLOGY INDIA PRIVATE LIMITED	53	450$
2	OSM FLEET MANAGEMENT INDIA PRIVATE LIMITED	13	600$

3	V.SHIPS INDIA PVT. LTD.	12	400$
4	GOODWOOD MARINE SERVICES PVT LTD.,	10	350$
5	NauticFleet Private Limited	10	500$
6	APEEJAY SHIPPING	9	390$
7	FLEET MANAGEMENT LTD	9	400$
8	ASP SHIPS INDIA PRIVATE LIMITED	8	350$
9	Thome India Pvt. Ltd	8	690$
10	M/S BW MARITIME PTE LTD., MUMBAI	7	350$
11	MARLOW NAVIGATION INDIA PVT. LTD., MUMBAI	7	380$
12	MOL Maritime (India) Pvt. Ltd.,	7	400$
13	MSI SHIPPING SERVICES INDIA PVT LTD.,	7	420$
14	MMS MARITIME AGENCY (INDIA) PVT. LTD	6	400$
15	NYK SHIPMANAGEMENT (INDIA) PVT LTD	6	370$
16	Bernhard Schulte Ship Management	5	400$
17	Bravo Ship Management Pvt Ltd	5	350$
18	Seaspan Crew Management India Private Limited	4	370$
19	WALLEM GROUP	4	400$
20	CHEVRON SHIPPING	3	600$
21	KNK SHIP MANAGEMENT, MUMBAI	3	350$
22	M/S. AD SHIP MANAGEMENT PRIVATE LIMITED.	3	390$
23	MOHAN MUTHA EXPORTS PVT. LTD	3	350$
24	NAUTAI MARINE SERVICES AND TRADING PRIVATE LIMITED	2	400$
25	SINASTA MARITIME PRIVATE LIMITED	2	370$
26	Greatship (India) Limited	1	400$
27	INTERNATIONAL SEAPORT DREDGING PRIVATE LIMITED	1	400$
28	M/S SEASPEED MARINE SERVICES LLP	1	400$
29	M/S. AURUS SHIP MANAGEMENT PRIVATE LIMITED	1	390$

30	M/S. TW SHIP MANAGEMENT PRIVATE LIMITED	1	380$
31	Melody Ship management Private Limited	1	390$
32	ABS MARINE SERVICES PVT. LTD.	1	370$
33	AURUM MARINE MANAGEMENT SERVICES PVT LTD.,	1	380$
34	BLACKHULL MARITIME SERVICES PRIVATE LIMITED	1	390$
35	HELIA MARINE SERVICES PVT.LTD.	1	370$
36	LIHGHTHOUSE MARINE SERVICES INDIA PVT. LTD	1	390$
37	M/S. ALPHARD MARITIME PRIVATE LIMITED	1	370$
38	M/S. SUCHNA MARINE SERVICES PRIVATE LIMITED	1	370$
39	NAUTILUS SHIPPING INDIA PVT LTD.	1	390$
40	OCEAN SPARKLE LIMITED	1	370$
41	OCEANIC STAR SHIPPING PRIVATE LIMITED	1	380$
42	OGEN SHIP MANAGEMENT PRIVATE LTD.	1	390$
43	PACIFIC STAR NAVIGATION PRIVATE LIMITED	1	390$
44	SARWAMANGLA MARINE ACADEMY PVT.LTD.	1	400$
45	SWARAJ MARINE PRIVATE LIMITED	1	390$
46	The Shipping Corporation of India Ltd	1	370$
	Total Cadets Placed	**227**	

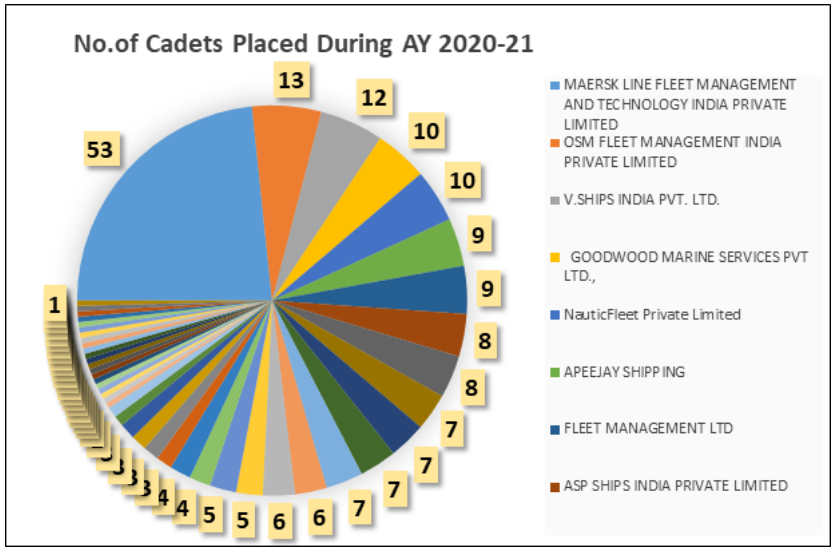


Fig 7.3.2.b No. of cadets placed during AY 2019-2020

Table B 7.3.2.c Cadets placed in Shipping Company during 2021-2022

ACADEMIC YEAR 2021-2022			
Sl.No	**Name of Shipping Company**	**No.of Cadets Placed**	**Monthly Salary**
1	A.P. MOLLER SINGAPORE PTE LTD	56	450$
2	THOME INDIA PVT. LTD	9	690$
3	BW MARITIME PTE. LTD	8	350$
4	GOODWOOD MARINE SERVICES PVT LTD	8	390$
5	NEW SHIPPING KAISHA LTD, CHENNAI	8	400$
6	PACC SHIP MANAGERS PTE LTD	8	350$
7	BERNHARD SCHULTE SHIPMANAGEMENT INDIA PVT LTD	7	400$
8	CHEVRON ASIA PACIFIC SHIPPING PTE LTD	7	600$
9	MMS MARITIME (INDIA) PVT LTD	7	400$
10	MOL MARITIME (INDIA) PVT. LTD.,	7	420$
11	NAUTICFLEET PRIVATE LIMITED	7	500$
12	ASP SHIPS INDIA PRIVATE LIMITED	6	420$
13	FLEET MANAGEMENT LTD	6	370$
14	MSI SHIPPING SERVICES	6	420$

15	NYK SHIPMANAGEMENT (INDIA) PVT LTD	6	370$
16	PIL SHIPPING	6	350$
17	APEEJAY SHIPPING	5	390$
18	BRAVO SHIP MANAGEMENT PVT LTD	5	350$
19	MARLOW NAVIGATION INDIA PVT.LTD.	5	400$
20	SEMBCORP MARINE	5	390$
21	WALLEM GROUP	5	400$
22	FUGRO LTD.,	4	370$
23	NORINCO PVT LTD	4	400$
24	OCEAN ONE SHIP MANAGEMENT	4	350 $
25	V SHIPS	4	400$
26	ANDROMEDA SHIPPING (INDIA) PVT. LTD. (AS AGENTS ONLY)	2	350$
27	DESTAN SHIP MANAGEMENT PVT LTD	1	370$
28	GRINFORD SHIPMANAGEMENT	1	350$
29	OCEAN SPARKLE LIMITED	1	370$
30	OCEANIC STAR SHIPPING PVT LTD	1	380$
31	SK ENGINEERING SHIPPING & TRADING PVT LTD	1	350$
	Total Cadets Placed	**210**	

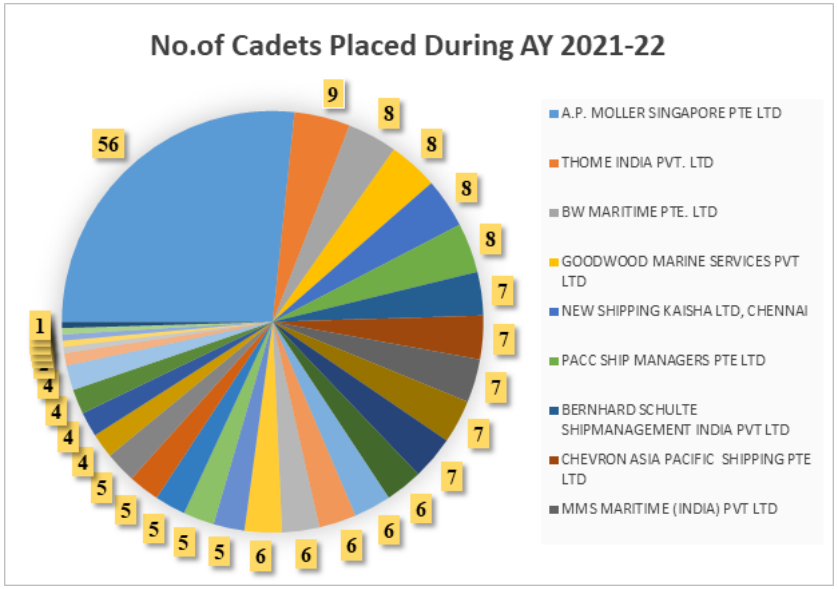


Fig 7.3.2.c No. of cadets placed during AY 2021-22

Placement Percentage:

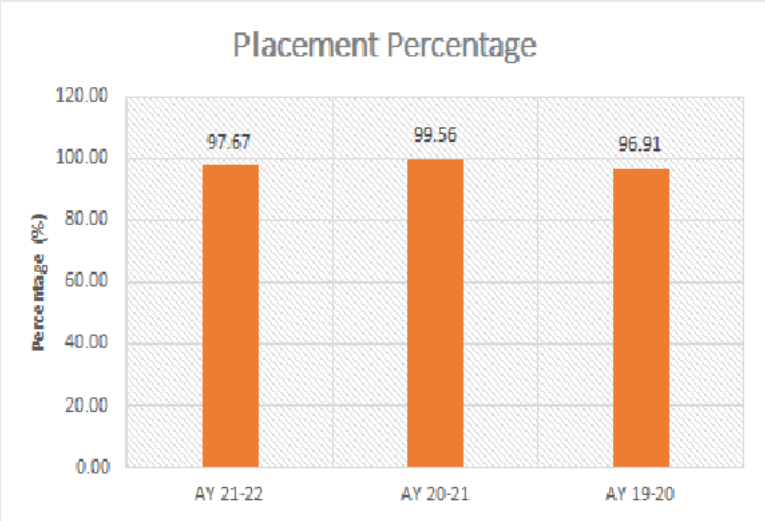


Fig 7.3.3 Academic Year wise placement percentage

7.4 Improvement in the quality of students admitted to the program (20)

Total Marks 20.00

Institute Marks : 20.00

Item		2022-23	2021-22	2020-21
National Level Entrance Examination	No of students admitted	181	0	0
	Opening Score/Rank	74	0	0
IMU Entrance Examination	Closing Score/Rank	68	0	0
State/ University/ Level Entrance Examination/ Others	No of students admitted	0	224	192
	Opening Score/Rank	0	98	97
AMET Common entrance e:	Closing Score/Rank	0	74.7	59
Name of the Entrance Examination for Lateral Entry or lateral entry details	No of students admitted	0	19	29
	Opening Score/Rank	0	96	98
AMET Common Entrance E	Closing Score/Rank	0	64	66
Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)		0	77.50	74.18

8 FIRST YEAR ACADEMICS (50)

Total Marks 46.44

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

Total Marks 5.00

Institute Marks : 5.00

Please provide First year faculty information considering load

Name of the faculty member	PAN No.	Qualification	Date of Receiving Highest Degree	Area of Specialization	Designation	Date of joining	Teaching load (%)			Currently Associated (Yes / No)	Nature Of Association (Regular / Contract)	Date Of leaving(In case Currently Associated is 'No')
							CAY	CAYm1	CAYm2			
Dr. A.Manoj Ku	CYOPM1400Q	M.A and Ph.D	25/06/2012	Sports Training	Assistant Professor	10/08/2012	0	0	100	No	Regular	29/05/2021
Dr.Anita Warrie	ABYPW0832H	M.Sc. and PhD	10/10/2011	Physics	Assistant Professor	15/10/2014	100	100	100	Yes	Regular	
Dr.K.Anandan	BSUPA4846D	M.Sc. and PhD	17/04/2015	Physics	Assistant Professor	14/09/2015	100	100	100	Yes	Regular	
Dr.L. Senthilna	CHZPS6906B	M.Sc. and PhD	26/02/2016	Environmental Science	Assistant Professor	19/10/2015	100	100	100	Yes	Regular	
Dr.I.Paulraj Jay	BTRPP2139Q	M.Sc. and PhD	09/06/2017	Mathematics	Associate Professor	04/07/2016	100	100	100	Yes	Regular	
Dr.K. Rajesh	CNGPR3372F	M.Sc. and PhD	11/04/2015	Physics	Assistant Professor	07/04/2016	100	100	100	Yes	Regular	
Dr.K.Komathy	AGPPK9366C	ME/M. Tech and PhD	02/12/2008	Computer Science	Professor	15/05/2017	100	100	100	No	Regular	02/02/2023
Dr.P. Balagane	AFIPB8703L	M.Sc. and PhD	22/07/2017	Mathematics	Associate Professor	12/07/2017	100	100	100	Yes	Regular	
Dr.K.Gayathri	BQSPG5031Q	M.Sc. and PhD	14/03/2015	Physics	Assistant Professor	12/07/2017	100	100	100	Yes	Regular	
Dr. T.Dhivya	DYNPD9911F	M.Sc. and PhD	22/08/2022	Mathematics	Assistant Professor	17/07/2017	100	100	100	Yes	Regular	
Dr.T.R. Heera	AIHPH6816Q	M.Sc. and PhD	04/02/2010	Physical Chemistry	Assistant Professor	26/07/2017	100	100	100	Yes	Regular	
Dr.C.Vairavan	AHJPV8538J	M.A and Ph.D	19/04/2017	English	Assistant Professor	03/10/2017	100	100	100	Yes	Regular	
Mr. V. Kurinji	CZBPK2115E	M.E/M.Tech	14/11/2006	Mechanical Engineering	Assistant Professor	02/01/2018	0	0	100	No	Regular	31/12/2020
Mr.Balamuruga	AYQPB1947F	M.Phil	02/07/2012	English	Assistant Professor	16/07/2018	100	100	100	Yes	Regular	
Dr.D.Jaisankar	AJIPJ7831K	M.A and Ph.D	17/10/2018	English	Associate Professor	06/08/2018	100	100	100	Yes	Regular	
Dr.K.K.Siva Ku	ALEPK0825G	M.Sc. and PhD	04/10/2013	Physical Chemistry	Professor	01/07/2019	100	100	100	Yes	Regular	
Dr.S.Rafi Aham	AURPA4279J	M.Sc. and PhD	03/10/2017	Physics	Associate Professor	01/07/2019	100	100	100	Yes	Regular	
Dr.A.Mohamed	AWYPM1495R	M.Sc. and PhD	12/06/2017	Physics	Associate Professor	01/07/2019	100	100	100	Yes	Regular	

Dr.M.Subha	BGZPS7475R	M.A and Ph.D	17/10/2018	English	Assistant Professor	23/10/2018	100	100	100	Yes	Regular	
Dr.N.Maheswa	BWJPM7256A	M.Sc. and PhD	05/04/2019	Physics	Assistant Professor	24/07/2019	100	100	100	Yes	Regular	
Mrs.V.Ramabh	FAQPR4767C	M.E/M.Tech	15/06/2014	Environmental Science	Assistant Professor	04/01/2020	100	100	100	Yes	Regular	
Dr.Jayakumar	ARQPJ2405H	ME/M. Tech and PhD	10/01/2020	Mechanical Engineering	Assistant Professor	16/07/2018	100	100	0	Yes	Regular	
Mr.B.Prabhush	AOHPP4187C	M.E/M.Tech	17/04/2010	Computer Science	Assistant Professor	16/08/2018	0	0	100	No	Regular	25/07/2021
Ms.Shanmuga	EGDPS4302E	M.E/M.Tech	01/06/2016	Environmental Science	Assistant Professor	05/02/2021	100	100	0	Yes	Regular	
Mr.S.Ramaraju	ALFPR7893C	M.Phil	01/08/2002	English	Assistant Professor	12/07/2022	100	0	0	Yes	Regular	
Dr. A. Ananthi (	AHZPA2377A	ME/M. Tech and PhD	16/03/2016	Electrical Engineering	Professor	01/02/2023	100	0	0	Yes	Regular	
Mr.K.Dinesh Ku	AKMPD5383K	M.E/M.Tech	30/04/2013	Computer Science	Assistant Professor	16/07/2018	100	100	100	No	Regular	30/08/2022
Dr.R.Suresh	EETPS1447N	M.A and Ph.D	20/06/2015	Physical Education	Assistant Professor	09/03/2022	100	100	0	Yes	Regular	
Dr. Selvakumai	DPPPS7068P	M.Sc. and PhD	25/05/2013	Environmental Science	Assistant Professor	21/12/2020	0	100	100	No	Regular	28/02/2022
Dr.S.Arjunan	AEGPA0377L	M.Sc. and PhD	02/09/2008	Physics	Professor	10/07/2019	0	100	100	No	Regular	30/08/2022
Dr.S.Kalpana	AXFPK2107E	M.Sc. and PhD	24/05/2019	Physics	Associate Professor	27/08/2019	0	100	100	No	Regular	05/08/2022
Dr.Anitha Rexa	AQGPA6291D	M.Sc. and PhD	30/08/2014	Physics	Assistant Professor	24/09/2022	100	0	0	Yes	Regular	
Dr.C.Chitra	CJYPC4507M	M.Sc. and PhD	09/10/2015	Biology	Assistant Professor	06/10/2022	100	0	0	Yes	Regular	
Dr.C.Dhanalak	BGNPD9345R	M.A and Ph.D	18/03/2022	Physical Education	Assistant Professor	12/10/2022	100	0	0	Yes	Regular	
Dr. K. Bharathi	APJPB2323R	ME/M. Tech and PhD	25/02/2022	Electrical Engineering	Associate Professor	30/01/2023	100	0	0	Yes	Regular	
Dr.G. Mayakka	CNZPM0314H	M.Sc. and PhD	17/08/2013	Environmental Science	Assistant Professor	10/03/2021	0	100	100	No	Regular	28/02/2022
Dr. Sylvester F	BPVPS8466R	M.Sc. and PhD	07/03/2014	Environmental Science	Assistant Professor	15/11/2017	0	0	100	No	Regular	22/05/2021
Dr.M.Suresh K	BBCPS8597Q	M.Sc. and PhD	24/07/2021	Physics	Assistant Professor	01/08/2008	100	100	100	No	Regular	30/01/2023
Dr.S.Meher Taj	GTHPS8759E	M.Sc. and PhD	12/12/2020	Mathematics	Assistant Professor	09/08/2010	100	100	100	Yes	Regular	

Dr.K.Manigand	BXNPM9080M	M.A and Ph.D	08/10/2021	English	Assistant Professor	01/08/2011	100	100	100	Yes	Regular	
Ms.P. Indhuma	AFEPI0418R	M.Phil	02/02/2017	English	Assistant Professor	22/10/2018	0	0	100	No	Regular	31/12/2020
Dr. N.R.Ramku	AKJPR5949J	M.A and Ph.D	25/07/2012	Physical Education	Professor	17/08/2016	100	100	100	Yes	Regular	
Ms. S. Sowmiy	IRHPS1180M	M.E/M.Tech	09/05/2018	Mechanical Engineering	Assistant Professor	26/02/2020	0	100	100	No	Regular	30/12/2021
Dr.M.Sudha	DZEPS1084N	M.Sc. and PhD	18/12/2020	Mathematics	Assistant Professor	02/12/2021	100	100	0	No	Regular	17/12/2022
Dr.C.M.Ramak	AOVPR7013P	M.Sc. and PhD	04/03/1994	Environmental Science	Professor	13/05/2022	100	0	0	Yes	Regular	
Mr.P.Ramesh	AWXPR8154P	M.E/M.Tech	28/04/2014	Mechanical Engineering	Assistant Professor	01/07/2019	0	0	100	No	Regular	10/01/2023
Dr.G.Jenitha	BSVPG7440N	M.Sc. and PhD	24/01/2022	Mathematics	Assistant Professor	04/09/2014	100	100	100	Yes	Regular	
Dr. N.Sivakuma	GOOPS5559Q	M.Sc. and PhD	27/07/2012	Organic Chemistry	Assistant Professor	28/10/2014	100	100	100	Yes	Regular	
Dr.Altaff Kareer	AAEPA4302R	M.Sc. and PhD	10/05/1990	Environmental Science	Professor	13/09/2017	100	100	100	Yes	Regular	
Dr.L.Rajendran	ABUPR6656R	M.Sc. and PhD	28/01/2012	Mathematics	Professor	21/05/2018	100	100	100	Yes	Regular	
Mrs. R.K. Padn	BZYPP2672P	M.E/M.Tech	07/07/2008	Electrical Engineering	Assistant Professor	06/08/2018	100	100	100	Yes	Regular	
Ms.U. Pushpal	AWCPP7334G	M.Phil	05/03/2011	English	Assistant Professor	01/11/2018	100	100	100	Yes	Regular	
Dr. S. Krishna	KFCPK0006M	M.A and Ph.D	18/09/2018	English	Assistant Professor	24/02/2020	100	100	100	Yes	Regular	
Mr. R. Karthick	BMOPK2366E	M.E/M.Tech	12/04/2012	Electrical Engineering	Assistant Professor	24/02/2020	0	0	100	Yes	Regular	
Mr. J. S. Ashwi	AZXPA0303Q	M.E/M.Tech	01/06/2014	Electrical Engineering	Assistant Professor	24/02/2020	100	100	100	Yes	Regular	

Year	**Number Of Students(approved intake strength) N**	**Number of Faculty members(considering fractional load) F**	**FYSFR (N/F)**	***Assessment=(5*20)/FYSFR(Limited to Max.5)**
2020-21(CAYm2)	606	44	14	5
2021-22(CAYm1)	558	41	14	5
2022-23(CAY)	618	43	14	5
Average	594	42	14	5

AverageFYSFR: 0.00

Assessment [(5 * 15) / AverageFYSFR]: 5.00

8.2 Qualification of Faculty Teaching First Year Common Courses (5) Total Marks 5.00

Institute Marks : 5.00

Year	x (Number Of Regular Faculty with Ph.D)	y (Number Of Regular Faculty with Post graduate Qualification)	RF (Number Of Faculty Members required as per SFR of 20:1)	Assessment Of Faculty Qualification [(5x + 3y) / RF]
2020-21	25	10	30	5.00
2021-22	26	7	27	5.00
2022-23	27	7	30	5.00

Average Assessment: 5.00

8.3 First Year Academic Performance (10) Total Marks 6.44

Institute Marks : 6.44

Academic Performance	CAYm1(2021-22)	CAYm2(2020-21)	CAYm3 (2019-20)
Mean of CGPA or mean percentage of all successful students(X)	7.93	8.26	8.20
Total Number of successful students(Y)	157.00	166.00	186.00
Total Number of students appeared in the examination(Z)	218.00	191.00	237.00
API [X*(Y/Z)]	5.71	7.18	6.44

Average API[(AP1+AP2+AP3)/3] : 6.44

Assessment = Average API : 6.44

8.4 Attainment of Course Outcomes of first year courses (10) Total Marks 10.00

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

Institute Marks : 5.00

CO Assessment Processes

A)Assessment process

In the Outcome Based Education, evaluation of Course Outcome is done through internal and external assessment processes such as CAT1, CAT2, Model Examination, End Semester Examination, Assignments and Seminar or any Activity Learning Methods.

Direct assessment includes evaluation of the student's knowledge and skills based on their performance in the internal and external assessments and indirect assessment is done through Course End Survey.

B) Assessment Tools

The Direct assessment tools which are used for evaluation is shown in Table B 8.4.1 (a) and the Indirect assessment tool of evaluation is shown in Table B 8.4.1 (b).

Table: 8.4.1 (a) DIRECT ASSESSMENT TOOLS

Assessment Process	Frequency	Process
DIRECT ASSESSMENT TOOLS		
THEORY COURSES		
Continuous Assessment Test (CAT)	Two per semester	The internal assessments are carried out in a centralized manner in the department level and are so designed to facilitate the assessment of the attainments of the outcome.
Model Exam	One per semester	The Model examination is of three hour duration and covers the entire syllabus of the course and satisfies all course outcomes for the particular course
End Semester Examination	As per the End Semester Exam schedule	The end-semester examination is of three hour duration and covers the entire syllabus of the course and satisfies all course outcomes for the particular course.
Assignments	Two/three Assignments per course	To develop the critical and analytical skills of the students, assignments are given and is also taken as a criterion to assess the attainment of Cos
Seminar/ALM	One per Course	In view of improving communication skills, gaining expert knowledge, networking with others and renewing motivation and confidence, seminars are presented by students and is also taken as a criterion to assess the attainment of COs
LABORATORY COURSES		
Performance Evaluation	Continuous Monitoring	Continuous evaluation of laboratory courses as per rubrics

End Semester Exam	As per the End Semester Examination schedule	The end-semester examination is of three hours duration and covers all the experiments of the course and satisfies all course outcomes.
Communicative and Soft Skills Laboratory/English Laboratory	Throughout the semester	Assessment process includes interactions with questions structured properly and analyzing student's communication and writing abilities
PT/Parade/Games	Continuous Monitoring	Student assessment is done in alignment with University Standards and Rubrics.

Table B: 8.4.1 (b) INDIRECT ASSESSMENT TOOL

S.No	Assessment Tool	Frequency	Method Description
1	Course End Survey	End of semester	To enhance the Teaching Learning Process, Students are provided with an opportunity to reflect and provide feedback based on their understanding level.

CO Assessment Process for Theory Courses:

Table B 8.4.1.(C) CO ASSESSMENT PROCESS FOR THEORY COURSES

		CO1	CO2	CO3	CO4	CO5	CO6
Assessment	**Internal Assessment (IA) (CAT-I, CAT-II, Model exam, Assignments and Seminar/ALM)**	40%	40%	40%	40%	40%	40%
	End Semester Examination (ESE)	60%	60%	60%	60%	60%	60%
	Total Direct assessment (TDA) = IA+ESE	100%	100%	100%	100%	100%	100%
DA (90%) = TDA x 0.9		90%	90%	90%	90%	90%	90%
INDA (10%) = CES x 0.1		10%	10%	10%	10%	10%	10%
CO attainment % = DA + INDA		100%	100%	100%	100%	100%	100%
CAT I : Continuous Assessment Test -1 ; CAT II : Continuous Assessment Test II; DA : Direct Assessment ; INDA: Indirect Assessment; CES :Course End Survey							

ALM : Activity Learning Method

CO Assessment Process for Laboratory Courses:

Table B 8.4.1 (D) CO ASSESSMENT FOR LABORATORY COURSES

		CO1	CO2	CO3	CO4	CO5	CO6
Assessment	Internal Assessment (IA) (Observation+ Performance Evaluation+ Record)	40%	40%	40%	40%	40%	40%
	End Semester Examination (ESE)	60%	60%	60%	60%	60%	60%
	Total Direct Assessment (TDA) = IA+ESE	100%	100%	100%	100%	100%	100%
DA (90%) = TDA x 0.9		90%	90%	90%	90%	90%	90%
INDA (10%) = CES x 0.1		10%	10%	10%	10%	10%	10%
CO attainment % = DA + INDA		100%	100%	100%	100%	100%	100%

CES: Course End Survey ; DA: Direct Assessment ;INDA: Indirect Assessment

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

Institute Marks : 5.00

Criteria for Attainment Level of Course Outcomes:

Table B: 8.4.2 (a) THE CRITERIA FOR ATTAINMENT LEVELS OF COURSE OUTCOMES.

ATTAINMENT LEVEL FOR COURSE OUTCOMES	
Theory Courses & Laboratory Courses	
Overall Attainment Level (Direct assessment + Indirect Assessment)	**Level**
50% - 60% students scoring more than the subject threshold	1
>60% - 70% students scoring more than the subject threshold	2
> 70% of students scoring more than the subject threshold	3

Table B 8.4.2 (b) gives the Course outcome statements for a sample course ‘Engineering Physics-I C102’ and Table B 8.4.2 (c) gives the CO articulation matrix for a sample course ‘Engineering Physics-I C102’.

Table B: 8.4.2 (b) Course Outcome Statements for the Course

CO No.	CO Statement	BTL
CO1	**Summarize the laws and principles of basic mechanics**	K2
CO2	**Explain the concepts of elasticity and plasticity**	K2
CO3	**Illustrate different types of oscillators**	K2
CO4	**Demonstrate polarization, diffraction and interference**	K2
CO5	**Analyze different types of laser and optics**	K4
CO6	**Apply the principles of Physics in engineering applications.**	K3

Table B: 8.4.2 (c) CO Articulation matrix for the Course Engineering Physics-I (C102)

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO 1	**2**	**2**	**-**	**1**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**2**
CO 2	**2**	**-**	**2**	**2**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**2**
CO 3	**2**	**2**	**2**	**1**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
CO 4	**2**	**2**	**2**	**1**	**2**	**-**	**-**	**-**	**-**	**-**	**-**	**2**
CO 5	**3**	**2**	**2**	**2**	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**2**
CO 6	**3**	**3**	**3**	**3**	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**3**

Indirect Assessment Process for Course Outcomes:

Course end survey is an integral part of assessment process. Surveys are conducted for all courses as a step towards quality measure. The survey includes a questionnaire set for each course outcome. This system gives a measure of the program outcomes attained indirectly which forms an essential element to improvise on course goals. The strategy by which indirect assessment is carried out is shown in Table 8.4.2 (d) and the Overall Assessment Process in Table 8.4.2 (e) for a sample course 'Engineering Chemistry (C105)'. The average of the course end survey in the overall attainment calculation of course outcomes is 10%

Table B: 8.4.2 (d): Indirect Assessment Process for Course Outcomes. Engineering Physics-I (C102)

Indirect Course Outcomes	CO1	CO2	CO3	CO4	CO5	CO6
Number of Students Answered - 1 (Low)	30	34	36	39	25	37
Number of Students Answered - 2 (Medium)	73	79	86	78	90	78
Number of Students Answered - 3 (High)	115	105	96	101	103	103
Total Number of Students Participated	218	218	218	218	218	218
Total Number of Students Answered 2 & 3	188	184	182	179	193	181
Indirect CO Attainment Percentage	86%	84%	83%	82%	89%	83%

Table B: 8.4.2 (e): The Overall CO Attainment Process for the Course 'Engineering Physics-I(C102)

Process for CO attainment	CO attainment					
	CO1	CO2	CO3	CO4	CO5	CO6
% Of Direct Attainment Through Internal Exams(CAT I & II, Model exam, Assignment I,II & ALM	71.10 %	83.49 %	79.36 %	89.45 %	89.45 %	87.16 %
40% From Direct Attainment Through Internal Exams	28.44 %	33.39 %	31.74 %	35.78 %	35.78 %	34.86 %
% Of Direct Attainment Through End Semester Exam	76.61 %	60.09 %	57.80 %	62.39 %	60.55 %	47.71 %
60% From Direct Attainment Through End Semester Exam	45.96 %	36.06 %	34.68 %	37.43 %	36.33 %	28.62 %
40% + 60% Of Direct Attainment	74.40 %	69.45 %	66.42 %	73.21 %	72.11 %	63.49 %

90% From Direct Attainment	66.96 %	62.50 %	59.78 %	65.89 %	64.90 %	57.14 %
% Of Indirect Attainment Through Course End Survey	86.24 %	84.40 %	83.49 %	82.11 %	88.53 %	83.03 %
10% From Indirect Attainment Through Course End Survey	8.62 %	8.44 %	8.35 %	8.21 %	8.85 %	8.30 %
90% From Direct + 10% From Indirect For Co Attainment	75.59 %	70.94 %	68.13 %	74.10 %	73.75 %	65.44 %
Attainment Level	3	3	2	3	3	2

CO Attainment for First Year Courses (Academic Year: 2020-2021:

Based on the tools and processes described in section 8.4.1, the assessment of COs is carried out for all the courses. Table 8.4.2(f) gives the attainment of course outcomes of first year courses for the academic year 2020-21.

Table B: 8.4.2. (f) : The CO Attainment of First Year Courses

FIRST YEAR	**Theory Courses (% of students crossing threshold)**														
Course Outcomes	C102	C103	C105	C101	C106	C104	C112	C114	C115	C119	C120	C116	C113	C117	C118
CO1	75.63 %	69.90 %	76.40 %	76.29 %	75.79 %	71.26 %	74.54 %	90.85 %	80.93 %	73.87 %	77.82 %	72.13 %	79.49 %	83.00 %	85.58 %
CO2	70.99 %	67.18 %	78.93 %	68.08 %	68.31 %	67.62 %	64.47 %	91.03 %	79.36 %	75.63 %	76.31 %	68.76 %	77.05 %	79.43 %	81.89 %
CO3	68.27 %	70.86 %	78.54 %	80.18 %	80.00 %	70.09 %	72.33 %	91.01 %	80.56 %	74.24 %	75.59 %	74.12 %	72.21 %	66.35 %	85.85 %
CO4	74.28 %	72.33 %	77.21 %	75.88 %	75.97 %	70.92 %	71.77 %	89.09 %	80.18 %	77.93 %	75.86 %	74.37 %	79.35 %	79.96 %	75.85 %
CO5	72.97 %	70.76 %	80.62 %	76.05 %	75.86 %	70.49 %	69.70 %	88.10 %	83.48 %	78.76 %	76.09 %	68.84 %	81.84 %	84.84 %	80.18 %
CO6	65.39 %	69.94 %	75.54 %	83.09 %	83.00 %	66.52 %	79.08 %	93.74 %	83.09 %	79.10 %	75.39 %	81.25 %	81.94 %	79.17 %	79.82 %
Overall CO attainment	71.26 %	70.16 %	77.87 %	76.60 %	76.49 %	69.48 %	71.98 %	90.64 %	81.27 %	76.59 %	76.18 %	73.24 %	78.65 %	78.79 %	81.53 %
ATT LEVEL	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3

FIRST YEAR	Lab Courses (% of students crossing threshold)								
Course Outcomes	C107	C123	C111	C108	C110	C109	C121	C124	C122
CO1	84.61 %	89.90 %	82.91 %	85.93 %	87.70 %	83.83 %	95.33 %	93.37 %	95.88 %
CO2	85.12 %	81.44 %	82.59 %	86.43 %	86.34 %	84.10 %	89.76 %	93.45 %	96.71 %
CO3	84.98 %	92.58 %	82.73 %	86.07 %	88.10 %	83.83 %	95.28 %	94.18 %	95.93 %
CO4	85.03 %	81.77 %	82.41 %	86.48 %	87.53 %	84.42 %	89.90 %	93.08 %	96.02 %
CO5	84.61 %	92.30 %	82.32 %	86.80 %	87.69 %	84.24 %	94.96 %	94.14 %	96.11 %
CO6	85.07 %	86.68 %	82.04 %	86.48 %	87.43 %	84.24 %	95.15 %	93.50 %	96.43 %
Overall CO attainment	84.91 %	87.45 %	82.5%	86.36 %	87.47 %	84.11 %	93.4%	93.6%	96.18 %
ATT LEVEL	3	3	3	3	3	3	3	3	3

8.5 Attainment of Program Outcomes from first year courses (20) Total Marks 20.00

8.5.1 Indicate results of evaluation of each relevant PO and/or PSO if applicable (10)

Institute Marks : 10.00

POs Attainment:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C101	PO1	PO2	PO3	PO4	PO5	2.29	2.29	PO8	2.3	2.3	PO11	2.29
C102	2.13	2.12	2.10	2.11	2.13	PO6	PO7	PO8	PO9	PO10	PO11	2.14
C103	2.1	2.1	2.1	2.1	2.09	PO6	PO7	PO8	PO9	PO10	PO11	2.1
C104	2.08	2.08	2.08	2.08	2.08	PO6	PO7	PO8	PO9	PO10	PO11	2.08
C105	2.33	2.33	2.33	2.33	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2.33
C106	1.99	1.99	1.99	1.98	PO5	PO6	PO7	PO8	PO9	PO10	PO11	1.94
C107	2.55	2.55	2.55	2.55	2.55	PO6	PO7	PO8	2.55	2.55	PO11	2.55
C108	2.6	2.6	2.6	2.61	2.6	PO6	2.6	PO8	2.61	2.6	PO11	2.61
C109	2.6	2.62	2.62	2.62	2.62	PO6	PO7	PO8	PO9	2.53	PO11	2.53
C110	2.62	2.62	2.62	2.62	2.62	PO6	PO7	PO8	2.62	2.62	PO11	2.62
C111	2.47	2.47	2.47	2.47	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2.47
C112	2.17	2.18	2.17	2.15	2.16	PO6	PO7	PO8	PO9	PO10	PO11	2.17
C113	2.37	2.36	2.37	2.38	2.37	PO6	PO7	PO8	PO9	PO10	PO11	2.37
C114	2.71	2.70	2.71	2.71	2.71	PO6	PO7	PO8	PO9	PO10	PO11	2.71
C115	2.44	2.36	2.36	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2.44
C116	2.18	2.17	2.27	2.27	2.19	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C117	PO1	PO2	PO3	PO4	PO5	2.38	2.36	2.35	2.34	PO10	PO11	2.36
C118	PO1	PO2	PO3	PO4	PO5	2.44	2.44	PO8	2.43	2.43	PO11	2.43
C119	2.29	2.29	2.28	2.28	PO5	PO6	PO7	PO8	PO9	PO10	PO11	2.36
C120	2.29	2.28	2.28	2.28	2.3	2.27	PO7	PO8	PO9	PO10	2.29	2.29
C121	2.8	2.8	2.8	2.8	2.8	PO6	PO7	PO8	2.81	2.81	PO11	2.8
C122	2.89	2.89	2.89	2.89	2.89	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C123	2.66	2.63	2.65	2.64	2.6	PO6	PO7	PO8	2.62	2.7	2.62	2.62
4124	2.66	2.67	2.67	2.67	2.71	PO6	2.6	PO8	2.68	2.64	PO11	2.61

PO Attainment Level

PSOs Attainment:

Course	PSO1	PSO2	PSO3
C101	PSO1	PSO2	PSO3
C102	2.12	2.12	PSO3
C103	PSO1	PSO2	PSO3
C104	PSO1	PSO2	PSO3
C105	2.32	2.32	PSO3
C106	1.99	1.99	1.96
C107	2.55	2.55	PSO3
C108	PSO1	PSO2	PSO3
C109	PSO1	PSO2	PSO3
C110	PSO1	PSO2	PSO3
C111	2.48	2.48	2.47
C112	2.36	2.08	PSO3
C113	2.33	2.33	PSO3
C114	2.7	PSO2	PSO3
C115	2.34	2.34	PSO3
C116	PSO1	PSO2	PSO3
C117	2.62	PSO2	PSO3
C118	PSO1	PSO2	PSO3
C119	2.51	2.49	PSO3
C120	PSO1	PSO2	PSO3
C121	2.79	2.8	2.81
C122	PSO1	PSO2	PSO3
C123	2.61	2.62	2.62
C124	2.81	2.81	2.81

PSO Attainment Level

Course	PO1	PO2	PO3
Direct Attainment	2.47	2.41	2.53
PSO Attainment	2.47	2.41	2.53

8.5.2 Actions taken based on the results of evaluation of relevant POs and PSOs (10)

Institute Marks : 10.00

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

POs	Target Level	Attainment Level	Observations
PO 1 : Engineering Knowledge			
PO 1	2.4	2.43	This attribute has reached the set attainment level and the following subjects are having the scope for further improvement C102 Engineering Physics I: 2.13 C104 Engineering Chemistry: 2.08 C106 Thermal Engineering : 1.99
Action 1: ALM teaching methods will be continued to improve the clarity on basic concepts Action 2: More assignments will be given to the students for better understanding of Engineering Knowledge Action 3: Additional tutorial session and assignment will be given to improve the performance of students Action 4: Concepts will be explained with the help of Demo and Practical sessions to Engineering Physics			
PO 2 : Problem Analysis			
PO 2	2.4	2.42	This attribute has reached the set attainment level but the following subjects were substantially contributed C103 Engineering Mathematics: 2.1 C106 Thermal Engineering : 1.99 C102 Engineering Physics I : 2.12
Action 1: More visual based materials with animations will be given to improve the learning level of the students. Action 2: Research oriented projects will be encouraged to the develop their analytical skills. Action 3:: Additional classes will be conducted for the students to enrich their knowledge towards the problem-solving strategies			
PO 3 : Design/development of Solutions			
PO 3	2.1	2.42	This attribute has reached the set attainment level but the following subjects were substantially contributed C104 Engineering Chemistry: 2.08 C116 Python for Problem Solving:2.18 C115 Engineering Mechanics II :2.36
Action 1: Guest Lectures by Industry Experts will be arranged to the students to enhance the knowledge in chemical reaction Action 2: Extra hours will be arranged and activity based learning like quiz and seminar will be given to students for improving their learning interest on basic concepts			
PO 4 : Conduct Investigations of Complex Problems			
PO 4	2.4	2.43	This attribute has reached the set attainment level still the following oc C106 Thermal Engineering :1.99 C115 Engineering Mechanics II :2.36 C104 Engineering Chemistry: 2.08
Action 1: Question Banks will be provided to the students for more practice Action 2: Practice sessions provided for the needy students to acquire the problem solving skill support them in understanding complex problems. Action 3: Guest Lecture through Industrial Experts will be arranged for more practical exposure			
PO 5 : Modern Tool Usage			
PO 5	2.4	2.46	This attribute has reached the set attainment level the following subjects rae required further improvement C102 Engineering Mathematics:2.09 C116 Python for Problem Solving"2.19
Action 1: More practice will be given in special coaching classes to improve the design based knowledge. Action 2: Workshop and seminar will be arranged for the students to know about the recent technique and modern tools used in Industrial applications			
PO 6 : The Engineer and Society			
PO 6	2.4	2.34	This attribute is reached the set attainment level hence some courses are having scope further improvement C1167 Environmental Science:2.38
Action 1: Guest lectures and Workshops will be arranged to create awareness about the role of engineers for the betterment of the society.			
PO 7 : Environment and Sustainability			
PO 7	2.4	2.46	This attribute has reached the set attainment level still C117 Environmental science:2.36 is scope are having for further improvement
Action 1: Workshop and motivational talk will be arranged for the students to create awareness on societal and environmental context. Action 2: Students will be encouraged to develop renewable energy based mini project to safe guard environment.			

PO 8 : Ethics

PO 8	2.4	2.35	This attribute is not reached the set attainment level and C117 Environmental science:2.36 is scope are having for further improvement
Action 1: Career guidance program and corporate lectures will be arranged to gain knowledge on professional and ethical responsibility on Environment			

PO 9 : Individual and Team Work

PO 9	2.4	2.55	This attribute has reached the set attainment level and C117 Environmental science:2.36 is scope are having for further improvement
Action 1: Students will be encouraged to organize as well as participate in technical events to improve their leadership skills and team spirit.			

PO 10 : Communication

PO 10	2.4	2.58	This attribute has reached the set attainment level will be strengthened in higher semesters.
Action 1: Students will be motivated to give seminars in regular classes to improve their communication and presentation skills.			

PO 11 : Project Management and Finance

PO 11	2.4	2.46	This attribute has reached the set attainment level and C120 Material Science and Metallurgy :2.29 needs further improvement
Action 1: Students will gain knowledge about the finance management through their mini project. Action 2: Group Discussion on real time problems will be conducted			

PO 12 : Life-long Learning

PO 12	2.4	2.40	This attribute has reached the set attainment level and the following courses having the scope for the further improvements C101 Technical English I:2.29 C119 Thermal Engineering II :2.36
Action 1: Students will be encouraged to attend online courses in recent trends through NPTEL, MOOC courses etc. Action 2: Advanced level courses will be conducted for strengthening their learning objectives.			

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

PSOs	Target Level	Attainment Level	Observations
PSO 1 : Design, analyze and integrate electrical and mechanical systems in on-board ships and apply tools and techniques such as programmable logic controllers, SCADA and CAD in marine industries and create passion for lifelong learning.			
PSO 1	2.1	2.53	This attribute has reached the set attainment level even though the following subjects needs improvement C106 Thermal Engineering I : students need to improve their knowledge in solving complex Marine Engineering problems
Action 1: Value added Training will be provided to the students to solve the complex engineering problems. Action 2:Extra tutorial classes will be conducted for slow learners to clarify their doubts Action 3: Industrial visits and Internship will be arranged to have a practical experience on modern tools. Action 4: Students will be encouraged to attend online courses in recent trends through NPTEL, MOOC courses etc.			
PSO 2 : Apply the knowledge of Marine Engineering to solve the problems in on-board ships to meet the needs of the maritime industries.			
PSO 2	2.1	2.47	This attribute has reached the set attainment level even C106 Thermal Engineering I: still need improvement in developing solutions for complex Engineering problems in the broad field of marine industries
Action 1: Projects will be allotted to the students in the broad field of Thermal Engineering I to develop solutions for complex Engineering problems. Action 2: Guest Lectures will be arranged to the students with the help of industrial experts to improve their problem solving skills.			
PSO 3 : Analyze complex engineering problems to formulate and develop solutions for the onshore and offshore shipping industries.			
PSO 3	2.1	2.41	This attribute has reached the set attainment level and it can be improved in higher semester
Action 1: Training programme are organized for students to gain knowledge in-board ship Automation Action 2: Industrial visits and Internships are organized to get core industrial exposures and Ship visit are arranged for the students to gain the knowledge of practical applications.			

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

9.1 MENTORING SYSTEM TO HELP INDIVIDUAL LEVEL (5)

An effective mentoring relationship is characterized by mutual respect, trust, understanding, and empathy. Our mentors are able to share life experiences and wisdom, as well as technical expertise with the students. They are good listeners, good observers, and good problem-solvers. They make an effort to know, accept, and respect the goals and interests of a student. In the end, they establish an environment in which the students accomplishment is limited only by the extent of his or her talent.

In AMET, we follow the best possible mentoring system (i.e.) Total Development Mentoring System for the benefit of the students. The student mentor ratio is 15:1 to 20:1 which greatly helps the mentor to focus not only on the issues raised by the students but enables them to communicate the desired and constructive outcomes of the students. The mentors meet the students once in a week and discuss a range of topics from academics to personal life and other beneficiary topics.

Table 9.1. (a) Frequency of Meetings

Mentoring System	Yes
Type of Mentoring	All Round Development
Number of Faculty Mentors	170
Number of Students per Mentor	15 to 20
Frequency of Meeting	Weekly

Details of Mentoring System:

The purpose of the mentoring system is to monitor the student with regard to their academic and professional well-being. Every student is assigned to a faculty member who continues to be the mentor for that student till the completion of his/her course. Mentors identify the shortcomings with respect to punctuality, attendance, academic performance etc.

Mentors also identify the core competencies of the students and guide them to make better professionals. Students are counselled before and after conducting internal assessment examinations. Marks scored, attendance percentage with respect to every subject is analyzed and remarks are listed in the mentor file. Problems if any are suitably addressed. Students are monitored to incorporate the suggestions for further improvements. Parent Teacher meetings are conducted as and when required. An independent login is provided to every student in ERP for sharing the pertinent information like attendance, academic performance, feedback etc. All Faculty encourage the students to participate in co-curricular, extra-curricular and other professional activities, which motivates them and stimulate their growth to become all-round young professionals.

All Round Development:

- Ø Pre motivation for all students taking part in sports activities, cultural activities, symposiums, conferences, mini projects, internships and seminars, will be given by class in charges, mentors and professional body coordinators.
- Ø Students are also motivated by extracurricular activities and co-curricular activities.
- Ø Mentoring is also provided for the students who participate in various activities organized by other institutions.
- Ø Counselling for Extra Curricular and co-curricular activities will help the student to become an all-rounder and OD is also provided for the same.

v **Professional Guidance**

- Ø Professional counselor is available in the campus on all the working days during the college working hours.
- Ø The counselor counsels the aggressive students and students with health issues in a private confidential environment.
- Ø The Institution provides Professional Counselling and psychological assistance for all the students and to ensure a healthy environment and an emotional well-being.

v **Career Advancement**

- Ø Pre motivation for all the students taking part in the personality development program, English reasoning and technical training will be given by the placement training coordinator of the concerned Department and the IELTS training officer.
- Ø Pre motivation for all students taking part in campus drive and placements will be given by the placement officer.
- Ø Placement cell coordinator plays an important role in this regard, they frequently visit each and every class to motivate and counsel students in the career aspect.
- Ø Career based counselling is also provided on the various companies visiting the campus and kind of skill sets and preparation is required for each company.
- Ø Mentors and alumni counsel students on the opportunities for higher studies and the preparations required for the same.

v **Course Work Specific**

- Ø The student’s personal details along with their academic performance and progress is updated in the ‘Green card’ maintained by the mentor.
- Ø The counselor whose primary activity is to monitor the academic progress of the students under their care and to take corrective measures for any aberration in their progress in academic pursuits.
- Ø The students can acquire the uploaded course material from LMS/ERP uploaded by the faculty.

Ø Faculty members while giving the evaluated answer sheets to the students for checking, discuss about the general weakness and improvements to be done in the course. Later on weak students are individually called upon to discuss about the ways to improve their performance by identifying areas of weakness.

Ø These students are counseled by the faculty during the Library/counseling hour and improvement at the end of the semester is also recorded in Mentoring efficacy.

Ø Any discrepancy found in counseling is taken to the HOD.

v **Laboratory Specific**

Ø Students those who are not attending Lab sessions due to Leave, O.D are monitored by the mentors. They are motivated to complete their experiments in the evening within a week.

Ø These students are asked to meet the faculty in person during the extra hours such as Library/Counseling /Break and will be given the importance of Lab Experiments.

Ø Faculty members encourage students to give seminar on the course topics to improve their technical communication and presentation.

Objectives of Mentoring Program:

- To interact with students about their need, problems, difficulties and to address them effectively.
- To mentor students to participate in various technical and cultural events for their overall development.
- The mentor regularly observes the overall growth of the student and provides counselling whenever required.
- To guide the students to ease the transition from school to work.
- To gain access to the professional community.
- To help students develop skills and dispositions such as resilience, perseverance and determination.
- To ensure that they can solve problems and work through challenges as well as take ownership of their learning and decis
- To gain access to the professional community.

Responsibilities of Mentor

- · Professional and Personal Guidance
- · Internships, Industrial Trainings & Industry Readiness
- · Higher studies exposure
- · Guiding in project works
- · Participation in co-curricular and extra-curricular activities. Special attention on students with learning difficulties.
- · Facilitate career exploration and professional growth
- · Developing self-confidence and peer relationships

v **Issues to be discussed with the students by mentor**

- · Personal study timetable
- · Attendance in Theory and Practical classes
- · Economic status
- · Area of Interest
- · Hostel / Food issues
- · Confidence level
- · Personal, Family, social and academic issues.
- · Vision and goals of Career plans

Frequency of Meeting:

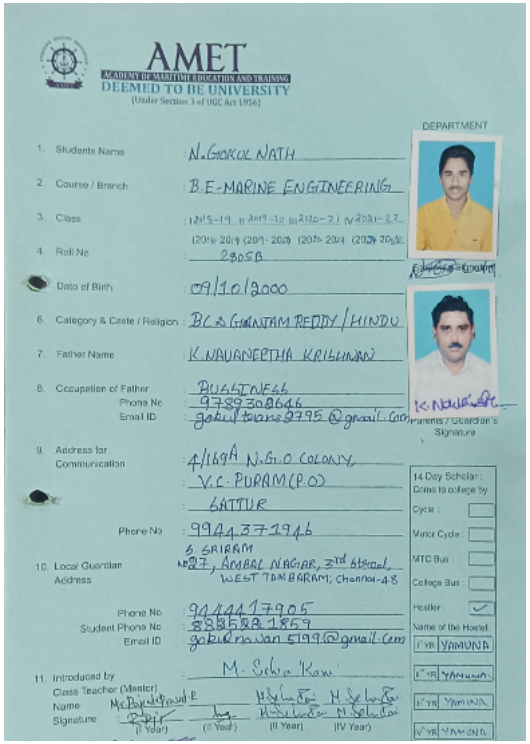
The mentors meet the students every week on Wednesday from 3.20 - 4.10 pm and discuss a range of topics from academics to personal life and other beneficiary topics. The students can meet the mentors on every working day after 4.00pm.

Effective mentoring system is followed in our university to create a healthy relationship between faculty members and students.

Mentor ward meetings are conducted regularly to ensure good academic performance as well as to address personal grievances of the students. Mentors maintain a separate WhatsApp group with their wards and their parents to keep them updated about their academic performance, daily tasks, upcoming technical events organized by premier Institutions, quote of the day etc.

Green Card:

AMET has Green card system to monitor the student's academic progress. This green card contains the academic performance of an individual which includes marks obtained in internal assessment for all the eight semesters and also about the end semester examinations. It also contains the personal information of the student so that the parents will be contacted as and when required. Also, during every parent teacher's meeting this green card will be shown to the parents and discuss with them about their ward's performance in studies. A Sample Green Card is given below in Fig.9.1.(a)



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DEPARTMENT

1. Students Name : N.GOKUL NATH
2. Course / Branch : B.E-MARINE ENGINEERING
3. Class : 2015-19 (2015-2019) II 2019-20 (2019-2020) III 2NLO-21 (2020-2021) IV 2021-22 (2021-2022)
4. Roll No : 23058
5. Date of Birth : 09/10/2000
6. Category & Caste / Religion : BC & GANTAM REDDY / HINDU
7. Father Name : K.NAVANEETHA KRISHNAN
8. Occupation of Father : BUSINESS
Phone No : 9789308646
Email ID : gokulkans2795@gmail.com
Parents / Guardian's Signature
9. Address for Communication : 4/169A N.G.O COLONY,
V.C. PURAM (P.O)
ATTUR
Phone No : 9944371946
10. Local Guardian Address : S. SRIRAM
NO27, AMBAL NAGAR, 2nd Street, WEST TAMBARAM, Chennai-45
Phone No : 9444417905
Student Phone No : 8838588859
Email ID : gokulkrishnan5799@gmail.com
11. Introduced by Class Teacher (Mentor)
Name : M. Selva Kani
Signature : (I Year) (II Year) (III Year) (IV Year)

14 Day Scholar : Come to college by
Cycle :
Motor Cycle :
MTC Bus :
College Bus :
Hostler : ✓
Name of the Hostel
I YR YAMUNA
II YR YAMUNA
III YR YAMUNA
IV YR YAMUNA

Fig.9.1. (a) Sample Green Card

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Department of Marine Engineering

Student's Counselling Report

Name of the Mentor : **Year / Group :**
Designation : **Semester :**

S.No	Roll No	Name of the Student	Counselling date	Remarks	Signature
1					
2					
3					
4					

Fig.9.1. (b) Sample Format of Student Counseling Report

Professional Counselor:

Apart from effective counselling sessions by the faculty members, Our University has a professional Counsellor Ms. Mathew Henah.B., MA, (Psychology), to provide personal and professional counselling for our students. Having more than 20 years of professional experience, associating with the student's community in different roles, she helps students to identify goals and potential solutions to problems which cause emotional turmoil seek to

improve communication and coping skills strengthen self-esteem and promote behavioural change and optimal mental health.

Efficacy of Mentoring System:

Establishment of the above stated mentoring system helps us in the following ways,

1. Enhanced the teaching- learning process to be more student centric
2. Created a positive work environment helped the students learn to take better control of his or her career
3. Provided impartial advice and encouragement to students
4. Developed a supportive relationship between students and staff
5. Assisted with problem solving and Improved self-confidence in students
6. Obtained gradual improvement in the attendance percentage of students
7. Enables to provide individual and personal care to the students with the help of mentors
8. Information gathering and dissemination is easy..

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Mentoring Efficacy

Academic Year / sem : Class :

Name of the Mentor: Date:

S.no	Name of the Student with Register Number	Counseling I (Purpose of Counseling)	Counseling II (Purpose of Counseling along with Follow up Counseling)	Counseling III (Purpose of Counseling along with Follow up Counseling II)	Overall Improvement Through Counseling
1					
2					
3					
4					
5					

Counseling Criteria for Enhancing Student's Participating:

1 Punctuality/class room attendance
2 Performance in end semester exam
3 Dress code, Cleanliness & Obedience
4 Performance in Internal Assessment
5 Motivation towards Higher studies/Entrepreneurship
6 Motivation towards ECA & CCA
7 Motivation towards Internship/ In plant Training
8 Motivation towards Innovation / Projects

Signature of the Mentor

*** Note: This has to be followed along with counseling Book

Fig 9.1. (c). Efficacy of Mentoring System

9.2 Feedback analysis and reward /corrective measures taken, if any (10) Total Marks 10.00

Institute Marks : 10.00

The feedback is collected from the students through online at the end of every semester. Different kinds of feedbacks are received from the stakeholders. They are feedback on curriculum, teaching learning process, faculty and facilities.

Feedback collected for all courses : **YES**
Specify the feedback collection process : **Through software**
Average Percentage of students who participate : **100%.**

Feedback Process:

Methodology being followed for feedback collection, analysis and corrective action taken

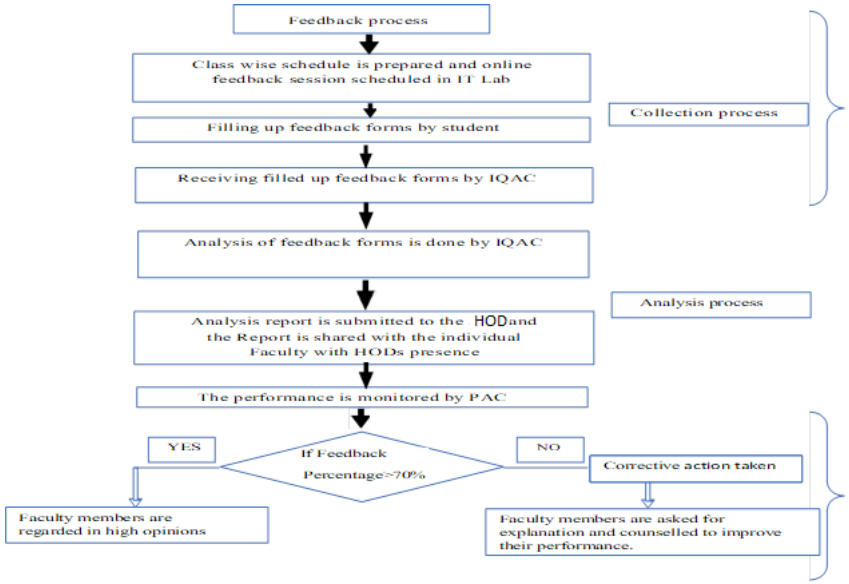

Fig: 9.2. (a) Feedback process methodology

v. **Feedback collection process**

Feedback is collected through an Online. Software with the parameters to be considered, the name of the Faculty handling the subjects for each class is prepared. A class wise schedule is prepared and the same is circulated to all the students in all the Departments. The students of each class go to the laboratories assigned for them and give confidential feedback for each faculty handling classes for them based on a standard questionnaire.

Percentage of students who participated: 100%.

Feedback assessment process

The feedback collected from students is first analyzed by the Internal Quality Assurance cell headed by the IQAC Coordinator.

- The contents of the feedback are shared with each faculty member individually by the Vice Chancellor with the presence of the concerned Head of the Department.
- Performance of each individual faculty is monitored by the Program Assessment Committee and Quality Improvement Committee.

Feedback analysis process

The software is designed that the rating for each parameter is cumulatively calculated for a total of 5 points. Based on the average points accrued for all the questions the faculty performance level is assessed. The performance of the teacher is graded as below:

More than 4.5 points : Excellent

From 4 to 4.4 : Good

From 3.5 to 4 : Average

Below 3.5 : The Teacher is subjected for any corrective measures as decided by Head of the Department.

If the faculty receives good performance feedback from the students, he is appreciated by the Vice Chancellor and HOD in the Department meetings and also rewarded with monitory benefits. If the Faculty receives average or below average performance, he/she gets counseling by the authorities and tend to improve their performances.

Metrics:

- Teaching Methodology
- Communication Skill
- Technical Skill
- Punctuality
- Class control
- Student Evaluation process

Inferred from the metrics:

- Faculty Performance
- Attitude of Faculty
- Course Delivery
- Interactive learning of students
- Interpersonal Skills
- Student satisfaction

Basis of reward:

- Performance is recorded in the Faculty appraisal.
- Performance rating of Faculty through student feedback system is one of the factors in evaluating the annual performance of the Faculty. Based on the annual performance of the Faculty the annual increments are released.

Corrective actions taken:

- The feedback on the teaching practices and methods are assessed with due attention and the reports are sent to the respective HODs. Based on the report, the HOD counsels the faculty members accordingly. The quality of teaching shall be observed periodically by the Head of the Department and the Registrar. Further guidance are given to the faculty members in person.
- The motivation and encouragement of the Head of the Department enables the Faculty to perform better. Explanation from the Faculty will be demanded for the inappropriate result and subsequent action will be processed. Counselling will be given to the concerned faculty by the HOD.

Effectiveness

The improvement of the Faculty performance with respect to parameters is reflected in the subsequent feedback.

Record of corrective action taken

The following necessary corrective actions are initiated for Faculty members having Performance Index less than the university standards:

1. Necessary advice by the Head of the department.
2. Deputing faculty to the Faculty Development Program (FDP).
3. Advise the Faculty through counsellors / Improve the domain knowledge by Subject Experts.

Interactive Feedback:

Student's Council meetings are conducted as and when required by the Vice Chancellor and the Registrar along with the HODs, to share their feedback among the Faculty handling classes and facilities. Student representatives from each year will attend the meeting to give feedback and suggestions regarding academic and co-curricular activities directly. This feedback is then shared with the concerned faculty members for remedial actions.

Department level feedback collection:

Students are invited to express their view on subjects and other grievances in the department level class committee meetings by PAC Committee and the findings are communicated to the HOD for further actions. Apart from this, feedback is collected from all the students for all the subjects as and when required to improve the teaching learning methods and to address grievances of students. A Sample Feedback as shown in Fig.9.2.2

Metrics for Course evaluation:

- The course objectives, content and methods of evaluation are clearly explained at the beginning of the semester.
- Class activities include a variety of methods to hold students, maintain interest in the course and to understand the course materials.
- The assignments and activity based learning help the students understand the course materials.
- The course content and notes/handouts appeared appropriate and well structured, neatly prepared and readily understood.
- The library resources are adequate.

- Timetable, class grouping and classroom information are clearly stated sufficiently in advance.
- Percentage level of understanding that achieved for all the units in a course

Metrics based on which faculty evaluation is made:

- Methodology of teaching
- Interest in the well-being and progress of the student and courses.
- Firm in evaluating the students
- Open mind discussions with the students
- Good presentation and highly Interactive teaching
- Relationship and interaction in and out of the class
- Concern for students attendance
- Timely assignments, quizzes and assessments
- Encouraging students to improve their independent level of exploration
- Clarity in explanation
- Encouraging students to ask questions and giving them appropriate answers
- Competency of faculty
- Punctuality for the classes
- Concern for students discipline and their appearance
- Understanding the concepts

Indices used for measuring quality of teaching and learning:

[5] Strongly Agree

[4] Agree

[3] Neutral

[2] Disagree

[1] Strongly Disagree

Inferred from the metrics:

- Faculty Performance
- Attitude of Faculty
- Course Delivery
- Interactive learning of students
- Interpersonal Skills
- Student satisfaction

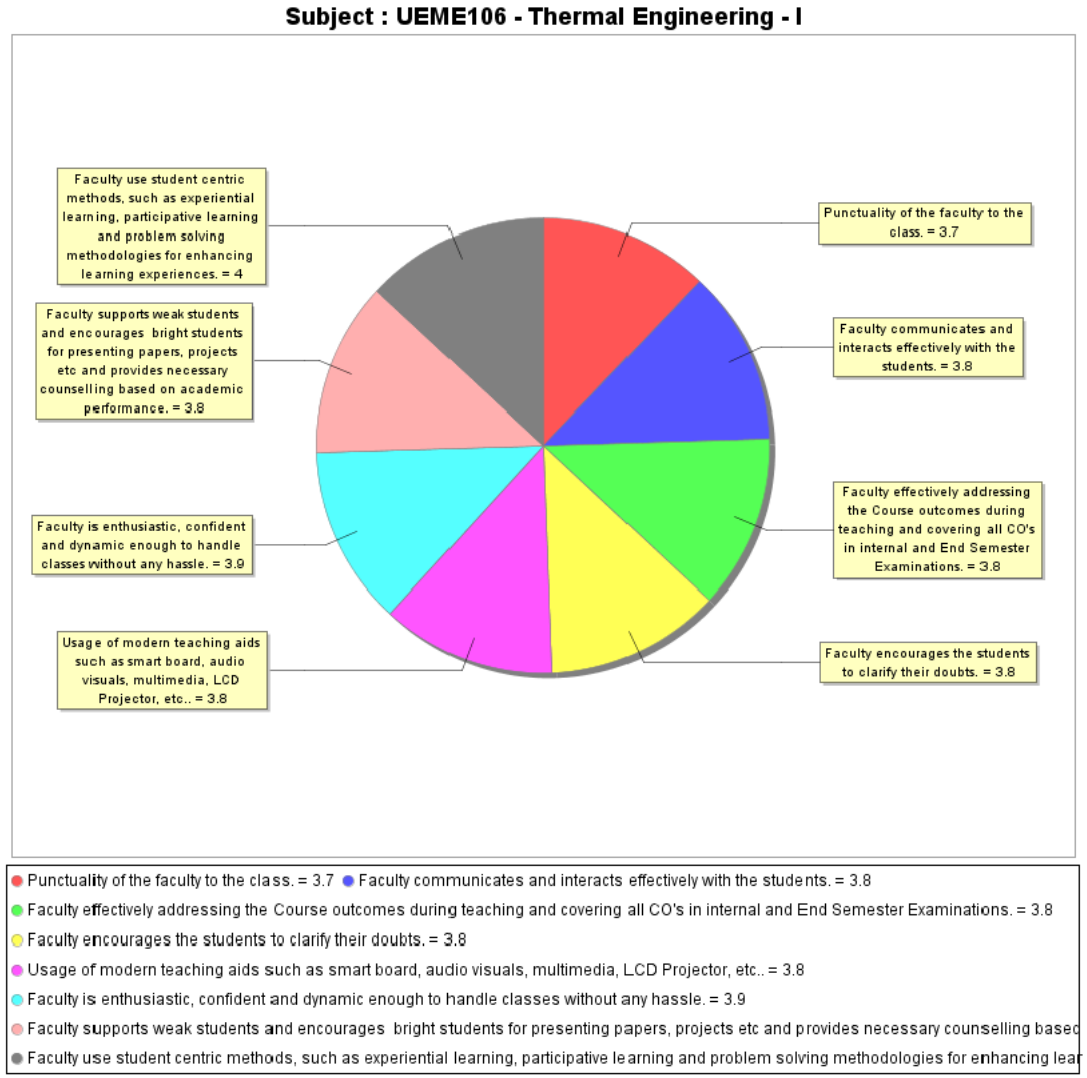

Fig: 9.2. (b) Feedback Analysis of UEME106-Thermal Engineering-I

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FEEDBACK ANALYSIS

Course	B.E. - Marine Engineering - BE(ME)-21
Semester	First
Group Number	6

Faculty - Feedback Analysis - Table

S.No	Subject Code	Subject Name	Faculty	Faculty - Feedback Parameters								Avg
				Punctuality of the faculty to the class.	Faculty communicates and interacts effectively with the students.	Faculty effectively addressing the Course outcomes during teaching and covering all CO's in Internal and End Semester Examinations.	Faculty encourages the students to clarify their doubts.	Usage of modern teaching aids such as smart board, audio visuals, multimedia, LCD Projector, etc..	Faculty is enthusiastic, confident and dynamic enough to handle classes without any hassle.	Faculty supports weak students and encourages bright students for presenting papers, projects etc and provides necessary counselling based on academic performance.	Faculty use student centric methods, such as experiential learning, partidpative learning and problem solving methodologies for enhancing learning experiences.	
1	UEME107	Engineering Chemistry	Dr.K.K.Siva Kumar	4.6	4.6	4.4	4.5	4.3	4.5	4.5	4.5	4.5
2	UEME103	Technical English - I	MRS.U.PUSHPALATHA	4.6	4.6	4.5	4.7	4.5	4.6	4.6	4.7	4.6
3	UEMET01	Placement Technical Training	Visweswaran A	4.3	4.2	4.4	4.3	4.1	4.1	4.2	4.2	4.2
4	UEME101	Engineering Physics - I	DR.S.RAFI AHAMED	4.8	4.7	4.8	4.8	4.6	4.8	4.7	4.7	4.7
5	UEME102	Engineering Mathematics - I	M.SUDHA	4.6	4.5	4.5	4.6	4.2	4.5	4.5	4.5	4.5
6	UEME106	Thermal Engineering - I	MR.R.PRAVEEN KUMAR	3.7	3.8	3.8	3.8	3.8	3.9	3.8	4.0	3.8
7	UEME104	Engineering Mechanics - I	Mr.M.Ramamurthy	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.7	4.8
8	UEME1PE	Engineering Practices Laboratory - I	SAMPATH .K	4.4	4.5	4.4	4.5	4.5	4.5	4.4	4.6	4.5
9	UEME1PC	Thermal Engineering Laboratory	D.KUMARAVEL	4.2	4.2	4.2	4.2	4.2	4.3	4.2	4.3	4.2
10	UEME1PB	Life Saving Laboratory	G.CHANDRASEKHARAN	4.4	4.5	4.4	4.4	4.5	4.5	4.5	4.5	4.5
11	VCLE001	English - Personality Development 1	M.SHOBANA	4.6	4.6	4.7	4.6	4.5	4.6	4.6	4.4	4.6
12	UEME1PA	Engineering Physics Laboratory	DR.S.RAFI AHAMED	4.6	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7
13	UEME1PF	Engineering Graphics Laboratory	Mr.Stalin kesavan	4.1	4.1	4.2	4.3	4.0	4.1	4.0	4.2	4.1
14	UEME1PD	Engineering Chemistry Laboratory	Dr.K.K.Siva Kumar	4.7	4.5	4.7	4.7	4.4	4.5	4.5	4.5	4.6

Fig: 9.2. (c) Feedback Analysis of B.E (Marine Engineering)

Corrective Actions taken based on Feedback:

The teachers who secure a grade less than 3.5 to 4 are counseled by the HOD on how to improve the teaching-learning process. Both study the metrics and the method for effective teaching is charted out for improvement.

In the above feedback analysis the faculty handling ***UEME106-Thermal Engineering*** has scored an overall average of 3.8 but he has a shortcoming in some of the aspects. So that the following faculty was counseled by the Head of the Department and gave him the following suggestions.

• Punctuality to the class (3.7)	Advised the faculty to come 5-minutes before the commencement of class and it was monitored by the class advisor.
• Student Interaction(3.8)	Advised the faculty to conduct the class more interactive.
• Clarification of Doubts(3.8)	Asked the faculty to clarify doubts then and there.

• Subject Knowledge(3.8)	The faculty is encouraged to attend FDP in this subject by subject expert.
• Attitude of faculty(3.8)	Advised the faculty to improve personel bonding with students.

The counseling has a strong positive influence on teacher and in his work. His teaching become more interactive and he comes to class on the time.

Class Committee Meeting:

Each class shall have a Class Committee which is constituted by a Chairperson, Class Counsellors, Faculty members teaching the courses for the classes, and student representatives. Three subsequent meetings are held in a semester at suitable intervals. The Chairperson is required to conduct the meetings and the concern HOD shall address the issues raised by the students and the same shall be brought to the notice of the higher authorities if needed. A format for Minutes of Meeting is given below in the Fig.9.2. (c) .

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Minutes of Class committee meeting – B.E (Marine Engineering)

Date:

Feedback from the students regarding academics are collected orally in the meeting based on the following criteria 1. Quality of teaching 2. Syllabus coverage 3. Slow learner's classes 4. Student interaction 5. Text Books/ Reference materials provided etc.

Sl. No	Name of the Course	Name of the Faculty	Quality of teaching	Text Books/ Reference materials	Student Name	Student Signature

Academic Issues:

1. .....
2. .....
3. .....
4. .....

Non Academic Issues:

1. .....
2. .....
3. .....
4. .....

HOD/Marine

Fig 9.2. (d) Sample Class Committee Meeting for the Marine Department

9.3 Feedback on facilities (5) Total Marks 5.00

Institute Marks : 5.00

The University provides a conducive learning environment to the students with effective support on co-curricular and extracurricular activities to elicit the apparent and latent talents. The students are assisted throughout their course of study in the campus through the Director of Student Affairs, Proctor, Student Union Leader, activity Cells, activity Centres and Committees. Every student in the University campus is given an equal opportunity to participate in various events of their choice. The University takes special care of the SC/ST, minority students. The students are motivated to participate in National / International Conferences/Workshops with financial assistance. Every academic department has a mentoring system to counsel and support students through Green Card System, Student's Resource Centre, Career Development Centre and Remedial Coaching for slow learners. The students are offered various facilities in the University campus such as Student's Scholarship, Student's Insurance, ATM facility inside the campus, Swimming Pool facility, Cafeteria facility, Yoga Centre, Uninterrupted Power Supply Facility for comfortable learning, Internet facility, WIFI facility and well-equipped library facility. The University offers effective coaching to students in shaping their career through soft skills training and career development programs. The University maintains strict discipline in the campus because of the diversity of the student community. Having established as a Deemed to be University under de-novo category, AMET has developed its own unique strategy for students support and progression.

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INTERNAL QUALITY ASSURANCE CELL (IQAC) AMET
STUDENT FEEDBACK ON CURRICULUM, TEACHING-LEARNING PROCESS AND RESOURCES
Academic year:……..

Name of Student (optional):	**Department:**
Programme Name:	**Year & Semester:**

Note: Please give your valuable feedback on curriculum to improve quality of the programme. Select your ranking on the scale of 0 to 4 (where 0 is strongly disagree and 4 is strongly agree) for each of the following parameters.

S.NO.	PARAMETER	Feedback				
		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1.	Punctuality to the class					
2.	Subject Knowledge of the Faculty					
3.	Clarity and Audibility					
4.	Writing Legibility					
5.	Understanding level of the subjects					
6.	Faculty- student interaction					
7.	Syllabus coverage					
8.	Technical assistance to students by providing Question Bank and study materials					
9.	Doubt Clarification					
10.	Class interaction with students promoted					
11.	Students ideas are considered and addressed					
12.	Prescribed text books and reference books are adequate and appropriate					
13.	Value added courses are well structured and effective					
14.	The courses provided by the university supports career guidance and attend competitive examination					
15.	Online courses platform like NPTEL, SWAYAM etc., useful for knowledge enrichment					
16.	AMET library is enriched with adequate facilities					
17.	Information and communication technology tools are effectively used in teaching learning process					
18.	Student support services (sports, recreation, accommodation, transport etc.,) are adequate					
19.	Opportunities available for doing extension activity and community service					
20.	Overall, AMET has very good learning environment					
Remarks if any:						

Signature of the Student (Optional) **Date:……**

Fig: 9.3(a) Sample Student Feedback Teaching Learning Process and Resources

Feedback collection process:

Feedback is collected from the students on the facilities available in the University. Based on the suggestions, actions will be taken to improve the facility and the same is presented to the Management review meeting.

Table 9.3. (a): Details of feedback collection process

Items	Description
Feedback collected on all facilities provided by the University	YES
Feedback collection process	Computerized
Feedback received	IQAC
Frequency of feedback collection	Once in an academic year
Metrics used for calculation	5-Excellent, 4-Very good, 3-Good 2-Satisfactory ,1-Below average
Purpose of comments	For improving the quality of facilities.

Feedback analysis process:

Feedback is collected from the Final year students on the facilities available in the University such as class room, infrastructure, library, labs, canteen, playground, internet facility, medical facility etc. The feedback is analysed by IQAC and the necessary corrective measures are implemented after discussions with the authorities.

Table. 9.3. (b) Analysis of Feedback on Facilities

Particulars	*Attributes*	Average
Assessment of Learning Environment		
Learning Environment	Standard of class room facilities	3.73
	Lighting and Ventilation of Classrooms.	
	Quality of teaching aids	
	Toilet Facilities	
	Availability of drinking water	
Assessment of Infrastructure Facilities		
Library	Adequacy of books	4.09
	Library arrangements (Reading room facilities, adequacy of journals, books stacking & identification)	
Recreational Facilities	Adequacy	3.62
	Encouragement for sports	
	Facilities for Extra-Curricular Activities.	
Swimming pool	Cleanliness	3.65
	Arrangements (Availability of adequate life jackets, etc.,)	
Medical Facilities	Regular hours	3.39
	After hours	

Particulars	*Attributes*	Average
Canteen	Quality of food/ Quality of drinking water	3.72
	Adhering to Menu/ Adhering to scheduled time	
	Ventilation/Dining Seat arrangements	
	Hygiene/ Cleanliness of staff	
	Wash area	
Hostel Facilities	Quality of cabins	3.84
	Cabin ventilation	
	Toilet/ Bathroom/ Wash basins – Cleanliness	
	Availability of water	
	Availability of drinking water	
	Availability & Internet facilities	
	Facilities for Sports & Entertainments at Hostel	
Transport Facilities	Timeliness	3.74
	Safety	
	Condition of the Vehicles	

Action Taken for Medical Facility:

- **Dr. Vijayalakshmi,** a full time Doctor is appointed in the University. She is available on all working days from morning 8:00 A.M to evening 6:00 P.M.
- From evening 6:00 P.M to morning 8:00 A.M Duty Doctor is visiting our campus and is supported by Chettinad Hospitals at any emergency situation.
- Well trained and a qualified Nurse is available 24X7.
- Ambulance with first aid facility is available 24X7. Complete care is provided to the students with fully equipped campus clinic.

Feedback received from the final year students to gather their suggestions on the various facilities provided to them in their four-year degree program. Recommendations and Suggestions are suitably incorporated for the development of next batch students. A sample feedback analysis chart is shown below in Fig. 9.3.2.

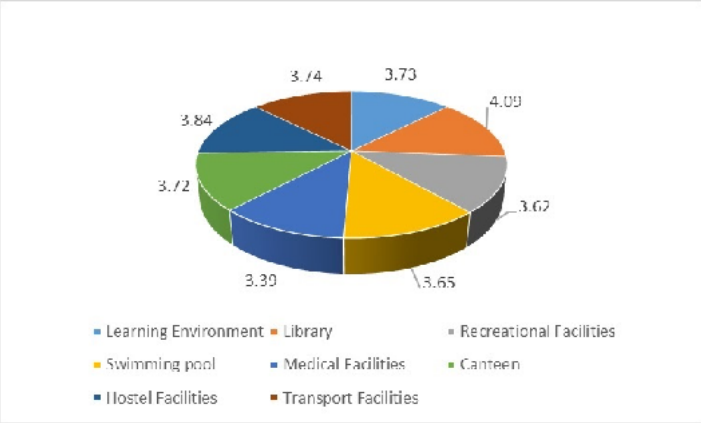


Fig.9.3(b). Feedback analysis

Feedback analysis and Corrective measures taken on facilities:

Feedback obtained from the students, alumni, industrial experts, parents are analysed and the outcome is used for enriching the system.

- Value added courses and contents beyond the syllabus are conducted on the basis of feedback from stakeholders for the betterment of the students.
- The transport coordinator takes care of the facilities related to transport.
- The Hostel facilities are improved by Proctor and Hostel Warden with the help of concerned authorities based on the feedback.
- Canteen facilities are improved and maintained with high hygiene and quality of food.
- Medical Facilities are improved and maintained with high quality of medicines.

9.4 Self-Learning (5) Total Marks 5.00

Institute Marks : 5.00

Scope of Self Learning:

- Web based teaching and learning (teaching a course online through My CAMU)
- Learning through MOOCs, NPTEL, edX, Coursera, Webinars, YouTube etc
- Library and Digital Library
- CDs, Videos and Digital books
- Learning activities around collaborative projects (Project Based Learning)
- Learning around case descriptions (Case Study)
- Tutorials/Assignments/ Seminars/ Activity based learning
- Club activities
- Adapting to industrial needs through in plant training and industrial visits. Acquiring managerial skills and information through symposiums conducted annually.
- Participation in activities through Professional bodies, EDC, Innovation and Incubation cell.

Web based learning	The university has created Internet facility with 1000 Mbps (BSNL), 100MBps (TIC/Fibre) leased line and 1000 computer terminals facility to promote and motivate students to self-learning. Various sources of information, media and materials such as texts, images, Video integrate as self- learning content for the students.
Library/Digital Library	Availability of course material on intranet, digital library facility, availability of video lectures in CD form as well as captured videos through Lecture Capture System. LCD projectors for presentations have been facilitated by the University. University library equips students with learning skills and latest subject knowledge. Availability of NPTEL Videos and books E-Shodh Sindhu
Professional Bodies	Joining a professional association like IEEE, IEI, SAE, MTS etc. gives all the valuable information and resources to the students for the career enhancement and self-learning. Activities conducted under these professional chapters give good learning experiences
Club activities	Various club activities are organized to enhance team work and inter-personal skills of the students
Tutorials/Assignments/activity based learning	It enables students to go through the topics in a more elaborate manner in order to explore the academic topic and enhances higher order thinking.

Resources for Self-Learning:

Every week an hour in the time table is provided as Library hour and students are requested to be in the library under the supervision of a faculty member for self-learning. Besides regular tutorial classes to enrich curriculum, additional topics/courses are designed as content beyond syllabus to motivate the students towards new engineering and technology fields. Special laboratories under centre of excellence, web based and multimedia learning are the other facilities established for students to enhance them for sophisticated self-learning. The below flowchart Fig.9.4.1will explain about the various modes, availability of using the resources for self-learning along with its efficacy

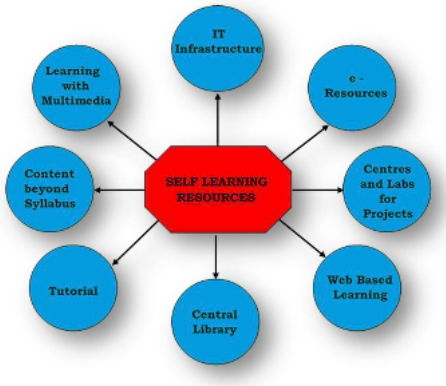


Fig. 9.4. (a) Resources of Self learning

Central Library:

The Central Library has been functioning in a separate building and the total area of the library is 2936.38 Sq.m.

- Total No. of Books : 103535
- Total No. of Titles : 19444
- Total No. of Print Journal : 110
- Total No. of E-Journal : 40934
- Total No. of E-Books : 206784
- Total No. of database : 4
- Total No. of Back Volumes : 2461
- NPTEL Video and web courses : 36802
- SWAYAM PRABHA32 DTH Channels of High Quality Educational Programs
- Well protected with fire alarms and CCTV security systems.
- Separate Audio-Visual Section
- Wi-Fi enabled with library building
- Equipped with reading halls in two floors with reference section
- Organization of Book Review / Book Talk Sessions
- Organization of Book Exhibitions/Displays of new books.
- Proper system of obtaining, analysis and action pertaining to feedback from the Users of library services.

Users can submit their suggestions/grievances through library web Portal which are forwarded to the Library Committee for necessary action. Users can also submit their suggestions/ grievances through general interaction, making an application, and through e-mail.

E-Journals:

- IEEE : 205 e-Journals + Back file to 1998
- J-GATE Engineering : 35550 e-journals
- EBSCO : 1079 e-journals
- DELNET E-JOURNALS : 4100 e-journals

USE OF PLASMA TV

As an awareness the events of AMET are displayed through plasma TV. Power point slides denoting the various resources available in the library are displayed to enlight the user community.

Web OPAC (Online Public Access Catalogue)

In-house resource list can be accessed through website of AMET. Central Library has online access facility to search the availability of the required resources for the user community. The search option is unique and can be made through Author-wise, Title-wise, Subject-wise indexes using keywords and can be accessed from on and off the campus. The advanced search is provided with a more specific search for a title with Boolean operators.

ACCESS CARDS

AMET provides Identity card with Barcode Technology, for all students and staff members, which can be utilized for registering GATE Entry as well as for borrowing the library resources

Facilities / Value Added Services:

In order to meet the contemporary needs of the library users, the Central Library offers the following facilities and value-added services through Information and Communication Technologies (ICT).

Information and Communication Technology (ICT)

Preamble:

The objective of the Network and system administration is to Plan and implement the ICT (Information and Communication Technology) in AMET. The following infrastructure is implemented in order to enable the ICT.

Objective:

1. Desktops to be provided to the department staffs
2. High speed networking of the systems
3. Internet facilities for the staffs
4. Mail IDs for the staffs
5. Data centre architecture implementation
6. Security of the data
7. Firewall configuration and implementation
8. Wireless Internet access for the cadets (24*7)

9. Wireless access for top management
10. Content filtering for the internet
11. Providing teaching aids
12. Video conferencing facility
13. NPTEL
14. SMART CLASS ROOMS

Progress Planned:

- Planning to setup LAB and provide branded desktops to Staffs
- Planning to provide data centre to deploy servers and switches
- Planning to provide high speed internet line
- Provide dedicated internet with Wi-Fi for hostels
- Provide High speed connectivity with OFC for different blocks
- Implement domain controller with DHCP, DNS and an additional domain controller

Progress executed:

- Planning to setup LAB and provide branded desktops to Staffs-completed
- Planning to provide data centre to deploy servers and switches -completed
- Planning to provide high speed internet line-BSNL and TATA high speed provided
- Provide dedicated internet with Wi-Fi for hostels –Dedicated line for hostels
- Provide High speed connectivity with OFC for different blocks- Fiber connectivity provided
- Implement domain controller with DHCP, DNS and additional domain Controller-Implemented

Network and system administration activities

The main function of the Network and system administration department is to ensure that the following facilities are provided to staffs and students.

- The staffs are given desktops with Internet facility
- Email IDs are provided to teaching and non-teaching staffs on need basis.
- Maintenance of data center with Switches and Servers.
- The Entire campus is networked through OFC cabling with redundancy
- The departments are provided with sufficient Laptops and Projectors for teaching purpose
- Helpdesk management
- On need basis the teaching halls are provided with Smart class rooms
- SMS are sent to staffs and parents
- Backup space provided to departments in a server and required credentials are given to the staffs to ensure there is no single point failures
- Internet facility for the staffs with redundancy
- The Entire hostel is provided with Ruckus WIFI access points with dedicated leased line. The maintenance of the same with intelligent wireless access controller. Ensure that 24*7 Wireless Internet access is provided to all the students
- Installation and maintenance of Video conferencing equipment
- Installation and administration of Domain controller, Additional Domain controller, Configuration of Dynamic Host Configuration Server, Domain Name server
- Preventive maintenance of the systems on monthly basis
- Palo Alto Firewall administration and content filtering, load balancing between TATA and BSNL Leased line
- Installation and management of Surveillance cameras
- Maintenance of hardware and software assets
- Thin Clients in the digital Library for Internet access

Library Web Portal:

Library Portal is an interface to the Library resources and services to access e-question bank. Open source e-journals and magazines, open source e-books, e-newspapers etc., are also made available. Link: https://ametlibrary.wordpress.com

Digital Knowledge Centre:

Library has a separate section for digital library, which consists of 50 computer systems with an internet speed of 1 GBPS of National Knowledge Network and 100 Mbps of Tata Communications. Access of Internet in Digital Knowledge Centre enhances the facility to explore the electronic databases such as DELNET E-Journals and E-books subscribed by the Central Library.

Learning beyond Syllabus:

Content beyond syllabus is taught by each and every Faculty and is made available in the AMET LMS portal. Video conferencing lectures are organised by various Departments on content beyond the syllabus to get updated with the latest technology. The materials for content beyond syllabus, video lectures prepared by the Faculty are made available in You Tube Channels and the AMET website. The viva presentation made by Research Scholars, PG students is also available in the AMET LMS portal/My CAMU platform.

Credit allocation/ Self Study courses:

As per the AMET CBCS regulations 2018, students are permitted to earn maximum of six credits through online courses/self-study courses with the approval of Dean Academic and the Head of the Department. Online courses completed with certificates issued by recognized agencies will be considered for the credit allocation as given ,

a) 4 weeks course = 1 credit b) 8 weeks course = 2credit c)12 weeks course = 3 credit

Webinars/ Online Workshops:

AMET has the practice of organising many training programs for the students and the Faculty. Various Departments have organized many webinars on Intellectual Property Rights Pedagogical Initiatives and Outcome based Education etc during the lock down period.

MOOC/NPTEL/ Coursera Certification course:

Each Faculty member and student is informed to register for at least one online course in platforms such as Coursera, Edx and NPTEL, etc. per year. This enables them to enrich their subject knowledge with current trends, and also to equip themselves with multi-disciplinary domain knowledge.

National Program on Technology Enhanced Learning (NPTEL), funded by Ministry of Human Resource Development (MHRD), Government of India provides E-learning through online video courses in Engineering, Science and Humanities and Management streams. The mission of NPTEL is to enhance the quality of engineering education in the country by providing free online courseware. The collection consists of 31780 video courses.

Table.9.4(a) Student participated in SWAYAM

S.No.	SWAYAM DETAILS	2019-20 (ODD)	2019-20 (EVEN)	2020-21 (ODD)	2020-21 (EVEN)	2021-22 (ODD)	2021-22 (EVEN)	2022-23 (ODD)	2022-23 (EVEN)
1	Students Registered in SWAYAM courses	149	250	-	1	-	4	-	440
2	Students appeared in examination for SWAYAM courses	6	7	-	1	-	4	-	440
3	No of students passed in SWAYAM courses	3	7	-	1	-	4	-	Yet to attend

Seminar by Students on Innovative Topics:

Students give extramural lecture once in a week on any innovative topic of their own interest in front of all the students to demonstrate their communication and presentation skills. Students who presents extramural lecture are appreciated with certificates of participation by the Departments.

9.5 Career Guidance, Training, Placement (10) Total Marks 10.00

Institute Marks : 10.00

Career Guidance and Training:

The University has a separate cell namely “Centre for Career Development” to guide the students to choose their right career. Career guidance provides a substantial understanding about the career that the student is considering or needs help in choosing the right career. This is useful because the students might not have an overall knowledge of careers and the kind of expectation that is put by employers on the incumbents who are opting for that career. To understand their own strengths and weaknesses and know what careers they would be best suited for, and how to pursue them, our University has a Centre for Career Guidance cell for providing Career guidance and skill development trainings. The Centre organizes various training programs and activities for the students of all the Departments.

Table.9.5.(a) Activities conducted by the Centre for Career Development

No. of placement programme conducted	Academic year- 2019-20	Academic year- 2020-21	Academic year- 2021-22
	10	7	9

Table.9.5(b).Activities conducted by the Centre for Career Development (samples)

S.No	Name of the capacity development and skills enhancement schemes	Year	Number of students enrolled	Name of the agencies/consultants involved with contact details (if any)
1	Communication Training-I	2021-2022	900	CCPD
2	Communication Training-II	2021-2022	900	CCPD
3	English - Personality Development - I	2021-22	218	CCPD
4	Personality Development Program –II	2021-22	218	CCPD
5	English - Personality Development - III	2021-22	221	CCPD
6	Personality Development Program – IV	2021-22	221	CCPD
7	Scale Up - Personality Development - I	2021-22	258	CCPD
8	Scale up – Personality Development Program –II	2021-22	258	CCPD
9	Scale up – Personality Development Program –III	2021-22	233	CCPD

Placement Training:

The Placement Cell is headed by the Placement Director. The Placement Department nominates a placement coordinator for every department of the University. The placement coordinators assist the placement cell by inviting the companies to the University and also prepare the students for the recruitment process in an efficient manner. The following placement services are provided to the students:

- Personality Development Program
- Communication skill development and soft skills Training
- Technical Training
- Value Added Training Programme
- Group Discussion
- Mock Interview

Pre-Placement and Placement Trainings are offered to the students by the Placement Cell to face interviews confidently and secure the job. Here students are guided in the following activities:

- Resume scrutiny
- Public speaking
- Written test
- Group discussion

- Personal interview
- Learning corporate culture
- Team Building etc.

The pre-placement training is given to the students on a regular basis throughout the academic year and also placement training is given before the arrival of a company to the University campus.

Table 9.5 (c) Details of Campus Placement

Name of the Program	Name of the Department	Total no of Students	No of students placed	No of Companies Visited AMET	No. of Students turned Entrepreneurs	No. of Students admitted to Higher studies
Academic Year 2019-2020						
BE (Marine Engg)	Marine Engineering	200	188	31	-	
BE (NA&OE)	Naval Architecture &Offshore Engineering	86	65	13	-	6
BE(Petroleum Engg)	Petroleum Engineering	68	46	12	-	
BE (Mechanical Engg)	Mechanical Engineering	82	34	11	-	32
BE (EEE Marine)	Electrical and Electronics Engineering	29	15	4	-	3
MBA(Shipping and Logistics Management)	Master of Business Administration	62	41	25	-	12
Academic Year 2020-2021						
BE (Marine Engg)	Marine Engineering	248	227	33	-	-
BE(NA&OE)	Naval Architecture &Offshore Engineering	72	58	15	-	5
BE(Petroleum Engg)	Petroleum Engineering	50	28	7	-	-
BE (Mechanical Engg)	Mechanical Engineering	69	44	9	-	-
BE(EEE Marine)	Electrical and Electronics Engineering	47	5	3	-	37
MBA(Shipping and Logistics Management)	Master of Business Administration	62	51	23	-	2
Academic Year 2021-2022						
BE (Marine Engg)	Marine Engineering	233	210	28	-	-
BE(NA&OE)	Naval Architecture &Offshore Engineering	50	40	15	1	2
BE(Petroleum Engg)	Petroleum Engineering	21	13	4	-	-
BE (Mechanical Engg)	Mechanical Engineering	70	38	9	-	-
BE(EEE Marine)	Electrical and Electronics Engineering	21	9	4	-	-
MBA(Shipping and Logistics Management)	Master of Business Administration	62	52	21	-	-

Centre for Higher Studies:

Centre for Higher Studies is constituted exclusively to cater to the needs of the students. Students are encouraged to write competitive exams. All the Departments offer coaching classes for Competitive Examinations such as GATE, IELTS, GMAT, GRE, TOEFL etc. The IELTS Centre has been established in AMET. This centre provides the orientation and coaching for examinations like IELTS and TOEFL.

AMET Centre for IELTS:

The AMET Centre for IELTS aims at enrichment of the language and providing in depth knowledge in communicative English and the fervour to appreciate the language in its originality. The course is designed for the students who come from different cultures and speak different languages. English for International Communication course helps the students with the necessary skills, knowledge and understanding of the language which enables them to use and apply English in everyday life effectively.

The students from various streams and disciplines attended and found the significance of IELTS to be of utmost importance. The students of all branches of Engineering, Nautical Science, HND (NS) liked International English Language Testing System to a great extent.

The students knew the need and importance of English language and understood well the benefits thereof. These students were very much motivated, decided to take up the IELTS test. They understood the need of assessment of their standard of English language with respect to listening, speaking, reading and writing skills.

Students were trained by Mr. Johnson, Mrs. Maria and Mr.T. P. Rahmathullah. The students found the training much more beneficial and they were ready to undergo good English communication training through IELTS.

The students understood that his course was initiated with an objective to enable them to be expert in all the four aspects of communication namely LSRW, Listening Speaking, Reading and Writing.

Precisely speaking the students who were trained in International Schools, Army Schools, and International Boards found the training quite easy and gave importance for deep knowledge of grammar.

Needless to say that the Students did not have an English environment at all they expressed their need for deep knowledge of English grammar. They were given assurance that grammar will also be taught with utmost importance.

Centre for Institute Industry Interaction (CIII):

The institution makes all the efforts to connect the industry with the institute by organizing visits, guest lectures, inviting the industry personnel as chief guests, arranging faculty visits to the industry, tie-up with bodies such as CIII, ICTACT, etc., and signing of MOUs with industries. The institution invariably strains to connect the academic earn and Industrial needs through several activities and ensures the industrial readiness of students. The industry interaction is headed by the experienced.

Value Added Programmes:

The students are trained with recent technologies in various courses through Value Added Programs. Value added and audit courses by the internal faculty members and Value-added certificate programs from collaborative organizations in relevant fields are provided by the University for making the student industry ready candidates.

Table.9.5 (d). Value added conducted for students detail

No. of Value Added programme conducted	Academic year- 2019-20	Academic year- 2020-21	Academic year- 2021-22
	27	27	31

Table. 9.5. (e) Shows the Value added courses conducted in AMET(sample)

S.no	Name of the value added courses (with 30 or more contact hours)offered	Course Code (if any)	Duration of course	No. of students benefited
1	BASIC SAFETY TRAINING (BST)	VCME001	30 HOURS	518
2	SECURITY TRAINING FOR SEA FARERES WITH DESIGNATED SECURITY DUTIES (STSDSD)	VCME008	30 HOURS	518
3	ECDIS Simulation	VCNS016	30 HOURS	355
4	Steering simulation	VCNS017	30 HOURS	308
5	RADAR Simulation	VCNS018	30 HOURS	12
6	Electrical machines and control	VCEE003	30 HOURS	22
7	Maintenance of electrical apparatus	VCEE015	30 HOURS	22
8	Simulation of electrical circuit using matlab	VCEE014	30 HOURS	9

9	Plc, scada and vfd for automation	VCEE013	30 HOURS	22
10	Introduction to Internet of things	VCMC015	30 HOURS	41
11	Industrial Automation	VCMC016	30 HOURS	70
12	FEA-ANSYS	VCMC017	30 HOURS	70
13	IIOT and its protocol	VCMC018	30 HOURS	8
14	IOT protocol and Architecture	VCMC019	30 HOURS	41
15	PLC and SCADA in Automation	VCMC020	30 HOURS	8
16	ANALYSIS and Simulation using ANSYS	VCMC021	30 HOURS	41
17	Modelling and Simulation in Upstream Oil and Gas	VCPE016	30 HOURS	24
18	Export and Import Documentation	VCBS015	30 HOURS	62
19	Customs Procedure	VCBS016	30 HOURS	49
20	Food Safety Training and Certification(FOSTAC)-Level 2	VCFT003	30 HOURS	8
21	Design and development of basic robots	VCEE011	30 HOURS	9
22	Application of FRP in Marine Industry	VCNA013		50
23	Advanced welding Technology in Shipbuilding	VCNA012	30 HOURS	50
24	GIS Software and Applications	VCMN010	30 HOURS	30
25	Modern Mine Survey by using Lidar and Drone Technology	VCMN011	30 HOURS	27
26	GEOVIA SURPAC (Mining Software)	VCMN009	30 HOURS	24
27	Fire Prevention and Fire Fighting (FPFF)	VCME021	30 HOURS	247
28	Personal Safety and Social Responsibilities (PSSR)	VCME022	30 HOURS	247
29	Fundamentals of CAD Modelling	VCME023	30 HOURS	216
30	CAD Modelling using AutoCAD	VCME024	30 HOURS	216
31	ISO 9001:2015	VCME025	30 HOURS	216

Memorandum of Understanding (MOU):

With a view to impart training and inculcate technical knowledge through hands on training / real time situations to the students, 140 Memoranda of Understanding have been signed with industries. The faculty members and students regularly undergo training in these companies. A MOU has been signed with Asia Pacific University of Technology Innovation, Malaysia for interacting with overseas experts.

In-plant Training

In-plant training offers a brief period of time in an industry to gain the knowledge of the work culture in industries. It is beneficial for students to gain knowledge when they work in the company after graduation. They will be familiar with the industry and help them to work better in the surroundings. The alumni coordinator constantly interacts with alumni those who are working in the industries and they also support for their junior’s internship.

Industrial Visit

The department organizes industrial visits for students once in a semester to relevant organizations/companies to enable the students to experience the practical implementation of theoretical knowledge in the real world. This gives them an insight of exposure to the industrial environment and the work culture ethics in Industries.

9.6 Entrepreneurship Cell Total Marks 5.00

Institute Marks : 5.00

The Entrepreneurship Development Cell (EDC) continuously guide and support students to participate in various activities and motivates them to become entrepreneurs. The EDC of AMET Deemed to be University was enrolled under the Academic Innovation and Entrepreneurship Development Programme (AIEDP) of Entrepreneurship Development and Innovation Institute – Tamil Nadu (EDII-TN) with effect from 26/10/2018. AMET Deemed to be University is attached as a SPOC institution with Centre for Entrepreneurship Development - CED ANNA University. Based on this, EDC students attend programmes organised by CED ANNA University. EDC organizes Entrepreneurship Awareness Camps sponsored by National Science & Technology Entrepreneurship Development Board (NSTEDB) and Department of Science & Technology (DST-NIMAT), National Entrepreneurship development centre (NEDC), National Institute of Entrepreneurship and Small Business Development (NIESBUD).

Funding from MSME – Development Centre under DC – MSME:

As the innovation ecosystem was development over a period with various activities among the students and faculty, the University is approved as the Host Institution to carry out Business Incubation (HI/ BI) from DC MSME – Micro, Small, Medium, Enterprises, New Delhi, and Government of India and is entitled to undertake innovative and entrepreneurial development activities. Under this scheme AMET is approved to undertake projects and nurture them to become start-ups by incubating them in our campus. This scheme provides Rs.3.5 crore as financial assistance, which includes up to 15 Lakh for nurturing10 ideas (Rs.15lac x 10 ideas = 1.5 crores) to HI, Rs. 1.00 crore. As Capital Support to HI for Plant and Machines, Rs. 1.00 crore as SEED capital support to deserving idea, awareness and workshop programme.

The Incubation centre is approved as Design Centres under Incubation Scheme of DC MSME with effect from April 2020 and the centre have already tapped the opportunity, by submitting various proposals to organise awareness programmes, workshops, seminars and student design projects to a tune of Rs.3.11 Crore. This is approved under the MSME Credit Link Capital Subsidy – Technology Up Gradation Scheme (CLCS-TUS). The AMET Innovation and Incubation centre facility is equipped to accommodate incubates and have accommodated 8 external incubates over a period since 2016. Under MSME scheme 15 project ideas and Business proposal from students/ faculty are submitted and are awaiting approval in addition to 4 projects submitted by external members.

Institution Innovation Council (IIC):

In the academic year 2019-20 we have 24 faculty members and 135 student members enrolled in IIC and have so far received 2 STAR recognition for the quarter 1 and quarter 2 performance indexes with a maximum cumulative score of 37.45/50. Students of AMET participated in SMART INDIA HACKATHON (SIH -2019) organised by MHRD innovation cell (MIC). 44 team (5-software, 39-hardware) participated by submitting innovative ideas and 4 teams were selected for round 2 video presentation of the working model. 15 innovative problem-solving ideas were submitted by the students for SIH 2020. The University organised an internal Hackathon as per the norms and submitted 3- software ideas and 2-hardware ideas after internal scrutiny. In the academic year 2021-22 AMET secured a 3 star grade in IIC.

Table. 9.6. (a) Student's participation in Smart India Hackathon

S. No	Name of the Student	Prize/ Participation	Title	Event place
1	Yedida Venkata Sesha Sai Lavanya	Participation	Smart India Hackthon (SIH) 2022	Chandigarh Group of Colleges, Chandigarh
2	Anoop George	Participation	Smart India Hackthon (SIH) 2022	Chandigarh Group of Colleges, Chandigarh
3	Mohammed Arham Shariff	Participation	Smart India Hackthon (SIH) 2022	Chandigarh Group of Colleges, Chandigarh
4	Sanjana J T	Participation	Smart India Hackthon (SIH) 2022	Chandigarh Group of Colleges, Chandigarh
5	Chandana Saran Venkata Amarnath Swamy	Participation	Smart India Hackthon (SIH) 2022	Chandigarh Group of Colleges, Chandigarh

Table. 9.6. (b) Details of Programs organised on innovation/entrepreneurship

Academic Year	Name of the workshop/ seminar	Date

2021-22	Idea Ignition Day 2022	24.05.2022
2021-22	Workshop on Prototype/Process Design and Development- Prototyping	13.05.2022
2021-22	Internal Hackathon 2022	22.03.2022
2021-22	Webinar series on Motivational Story of an Successful Entrepreneur – “Turn your Struggles into Stepping Stones”	02.03.2022
2021-22	Webinar series on Motivational Story of an Successful Entrepreneur	16.02.2022
2021-22	International Day of Women and Girls in Science	11.02.2022
2021-22	Expert Talk on “Process of Innovation Development & Technology Readiness Level (TRL)" & "Commercialization of Lab Technologies & Tech-Transfer.	28.01.2022
2021-22	Webinar on “Achieving Problem – Solution Fit & Product – Market Fit”	25.01.2022

Table. 9.6. (d) List of Companies incubated in AMET (samples)

S.No	Company	Name of Founder / SPOC	Designation
1	Dr.Aaliya’s Easylife Healthcare Pvt. Ltd	Dr.Aaliya Firdose	Founder /Director
2	Tems Tech Solutions	Mr.P Bhuvaneshwaran	Manager
3	Healthathon Tech Pvt Ltd	Mr. Salil Sahu	Founder & CEO
4	Wellness Mandala Pvt. Ltd.	Mr. Rakesh Sarin	Founder & Chairman
5	Polowings Healthtech Pvt. Ltd.	Mr. Mannat S	Founder & CEO
6	Renergizr Industries Pvt. Ltd.	Mr. Himanshu Gupta	Founder & CEO

7	Wenexcorp Pvt. Ltd.	Mr. Saurav Chatterjee	Founder & CEO

Table. 9.6. (e) List of student start- up registered under UDHYOG ADHAR (samples)

S.No	Company	Name of Founder / SPOC	UDYAM
1	Anoria Syscoms	Dr D Sivakumar	UDYAM-TN-08-0053819
2	Sgnar Consumer Products Pvt. Ltd	Dr.S.Ranganathan	UDYAM-TN-08-0054317
3	Rocks Industries	Mr.S Vishnu	UDYAM-TN-24-0060566
4	Tatolic Energy Systems	Mr.Zuben Kalyan	UDYAM-JH-06-0028250
5	Trekcodes	Mr.R S Lakshmi Balaji	UDYAM-TN-24-0062527
6	Sagaram Herbal Enterprises	Ms.Shanthi Pandurangan	UDYAM-TN-02-0023597
7	Green Prasada Food Pvt Ltd	Ms.Ponmani Swaminathan	UDYAM-TN-02-0189233
8	Go Green Uni Cycle	Dr. Duraimutharasan	UDYAM-TN-02-0190976

9.7 Co-curricular and Extra-curricular Activities Total Marks 10.00

Institute Marks : 10.00

Co-Curricular Activities:

AMET motivates the students to take part in various co-curricular activities. Students are actively participating in the co-curricular activities such as symposia, conferences, project expo, technical events and competitions conducted by various institutions. AMET encourages the students to take part in co-curricular activities along with their regular academic commitments to keep them exposed to recent developments in the field of interest and to share their experiences among peer groups. The students are encouraged to associate themselves with the technical societies like ISTE, IEEE, SAE, MTS, etc., to present their work in conferences and to publish in reputed National and International Journals. Participation in workshops and design contests is encouraged to sharpen their knowledge. Each department has separate Technical Association through which students organize National and International level technical events under the supervision of faculty members every year.

Air-conditioned auditorium and seminar hall for organizing the guest lecture, conference, symposia, Workshops etc are available in the campus.

Table. 9.7. (a) Participation of Students in Workshop/Seminar/Symposium/Other training Program

No. of students participated Workshop/Seminar/Symposium	Academic year- 2019-20	Academic year- 2020-21	Academic year- 2021-22
	25	30	40

Participation of Students in Workshop/Seminar/Symposium/Other training Program (samples)

S.NO	Name Of Students	NAME OF EVENTS	MONTH	YEAR
1	Murari Kumar	Symposium	May	2022
2	Jai Vishnu	Internship program on boilers	June	2021
3	P Jai Vishnu	Webinar	October	2021
4	Shivam Kumar Singh	Feasibility of Deep Learning	October	2021
5	P Jai Vishnu	One Day National Webinar	June	2021
6	Shivam Kumar Singh	Data Privacy and Protection	June	2021

Table.9.7.(c).Participation of students in National/ International Conferences

No. of students participated National /International Conference	Academic year- 2019-20	Academic year- 2020-21	Academic year- 2021-22
	18	22	240

Table. 9.7. (d) Participation of students in National/ International Conferences (samples)

S. No	Name of the Student	Prize/ Participation	Title of paper	Name of conference
1	Afil Mohammed Ismail	Participation	Electromagnetic Automatic Mooring System	International Virtual Conference on “New Technologies for Greener Shipping”
2	Aditya Gautam	Participation	Fabrication Of Saltwater Purifier For Marine Applications	International Virtual Conference on “New Technologies for Greener Shipping”

3	Ankit Jha	Participation	Development Of A Public Address System For Maritime Applications	International Virtual Conference on “New Technologies for Greener Shipping”
4	Chetna Saini	Participation	Controlled Pitch Propelle	International Virtual Conference on “New Technologies for Greener Shipping”
5	Arunachallam S G	Participation	Impressed Current Cathodic Protection	International Virtual Conference on “New Technologies for Greener Shipping”

Extra-Curricular Activities:

Sports and Games being an integral part of AMETs total educational programme, the following Indoor and Outdoor facilities are developed and maintained for the students.

Table 9.7. (e) Sports Facilities in AMET

S.No	Details	Location	Area in Sq. Mtrs
Outdoor			
1.	Multi-Purpose 200 Mtrs Mud Track / Cricket Field / Football Field	Ship In Campus	4225
2.	Hand Ball Court	Ship In Campus	800
3.	Kabaddi Court	Opposite to D Block	360
4.	Volley Ball Court	Opposite to D Block	600
5.	Basket Ball Court	Parade Ground	405
6.	Beach Volleyball	Ship In Campus	200
7.	Futsal Court	Ship In Campus	675
8.	Long Jump Pit	Ship In Campus	175
9.	Cricket Nets	Ship In Campus	520
10.	Swimming Pool with Gallery	Opposite to C Block	875
Indoor			
11.	Table Tennis	C Block	48
12.	Badminton Court	Yamuna Hostel	294
13.	Chess	C Block	100
14.	Carrom	C Block	100
15.	Snooker	C Block	42
Gymnasium			
16.	Boys Gym I & II	C Block & Ganga Hostel	780
17.	Girls Gym	Girls Hostel	24

Our students actively participate in the zonal, district, state and national level sports competitions and bring laurels to the University. Certificates and championships are being honored for the achievers. Travel allowances are provided to the students to participate in the Sports Meet held at various places. Sports day is conducted every year. An exclusive department headed by Physical Education Director takes care of the sports activities. Students are permitted to participate in various tournaments after getting permission from the Registrar, Vice Chancellor and the respective Head of the Department. Physical Director accompanies the students for inter/intra/zonal/state level tournaments. The participants are provided with travelling assistance, sports kit, T-shirts, etc.

Table. 9.7. (f) Availability of Sports Facilities

S.No	Game	Particulars

1.	Badminton	3 Courts with cement floors
2.	Basketball	1 Basketball court with standard marking
3.	Beach Volleyball	1 Standard Court
4.	Carrom	10 Carrom Boards
5.	Chess	15 Chess Boards
6.	Cricket	2 Cricket Nets with cement concrete
7.	Football / 200 Mtrs Athletics Track / Cricket	Multipurpose facilities
8.	Handball Court	2 Standard Courts
9.	Futsal Court	2 Nos.
10.	Gym	3 Gyms, Two Gym for Boys and 1 for Girls, all the gyms having 11 Multi Session Machines with all weight training equipments
11.	Kabaddi	2 Standard Courts and 1 mat court
12.	Snooker	1 Snooker Board
13.	Swimming Pool	One Standard Swimming Pool is available with proper safety measures (19*16 m) length (5 feet to 12 feet depth)
14.	Table tennis	6 Table tennis boards
15.	Volleyball	3 Volleyball courts protected with fencing.

The following tables show the number of awards/medals won by the students for the outstanding performance in sports activities at national/international level during the last three years.

Table.9.7. (g) Student Participation in Sports (samples)

S.No	Name of Student	Name of Event	Month	Year	Prize
1	Hemanth	Handball Fest	April	2022	Winner
2	Madasamy	Kabaddi League	May	2022	Runner Up
3	Madasamy	Cricket	May	2022	Runner Up
4	Madaswamy	Volley Ball	April	2022	Runner Up
5	Madasamy	Volley Ball	October	2021	Winner
6	Siva Subramanian	Kabaddi League	May	2022	Runner Up
7	Ignatious Antony	Volley Ball	April	2022	Winner
8	Zanetti	Football League	May	2022	Runner Up
9	Vasanth	Handball Fest	April	2022	Winner
10	Emmanuvel	Handball Fest	April	2022	Winner
11	Deepak	Kabaddi League	May	2022	Runner Up
12	Gowtham Kumar	Handball Fest	April	2022	Winner
13	Jetti Sushmanth	Cricket	April	2022	Winner

Sports Day:

AMET celebrates Sport Day ‘AMETUNISPO every year. The function started with the Inaugural Address by Mrs. Sangeetha Albin, Director - Administration. The Chief Guest of the day was Mr. C.P. Senthil Kumar, Managing Director, Brizo Global Logistics Pvt. Ltd., who delivers the Chief Guest address, and the Guest of Honor was Ms. Tamilarasi Srinivasan, Paralympics State Champion. The presence of the Chief Guest and the Guest of Honors steals the student’s attention. Mrs. Sangeetha Albin, Director Administration, give away the prizes for the winners and runners for the Intramural competitions. The program

ends with the National anthem.

Tournaments:

The following table lists the various tournaments participated by our AMET students

Table.9.7. (h) Student's Participation in various tournaments

S.No	Context	Level
1.	AIU- South Zone Inter University **TABLE TENNIS (Women)** Tournament Organized By SRM University Tamil Nadu **06.01.2022**	South Zone
2.	AIU- South Zone Inter University **CHESS (Men)** Tournament Organized By SRM University Tamil Nadu **03.04.2022**	South Zone
3.	AIU- South Zone Inter University **VOLLEYBALL (MEN)** Tournament Organized By SRM University Tamil Nadu **25.12.2021**	South Zone
4.	AIU- South Zone Inter University **BASKETBALL(MEN)** Tournament Organized By Christ University Karnataka **09.02.2022**	South Zone
5.	AIU- South Zone Inter University **FOOTBALL(MEN)** Tournament Organized By MG University Kerala **09.02.2022**	South Zone
6.	AIU- South Zone Inter University **POWER LIFTING (MEN)** Tournament Organized By JRN University, Udaipur Rajasthan **21.04.2022**	All India
7.	AIU- South Zone Inter University **TABLE TENNIS (WOMEN)** Tournament Organized by AMET University Tamil Nadu **06.01.2022**	South Zone
8.	AIU- South Zone Inter University **CRICKET (MEN)** Tournament Organized by Hindustan University Tamil Nadu **07.06.2022**	South Zone
9.	State Level TNPESU Rolling Trophy **VOLLEYBALL (MEN)** Tournament Organized by Dept Physical Education TN Sports University Tamil Nadu **07.04.2022**	State
10.	State Level TNPESU Rolling Trophy **FOOTBALL(MEN)** Tournament Organized by Dept Physical Education TN Sports University Tamil Nadu **07.04.2022**	State
11.	State Level TNPESU Rolling Trophy **HANDBALL(MEN)** Tournament Organized by Dept Physical Education TN Sports University Tamil Nadu **07.04.2022**	State
12.	State Level TNPESU Rolling Trophy **CRICKET(MEN)** Tournament Organized by Dept Physical Education TN Sports University Tamil Nadu **08.04.2022**	State
13.	State Level TNPESU Rolling Trophy **KABADDI (MEN)** Tournament Organized by Dept Physical Education TN Sports University Tamil Nadu **08.04.2022**	State
14.	State Level TNPESU Rolling Trophy **BASKETBALL (MEN)** Tournament Organized by Dept Physical Education TN Sports University Tamil Nadu **08.04.2022.**	State

Cultural Activities:

The cultural talents of students are identified and encouraged to participate in the cultural programs conducted by our university and other institutions. Traditional festivals like Pongal, Onam, and Saraswathi Pooja are celebrated in our campus. The students work as a team to make all needful arrangements for the celebrations.

The University conducts special drives / campaigns through

- Pongal Celebration
- Onam Celebration
- Holi Celebration
- Raksha-Bandan Celebration
- Christmas Celebration

- Pooja Festival
- Eid Celebration
- Guru Nanak Gurpurab
- Maritime Day

Teacher's day

The Teacher's day was celebrated on the 5th of September 2022. The Management appreciates the faculty members and honours the good performers. The students extend their gratitude to the faculty members.

Children's Day:

AMET Students Council organized Photography Competition in the Childrens Day Celebration function, on 14 Nov 2022.

NCC Activities:

AMET is committed to social and national responsibilities; bearing this in mind, we have raised the NCC Signal Coy for boys and army wing for girls from 2004-05 onwards. We believe that an individual will come to possess an adoring personality only by involving himself / herself in activities like NCC, NSS, etc. AMET is equipped with several infrastructure facilities like short-range firing and offers obstacle courses for NCC training program. The NCC program provides ample opportunities to the students/cadets by conducting firing camps, drill practices, personality development and voluntary service program. The mission and vision of our NCC wing is to create awareness about its importance and role in the nation building among the student community.

Table 9.7(i)Participation of Students in NCC (Samples)

Sno	Date	Activity Name	organizer
1	02/08/2019	Awareness programme on organ donation and donor registration	NCC collaboration with TRANSTEN (Government multi-specialty hospital Omandur, Chennai)
2	02/08/2019	Rally on "Importance of Organ Donation", Kanathur	NCC collaboration with TRANSTEN (Government multi-specialty hospital Omandur, Chennai)
3	03/12/2019	WORLD AIDS DAY- Ending the HIV/AIDS Epidemic: Community by Community"	NCC and Marine Biotech(AMET)
4	13/01/2020	An Awareness Campaign on Road safety& Traffic Rules	NCC and Semmenchery J10
5	29/01/2020	An awareness Programme on "Women safety with Kavalan app"	NCC & NEWS 7-ANBU PALAM (NGO)
6	22/02/2020	Free medical checkup camp for differently able people. Venue: Meston Rehabilitation Research residential special school muttukadu Chennai	NCC & NEWS 7-ANBU PALAM (NGO)
7	24/02/2020	Awareness Rally on Corona virus , Kanathur	NCC & NEWS 7- ANBU PALAM (NGO)

National Service Scheme (NSS):

The University envisages among its students the values of democratic living and upholds the need for selfless service to the society by exactly following the motto of NSS namely "Not Me But You".

Table.9.7. (j) NSS programme (samples)

Sl. No.	Name of the Activity	Organizing Agency	Year	No of Students Participated

1.	Mega Blood Donation club	National Service Scheme	2022	300
2.	Free Type Writing course	National Service Scheme	2022	100
3.	Volunteer provision for marathon race	National Service Scheme	2019	100
4.	Kanathur pond cleaning camp	National Service Scheme	2019	300
5.	Voting awareness campaign	National Service Scheme	2019	250

Club Activities:

ECO Club

The University's Eco Club is an initiative taken by staff and students to create awareness about environmental issues. The Eco Club conducts various programs every year to address the challenges faced by the environment. The objectives of Eco Club are as follows:

- To sensitize the students about the environmental issues
- To create clean and green awareness among students through various pioneering methods
- To mobilize students towards scientific enquiry into environmental crisis and solutions
- To involve them in efforts to conserve the environment
- To motivate students to imbibe the knowledge and life style for minimizing waste generation.

Table 9.5(k)Participation of AMET Students in eco club Program (samples)

S.No	Name of the Programe	Venue of the programme	Conducted by	Date	No. of participants
1	Donate National flag	Kanathur, Reddy kuppam	Eco club and Marine Bio-technology	14.08.2022	20
2	Tree plantation on Independence day	AMET Campus (play ground)	Eco Club,AMET	15.08.2022	30
3	International Costal clean-up day – Beach cleaning	Juhu beach, Uthandi	Eco Club, AMET and Maersk	17.09.2022	140
4	Tree plantation programme to celebrate the special occasion of 72nd Birthday of Honourable Prime Minister	AMET Campus	Eco Club, AMET	20.09.2022	25

LEO Club

The University has formed Leo Club to promote service activities for the community which will develop the individual qualities of leadership, experience and opportunity. Leo Club focuses on the spotlight on children projects with a view to enrich the lives of children through:

- Blood donation camp
- Collecting food and clothes for local street children
- Repairing playgrounds
- Implementing after school tutoring programs
- Visiting children admitted in hospitals
- Raising funds for immunization programs

Through these service activities, Leo club brings hope and laughter to the needy children, especially on December 5, the International Leo Day.

Table.9.7.(l). Leo club Programme (sample)

Sl. No.	Name of the Activity	Organizing Agency	Year	No of Students Participated
1	MEGA BLOOD DONATION CAMP	AMET LEO CLUB	2022	350

v. **Rotaract Club**

Rotaract club brings together people of ages from 18-30 to exchange ideas with leaders in the community, develop leadership and professional skills, and have fun through service. With the support of our University Rotaract members work side by side to take action through various services.

- World Water Day Awareness
- Healthy Lifestyle Awareness
- Orientation Programme
- Rotaract Club Orientation Programme
- Tree Sapling Project – One Student One Tree
- Vigilance Awareness Programme – Integrity – A Way Of Life
- Vigilance Awareness Programme – Integrity – A Way Of Life In Kovalam School

Table.9.7.(m). Rotaract club progamme (samples)

Sl. No.	Name of the Activity	Organizing Agency	Year	No of Students Participated
1	Vote Awareness Campaign	AMET Rotaract Club	2019	450
2	First Aid Training	AMET Rotaract Club	2019	200
3	Organ Donation	AMET Rotaract Club	2019	120

Peace Club

The University has a joint initiative with Universal Peace Federation of Japan. The Peace Club functions with the aim of spreading peace and family welfare among people. It organizes events to bring harmony and hail humanity among the citizens.

Table.9.7.(n). Peace club programme (samples)

Sl. No.	Name of the Activity	Organizing Agency	Year	No of Students Participated
1	WORLD SUICIDE PREVENTION DAY	AMET Peace Club	2022	40
2	INTERNATIONAL PEACE DAY	AMET Peace Club	2022	50
3	UNITY DAY	AMET Peace Club	2022	40

Table.9.7.(m). Rotaract club programme (samples)

Name of the Club	LEO CLUB	PEACE CLUB	ECO CLUB	ROTRACT CLUB	NSS/NCC/YRC	YOGA
No. of Activities	1	3	4	3	20	8

Extension Activities:

Number of extension and outreach Programmes conducted in collaboration with industries, Non. Government Organisations, NSS/NCC/Red cross/YRC Club etc., during the last three years for the benefit of the Society.

Table. 9.7.(n). Extension Activity details (samples)

S.No	Name of the activity	Organising unit/ agency/ collaborating agency	Year of the activity	Number of students participated in such activities
1	World Ocean day Celebration" Beach Clean Activity	NCC- 1 TN Naval Unit	2022	47
2	Beach Cleaning Activity- Puneet Sagar Abhiyan	NCC- 1 TN Naval Unit	2022	55
3	Free medical checkup camp for differently able people	NEWST Anbupalam	2020	51
4	An awareness progranrme on wonlell safety with Kavalan App	NEWST Anbupalarn	2020	40
5	Sapling plantation programme	KEN Foundation Society	2020	30
6	Mega Swatchta Pakwada "Awareness on ground water pollution"	Amet Eco - Club and NCC Unit	2020	95
7	Rally on Rain Water Harvesting, Kanathur	NCC & Eco club	2020	150
8	Awareness Programme on organ donation and donor registration	NCC Collaboration with Transten	2020	163
9	Rally on Importance of Organ donation	NCC Collaboration with Transten	2020	200

AMET Student's Band:

The Band is divided into three sections namely the wood wing, the brass wing and the percussion. The band performs in the Morning parades, Colour ceremonies, Sunset, VIP visits, Passing-out parades, National day celebrations and Inaugural functions.

Swimming Pool Facility:

- The University has a standardized swimming pool to practice swimming as and when required.
- The primary purpose of the swimming pool is to provide training in swimming for the cadets / students and also for the sports activities.
- The University maintains and operates the swimming pool in a safe and secured manner.
- The students are provided with life jacket during training.
- Experienced swimming coaches and life guards monitor the students keenly during the swimming classes.

Centre for Yoga and Meditation (CYM):

- The University has a Yoga Centre to keep the health and soul fit for the students.
- The University has created exclusive premises for the Yoga Centre.
- The Yoga and Meditation programs are conducted in the Yoga Centre between 3pm to 5pm.
- The University has appointed an exclusive yoga master and also invites outside yoga experts to train the students.

Yoga and meditation are the two important aspects for a perfect body and mind. The Centre for Yoga and Meditation at AMET is providing training for the students and staff for yoga and meditation by certified trainers. It offers a good ambience, technical support and easy accessibility for all. Focus areas: Yoga for Health, Yoga for Stress Management and Yoga for Personality Development.

10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

Total Marks 120.00

10.1 Organization, Governance and Transparency (55)

Total Marks 55.00

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

Institute Marks : 5.00

Vision

To sustain identity as a World Class Leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society.

Mission

AMET will strive continuously to

- Impart value-based higher education and technical knowledge with uncompromising strides of an outstanding quality.
- Emerge as a Centre of Excellence inculcating skill development in recent technologies in accordance with industrial trends.
- Create World class research capabilities on par with the finest in the world and broaden student"s horizons beyond classroom education.
- Nurture talent and entrepreneurship to enable all round personality development in students.
- Empower students across socio economic strata.
- Make a positive difference to society through technical education.

10.1.2 Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (25)

Institute Marks : 25.00

AMET has a very ambitious Vision 2025 plan wherein it aims to be a one stop solution for all marine related activities happening around the World and has clearly charted out an action plan to gauge its growth towards for 2025 milestone. The Strategy document process has created a participatory process for involving stakeholders in the visioning and planning process of the University. Strategic goals were finalized keeping in view vision and mission of statements, quality policy, core values, and SWOC (Strengths, Weaknesses, Opportunities and Challenges) analysis, and current environmental, social, technological and competitive factors.

The Board of Management, Planning and Monitoring Board, Board of Research, Finance Committee and Academic Council, which have representatives from different organisations and Industries shall ensure effective planning and implementation of academic and non-academic programmes.

Availability of the Institutional Strategic Plan

AMET is progressively marching towards getting established as an **International Maritime Knowledge Hub** by expanding its all-academic, research and outreach activities in the chosen fields. The following priorities outlined in the Vision 2025 plan would help the University to achieve excellence in all facets of higher education. The AMET Vision 2025 plan is publicized through various means including hosting the same in the University website (Link: https://www.ametuniv.ac.in/mandatory_disclosure.html (https://www.ametuniv.ac.in/mandatory_disclosure.html))

· To receive and sustain the highest ranks and recognitions in all applicable accreditation and ranking frameworks such as National Assessment and Accreditation Council (NAAC), National Board of Accreditation (NBA), Common Inspection Programme (CIP) of the Directorate General of Shipping (DGS), Performance Indicators in Maritime Education and Training (PIMET) Ranking by the International Association of Maritime Universities (IAMU) and National Institutional Ranking Framework (NIRF) of Ministry of Human Resource Development (MHRD), Government of India, etc.

· To attract highly qualified and experienced personnel for Faculty positions, for imparting quality education and skills and motivating them to do research with excellent financial compensation in a congenial working environment.

· To enhance laboratory facilities with state-of-the-art equipment and advanced technological tools for teaching and research purposes.

· To reach out to industries, research laboratories and academic institutions around the world for collaboration, consultancy and joint research programmes for identifying and finding solutions to technical and technological problems.

· To concentrate on the environmental concerns plaguing the Earth due to industrial activities and deliver mitigation efforts.

· To reach out to the community through various outreach programmes for awareness, involvement and participation for the betterment of the neighbouring community in particular and the entire Nation in general.

As per the AMET Vision 2025, the following are the strategic plans with identified action plans to be implemented.

Sl. No.	Strategic Plan	Action Plan
Goal 1: Provide a quality maritime and associated professional education and acquire the stature as one of the top ranking maritime Universities		
1.1	Continuous improvement in Teaching - Learning process	• Adopting Outcome Based Assessment in OBE as per the new reforms suggested by the AICTE. • Revision of curriculum on need basis and to incorporate the recent advancements such as IOT (Internet of things), Artificial intelligence (AI) and Machine learning (ML). • Encouraging all faculty to attend FDP/ Conferences/Workshops/MOOCs. • Enhancing the teaching and learning experience by the use of ICT, Industry experts, mentoring system, and adopting interactive pedagogy with Active Learning Methods.

1.2	Improvement in students skills and industry readiness	• Inculcating lifelong learning skills by introducing self-learning components in the form of seminars, MOOCs in all the core departments. • Enhancing the Digital Resources in the campus, both online and offline • Incorporating project-based learning for 20% of the core courses in the curriculum • Imparting skill enhancement with competency certification to all the students • Enhancing the industry exposure to the students as part of curricular needs. • Soft Skill Training, Language Coaching, coaching for competitive examinations, career guidance, placement, training and assistance, value added courses, industry certified courses are provided to the students.
1.3	Centre of Excellence in core programs	• Establishing MoUs with Industry to set up Centre of Excellence in core Departments • Improving existing laboratories / establishing state of art laboratories in various departments as Centre for excellence in core programmes with related industry support. • Facilitating the lab availability beyond working hours.

1.4	Enhancement of Research (Academic, Sponsored and Consultancy Research; Innovation of students) accomplishments	• Formulating procedures to improve Internationalisation for developing good research accomplishments • Academic Research shall be promoted by providing University Research Fellowship for Full time scholars • Faculty members shall be provided with fee waiver and work load reduction to promote them to do Ph. D • Seed Money shall be provided to the Faculty to promote their research activities • Incentives shall be given to faculty with funded projects and those who publish research articles. • Promoting consultancy services in each Department by encouraging Faculty and also by appointing competent faculty with proven records earlier • Encouraging the young faculty for collaborative research with IITs and NITs and reputed foreign universities for publishing papers, international patents • Encouraging students to participate in National and International conferences to present and publish papers, insisting research scholars and Post Graduate students to publish in SCI/SCOPUS indexed journals. • Innovative ideas of students shall be encouraged to be translated into commercial products for the benefit of society by funding the student"s projects through MSME and other funding agencies. • Encouraging all the students to participate, in the talent events such as Hackathons to encourage their innovations • The Institution Innovation Council shall promote the innovative ideas of students to develop in to business ideas and support their start-up ventures through Incubation Centre.
	Overallimprovement throu gh good governance practices	• Policies, forms and procedures shall be defined and transparently known to all stakeholders • Enhancing the performance of Governance through adoption of modern technologies • Promotion of participative management • A well-defined decentralized governing system is in practice for the improved transparency and speedy decision making. • Well structured, active grievance redressal mechanism is in place for students, faculty and staff.

Key Indicators for Attainment of Goal 1

- Adopted Outcome Based Assessment in all the Engineering and Management Programmes which leads to 100% implementation by the year 2025.
- Incorporating revisions in Curriculum based on the recent advancements and needs of the employer.
- Regular consistency in all the Engineering and Management programmes which leads to 90% admissions and 100% placement in all the Programmes (Our Premier Placement Partners as on 2022 -Maersk Shipping Solutions, Flototech, Sembcorb Marine Limited, Albion Engineering India Pvt Ltd, Sea team Management India Pvt Ltd, Mediterranean Shipping Company, Vik Sandvik Ship Design and Off Shore Engineering India Pvt Ltd).
- Enhanced digital resources for Education and Research (LMS, ERP. Digital Library, E Learning portals, Digital Repositories, Software etc.) Leading towards 20% improvement in good quality and innovative projects every year.
- 100% ICT enabled class rooms.
- Fully Wi-Fi enabled Campus (hostel and classrooms).
- Enhanced Research Accomplishments leads to 50% improvement in R&D in the year 2025 (As on 2022, total Publications-3380; SCOPUS Publications:1679; h-index-53; Citations- 10276; Books-348; Patents-64; MoUs-140; Faculty with PhD-85; Faculty doing PhD-115; PhDs produced-103; Completed Projects: 7)
- Enhancing the revenue to the University by 20% through Research, Consultancy etc. (Ongoing Government Funded-18 projects; Consultancy, Seed Money and Industry sponsored projects-298; Mega Projects-4; Total worth of Grants: Rs.18.40 Crores)
- Improvement in Faculty retention ratio.

Goal 2: Enhance Interaction with Society and Industry

2.1	Enhancing Interactions with the Society and Community	• Selecting project topics based on societal needs like energy saving, green energy vehicles, remote sensing security systems, rain water harvesting, smart irrigation system, drone-modelling, retrofitting in suitable appliances and equipment.community • Engaging into Village Adoption Programme to promote Government Schemes and National Missions • Expanding the interactions with Society and Community by engaging extension, social outreach and community service events • Offering short term programmes for the benefit of the community.

2.2	Enhancing Interactions with the Industry	• Establishing MoUs and formal collaborations with Industry in Academic, Research and Extension Activities • Consulting Industry Experts in various activities of the University, including design and development of curriculum, course delivery, value added courses, guest lectures, Workshops, Seminars and joint conferences etc. • Mandatory Internships, Industrial Visits and Inplant training shall enhance industry interactions. • Addressing the needs of Industry through research proposals, thereby getting industry sponsored and consultancy projects. • Institutionalized enhanced interactions with industry through various forums such as ◦ Industry Institution Collaboration Cell ◦ Entrepreneurship Development Cell ◦ AMET Incubation Centre ◦ Business Incubator ◦ Institution Innovation Cell ◦ AMET Alumni Association ◦ Career Development Centre

Key indicators for Attainment of Goal 2:

- Upliftment of adopted villages by incorporating sustainable technological solutions which leads to good improvement in employment opportunities.
- More than 100 MoUs with various industries are active both at Institutional and Departmental level leading to 10% of the students turned to be Entrepreneurs. (As of 2022, No. of Business entities incubated: 23; No. of Start Ups Promoted: 11; No. of products available with Proof of Concept: 15; No. of innovative products developed with prototypes: 15; AMET has funded 71 student innovations with overall expenditure of Rs.46 lakhs during the past three years).
- Encouraging the students on innovation and start-up leads to improvement in the Ranking of ARIIA (Atal Ranking of Institutions on Innovation Achievements).
- Enhancing the consultancy and industry sponsored projects based on the demands of industries/organization. (As on 2022, No. of Industry Sponsored Projects-130; No. of Consultancy Projects-133; No. of Faculty Minor Projects-Seed Money Projects-194).

Goal 3: Generating Revenue to the University through Research, Consultancy and

Collaborative initiatives

3.1	Identifying and improvising the various avenues to generate revenue to the University through Research,Consultancy and Collaborative initiatives	• Promotion of Faculty to propose major and minor projects for grants/funding from Government and Private agencies for Research, Development and Consultancy in core areas • Consultancy projects for cargo ships, cruise ship propulsion system conversion, retrofitting, etc. With talented pool of experienced faculty in Marine, Electrical, Mechanical Engineering and MBA departments • Corporate training: setting up corporate training or career enhancement training with local companies provides additional funds and increases our reach to non-traditional students.
Key Indicators for Attainment of Goal 3: • Improvement in good quality funded projects through appropriate research and retrofitting solutions from various Government funding Agencies (As on 2022, Sagarmala Project-Skill Development in Maritime Sector with a grant of Rs 814.34 Lakhs; MSME Project- Business Incubator Establishment with a grant of Rs 350.00 Lakhs; ISRO project-Capacity Building in Marine Sciences with a grant of Rs 28.42 Lakhs and DST Projects-Digital Restoration of Poompuhar with a grant of Rs 81.51 Lakhs, No. of Ongoing Government Projects-25, A total amount of Rs.18.40 Crores sanctioned through R&D).		
Goal 4: Enhance the interaction with Alumni		
4.1	Networking with alumni	• Intensifying the activities of the AMET Alumni Association-AAA (Reg No: 135/2015; 28-09-205; Chengelpet Registrar Office, Tamil Nadu; with more than 12220 alumni registered through https://www.ametuniv.ac.in/alumni/Registration_Form_2016.as (https://www.ametuniv.ac.in/alumni/Registration_Form_2016.aspx) px). • Conducting University Level Alumni Association meeting in various Cities all over the World and Department Level Alumni Chapter Meetings in University Campus. • Alumni Representations in decision making bodies such as Board of Studies, IQAC etc. • Establishment of Alumni Sponsored Indoor Stadium in Yamuna Hostel. • Extending monitory support for the scheme „Earn While you learn" beneficial to students of AMET. • Providing fund for establishing Media Lab.

Key indicators for Attainment of Goal 4: • Alumni Association functioning proactively for the holistic development of the University (AAA sponsors every Department for Alumni Chapter Meeting, Alumni Guest Lecture; Besides, the AAA has contributed Rs 61 lakhs towards the establishment of a new hostel in the campus). • Regular Alumni meetings leading to good Industrial exposure and better support to training and placement. • Enhancement in the frequency of alumni lectures through online/offline meetings.		
Goal 5: Development and maintenance of state of the art infrastructure		
5.1	**Maintenance of the existing Infrastructure, identification of areas for improvement**	• Establishment of Cells/Centers for the effective implementation, monitoring and promotion of ICT Infrastructure in the University. • Establishing a good AI and Robotics Laboratory • Strengthening of Indoor and outdoor sports and recreation facilities. • Providing facilities for Yoga and other Life Skills in the campus. • Enhancing the features of the automated AMET Talking Library
5.2	**Improvising the Sustainable Development**	• Encouraging the faculty and the students to maintain green campus through periodic awareness programmes.Audits. • Promoting the motto"Clean and Green Campus" through various activities involving the faculty and the Students both in the Campus and Hostel. • Tree Plantation and Greenery Development activities. • Maintenance of Green House with medicinal plants. • Improvising the sustainable development practices such as Rainwater harvesting, wastewater recycling and solid waste management including biogas plant and composting pit etc. • Recycle of paper wastes, safe disposal of e-wastes. • Enhancing the renewable energy capacity by promoting the solar panels, windmills etc. • Conducting Energy Audits, Environmental Audits and Green
Key indicators of Attainment for Goal 5: • 100% ICT enabled class rooms. • Effective implementation of University policy for allocation of funds in the promotion of green energy and waste management. • University implementing sustainable development practices. (A project on rainwater harvesting and wastewater management for water conservation is taken up). • Every year Energy Audits and Environmental Audits are conducted and the suggested outcomes are implemented.		

Effective Implementation and Monitoring of Institutional Strategic Plan

The University has Strategic planning and Steering Committee for the effective implementation of AMET Vision 2025, a strategic plan of the University for achieving greater heights and sustaining the legacy.

Table 10.2. Strategic planning and Steering Committee

S.No.	Name of the Member	Designation	Position
1	Col.Dr.G.Thiruvasagam	Vice Chancellor	Chairman
2	Dr. V.Ramachandran	Former Vice Chancellor, Anna University of Technology, Trichy	External Member
3	Dr.S. Baskar	Dean (R&D), Thiagarajar College Of Engineering, Madurai.	External Member
4	Prof. Dr. S. Sathikh	Former Vice Chancellor, University of Madras, Chennai	External Member
5	Dr.R.Srinivasan	Member Secretary, Tamilnadu State Council for Science and Technology, Chennai	External Member
6	Dr.P.Devadoss Manoharan	Former Vice Chancellor, Anna University of Technology, Trichy	External Member
7	Dr.M.Jayaprakashvel	Registrar i/c	Secretary

Table 10.3. Institutional Strategic planning and monitoring Committee

S.No.	Name of the Member	Designation	Position
1	Col.Dr.G.Thiruvasagam	Vice Chancellor	Chairman
2	Dr. M. Jayaprakashvel	Registrar i/c	
3	Dr. R. Rajavel	HOD - Marine Engineering	Secretary
4	Capt.K.Karthik	Principal-Director General of Shipping Programme.	Internal Member
5	Dr.T. Sasilatha	Dean-Academics	Internal Member
6	Dr.N.R.Ramkumar	Dean-Student Welfare	Internal Member

The function of Strategic Planning Committee is

1. To provide strategic advice on global trends in marine and allied industries to help the University to design and revise its strategic plan.
2. To provide strategic plan and monitor the development of the University with the objective of implementing major goals.
3. To Monitor and implement various developmental programmes of the University, including academics, administration, infrastructure and quality culture.

Frequency of Meetings, Attendance and Membership details of Strategic Planning Committee

Regular meetings of the Strategic plan and Steering Committee with stipulated attendance are held and details are presented as below.

Table 10.4 Frequency of Meetings, Attendance and Membership details of Strategic Planning Committee

S.No	Name of the Committee	Frequency of Meetings	Attendance Requirement/Minimum quorum
1	Strategic planning and Steering Committee.	1 meeting in a year	Two Third of all Members
2	Institutional Strategic planning and monitoring Committee.	2 meetings in a year	Two Third of all Members

10.1.3 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10) Institute Marks : 10.00

Governing body, administrative setup and functions of various bodies

AMET Deemed to be University dedicated itself to becoming a World Class University by all virtue. The Management, administrative and executive authorities and committees like Board of Management, Academic Council, and Vice Chancellorship etc. are formed and practiced as per the requirements of the Statutory and Regulatory bodies such as the Ministry of Human Resource Development (Government of India), All India Council for Technical Education (AICTE), University Grants Commission (UGC), and Directorate General of Shipping (DGS) etc. The University is committed to follow the participatory governance to implement and keep up new and existing systems, respectively.

Following are the major Governing Bodies of the University

1. Board of Management
2. Planning and Monitoring Board
3. Academic Council
4. Board of Studies
5. Finance Committee
6. Management Review Committee

Board of Management

The Board of Management is the highest governing body of the University, which is headed by the Vice Chancellor. The Board of Management is consisting of eminent persons capable of contributing and upholding the University ideals and traditions. All the policy matters, developmental activities, regulatory activities are reviewed by the Board of Management. Hence, The Board of Management is the apex body for the effective implementation and monitoring of institutional strategic plan of the University.

The Board of Management draws its powers and functions from the Memorandum of Agreement (MoA) which is prepared and updated in consonance with the UGC Deemed to be University Regulations (2019) and its amendments issued from time to time. The Board of Management, delegates its powers to other committees/officers, chiefly to Vice Chancellor, who is reporting to the Board of Management about the decisions taken thereupon.

Table 10.5: Members of the Board of Management

S.No.	Member of the Board of Management	Designation
1	Col. Dr. G. Thiruvasagam Vice-Chancellor	Chairperson
2	Prof. Tulsi Ram, Jawaharlal Nehru University, New Delhi	UGC Nominee
3	Capt. G Ramaswamy, CEO of OSM Fleet Management India Pvt LTD, Chennai	Nominee of the Trust - Member
4	Dr. V. Ramachandran, Former Vice-Chancellor, Anna University	Eminent Academician - Member
5	Dr. R. Srinivasan, Member Secretary, Tamil Nadu State Council for Science and Technology	Eminent Academician-Member
6	Dr. R. Venkatesan, Scientist-G and Programme Director, National Institute of Ocean Technology (NIOT)	Eminent Academician - Member
7	Dr. D. Rajasekar, Dean-Research, AMET	Member

8	Dr. K. Altaff, Chairperson, School of Biotechnology, AMET	Member
9	Dr. S. Priya, Professor - Marine Electrical and Electronics Engineering	Member
10	Capt. P. Rajendran, Associate Professor, Nautical Science	Member
11	Dr. M. Jayaprakashvel Registrar i/c	Secretary

The Board of Management shall meet usually twice in a semester. The Board functions as both advisory and decision making bodies. It provides strategical plans for the University, implements the same through various Committees, Programmes and Procedures. Moreover, the Board also monitors and reviews the strategic plan at periodical intervals to ensure its effective implementation.

Powers and Functions of the Board of Management

- The Board of Management is the principal organ of Management and the apex executive body of the University, with powers to make rules and regulations
- The Board of Management is the final decision making body of the University with respect to every matter, including the academic, administrative, personnel, financial, and developmental matters.
- The Board of Management usually does not infringe upon the powers of the respective authorities provided under the Regulations; and where any authority has been given advisory/recommendatory powers, the Board of Management seeks advice/recommendations from such authority, before deciding on any matter before it.
- The Board of Management may delegate its powers to the Vice-Chancellor or any other Officer/Faculty or to a Committee of Officers/Faculty Members of the University. However, such powers are subject to the condition that the action taken by them shall be reported at the next meeting of the Board of Management.

Planning and Monitoring Board

The Planning & Monitoring Board is the principal Planning Body of the University and is responsible for the monitoring of the developmental programmes of the University. The Vice-Chancellor and the Registrar are the Chairman and Secretary, respectively, of the Planning and Monitoring Board, which includes both internal members of the University and Experts of eminence from outside the Institution.

The Planning and Monitoring Board has the right to advise the Board of Management and the Academic Council on any matter which it considers necessary for the fulfillment of the objectives and strategic plan of the University. The Planning and Monitoring Board ensures the equitable distribution and optimal utilization of physical resources. The recommendations of the Planning and Monitoring Board will be placed before the Board of Management for consideration and approval.

Table 10.6. Composition of Planning and Monitoring Board

S.No.	Name of the Member	Designation	Position
1	Col.Dr.G.Thiruvasagam	Vice Chancellor	Chairman
2	Dr.Sushma Yadav	Member UGC, Former Vice- Chancellor, BPSMV, Haryana	External Member
3	Prof.S.P.Thiyagarajan	Chancellor Avinashilingam Institute of Home Science	External Member

4	Dr.Chitra Krishnan	Former Professor and Head, Dept. of French, University of Madras	External Member
5	Capt.K.Karthik	Principal- DGS Courses	Internal Member
6	Dr.T.Sasilatha	Dean- Academics	Internal Member
7	Dr.D.Arivazhagan	Co-ordinator- IQAC	Internal Member
8	Dr.J.Rengamani	Professor- AMET Business School	Internal Member
9	Dr.D.Velmurugan	Director-Research Advisory Council	Internal Member
10	Dr.Anita R Warrier	HoD I/c- Physics	Internal Member
11	Dr.R.Vettriselvan	Asst. Professor- AMET Business School	Internal Member
12	Dr. M. Jayaprakashvel	Registrar i/c	Secretary Ex-officio

Powers and Functions of the Planning and Monitoring Board

- The Planning and Monitoring Board is the principal Planning Body of the University and is responsible for the monitoring of the developmental programmes of the University.
- The Planning & Monitoring Board is having the right to advise the Board of Management and the Academic Council on any matter which it considers necessary for the fulfillment of the objectives of the developmental plans of the University.
- The recommendations of the Planning & Monitoring Board will be placed before the Board of Management for consideration and approval

Academic Council

Powers and Functions of the Academic Council:

The Academic Council (AC) considers matters of academic interest either on its own initiative or at the instance of the Board of Management or those proposed by the Departments / Faculty Members and to take appropriate action thereon.

- The Council usually exercises general supervision over all academic work of the University
- The AC gives direction regarding methods of instruction, evaluation, and improvements in academic standards
- The Academic Council is the apex body for the matters concerned to research, degree programmes, examinations, providing equivalence to courses/degrees, appoint examiners etc.
- The Academic Council also passes recommendations to the Board of Management on aspects such as measures for improvement of standards of teaching, research and training, institution of Fellowships/awards/medals, starting of new programmes/Departments/Centers etc.
- The Academic Council frames rules covering the academic functioning of the University, admissions, examinations, award of fellowships and studentships, free-ships, concessions, attendance, discipline, residence etc.
- The Academic Council has the powers to appoint sub-committees to advise on such specific matters as may be referred to it by the Board of Management and consider the recommendations of the sub-committees and to take appropriate action.
- The Council may also take periodic review of the activities of the Departments / Centres and to take appropriate action with a view to maintaining and improving standards of education.

Table 10.7. Members of the Academic Council

S.No.	Name of the Member	Designation

I	**Col. Dr. G. Thiruvasagam** (Chairman)	Vice Chancellor
The Registrar, who shall be the secretary of the Academic Council		
II	**Dr M Jayaprakashvel** (Secretary)	Registrar i/c
III Dean(S) of Faculties		
1	Capt. K. Karthik	Principal-DGS Courses
2	Prof. Bhoopathy Bhaskaran	Dean- Marine Engineering
3	Prof.Dr.R.Karthikeyan	Dean-Employment Training and Progression
4	Dr. T. Sasilatha	Dean-Academics
5	Prof.Dr.K.Altaff	Chairperson - School of Biotechnology
6	Dr.N.R.Ramkumar	Dean-Student Welfare
IV Heads of the Departments		
1	Dr.S.K.Bhattacharya	Dept. of Naval Architecture and Offshore Engineering
2.	Dr.R.Rajavel	Department of Marine Engineering
3	Dr.D.Rajasekar	AMET Business School
4	Dr. C.M.Ramakritinan	Dept. of Marine Biotechnology
5	Dr.T.Nagalakshmi	Dept. of Petroleum Engineering
6	Dr.S.Priya	Dept. of Electrical and Electronics Engineering
7	Dr.K.S.Siva Subramanian	Dept. of Mining Engineering
8	Mr.R.Theertham	Dept. of HND-NS
9	Dr.John Wyson	Dept. of Food Processing Technology
10	Capt.Samson Joseph	Pre-Sea Modular Courses
11	Dr.N.Duraimutharasan	Dept. of Computer Science & Engineering
12	Dr.T.R.Heera	Dept. of Chemistry

13	Dr.P.Balaganesan	Dept. of Mathematics
14	Dr.Anitha R Warrier	Dept. of Physics
15	Dr.R.Ganesan	Dept. of English
16	Dr. K. Sekar	Librarian
V Professors other than the Heads of the Departments (By Rotation of Seniority)		
1	Dr.J.Rengamani	AMET Business School
2	Dr. D.Arivazhagan	AMET Business School
3	Dr.A.Shameem	AMET Business School
4	Dr.C.Manoharan	AMET Business School
5	Dr.G.Themozhi	Dept. of Electrical and Electronics Engineering
6	Dr.A.Suresh	Dept. of Marine Engineering
7	Dr.D.Madhesh	Dept. of Mechanical Engineering
8	Dr.K.Thiruvenkatasamy	Dept. of Naval Architecture and Offshore Engineering
VI Two Associate Professors from the Departments other than the Heads of the Departments by Rotation of Seniority		
1	Cdr.V.Ramakrishnan	Dept. of Nautical Science
2	Dr.D.Jaisankar	Dept. of English
VII Two Assistant Professors from the Departments by Rotation of Seniority		
1	Mrs.R.Divyaranjani	AMET Business School
2	Dr.P.Sivabalan	Dept. of Naval Architecture and Offshore Engineering
VIII Eminent educationist from other field related to the activities of the Institution / Deemed to be University who are not in the service of the Institution / Deemed to be University, nominated by the Vice - Chancellor		
1	Dr.K.Sivasami	Associate Professor & Head - SMET at Indian Maritime University, Chennai
2	Dr.Kalyani Desikan	Dean-Academic Research, VIT Chennai Campus

3	Dr.S.Swamynathan	Professor of Information Technology Anna University
4	Dr.S.Rajadurai	President, CEO and Head of R&D Sharda Motor Industries Ltd.
5	Dr.Chitra Krishnan	Former Professor and Head, Department of French, University of Madras
IX Three persons who are not members of the Teaching staff, co-opted by the Academic Council for their specialised knowledge		
1	Capt. Saurabh Mahesh	Head Crew Sourcing & Global Cadet Administration, Maersk Line, Singapore
2	Capt. Rohan Sabnis	Manager (Fleet Personnel & Training),Goodwood Ship Management Pvt. Ltd.
3	Capt. Sartaj Gill	Chief Executive Officer, V.Ships
4	Mr.J.ShyamSundar	Director & Chief Operating Officer Flyjac Logistics Pvt. Ltd.
Student Representatives		
1	Cadet. Bhuvaneswari	Reg.No.ASL19034, Yr:2019-21
2	Cadet. Keerthivasan	Reg.No.AME20051, 3rd year
3	Mr.Zuben Kalyan	Reg.No.AEE20015, 3rd year
4	Ms. Athira Viswanath	Reg.No.ASL21011, Ist year

Board of Studies

Composition of the Board of Studies

- Head of the Department – Chairperson
- All Professors of the Department-Members
- Two Associate Professors of the Department by rotation based on seniority
- Two Assistant Professors of the Department by rotation based on seniority
- One or Two Students of the Department
- External Experts/External Members

i. Industry Representative
ii. Academic Expert
iii. Alumni

Table 10.8 Membership of Board of Studies (Department of Marine Engineering)

S.No	Name	Membership category	Designation

1	C/E Bhoopathy Bhaskaran	Chairman	Dean(DGS) Chairperson
2	Dr.R.Rajavel	Internal Member	Professor & HOD
3	Dr.A Suresh	Internal Member	Professor
4	C/E Mohan Dass	Internal Member	Associate Professor
5	C/E Majendra Gopinath	Internal Member	Associate Professor
6	Dr.V.Saravanan	Internal Member	Assistant Professor
7	Dr.S.Muthu Baskaran	Internal Member	Assistant Professor
8	C/E Murthy	External Member Academics	Faculty, IMU, Chennai
9	C/E V.S.Seshadri Rajan	External Member – Industry	Country Head- Global Sourcing Solutions India, Supply Management, Halliburton ,Chennai
10	Cadet Sabarivasan Roll No. AME19065 BE (ME) – 19 Final Year	Final Year Student	Student"s Representative
11	C/E Gaurav Sinha 2018 Passed out	Alumni	Assistant Tech Leah (Project Management) Semcorp Marine, Singapore
12	Dr.T.Sasilatha	Internal Member	Dean Academics & Curriculum Development
13	Dr.D.Arivazhagan	Special Invitee	Coordinator, Internal Quality Assurance Cell
14	Dr.R.Karthikeyan,	Special Invitee	HOD, Mechanical Engineering
15	Dr.Anitha R Warrior	Special Invitee	HOD, Physics
16	Dr.K.Sivakumar	Special Invitee	HOD, Chemistry
17	Dr.BalaGanesan	Special Invitee	HOD, Mathematics
18	Dr. N. Duraimutharasan	Special Invitee	HOD, Computer Science Engineering
19	Dr. R.Ganesan	Special Invitee	HOD, English
20	Prof. N. Srinivasan.	Special Invitee	Director - Placement Centre

Powers and Functions of the Board of Studies

Board of Studies is one of the most important bodies of the University, which reviews the design, development and revision of curriculum and syllabus of all the programmes. There is separate Board of Studies in each Department of the University. The Board of Studies usually consists of both internal and external members with a representation of all stakeholders.

Finance Committee

Finance Committee is a mandatory Committee as per the regulatory bodies of the University. The Committee plans, monitors and reviews the financial resources of the University. The Committee considers the annual accounts and financial estimates of the University and submits them to the Board of the Management for its approval. The Committee also recommends the annual budget and revised estimates to the Board of Management. Finance Committee has the powers to fix limits of the total recurring expenditure and the total non-recurring expenditure of the year based on the income and resources of the University. The Finance Committee meets at least twice a year to examine the accounts and to scrutinize proposals for expenditure.

Table 10.9. Members of the Finance Committee

S.No.	Name of the Member	Position
1	Col.Dr.G. Thiruvasagam Vice Chancellor	Chairperson
2	Mr. R. Thiyagarajan, B.Sc, FCA	Nominee of the Trust
3	Mr.K.Balamanikandan, FCA	Nominees of the Board of Management
4	Dr. J. Rengamani, Member	Member of the Board of Management
5	Mr. K. Narayan Singh Joint Secretary, UGC	UGC Nominee
6	Mrs. K. Jayabharathi Finance Officer	Secretary

Powers and Functions of the Finance Committee

- The Finance Committee reviews and reports the annual accounts and financial estimates of the University and submits them to the Board of the Management for its approval
- The Annual Budget is prepared and submitted by each Department and functional areas. The budget proposals are reviewed in the Finance Committee and based on the merit and requirement it recommends sanction and release of funds by the Board of Management
- The Finance Committee fixes limits of the total recurring expenditure and the total non-recurring expenditure of the year based on the income and resources of the University

Management Review Committee

AMET is certified with ISO 9001-2015 by the World renowned classification society, Det Norske Veritas (Norway) and Germanischer Lloyd (Germany)-DNV GL. As per the ISO 9001-2015, AMET has a Quality Management System (QMS) which has detailed forms and procedure for quality sustenance. As per the QMS, the Management Review Committee consisting of Internal Members alone, monitors the quality related academic, administrative system and support service activities. The system has strong Internal Audit Mechanism by which minimum two internal audits are conducted every year by qualified and trained internal auditors, while the reports are presented in the Management Review Committee Meeting. In Management Review Committee Meeting, the outcome and action taken reports of all the internal audits, academic practices and administrative processes are presented and reviewed.

Functions of the Management Review (MR) Meeting

Through the Management Review Meeting, regular meetings are conducted as per a formal agenda consisting of:

a. The status of actions from previous management reviews
b. Changes in external and internal issues that are relevant to the quality management system

c. Information on the performance and effectiveness of the quality management system, including trends in:
    i. Audit results - first party, second party and third-party audits

b. The extent to which quality objectives have been met
c. Process performance - result analysis
d. Non-conformities and corrective actions other than the audit points
e. Monitoring and measurement results (course monitoring review)
f. Stakeholders feedback, complaints and concerns from students and relevant interested parties
g. The performance of external service providers
d. The adequacy of resources
e. The effectiveness of actions taken to address risks and opportunities
f. Opportunities for improvement - recommendations from participants
g. Any other issues related to QMS

The members shall come prepared for the review meetings with necessary inputs from their areas of responsibility. The decision taken and time bound action plans drawn at the review meetings are recorded and circulated by Management Coordinator to all members for necessary action and feedback. These decisions include resolutions made at MR Meeting for improvement of effectiveness of QMS, satisfaction of interested parties and sanction of new resources to realize the above objectives. Management Coordinator maintains records of management reviews and related correspondence.

Table 10.10. Members of the Management Review Committee

Sl. No.	Name of the Member	Designation	Position
1	Col.Dr.G.Thiruvasagam	Chairperson	Vice Chancellor
2	Dr. M. Jayaprakashvel	Secretary	Registrar i/c
3	Dr.D.Arivazhagan	Convener	Management Coordinator
4	Members	Ex Officio Heads of all Academic, Administrative and Support Service Departments	Members

Frequency of Meetings, Attendance and Membership details of Governing Bodies

Regular meetings of the governing bodies as per the UGC Regulations with stipulated attendance are held and details are presented as below.

Table 10.11 Frequency of Meetings, Attendance and Membership details of GoverningBodies

Name of the Governing Body	Frequency of Meetings	Attendance Requirement/Minimum quorum
Board of Management	4 meetings in a year	Two Third of all Members
Finance Committee	2 meetings in a year	Two Third of all Members
Planning and Monitoring Board	2 meetings in a year	Two Third of all Members
Academic Council	3 meetings in a year	Two Third of all Members
Board of Studies	1 meeting in a year	Two Third of all Members

Management Review Committee	2 meetings in a year	Two Third of all Members

Sample meeting notice, attendance, minutes of the meeting and action taken reports of the Governing/Administrative bodies

Few sample meeting notices, attendances, minutes of the meeting and action taken reports of the Governing/Administrative bodies are given as Annexure as per the following table

Table 10.12 List of annexure for the Governing Bodies and Administrative Bodies.

S.No	Name of the Governing Administrative Body	Annexure No	Annexure Details (Selected sample)	Annexure URL
1	Board of Management	10.1	1. Meeting Notice - Enclosed 2. Meeting attendance - Enclosed 3. Minutes of the Meeting- Enclosed	Annexure for the (https://drive.google.com/file/d/1Vjj8IguG9r6dtQjQaRKpA1yoKI_ovf8L/view?usp=sharing) Board of Management
2	Planning and Monitoring Board	10.2	1. Meeting Notice –Enclosed 2. Meeting attendance – Enclosed 3. Minutes of the Meeting - Enclosed	Annexure for the Planning and (https://drive.google.com/file/d/1CoXcnEMxgOn7zCwwQBR32G-Fcw7LyZC_/view?usp=sharing) Monitoring Board (https://drive.google.com/file/d/1CoXcnEMxgOn7zCwwQBR32G-Fcw7LyZC_/view?usp=sharing)
3	Board of Studies	10.3	Sample from one Department Board of Studies - Enclosed	Annexure for the (https://drive.google.com/file/d/1dIbr92u2l7b_yOe-yqwbD7TFKSXed3Um/view?usp=sharing) Board of Studies
4	Finance Committee	10.4	1. Meeting Notice -Enclosed 2. Meeting attendance – Enclosed 3. Minutes of the Meeting - Enclosed	Annexure for the (https://drive.google.com/file/d/1gQjmrKLXr9acwqn3zUx2hvFuPDZUukKM/view?usp=sharing) Finance Committee

Organisational Structure and Administrative Set Up

Being a Deemed to be University, AMET has a well established organizational structure by following the guidelines of the University Grants Commission. Salient features of the Organizational Structure/Administrative set up of the University are as follows:

1. Board of Management is the apex body for the University; The Vice Chancellor is the Chairperson of the Board of Management; The Board of Management shall delegate its powers to Vice Chancellor
2. The Board of Management consists of both Internal Members and eminent external experts as Members
3. The Vice Chancellor takes the recommendations of the various governing bodies and committees for taking decisions and there by strengthen the Participatory Management
4. The Board of Management and the Vice Chancellor has the powers to form various Committees and Boards, including sub committees for the effective functioning of the University through which the decentralization of powers is practiced in the University.
5. The Pro Vice Chancellor, the Registrar, Controller of Examinations and Finance Officer are the officers of the University who reports to the Board of Management through the Vice Chancellor.
6. Apart from these governing bodies and officers of the University, the Institution is having several mandatory committees/cells for the effective functioning of the University. A few such selected Committees/Cells are as follows
    a. Committee Against Sexual Harassment
    b. Anti-Ragging Committee
    c. Grievance Redressal Committee
7. The University is also having many advisory Committees for the proposal, implementation and monitoring of academic and administrative improvement activities. A few of them are listed below

a. Internal Quality Assurance Cell (IQAC)
b. Research Advisory Committee

c. Student Council
d. Staff Welfare Committee
e. Library Committee
f. Women Empowerment Cell

The overall University organizational structure and administrative set up is summarized in Figure 10.1

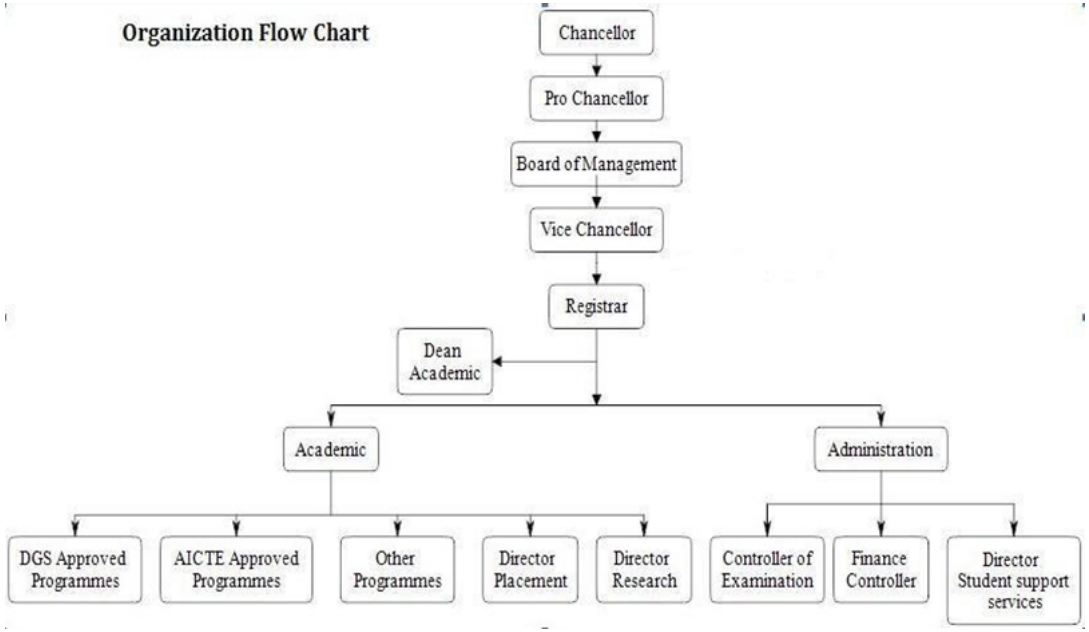


Figure 10.1 Organization Flow chart

Other Support Services/Administrative Committees

Table 10.13. Frequency of Meetings, Attendance, Membership details and Support Services/Administrative Committees

Name of the Support Service/Administrative body	**Frequency of Meetings**	**Attendance Requirement /Minimum quorum**	**Membership Details**
Internal Quality Assurance Cell (IQAC) of AMET	Minimum two meetings per year	Two Third of all Members	Given in Table 10.14

Anti-Ragging Committee- Key functions are to maintain AMET a ragging-free campus by creating awareness and attending ragging related complaints	As per the mandate of the UGC;As and when required; Minimum two meetings per year	Two Third of all Members	Given in Table 10.15 (Internal and External members)
Women Empowerment Committee- Creates awareness about women empowerment in campus by organizing events	Twice in a year; However, Committee conducts regular awareness events	Two Third of all Members	Given in Table 10.17
Grievance Redressal Committee frames the policy and procedures for the Grievance Redressal; Monitors the same	As and when required; Minimum two meetings per year	Two Third of all Members	Given in Table 10.18
Research Advisory Council-frames the policies and procedures for the operation academic,funded and consultancy research in the University	As and when required; Minimum two meetings per year	Two Third of all Members	Given in Table 10.19
Library Committee - providing necessary inputs for the purchase of library resources	Minimum two meetings per year	Two Third of all Members	Given in Table 10.20

Internal Quality Assurance Cell (IQAC) of AMET

Quality enhancement is a continuous process; the IQAC shall become a part of the institution"s system and work towards realization of the goals of quality enhancement and sustenance. The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of institutions.

Broad functions of the AMET IQAC are as follows:

- Ensuring timely, efficient and progressive performance of academic and administrative tasks
- Enhancing the quality of academic and research programmes
- Making the University environment and academic programmes accessible for all sections of the society
- Enhance the Institutional Social Responsibilities
- Advice upon the modern methods of teaching and learning
- Creation of credible feedback mechanisms
- Ensuring secure and transparent evaluation system
- Advice upon the enhancement of physical infrastructure
- Making the Green Campus by inculcating the environmental consciousness
- Ensuring the availability and maintenance of support structure and services
- Enhance the collaborations with Industry, Academia and other spheres of the society
- Development of quality benchmarks for various academic and administrative activities of the Institution
- Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes

- Dissemination of information on various quality parameters of higher education
- Organization of inter and intra institutional workshops, seminars on quality related themes
- Documentation of the various programmes/activities leading to quality improvement
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices;

Table 10.14: Members of the AMET IQAC

S.No.	Name of the Member	Designation	Position
1	Col.Dr.G.Thiruvasagam	Vice Chancellor	Chairman
2	Mr.S.Karikalan	Senior Vice President-AMET,	Member (Management)
3	Dr.M.Jayaprakashvel	Registrar I/C	Member
4	Dr V Ramachandran	Director-Distance Online Education	Member
5	Dr.R.M.Chandrasekaran	Former Vice Chancellor, University of Madras, Chennai	Member
6	Dr.Abudhahir.A	Director (IQAC) B.S. Abdur Rahman Crescent Institute of Science & Technology Vandalur, Chennai	Member
7	Dr.Sanjib Kumar Patnaik	Professor, Director- Centre for Academic Courses, Dept. of EEE, Anna University, Chennai	Member
8	Dr.S.Balakrishnan	IQAC Coordinator Professor Dept. of Earth Sciences, Pondicherry University	Member
9	Capt. K. Karthik	Principal-DGS Courses	Member
10	Prof.Dr.T.Sasilatha	Dean- Academics	Member
11	Dr.S.Prabhakaran	Professor- Marine Engineering	Member
12	Mr R Sundar	Assistant Professor-Marine Engineering	Member
13	Chairperson of the Student Council AMET	Student	(Student – Member)

14	Mr B Dinesh	Crew Operator- Mearsk, Chennai	(Employer - Member)
15	Mr Arumugam	President-Fishermen Association, Kanathur	(Local Society – Member)
16	Mr. K. Muralitharan	Manager-NRR Finance, Trichy	(Parent-Member)
17	Dr R Karthik	Regional Business Manage-Provet Pharma Private Limited, Chennai	(Alumni - Member)
18	Dr D.Arivazhagan	Professor-AMET Business School	Member - Coordinator

Anti-Ragging Committee

Broad functions of the Anti-Ragging Committee are as follows:

1. To ensure compliance with the regulations as well as the provisions of any law currently in force concerning ragging and directions of the Honble Supreme Court.
2. To monitor and oversee the performance of the Anti-Ragging Squad in the prevention of ragging in the University.
3. To publicize to all students and prevalent directives and the actions that can be taken against those indulging in ragging;
4. To consider the complaints received from the students and conduct enquiry and submit a report to the Anti- Ragging Committee along with punishment recommended for the offenders;
5. Oversee the procedure of obtaining an undertaking from the students in accordance with the provisions;
6. To take all necessary measures for prevention of ragging inside the Campus/ Hostels

Table 10.15: Members of the Anti-Ragging Committee

Chairman	
Col.Dr.G.Thiruvasagam	Vice-Chancellor & Chairperson
Members	
Dr. M. Jayaprakashvel	Registrar I/C (9840529274)
Capt.K.Karthik	Principal- DGS Courses (9444084497)
Dr. N.R. Ramkumar	Dean-Students Welfare (9381080111)
Mr.Mahesh Henry	Advocate (9444319995)
Inspector of Police	Kanathur (94981 00175)
Ms. Sandhya Rani Ramadass	Lady Member of NGO and Psychologist(9840982160)
Mr. Dilli Ganesh	Local Media
Mr. Mathew Varghese	Proctor
Dr.K.Gayathri	Assistant Professor-Department of Physics (97899 33245)

Dr.R.Vettriselvan	Assistant Professor & Faculty Warden - Ganga Hostel (97881 61399)
Mr.Prem Anandh	Asst. NCC Officer & Faculty Warden - Yamuna Hostel (90033 60606)
Mr.Muthaiyalraj	Assistant Security Officer (98407 02091)
Dr.Meher Taj	Assistant Professor & Faculty Warden - Narmada Hostel
Cdt.Adhitya Sathish Kumar B.Sc Nautical Science, 3rd year	Chairman, Student Council
Ms.Anna Joy MBA 1st year	Secretary, Student Council
Mr.Jagadeesh B.E Marine Engineering, 4th year	Deputy Parade Commander

Table 10.16: Members of the Anti-Ragging Squad committee

Name of the Committee Member	Profession	Mobile Number	e-mail address
Dr.M.Jayaprakeshvel	Registrar i/c	98405 29274	registrar@ametuniv.ac.in (mailto:registrar@ametuniv.ac.in)
Dr.N.R.Ramkumar	Dean-Welfare Students	93810 80111	proctor@ametuniv.ac.in (mailto:proctor@ametuniv.ac.in)
Capt .K.Karthik	Principal- Courses DGS	94440 84497	karthik.k@ametuiv.ac.in (mailto:karthik.k@ametuiv.ac.in)
Dr.T.Sasilatha	Dean- Academics	94447 52994	deaneeem@ametuniv.ac.in (mailto:deaneeem@ametuniv.ac.in)
Dr.D.Rajasekar	HoD-Management Studies	98846 91744	rajasekar.d@ametuniv.ac.in (mailto:rajasekar.d@ametuniv.ac.in)
Prof.MSP. Raju	HoD-NA&OE	99896 25271	msp.raju@ametuniv.ac.in (mailto:msp.raju@ametuniv.ac.in)

Mr.Muthaiyalraj	Assistant Security Officer	98407 02091	-
Mrs. Pansy Chitty	Assistant Warden	98403 93972	-
Dr.K.Gayathri	Assistant Professor, Department of Physics	97899 33245	gayathri.k@ametuniv.ac.in (mailto:gayathri.k@ametuniv.ac.in)
Mr.P.C.Selvan	Deputy Registrar, Administration	9840196007	paul.r@ametuniv.ac.in (mailto:paul.r@ametuniv.ac.in)

Women Empowerment Committee

AMET, which is unique in offering maritime courses where girl students also get trained for shipping and maritime jobs. The WEC was established with the aim of supporting and providing resources for women (Students, Staff, Research Scholars and Supporting Staff) to make them empowered, economically independent and socially active. WEC organizes various workshops, seminars, extension activities centred towards empowering women of AMET and in the society as well.

Table 10.17 Members of the Women Empowerment Committee

S.No	**Name**	**Category in the committee**	**Designation**
1	Col.Dr.G.Thiruvasagam	Chairman	Vice Chancellor
2	Dr. Sangeetha Albin	Member	Joint Registrar
3	Ms.Shanthi H.J	Member	Assistant Professor, Department of Computer Science & Engineering
4	Dr. Anitha Warrier	Member	Associate Professor, Department of Physics
5	Ms.Diviyaranjani R	Member	Assistant Professor, AMET Business School
Students office bearers:			
6	Ms.Anna Joy	Secretary	I Year MBA
7	Ms. Ruba	Member	III Year BBA
8	Ms.Sangamithra	Member	I Year B.Sc (Computer Science)
9	Ms. Sruthi	Member	II Year B.E (NA & OE)

Table 10.18. Members of the Grievance Redressal Committee.

S.No	**Name**	**Designation**

1	Col.Dr.G.Thiruvasagam	Vice-Chancellor & Chairperson
2	Dr.M.Jayaprakashvel	Registrar i/c
3	Dr.T.Sasilatha	Dean -Academics
4	Mr.P.C.Selvan	Deputy Registrar-Administration
5	Ms.G.Bhavani	Student (II year BBA Roll No: ABA18014)
6	Ms. R. Pramiti Roy	Student III year (B.E (EEE) Roll No: AEE20017)

Online Grievance Redressal System

University has also made the provision to receive and attend various grievances of students online through University website portal ametuniv.edugrievance.com (http://ametuniv.edugrievance.com/). Students can register and login using their email ID /mobile number and post their grievance which are being addressed by the Grievance Redressal Committee officials concerned.

Table 10.19 Members of the Research Advisory Council

S.No.	Member	Designation
1	Col.Dr.G.Thiruvasagam	Vice Chancellor, AMET (Chairperson).
2	Dr. R. Dr.William Selvamurthy	President, AMITY University, Former Chief Controller – R&D, DRDO.
3	Dr.T.Balasubramanian	Former Vice Chancellor, CARE Deemed to be University (Chettinad) Chennai.
4	Dr.R.Venkatesan	Scientist G National Institute of Ocean Technology (Rtd), Chennai.
5	Mr.Vinay Kumar	Scientist F, Department of Scientific and Industrial Research (DSIR), Government of India, New Delhi
6	Dr.S.Nallayarasu	Professor and Head, Department of Ocean Engineering, IIT Madras
7	Dr.Vasudevan	Scientist G, National Physical Oceanographic Laboratory (DRDO), Kochi
8	Dr.K.Kadirvelu	Scientist F, DRDO-BU Centre for Life Sciences Coimbatore
9	Prof.Sudhir Varadharajan	School of Interdisciplinary Design and Innovation, IITDM Kanchipuram
10	Capt.K.Karthik	Principal- DGS Courses, AMET
11	Prof.Bhoopathy Bhaskaran	Dean- Marine Engineering, AMET
12	Dr. T .Sasilatha	Dean- Academics and International Relations, AMET
13	Dr.D.Rajasekar	Dean- Academic Research, AMET

14	Dr.Anita R Warrier	Associate Professor and Head i/c, Department of Physics, AMET
15	Dr.C M.Ramakritinan	Professor and Head, Department of Marine Biotechnology, AMET
16	Dr.D.Velumurugan	Director-Research and Development Cell (RDC)- Secretary and Convener
17	Dr.M.Jayaprakashvel	Registrar i/c , AMET (Ex-Officio Member)

Library Committee

The Prof VBS Rajan Library is the Central Library of the University in a separate building with a total area of 30,000 Sq.ft. The Library has a large collection of books with updated editions in different titles and volumes. The Library has a Digital Knowledge Centre in which research and publication databases, software etc. are available and updated every year. The Library is fully automated with RFID and Barcoding system. The Library Committee of the University is providing necessary inputs for the purchase of library resources.

Table 10.20 Members of the Library Committee

Sl.No	Name of the Members	Designation
1	Dr. M. Jayaprakashvel, Registrar i/c	Chairman (Ex Officio)
2	Capt. Ramakrishnan Venkat Associate Professor Department of Nautical Science	Member
3	Dr. S. Prabhakaran, Professor Department of Marine Engineering	Member
4	Dr. V. Leela Vinodhan, Associate Professor Department of Mechanical Engineering	Member
5	Dr. S.Krishna, Assistant Professor Department of English	Member
6	Dr.Prakash I.N, Librarian, Alliance University, Bengaluru, Karnataka-India	Member
7	Dr.P.Pannerselvam, Librarian Central library, B.S Abdul Rahman Cresent Institute of Science and Technology Vandalur, Chennai	Member
8	Mr. R. Sundar, Assistant Professor Department of Marine Engineering	Member
9	Dr.K. Sekar, Librarian	Member Secretary (Ex Officio)

Service Rules for the Key Leadership and Officials of the University The Chancellor

The Chancellor presides over the convocations of the University but shall not be the Chief Executive Officer. The Chancellor is appointed by the AMET Trust and the duration and tenure of appointment are given in the MoA. Where power is conferred upon the Chancellor to nominate persons to authorities, he/she shall, to the extent necessary, nominate persons to represent the various interests for the furtherance of the objectives of the University.

The Pro Chancellor

The Pro Chancellor is also appointed by the AMET Trust. The role of Pro Chancellor is limited to carrying out the tasks assigned to the Chancellor, when the latter is not available for carrying out the same.

The Vice-Chancellor

The Vice-Chancellor is a whole time salaried Officer of the University and has been appointed by the Chancellor from a panel of three names suggested by the Search-cum-Selection Committee. The Vice-Chancellor is the Principal Executive Officer of the University and will exercise general supervision and control over the affairs, and will be mainly responsible for implementation of the decisions of all its Authorities.

The Vice-Chancellor is the Ex-Officio Chairperson of the Board of Management, the Academic Council, the Finance Committee, the Planning & Monitoring Board, and Selection Committees. The Vice-Chancellor is having the powers to convene or cause to be convened meeting of the various authorities of the University. As per the Regulations and Rules of the University, the Vice-Chancellor is empowered to exercise any power conferred upon any authority of the University and to take action and then report to the authority concerned on the action taken by him / her on such matter. However, if the relevant authority is of the opinion that such action ought not to have been taken, it may refer the matter to the Chancellor whose decision thereon will be final.

If any person in the service of the University is aggrieved by the action taken by the Vice – Chancellor, he / she shall have the right to appeal against such decision to the Board of Management within 30 days where the Board of Management can confirm, modify or reverse the action taken by the Vice-Chancellor.

The Vice-Chancellor can exercise all other powers delegated by the Board of Management. The Vice-Chancellor is also having the power to re-delegate some of his/her powers to any of his/her sub-ordinate Officers with the concurrence and approval of the Board of Management. It is the duty of the Vice-Chancellor to ensure that Regulations and Rules of the University are duly observed and implemented. All powers relating to the proper maintenance and discipline of the University are vested in the Vice-Chancellor.

The Pro Vice-Chancellor

The Pro Vice-Chancellor is appointed by the Board of Management on the recommendations of the Vice-Chancellor. The Pro Vice-Chancellor will hold Office co-terminus with the Office of the Vice-Chancellor. The Pro Vice-Chancellor is having the powers and duties as prescribed by the Rules of the University.

The Registrar

The Registrar is a whole time salaried Officer of the University and is appointed by the Board of Management on the recommendations of the Selection Committee.

The Registrar is the ex-officio Secretary of the Board of Management, the Academic Council and the Planning and Monitoring Board. However, The Registrar is not a member of any of these authorities.

The Registrar is directly responsible and working under the orders of the Vice-Chancellor. The following are the duties of the Registrar: -

1. To be the custodian of the records and the funds and such other property of the University as the Board of Management may commit to his / her charge
2. To conduct the official correspondence on behalf of the authorities of the University
3. To issue notices convening meetings of the authorities of the University and all Committees and sub-Committees appointed by any of these authorities
4. To maintain the minutes of the meetings of all the authorities of the University and of all the Committees and sub-Committees appointed by any of these authorities
5. To make arrangements for the examinations conducted by the University
6. To represent the University in suits or proceedings by or against the University, sign powers of attorney and perform leadings or depute his / her representatives for this purpose
7. To enter into an agreement, sigh documents and authenticate records on behalf of the University
8. To make arrangements to safeguard and maintain the buildings, gardens, office, canteen, cars and other vehicles, laboratories, libraries, reading rooms, equipment and other properties of the University
9. To perform such other duties as may be specified in the Rules of the University, or as may be assigned by the Board of Management or the Vice-Chancellor from time to time.

The Finance Officer/Financial Controller

The Finance Officer is a whole time salaried officer of the University appointed by the Board of Management. The Finance Officer will work under the direction of the Vice-Chancellor and shall be responsible to the Board of Management through the Vice-Chancellor. He/she is responsible for the preparation of annual budget, estimates and statements of account for submission to the Finance Committee and the Board of Management. He/she is responsible for the management of funds and investments of the University, subject to the control of Board of Management.

The Controller of Examinations

The Controller of Examinations (COE) is appointed by the Board of Management. The COE ensure that all the specific directions of the Board of Management, Academic Council and Vice- Chancellor in respect of examination and evaluation are complied with. The Controller of Examinations is the permanent invitee to the Academic Council.

Chairpersons, Deans, Directors and Coordinators

In each of the schools of the University, a Chairperson is appointed by the Vice Chancellor who is responsible for the overall guidance of the Departments in the school. The Vice Chancellor appoints Deans and Directors for specialized functions. The Deans of different schools or specialized functions will work under the orders of the Vice Chancellors. Faculty members of the University are given additional responsibility as the Directors of various Centers and Coordinators of various Cells. They carry out the specialized functions of the Cells/Centers and report to the Vice Chancellor.

The Head of the Department

There will be a Head of the Department for each of the Departments in the University who shall be appointed by the Vice-Chancellor from amongst the Professors of the Department. Provided that if there is no Professor in the Department or there is only one Professor in the Department whose term as Head of the Department is ending, the Vice-Chancellor may appoint an Associate Professor as Head of the Department. The powers and functions of the Head of Department are prescribed by the Rules of the University.

Miscellaneous matters pertaining to authorities of the University

1. If any question arises, as to whether any person has been duly nominated or appointed as, or is entitled to be a member of any authority or any committee of the University, the matter shall be referred to the Chancellor, whose decision thereon shall be final and binding.
2. Any member, other than an ex-officio member of any authority, may resign by a letter addressed to the Registrar and the resignation shall take effect as soon as it is accepted by the Chancellor or the Chairperson of the Board of Management, as the case may be.
3. Sudden vacancies among the members of any authority or any Committee of the University shall be filled by the respective authority, as soon as may be, and within a period of six months.

a. A person shall be disqualified for being chosen as, and for being a member of any of the authorities of the University;
b. If he/she is of unsound mind
c. If he/she is an un-discharged insolvent
d. If he/she has been convicted by a court of law for an offense involving moral turpitude
e. If he/she has not been appointed as per the provisions of these Regulations.

Service rules, Procedures, Recruitment and promotional policies General Services Rules

1.Hours of Work

The working hours for the teaching faculty are between 9.00 A.M and 4.30 P.M for the non-teaching and administrative staff, the hours are from 9.00 A.M to 5.00 P.M. An Employee is expected to put around 48 hours of work every week.

2.Attendance and Punctuality

Regular attendance is essential to the efficient functioning of the institution and is a necessary condition of employment. Employees are expected to report to work as scheduled and on time.

3.Identification Card

Identification cards are issued to all staff members and they are expected to wear them while they are in the campus.

4.Code of conduct

a. **Dress code / Foot wear**

The Institute observes a formal dress code. All Male and Female employees should use discretion in wearing attire that is appropriate for the work in the institute.

b.Foot wear

Staff members are requested to wear slip-on shoes (Cut shoes or Pump shoes) or regular slippers with normal heels.

c.Prohibited Activities

The institute prohibits the consumption of alcohol and drugs, and gambling inside the premises. In addition, any damage caused to the institute"s property or cases of dishonesty and harassment or indulging in violent behaviour with students, visitors or other staff, etc. will lead to disciplinary action, which may also lead to suspension or termination for failure to comply with institute's policy.

d.Use of Telephone, Internet and Computer

The institute understands that when employees work during the week it is occasionally necessary to conduct personal business during office hours. However, employees should limit their personal use of the telephone, computer and internet during office hours.

e.Library

The library will be kept opened from 9 a.m. to 9 p.m. on all working days and from 9 a.m. to 5 p.m. on Sundays. Staff and students can make use of this facility. The Library can also be accessed from anywhere using INFED supported remote access facility.

Policies and Procedures

AMET is keen on developing and improvising various policies and proposals for the smooth functioning of the University. The Policies define the scope, aims and objectives, procedures, authorities concerned etc. These policies and procedures are uploaded in the University website (Link: https://www.ametuniv.ac.in/policies.html (https://www.ametuniv.ac.in/policies.html))

Table 10.21 Policies and Procedures of the University

Name of the Policy	Year of Implementation and publication
Admission Policy	2013

AMET Academic Integrity and Plagiarism Policy	2017
Fee Fixation Policy	2013
Governance Policy	2013
Infrastructure Policy	2013
Policy for Preventing Alcohol and Drug Abuses	2013
Policy for the Prevention, Prohibition and Punishment of Sexual Harassment of Women	2013
Policy on Curbing the Menace of Ragging	2013
Policy on Curriculum Design and Development	2013
Policy on Ethics in Research	2013
Quality Policy of AMET Deemed to be University	2013
Code of Conduct Handbook	2007
Vision 2025	2019
Recruitment and Promotional Policy	2007

Recruitment and Promotional Policies

AMET adheres the guidelines and regulations of the Regulatory and Statutory bodies such as University Grants Commission (UGC), All India Council of Technical Education (AICTE) and Directorate General of Shipping (DGS). The qualifications, emoluments and promotional avenues are also fixed based on the guidelines of UGC/AICTE/DGS.

The Recruitment and Selection process is by and large as per the guidelines of the University Grants Commission. The generalized procedure of recruitment and promotion are summarized below.

1. The Departments and Functional Areas identify the requirement of recruitment well in advance and bring it to the knowledge of Board of Management through Vice Chancellor
2. The Vice Chancellor/Board of Management reviews the recruitment requirement and process for notification of vacancy.
3. For all the teaching and key administrative positions, appropriate notification of vacancy is made by following necessary publicity measures
4. The applications are scrutinized by the University either with the help of Internal/External experts or both based on the need. The eligible applications are scrutinized for further selection process
5. Appropriate Selection Committee are formed by the Vice Chancellor for each recruitment process. The Vice Chancellor is the default Chairperson of the Selection Committee which contain both internal and external subject experts
6. The appointments are made based on the Personal Interview by the Selection Committee. Necessary wait lists are also prepared
7. Newly appointed Faculty/Staff are required to produce necessary educational qualification certificates and other documents for verification
8. The Promotion is based on Performance Based Appraisal System (PBAS) with due consideration to Academic Performance Indications (API) in case of teaching faculty and appraisal forms in case of non-teaching staff.
9. Promotional avenues based on Career Advancement Scheme are also available for the exemplary performers.
10. At appropriate sessions, University notifies the Faculty for Career Advancement Scheme in which applications are scrutinized by Scrutinizing Committee and eligible applicants are interviewed by the Selection Committee (with External Experts as Members). Based on the recommendations of the Selection Committee Board of Management/Vice Chancellor promotes the Faculty to the eligibility level.
11. University reserves the rights to cancel/revoke the appointment and promotions or terminate the probationary period of any employee for valid reasons that may deem fit to the Management.

Probationary period:

A new employee will be on probation for a period of One year from the date of joining. Employee"s performance during the probationary period will be at the discretion of the management and thoroughly assessed, and only on satisfactory completion of initial or extended period of probation, new employee will be confirmed in the regular service of the University.

Resignation

Employees who wish to leave the services of AMET, he/she will be relieved only at the end of a semester, provided they have to tender three months" notice or surrender three month"s salary. However, it is left to the discretion of the Management, to relieve earlier. Likewise, if employee"s service is not satisfactory / required by the Management, it has the discretion to terminate the services at any point of time, with a formal notice.

Policy on Employee Welfare

1. University has established a full time medical centre for the healthcare of Employee and students
2. The Management is keen on extending the benefits of “Employees Provident Fund” to the employees of AMET. Eligible regular employees (Teaching, Non–Teaching and Supporting) are registered under the EPF scheme.
3. As per the E.S.I. scheme, Staff have to contribute an amount of 12% of their total earnings every month. The Employer (AMET Management) in turn, shall contribute a sum of 12% of the total earnings of the employee Gratuity.
4. All Employees completing 2 years of service in our Institution are eligible to cover under the Group insurance scheme with applicable benefits (Accidental hospitalization for Rs.1,00,000/- per staff; Accidental death claim for Rs.1,00,000/- per staff; Hospitalization expenses up to Rs. 25000)
5. Teaching faculty are eligible for getting Financial Assistance to attend events for their professional developments ((National level – Max. limit: Rs. 3,000; International – Max. limit: Rs. 10,000)
6. University extends financial assistance to Faculty for research publications (50% Publication cost in “Journals” from Scopus Indexed, SCI Indexed) (Max. limit –: Rs. 10,000)
7. University provides full fee waiver for Faculty who do part time PhD at AMET
8. University provide incentives for paper publications, book publications, revenue generation through funded projects and consultancy.
9. University extends financial supports for faculty who organize curricular, co-curricular and extracurricular events both in campus and outside the campus
10. University financially supports faculty for the development of educational materials such as E contents (video lectures, short term courses, MOOCs etc.)
11. All Teaching and Non-Teaching are eligible for applicable leave benefits as given in Table. 10.22

Table 10.22 Leave benefits to the Employee of AMET

Leave	**Numbers of Days**	**Eligibility**
Casual Leave	12 days with pay	All staff
Medical Leave	15 days per year with pay	All the staff who probationary period completed
Maternity Leave	3 months with full pay (for first 2 children only)	All the staff who probationary period completed
Paternity Leave	15 days with full pay	All the staff who probationary period completed
Vacation Leave	Summer and Winter vacations as notified by the University	All Teaching Faculty (Non-teaching staff can avail vacation leave on rotational basis with prior approval from the Authorities)
On Other Duty Leaves	As approved by the Authorities considering case by case and merit of the request	All the staff who have completed probationary period

10.1.4 Decentralization in working and grievance redressal mechanism (5)

Institute Marks : 5.00

Decentralisation in working

1. AMET follows decentralization in the working system by delegating financial powers to the respective Heads of the Departments in case of Academics and to the Functional Heads in case of Administration. They are to make out the Academic and departmental expenses that are incurred by the Department at the Head of Department level for expenses up to a given value that is manageable within the funds allocated to the Department and close the accounts every month with the approval from the higher authorities.

2. Though Vice Chancellor is the principal authority of the University who is empowered to take decisions and implement the same as given by the Board of Management, Vice Chancellor usually constitutes various committee/cells/centre to provide recommendations, execute the decisions of the Vice Chancellor etc. This provision allows the participatory governance in the University

3. By virtue, all recommendations and resolutions pertaining to academic and administrative decisions are taken in a collective, collaborative and consultative manner through formal bodies such as Academic Council, Planning and Monitoring Board, Finance Committee, Board of Studies etc. and are approved by the Vice Chancellor/Board of Management based on merits

4. Heads of Academic Departments are given financial autonomy to operate separate Bank account for Department expenses to the limit allowed by the University.

5. Heads of Academic Departments are empowered to convene Department meetings, Board of Studies and other OBE Committees.

6. Students are empowered to be a part of decision making bodies such as Academic Council, Board of Studies besides representatives in other committees such as Cultural Club, Sports Club, Student Council, Mess Committee etc.

7. There have been several committees, which takes up decentralization of administration and academic activities. Some of the Committees are:

a. Research is being administered by Board of Research, Research Monitoring Committee, Department Research Committee
b. Library activities are administered by the Library Committee
c. Mess and canteen activities by Mess Committee
d. Disciplinary committee
e. Committee Against Sexual Harassment
f. Anti-Ragging Committee
g. Student Council

Table 10.23: List of the faculty members (selected) who have been delegated powers fortaking administrative decisions

Sl. No.	Name of the Faculty	Functional Area	Role
1	Capt.K.Karthik	Principal-DGS Programs	Governing academic and administrative aspects of the DGS approved programmes
2	Dr T Sasilatha	Principal-Engineering &Technology Programmes	Governing academic and administrative aspects of the AICTE approved programmes
3	Prof K Seyadu	Chief Executive Officer	Operational aspects of infrastructure, student affairs and external affairs related to legal and regulatory aspects

4	Dr.D.Velumurugan	Director Research	Administration of PhD Progamme, funded research, consultancy projects, IPR etc.
5	Dr.R.Karthikeyan	Director Placement	Organizing Placement Training and On campus placement interviews
6	Dr. D.Arivazhagan	IQAC Coordinator	Forms, procedures and documentation of quality initiatives in the University
7	Dr.D.S.Balaji	Director, ICT	Maintenance and enhancement Of ICT
		Enabled Education	Infrastructure, Training of Faculty in ICT
8	Mr. Mathew Varghese	Proctor	Hostel Administration
9	Mr P Ramakrishnan	Advisor (Security and Vigilance)	Campus security and vigilance
10	Dr.R.Karthikeyan	Director Innovation and Incubation Centre	AMET Innovation, Start-up and Entrepreneurship Development activities
11	Dr. Deepa Rajesh	Director HRDC	Training and faculty empowerment
12	Mr R Sundar	Coordinator,Educational Materials Resource Development Centre	Facilitation of Faculty to prepare e contents
13	Mr J Balasubramanian	System Manager	Maintenance and enhancement of ITfacilities and networking in campus
14	Mr Kannan	Transport Manager	Management of Transport Needs and transportation
15	Mr Ramanan	Public Relations Officer	Maintenance of Public Relations, Event Management and Hospitality

Grievance Redressal Mechanism

AMET has formed Grievance Redressal Committee, Committee against Sexual Harassment and Anti-Ragging Committee as per UGC regulations to obtain, analyse, resolve and recommend solutions when there are grievances of any sort and also to impose punishment on the offenders. The above committees are working as per UGC guidelines.

AMET has also made provision for online grievance representing mechanism through website.

1. Harassment/Discrimination Complaint: http://www.ametuniv.ac.in/harassment-discrimination-complaint.html (http://www.ametuniv.ac.in/harassment-discrimination-complaint.html)

2. Information for Students about Grievance Redressal:http://www.ametuniv.ac.in/Students-grievance-redressal-mechanism.html (http://www.ametuniv.ac.in/Students-grievance-redressal-mechanism.html)

Besides these Committees, AMET addresses the student grievances posted in the UGC Online Grievances Redressal Portal. AMET popularizes these online grievance portals by displaying boards and notifying through circulars among the stake holders. The web link for UGC online grievance portals is posted on AMET website.

Apart from these, AMET has the following unique mechanisms with reference to grievances from stakeholders

1. Green Box for General Grievances
2. Black Box for ragging related Grievances

Director for Student Affairs is a specialized nodal officer for channelling all kinds of student grievances and also acts as a facilitator for students to register their requests and grievances.

Students Grievance Redressal Committee

This committee has been constituted as per the UGC notification published in the Gazette on 23rd March 2013.

I.Management

- The Vice Chancellor
- The Registrar
- The Director, Student Affairs

II.Heads of the Core Departments

III. **Controlling Officers**
    - The Controller of Examination
    - The Proctor
    - The Director, Physical Education
    - The Librarian
    - The Public Relations Officer

Grievance Redressal Committee

The Grievance Redressal Committee has been formed to analyse, examine and conduct inquiries if needed on the grievances and recommend the decisions to the Authorities for appropriate redressal measures. The details and function of this committee is given in Table 10.19.

Online Grievance Redressal System

University has also made the provision to receive and attend various grievances of students online through University website portal ametuniv.edugrievance.com (http://ametuniv.edugrievance.com/). Students can register and login using their email ID /mobile number and post their grievance which will be addressed by the concerned Grievance Redressal Committee officials.

Registration Process for Grievance Redressal

- Students can register their grievance through the website ametuniv.edugrievance.com (http://ametuniv.edugrievance.com/)
- Click Students Icon.
- Click “New User Registration”.
- Enter your details such as Name, Course, Batch, Mobile No., and Email and click Register.
- Once your registration is approved, you can post a grievance.

To Post a Grievance in Online Grievance Redressal Portal

- Use Email ID or Mobile Number to Login.
- Click Post a Grievance to register your grievance.
- Select the Grievance Type - If the grievance is related to a department, select your department name. If not, select the appropriate grievance type listed.
- Enter the grievance subject with brief description. If there is any proof or documents, it can be attached.
- Click Create to submit your grievance.

To view the Status of Grievance Redressal in online portal

- Students can view the status of grievance in My Grievances section.
- To view the details of the action taken on the grievance, click the View button.
- If the student is not satisfied with the reply, they can reopen the grievance and submit it with their queries again.
- To reopen the grievance, click Reopen button and type your grievance and post it.

Other Grievance Redressal Mechanisms

Besides these generalized grievance redressal mechanisms, the University is having the following Committees for the specialized grievances.

1.Anti-Ragging Committee

2.Anti-Ragging squad committee

3.Committee against Sexual Harassment

4.**Student Grievance Cell**

The summary of activities, membership details of the above committee are given in the following Table

Table 10.24 summary of activities, membership details of the Grievance Redressal Committees at AMET

Sl.No	Name of the Composition Major functions Committee	Composition	Major functions
1	Grievance Redressal Committee	Three Senior Professors of AMET as internal Members; Details given in Table 10.18	Analyse, examine and conduct inquiries if needed on the grievances and recommend the decisions to the Authorities for appropriate redressal measures
2	Anti-Ragging Committee	Given in Table 10.15 (Internal and External members)	Key functions are to maintain AMET a ragging-free campus by creating awareness and attending ragging related complaints
3	Anti-Ragging squad committee	Given in Table 10.16 (Internal Members)	Key functions are to organize periodic and surprise monitoring of the campus to curb ragging
4	Committee Against Sexual Harassment	Internal and External Members; Details are given in Table 10.25	Receive grievances on sexual harassment from both Faculty and students Conduct inquiry and recommend action/punishment etc. Conduct events to create awareness against sexual harassment.

5	Student Grievance Cell	Internal Members; Details are given in Table 10.26	In the event of difficulties based on COVID 19 pandemic, and also guidelines from the UGC, the University has formed a Student Grievance Cell, for Academic and Examination related grievances from students. However, the committee will continue its function after the pandemic too. Students are given special e mail ID to lodge their grievances on examinations and other academic issues (egrievances@ametuniv.ac.in)

Table 10.25. Members of the Committee against Sexual Harassment

S.No	Name	Designation
1	Dr. V. Sangeetha Albin	Joint Registrar
2	Dr. A. Shameem	Professor, AMET Business School
3	Ms. Sandhya Rani Ramadass	Lady Member of NGO and Psychologist
4	Dr.N.R.Ram Kumar	Dean – Students Welfare
5	Capt.S.Kumarakuruparan	Proctor
6	Dr. K. Gayathri	Associate Professor, Dept. of Physics
7	Mrs. H.J.Shanthi	Coordinator, Women Empowerment Cell
8	Dr. Meher Taj	Assistant Professor& Faculty Warden -Narmada Hostel
9	Ms.Pramiti Roy	BE-ECE-III year
10	Ms.Janani Shetty	B.Sc Nautical Science - II year

Table 10.26. Members of the Students Grievance Cell

S.No	Name	Designation

1	Dr. K. Durai Pandian	Dean-Students Welfare
2	Mr.R. Sundar	Coordinator-Students Welfare
3	Mr.S. Ramesh Kumar	Section Officer-Students Welfare

10.1.5 Delegation of financial powers (5)

Institute Marks : 5.00

Since AMET is following the participatory governance and decentralization of administrative powers, various authorities of the University are provided with Financial Powers. Academic Departments are provided with separate bank accounts through which they can spend amounts not exceeding Rs. 50000.

AMET has permitted the Principal Investigators of the funded projects to have a separate bank account for each of the Government funded projects. They are empowered to get advance payments from the project accounts. They can make their own purchase for amounts not exceeding Rs.50000 whereas, beyond that they need to take permission of the University Authorities. They need to provide statement of expenditure to prepare the Utilization Certificate for the purpose of reporting funding agencies.

The Faculty Members provided with seed money are empowered to utilize the full project amount at their own discretion and then to give statement of expenditure to the University

Table 10.27. Details of selected Officers/Faculty of AMET who have been provided with financial powers

Sl. No.	Position	Financial Powers
1	Registrar	Up to Rs. 2 lakh
2	Principal	Up to Rs. 1 lakh
3	Deans	Up to Rs. 50000
4	Heads of Departments	Up to Rs. 50000
5	Public Relations Officer	Up to Rs. 50000
6	Director Research	• Approve the Honorarium for PhD Related Meetings • Empowered to receive payments on behalf of University through formal manner
7	Controller of Examination	• Empowered to Receive Penalties and Fine amounts related to examination processes • Approve honorarium for Examiners and Evaluators
8	Proctor	Up to Rs. 50000
9	Duty Officers	Up to Rs. 10000

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

Institute Marks : 5.00

Transparency in University functioning

AMET maintains transparency in all its operations and working. At the beginning of every semester, AMET brings out calendar of events that contains information of semester activities and the same is sent to all Departments. Information on policies, rules, processes and its dissemination of this information is made available to Stakeholders on the AMET website. The required information about the Institution is made available on the AMET website www.ametuniv.ac.in (http://www.ametuniv.ac.in/).

Annual Reports

In every Annual Convocation, Vice Chancellor presents the Annual Report of the University comprising all the activities pertaining to entire functioning of the University. The Annual Reports are printed and distributed to all the stakeholders.

AMET Website

A website by the URL www.ametuniv.ac.in (http://www.ametuniv.ac.in/) is available from which the latest information and activities of the University can be accessed from anywhere, anytime. University has uploaded all mandatory documents such as course approval, ranking and accreditation documents, and approval by statutory bodies, honours and awards, compliance reports to statutory body review reports and rules and regulations of the University.

The norms, procedures, circulars & all other updated relevant information are available on the Management Information Systems. Apart from this, Mission and Vision is disseminated to all the stakeholders of the programmes through faculty meetings, workshops, student induction programmes, and parent meetings.

Transparent fee

The prospectus of AMET contains transparent information about the fees and charges payable. The same is also made available in AMET website which is updated periodically.

AMET follows its own declared policy (Admission Policy and Fee Fixation Policy) in collecting any fees or charges.

AMET collects only the fee that is transparently notified in the website and prospectus may be in full or in instalments. Besides, AMET does not charge/ collect any fee or other charges which are not publically stated /notified in the Prospectus.

Transparency in Appointments and Admissions

University maintains complete transparency in Employee appointments where details of all vacancy notifications are hosted in the website. During admission, the details of eligible applicants, merit/rank list etc. are publicly displayed in the notice board and University website

Transparency in Financial Transactions

AMET conducts both internal and external financial audits in every financial year. The audited account statements certified by the qualified Chartered Accountants are hosted publicly at AMET Website. The Annual Report of the University contains information about statement of income and expenditure.

Transparency in Accomplishments

University maintains all publications, funded projects, research facilities, details of research scholars and facilities for research in the University website. Besides, University maintains all necessary documents and reports submitted to regulatory, statutory and ranking bodies. The documents include Self Study Report and Annual Quality Assurance Report (AQAR) for NAAC, NIRF Ranking documents, DSIR certification, NBA related documents etc.

10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (15) Total Marks 15.00

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY : (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 - CFY 2022-2023

Total Income 9075				Actual expenditure(till…): 8811			Total No. Of Students 3238
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
8645	0	150	280	7339	825	647	2.72

Table 2 - CFYm1 2021-2022

Total Income 8415.25				Actual expenditure(till…): 9254.90			Total No. Of Students 3398
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
8171.35	0	46.43	197.47	6935.31	1679.42	640.17	2.72

Table 3 - CFYm2 2020-2021

Total Income 6614.02				Actual expenditure(till…): 6691.01			Total No. Of Students 3390
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
5945.59	0	158.01	510.42	5762.98	320.30	607.73	1.97

Table 4 - CFYm3 2019-2020

Total Income 11478.75				Actual expenditure(till…): 10339.09			Total No. Of Students 3649
Fee	Govt.	Grants	Other sources(specify)	Recurring including salaries	Non Recurring	Special Projects/Anyother, specify	Expenditure per student
9982.28	814.34	73.34	608.79	8717.52	1013.39	608.18	2.83

Items	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till	Budgeted in 2020-2021	Actual Expenses in 2020-2021 till	Budgeted in 2019-2020	Actual Expenses in 2019-2020 till
Infrastructure Built-Up	697	568.82	1458.50	1449.02	345.25	169.80	847	762.62

10.2.1 Adequacy of budget allocation (5)

Institute Marks : 5.00

The Annual budget for the Year is prepared in accordance with the needs & requirements of the concerned Departments after taking into consideration the annual student"s intake, lab and infrastructure upgradation, faculty and staff requirements and adopting the latest technologies. The Budget so prepared by each Department shall be reviewed in HOD"s meeting with the participation of Vice Chancellor, Registrar, Finance Controller and Principal.

After making required amendments and corrections based on the discussions and deliberations, a formal budget shall be prepared and the same is being sent to the Principal. The Registrar shall present the draft budget to the Board of Management for approval and sanctioned in the Finance Committee. The budget allocation and utilization for the last three years is found to be adequate.

Table 10.28. Adequacy of budget allocation for the last four financial years

S.No	Financial Year	Budget Allocation (Rs in Lakhs INR)	Actual Expenditure (Rs in Lakhs INR)	Adequacy Status
1	CFY = 2022-23	9,614.00	8,871.27	Yes
2	CFY m1 = 2021-22	9,586.00	9,254.90	Yes
3	CFY m2 = 2020-21	7,807.00	6,691.01	Yes
4	CFY m3 = 2019-20	10,640.80	10,339.09	Yes

10.2.2 Utilization of allocated funds (5)

Institute Marks : 5.00

Process of Utilisation of Funds started with allocation from Management to the University. Department Heads / Section-in-charges are intimated of the extent of funds allocated against their budget proposals.

Major works like Construction, Up-gradation of Existing Infrastructure, Procurement and Maintenance of Common utilities, House-keeping, Procurement of furniture etc. are controlled directly by the Finance Controller. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc. are initiated from the respective Departments through Purchase Department and the funds are released on a case to case basis by the Finance and Accounts section of the University after obtaining approval from the Management.

University forms Technical Committee and Purchase Committee for all the expenditure worth beyond Rs 50000.

During the last three years, the budget was utilized to meet expenses such as salary for staff, Infrastructure development, Equipment purchases, Expenses towards consumables and contingencies, travel etc. Almost 98% of the allocated budget provided by the Management was effectively utilized by the University in the last four financial years.

Table 10.29. Details of Funds Utilization percentage (%) in the last four financial years

S.No	Financial Year	Budget Allocation (Rs in Lakhs)	Actual Allocation (Rs in Lakhs)	Utilisation (%)
1	CFY = 2022-23	9,614.00	8,871.27	92.27%
2	CFY m1 = 2021-22	9,586.00	9,254.90	96.55%
3	CFY m2 = 2020-21	7,807.00	6,691.01	85.71%
4	CFY m3 = 2019-20	10,640.80	10,339.09	97.16%

10.2.3 Availability of the audited statements on the institute's website (5) Institute Marks : 5.00

AMET Deemed to be University conducts financial audits both by internal and external auditors. Besides, during Academic and Administrative Audits and ISO Audits, account statements are audited.

The audited statement of accounts certified by the qualified chartered accountants are made available publicly in the University website. These statements are also submitted to the Statutory and Regulatory Authorities of the University along with various reports.

Hence, the University is engaging internal and external audits for financial statements which are also publicly displayed.

AMET Deemed to be University also made provision for online Audited statement through website.
https://www.ametuniv.ac.in/attachment/audited_statementsof_accounts.pdf (https://www.ametuniv.ac.in/attachment/audited_statementsof_accounts.pdf)

10.3 Program Specific Budget Allocation, Utilization (30) Total Marks 30.00

:

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3
CFY: (Current Financial Year),
CFYm1 : (Current Financial Year minus 1),
CFYm2 : (Current Financial Year minus 2) and
CFYm3 : (Current Financial Year minus 3)

Table 1 :: CFY 2022-2023

Total Budget 1884.04		Actual expenditure (till…): 1743.28		Total No. Of Students 893
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
257.54	1626.50	220.44	1522.84	1.95

Table 2 :: CFYm1 2021-2022

Total Budget 1699.34		Actual expenditure (till…): 1611.80		Total No. Of Students 930
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
224.74	1474.60	214.58	1397.22	1.73

Table 3 :: CFYm2 2020-2021

Total Budget 1462.46		Actual expenditure (till…): 1325.25		Total No. Of Students 960
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
180.41	1282.05	173.44	1151.81	1.38

Table 4 :: CFYm3 2019-2020

Total Budget 1737.52		Actual expenditure (till…): 1685.70		Total No. Of Students 918
Non Recurring	Recurring	Non Recurring	Recurring	Expenditure per student
170.95	1566.57	172.46	1513.24	1.84

Items	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till	Budgeted in 2020-2021	Actual Expenses in 2020-2021 till	Budgeted in 2019-2020	Actual Expenses in 2019-2020 till
Maintenance and spares	249.59	226.78	238.11	237.30	160.85	87.96	231.45	225.63
R & D	73.77	62.16	72.94	90.69	59.94	50.09	66.16	68.15
Training and Travel	481.66	444.72	454.19	427.77	439.25	303.87	554.18	518.95
Miscellaneous Expenses*	996.61	956.02	883.15	806.72	793.34	871.63	843.09	834.83
Laboratory equipment	50	30.55	40	39.37	2	1.34	20	19.46

Software	20	11.46	0	0	0	0	0	0
Laboratory consumable	12.41	11.58	10.95	9.95	7.08	10.36	22.64	18.68
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

10.3.1 Adequacy of budget allocation (10)

Institute Marks : 10.00

The allocated budget was used to meet the new facilities for Equipment, Replacement of outdated Equipment and setting up of new labs due to Revision in syllabi. Budget requirements under recurring and non-recurring heads are collected from each department and section before the commencement of the financial year. Allocations are made as per the availability of funds are monitored by the Finance and Accounts section of the Institute. The University carefully monitors the expenses so that the requirements are met for smooth working of the Departments. The Management has been very efficiently doing this over the past several years and the institution never had any serious Budget Crunch that affected the function of the University.

The details of adequacy of budget allocation for the current financial year and for the last three years for the Program of Marine Engineering is provided in the following table.

Table 10.31 Adequacy of Budget Allocation - BE-Marine Engineering

S.No	Financial Year	Budget Allocation (Rs in Lakhs)	Actual Allocation (Rs in Lakhs)	Adequacy Status
1	**CFY = 2022 - 23**	1,884.04	1,743.27	Yes
2	**CFY = 2021 - 22**	1,699.34	1,611.80	Yes
3	**CFY m1 = 2020 - 21**	1,462.46	1,325.25	Yes
4	**CFY m2 = 2019 -20**	1,737.52	1,685.70	Yes

10.3.2 Utilization of allocated funds (20)

Institute Marks : 20.00

Funds are allocated by the Management of the University. Department Heads are intimated of the extent of funds allocated against their budget proposals. Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables, etc. are initiated from the department through Purchase Department and the funds are released on case to case basis from the accounts office of the college on approval by the Management. During the last three years, the budget was utilized to meet expenses like purchase of equipment, expenses towards consumables and contingencies, etc.

The percentage of funds utilization for the current financial year and also for the last three years with respect to the Program of Marine Engineering is provided in the following table.

Table 10.32 Utilisation of Allocated Funds (Percentage) - (BE-Marine Engineering)

S.No	Financial Year	Budget Allocation (Rs in Lakhs)	Actual Allocation (Rs in Lakhs)	Utilisation (%)
1	CFY = 2022 - 23	1,884.04	1,743.27	92.53%
2	CFY = 2021 - 22	1,699.34	1,611.80	94.85%
3	CFY m1 = 2020 - 21	1,462.46	1,325.25	90.62%
4	CFY m2 = 2019 -20	1,737.52	1,685.70	97.02%

10.4 Library and Internet (20) Total Marks 20.00

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

Institute Marks : 10.00

AMET Deemed to be University has adequate library and internet facilities. In all the previous assessment years, the University has recorded nil deficiency with reference to library resources and internet facilities

10.4.1. Quality of learning resources (hard/soft)

Prof VBS Rajan Library is the Central Library of the University which is named after Prof.V.B.S. Rajan and is functioning in a newly built Library Block inaugurated by Mr. Efthimios E. Mitropoulos, Secretary General Emeritus, and International Maritime Organization (IMO) on 4th September, 2014.

The University has attained Deemed to be University status in the year 2007. Since then, the Central Library of the University (Prof VBS Rajan Library) has purchased and made access for a huge volume of books, journals, magazines, e books, e journals, databases, software, technical reports, dissertations and Theses, rare books etc. The Library has a Digital Knowledge Centre in which research and publication databases, software etc. are available and updated every year. The Library is fully automated with RFID and Barcoding system. The Library Committee of the University is providing necessary inputs for the purchase of library resources.

Table 10.32. Members of the Library Committee

Sl.No	Name of the Members	Designation
1	Dr. M .Jayaprakeshvel, Registrar i/c	Chairman
2	Capt. Ramakrishnan Venkat Associate Professor Department of Nautical Science	Member
3	Dr. S. Prabhakaran, Professor Department of Marine Engineering	Member
4	Dr. V. Leela Vinodhan, Associate Professor Department of Mechanical Engineering	Member
5	Dr. S.Krishna, Assistant Professor Department of English	Member
6	Dr.Prakash I.N, Librarian, Alliance University, Bengaluru, Karnataka-India	Member
7	Dr.P.Pannerselvam, Librarian Central library, B.S Abdur Rahman Cresent Institute of Science and Technology Vandalur, Chennai	Member
8	Mr. R.. Sundar, Assistant Professor Department of Marine Engineering	Member
9	Dr.K.Sekar, Librarian	Member Secretary

University Library has given equal importance for both hard and soft copy of different category of learning resources. Besides, Prof VBS Rajan Library (Central Library), all the University Departments have Department Library with more specialized books, journals, magazines and technical reports both in electronic and conventional forms.

Relevance of available learning resources including e-resources

The University is having a Library Committee which recommends the up keeping and strengthening of the learning resources both in hard and soft copy formats. The Library consists of large collection of books with updated editions in various titles and volumes. The book collections are available in the field of Engineering, Science and Technology and Management including Marine Engineering, Nautical Science, Management Studies, Marine Biotechnology, Naval Architecture, Petroleum Engineering, Electrical and Electronics Engineering, Mechanical Engineering, Food Processing & Technology and Mining Engineering, Mathematics, Physics, Chemistry, English, Career Information & Guidance, Literature, Books in Regional Languages and other General Areas of study. The general details of physical structure and functional areas of the Prof VBS Rajan Library are given in Table 10.33

Table 10.33. Brief about the Library Facilities

S.No.	Category	Availability/Value
1	Carpet Area of Library (in m2)	2160.52(2342 Plinth Area)
2	Reading Space (in m2)	1171 Total 2342

3	Number of Seats in Reading Space	First Floor: 200 Second Floor: 200 Digital Knowledge Centre: 40 Audio Visual Room: 40 Total: 480
4	Average No. of Users (Issue book) per Day	152
5	Average No of users (Reading space) Per Day	520
6	Working Hours in Timings:	Working Days 09 am to 09 pm; During Examination 9 am to 10 pm; Holiday 09 am to 05 pm
7	Number of Library Staff	4
8	Number of Library Staff with a Degree in Library Science	3
9	Library Management	Yes – AUTOLIB with RFID
10	Computerization for Search, Indexing	Yes
11	Issue/Return Records Bar Coding used	Yes
12	Library Services on Internet/Intranet INFLIBNET, SHODHGANGA, DELNET or other similar membership archives	Yes
13	Remote Access (INFED)	Yes
14	Dissertation/Thesis Section	Yes
15	Rare Books Collection	Yes

Prof VBS Rajan Library is having over 102738 books, more than 60000 E-books (stored version besides access to several lakhs number of e books) and 123 print journals. The overall collection of library resources is provided in Table 10.34.

Table 10.34. Library Resource Collection

Resources	Numbers
Books	103535
E - Books	206784
E- Journals	40934
Current Journals on Subscription	110
Book Bank	1224
Thesis/Project	2657
CDs & Videos	2841
Bound Volumes of Journals	2461
Reports/Standards/Proceeding	149
NPTEL Video and web courses	36802
Number of Newspaper	13
Total Collection	**397510**

Besides the above library collection, Prof VBS Rajan Library is equipped with

- Swayam Prabha- 32 DTH Channels of High Quality Educational Programmes
- Well protected with fire alarms and CCTV security systems.

- Separate Audio-Visual Section
- Rare Books Collection
- Wi-Fi enabled with library building
- Equipped with reading halls in two floors with reference section
- Organization of Book Review / Book Talk Sessions
- Organization of Book Exhibitions/Displays of new books.
- Proper system of obtaining, analysis and action pertaining to feedback from the Users of library services.

Availability of E-Journals at Prof VBS Rajan Library

Prof VBS Rajan Library at AMET has subscribed e-journals from various service providers or journal aggregators such as IEEE, Elsevier, Scopus, Science Direct, ASME, ASCE, J-Gate (Engineering and Management), EBSCO, DELNET, INFLIBNET etc. Details are provided in the following tables.

Table 10.35. Details of E-Journals available for the Student and Faculty access at Prof VBS Rajan Library

S.No	**Journal Database**	**Subject Coverage**	**No. of Journals**
1	IEEE	Engineering and Technology (Access from 1998-current issues)	205
2	Elsevier Including SCOPUS and Science Direct	Science, Engineering, Technology, Management, Arts, Social Sciences etc.	340

3	ASME-The American Society of Mechanical Engineers	Mechanical Engineering	30
4	ProQuest E-journals	Engineering and technology	206784
5	J-GATE Engineering	All the Disciplines of Engineering and Technology	35550
6	EBSCO	Science, Engineering, Technology, Management, Arts, Social Sciences etc.	1079
7	J-GATE Management and Social Science	Management and Social Science	4538
8	DELNET	Science, Engineering, Technology, Management, Arts, Social Sciences etc.	4100
		Total	**252626**

Table 10.36. Details of E-Journals Access Links available for the Student and Faculty

Sl.No	DATABASE	LINKS
1	**EBSCO (E-Journals)**	https://web.p.ebscohost.com/ehost/search/basic?vid=0&sid=7e849e66-(https://web.p.ebscohost.com/ehost/search/basic?vid=0&sid=7e849e66-2ac4-4a80-b0ee-d5db2b1c82e8%40redis) 2ac4-4a80-b0ee-d5db2b1c82e8%40redis
2	**IEEE (E-Journals)**	https://ieeexplore.ieee.org/Xplore/home.jsp (https://ieeexplore.ieee.org/Xplore/home.jsp)
3	**ProQuest (E-Books &E-Journal)**	https://www.proquest.com/?parentSessionId=Eo4gj3faZb%2FG (https://www.proquest.com/?parentSessionId=Eo4gj3faZb%2FGYoU5iJ%2BFi7CLfVhxPoZMkv7GZQjQ6%2F0%3D) YoU5iJ%2BFi7CLfVhxPoZMkv7GZQjQ6%2F0%3D
4	**DELNET (E-Books & E-Journal)**	http://delnet.in/ (http://delnet.in/) orhttp://164.100.247.26/ (http://164.100.247.26/)
5	**ASME(E-Journals)**	Database accessed with in the AMET campus only
6	**J-Gate (E-Journals)**	Database accessed with in the AMET campus only
7	**RFID**	For 10,000 Books
8	**UGC e-resources developed by UGC**	http://ugceresources.in/ (http://ugceresources.in/)
9	**NATIONAL DIGITAL LIBRARY (NDL) E-Book and E-Journals**	https://ndl.iitkgp.ac.in/ (https://ndl.iitkgp.ac.in/)

10	**SHODHGANGA (E-THESIS)**	https://shodhganga.inflibnet.ac.in/ (https://shodhganga.inflibnet.ac.in/)
11	**The Networked Digital Library of Thesis and Dissertations (NDLTD)**	https://ndltd.org/ (https://ndltd.org/)
12	**e-ShodhSindhu: Consortium**	http://ess.inflibnet.ac.in/ (http://ess.inflibnet.ac.in/)
13	**VIDWAN**	https://vidwan.inflibnet.ac.in/ (https://vidwan.inflibnet.ac.in/)
14	**ShodhShuddhi**	https://shodhshuddhi.inflibnet.ac.in/ (https://shodhshuddhi.inflibnet.ac.in/)

Incremental increase in Library Resources (Hard and Soft Copies)

Since the University keeps on expanding the number of programmes offered and increase in intake, Prof VBS Rajan Library has adequately enhanced the Library resources both physical and digital forms. The details of year wise incremental increase in the Library Resources, increase in print and online journals and details of library expenditure on books, magazines/journals, and miscellaneous content are given in Tables 10.37, 10.38 and 10.39, respectively.

Table 10.37. Year wise incremental increase in the Library Resources

Year	Total No. of new volumes added	Total No. of New titles added
2016 – 2017	4334	1215
2017 – 2018	5921	1462
2018 – 2019	7714	1601
2019 – 2020	13162	3326
2020 – 2021	78	78
2021 – 2022	641	512

Table 10.38 Details of E Journals and Print Journals available at the Library over the past six years

Details		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Engineering, Technology and Management	As soft copy (E-Journal)	169	10149	10494	340	40965	40935
	As hard copy (Print Journals)	340	212	290	134	121	110

Table 10.39 Details of library expenditure on books, magazines/journals, and **miscellaneous count**

Year / Category of Resource	Expenditure (Rs)			
	Books	**Magazines/Print Journals (for hard copy subscription)**	**E-Journals (for soft copy subscription)**	**Miscellaneous contents**
2016 – 2017	5551666	1131981	476800	11000

2017 – 2018	7992615	1404562	2602084	29100
2018 – 2019	6171751	1284968	1077798	24800
2019 – 2020	6310033	441577	2331254	506500
2020 – 2021	58614	597308	2332698	171800
2021 – 2022	645401	534077	1758891	296700

Support Services at Prof VBS Rajan Library

a. **Thesis/Dissertations Facility**

The Library holds all UG, PG Dissertations and Doctoral thesis, of various academic departments of AMET to which they were submitted. 2018 hard copies of the Thesis / Dissertations are available in the Central Library.

b.Selective Dissemination of Information Service (SDI)

User profile and document profile are prepared. User profile contains name of the user, class / department, area of interest and topic of the research. Document profile includes bibliographic information about the books and journals required by the user. User profile and document profile are matched and the required resources will be sent to the individuals either in the form of soft copy or print.

c.Current Awareness Service (CAS)

Current awareness system alerts the user community about each and every new arrivals of the library. When new publication of any format reaches the library, the user community will be intimated about the new arrivals instantly, periodically or upon request. List of latest additions of books are displayed in the New Arrival Rack and subsequently the intimation will be displayed in the Notice Board so as to enable the user about the current awareness.

d.Article Alert Service

Contents of the latest relevant journal articles on request are scanned and sent through e-mail to the concerned faculty members.

e.News Paper-Clippings Service

Information related to Higher Education, research oriented information clippings are preserved and kept intact for ready reference.

f.Reprography Services and Scanning Facilities

Photocopier is provided for users in the Central Library. Students can make photocopy of restricted number of pages not violating the copyright rules from the book, articles from periodicals and newspapers and question papers. Library strictly follows copyright laws while providing this service. A scanner, photo copier cum printer and a printer are available in the library for the users.

g.Library as a space for Knowledge Events

The Audio Visual Hall of Prof VBS Rajan Library (fully air conditioned, audio and video projection facility including smart board; having a seating capacity of 50) is open to all library users (students and Faculty) to organize knowledge promotion events such as Book Talks, Quiz, Student Contests, debates etc.

Details of Digital Resources at Prof VBS Rajan Library

In order to meet the contemporary needs of the library users, the Prof VBS Rajan Library offers the following facilities and value-added services through conventional methods and by using Information and Communication Technologies (ICT).

a.Digital Knowledge Centre

Library has a separate section for digital library. This facility helps the users to explore the electronic databases such as E-Journals, E-books, databases and software subscribed by the Central Library. Access of Internet in Digital Knowledge Centre is enabled through 50 computer systems with an internet speed of 1 GBPS from National Knowledge Network and 100 Mbps from Tata Communications. The computer configurations are as follows

- THIN CLIENT DELL THIN CLIENT WYSE 3030 4GB FLASH/2GB RAM;
- DELL OPTIPLEX 3010 I3-322O 3.30GHZ/2GB/500GB/18.5LCD;
- LENOVA THINK CENTER/i3-4170/3.70GHZ/4GB/500GB/19 LED LENOVA;
- DELL OPTIPLEX330/CORE2DUO 2.53GHZ/2GB/160GH HDD/18.5 LCD DELL

b.E Journals from IEEE

The Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. It has highly cited publications of Journals to support Engineering professionals. The subscribed IEEE all Society Periodical Package consists of 183 e-Journals related to all the Engineering disciplines with access to back documents since 1998.

c.Elsevier Package: SCOPUS and SCIENCE DIRECT

SCOPUS is the largest abstract and citation database of peer-reviewed literature: scientific journals, books and conference proceedings. The subscribed package of Elsevier SCOPUS – Science Direct consists of 340 e-journals with enormous full-text articles related to various Science, Technology, Engineering and Management studies.

d.E Journals from ASME

The American Society of Mechanical Engineers (ASME) is the premier professional membership organization for Mechanical Engineering. AMET has subscribed ASME with access to 31 most prestigious electronic journals in the area of Mechanical Engineering with an access to back documents since 1960 along with available conference proceedings.

e.E Journals from ASCE

The American Society of Civil Engineers (ASCE) is a leading provider of electronic material to Civil Engineering and related disciplines. AMET has subscribed 31 e-journals from ASCE

f.E-Journals from J-GATE

J-Gate is an important electronic gateway to global e-journal literature which has seamless access to millions of online journal articles offered by a variety of Publishers. AMET has subscribed the two modules from ASME such as Engineering and Technology (with 4285 e- journals) and Management and Social Sciences (with 4538 e-journals).

g.E-Journals and electronic resources from EBSCO

AMET has subscription to EBSCO Business Source Elite, a database, which consists of 1079 full text electronic journals related to all the branches of Management studies. The database consists of the contributions from world renowned publishers in the form of peer reviewed academic journal articles, magazines, abstracts and trade publications.

h.E-Journals and electronic resources from DELNET

The Central Library of AMET has continuous annual institutional membership subscription with the Developing Library Network (DELNET) DELNET, through which access to more than 5000 e-journals and enormous e-books and Thesis/Dissertations are made available. Apart from electronic database, the Central Library of AMET is privileged to access the Union Catalogue of Books to explore Inter-Library Loan facility. DELNET E-resources can be accessed both in Library and also from remotely (from anywhere anytime), through the Remote Access Facility powered by INFED of INFLIBNET.

i.E Books from ProQuest

The subscription package of AMET with ProQuest consists of 40758 e-books covering various disciplines. ProQuest E-resources can be accessed both in Library and also from remotely (from anywhere anytime), through the Remote Access Facility powered by INFED of INFLIBNET.

j.Software

The Library is having following licenced software besides several free and open access software for the student usage

1. URKUND-Plagiarism Detection Software
2. SPSS-Statistical Software

Accessibility to students

a. Access Cards

AMET provides Identity card with Barcode Technology, for all students and staff members, which can be utilized for registering GATE Entry as well as for borrowing the library resources. In addition, the issue of books and return of books are electronically recorded using the OPAC system of the Library through the Library Cards.

b.Remote Access

AMET has also made the Library Resources to be accessed remotely through INFED system of the INFLIBNET. The NFLIBNET Access Management Federation (INFED) has adopted Shibboleth, a standard-based open source software, for authenticating authorized users from institutions and provide them seamless access to e-resources from anywhere, anytime.

c.BARCODE and RFID Systems

The University has adopted barcoding system for recording of issue and return of books. The University has also implemented the Radio-frequency identification (RFID) system to enhance the fidelity in the Library Access process.

d.Library Web portal

Library Portal is an interface to the Library resources and services to access e- question bank. Open source e-journals and magazines, open source e-books, e-newspapers etc., are also made available. Link :https://ametlibrary.wordpress.com/ (https://ametlibrary.wordpress.com/)

e.Institutional Membership & Inter Library Loan (ILL)

To enhance the Library Access coverage, Prof VBS Rajan Library has made collaborations with to explore Inter library Loan (ILL) to provide articles, books, and other materials to faculty members, researchers, students, through Institutional Membership. Prof VBS Rajan Library has the Institutional Members with the following institutions from where AMET students can borrow books and access the library resources.

- Anna University
- MALIBNET
- American Council Library
- British Council Library
- DELNET
- National digital Library (NDL)

f.Library Automation for enhanced Access Experience

The library uses the popular “AUTOLIB” software on windows environment capable of handling of records. It facilitates the students and Faculty to have trouble free access with online Public Access Catalogue (OPAC) and also consists of various modules such as Gate Entry, Acquisition Cataloguing, Circulation, Serial Control and possibility of generating various reports.

g.Web OPAC (Online Public Access Catalogue)

The in-house resource list can be accessed through website of AMET. Central Library has online access facility to search the availability of the required resources for the user community. The search option through OPAC system is unique and can be made through Author-wise, Title-wise, Subject-wise indexes using keywords and can be accessed from on and off the campus. The advanced search provides with more specific search for a title with Boolean operators.

h.Reference services and referral services

Library provides right information to the right person at the right time through Reference Service. Reference sources such as dictionaries, encyclopaedias, almanacs, atlases, etc. are research tools that can help for writing a project. Reference sources provide answers to specific questions, such as brief facts, statistics, and technical instructions and also provide background information. Referral Service includes guiding the users to approach the right institution for the information required.

i.Grievances online

Users can submit their suggestions/grievances through Online Grievance Portal of AMET or through Prof VBS Rajan Library Web Portal which are forwarded to the Library Committee for necessary action. Users can also submit their suggestions/ grievances through general interaction, making an application, through e-mail.

Support to students for self-learning activities

The Digital Knowledge Centre of Prof VBS Rajan Library and other digital resources as explained above are supporting the students for their self-learning activities.

a.List of digital resources available for students to enhance their self-learning activities

1. IEEE
2. Elsevier: Including SCOPUS and Science Direct
3. ASME-The American Society of Mechanical Engineers
4. ProQuest E-journals
5. J-GATE Engineering
6. EBSCO
7. J-GATE Management and Social Science
8. DELNET
9. URKUND –Plagiarism Detection Software
10. SPSS-Statistical Software

b.Audio Visual Section (AV Hall)

Audio-Visual Section of the Library is equipped with a computer system well supported by multimedia accessories for enhancing the self-learning experiences by the following ways

1. Effective and efficient utilization of National Programme on Technology Enhanced Learning (NPTEL) courses with the available technical videos, CD ROMS etc. The AV Hall of the Prof VBS Rajan Library is having more than 40000 video lectures (in Engineering, Science and Humanities and Management streams) stored in portable storage device (hard disc) and it is also loaded in the Library Portal Served.
2. Prof VBS Rajan Library has also a collection of locally stored version of more than 50000 books in CD format (more than 3200 CDs). Students can access these materials in the AV Hall to enhance their self-learning
3. Besides, students are using the AV Hall for their self-learning activities such as Club Meetings, Student Organized Weekly Seminars and Research Meetings at the AV Hall.

c.MOOC- Online certification courses

The University has made it mandatory that every student shall undergo minimum one Massive Open Online Course in MOOC platforms such as Coursera, Edx, SWAYAM and NPTEL, etc. per semester. In this regard, students in small groups can access the MOOC courses in AV Hall with state of the art projection, audio and video facility. This enables them to enrich their self-learning experience with current trends, and also to equip themselves with inter-domain subjects.

d.Swayam Prabha

Swayam Prabha is an initiative of Ministry of Human Resource Development (MHRD). It is facilitating access to high quality educational programmes of 32 DTH Channels on 24x7 basis. Everyday, there will be new content for at least four hours which would be repeated 5 times a day, allowing the students to choose the time of their convenience and learn quality online education at their own pace.

e.Institutional Repository

Prof VBS Rajan Library supports the students for self-learning activities through Institutional Repository which is an archives, where each and every administrative and research valuable records in any format can be preserved and accessed anytime. D Space Institutional Repository software has been installed in AMET and the repository can be accessed through library web portal. DSpace is open source software for building digital repositories. DSpace preserves and enables easy and open access to all types of digital content including text, images, moving images, mpegs and data sets. Born digital records can be catalogued and uploaded into the DSpace Repository to retrieve the right information at the right time to the user community.

10.4.2 Internet (10)

Institute Marks : 10.00

AMET has a total number of Computers 973 for student usage and 251 for Faculty usage. All these Computers/Laptops are provided with broad band internet connectivity. The campus and hostels are fully covered with internet connectivity though Wi-Fi. AMET has 110 Wi-Fi Hot Spots using Dlink in campus and 100 Hot Spots using Ruckus Networks in AMET hostels.

Table 10.40 Details of Internet Provider, Available Bandwidth, Wi-Fi Facility etc.

Particular	Response
Name of the Internet provider	BSNL and TIC FIBER
Available bandwidth	• LAN of 1 GBPS (from BSNL) connectivity under National Knowledge Network (NKN) is provided throughout the campus • TIC Fiber (Thamizhagha Internet Communications)– 100 MBPS • TATA – 100 MBPS (This is the default connection for Administration and Management) • In case of one line failure, each line can be switched to other line at optimized speed to have continuity in connection
Wi- Fi availability	The campus and hostels are fully (100%) covered with internet connectivity through Wi-Fi. AMET has 110 Wi-Fi Hot Spots using Dlink in campus and 100 Hot Spots using Ruckus Networks in AMET hostels.
Access speed	Average 75 Mbps for workstation and desktops
Availability of Internet in Labs	YES. • All the computers in the Labs are provided with Internet Connectivity. • All the Labs are having cat6 Cabling and D link Giga byte switches • Moreover, all the labs are connected with WiFi also.
Availability of Internet in computing lab	YES • The Computing Labs are provided with Internet Connectivity. • All the Labs are having cat6 Cabling and D link Giga byte switches. • Moreover, all the labs are connected with WiFi also.

Availability in Departments and other units	YES • All the Departments and other functional Units are provided with Internet Connectivity. • They are having cat6 Cabling and D link Giga byte switches. • Moreover, all the Departments and other Units are connected with WiFi also.
Availability in Faculty rooms	YES • All the Faculty Rooms Units are provided with Internet Connectivity. • They are having cat6 Cabling and D link Giga byte switches. • Moreover, all the Faculty Rooms are connected with WiFi also.
Institute own e-mail facility to faculty/students	YES • AMET has domain specific mail ID to the stakeholders (username@ametuniv.ac.in)
Security/privacy of e-mail/internet users	YES • Separate firewall for Campus and Hostel are installed with Gateway Content Filtering and IPS/IDS Protection.

Annexure I
(A) PROGRAM OUTCOME (POs)

Engineering Graduates will be able to:

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

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

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

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

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

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

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

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

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

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

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

Program should specify 2-4 program specific outcomes.

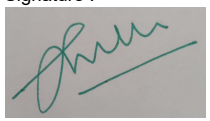
PSO3	Design, analyze and integrate electrical and mechanical systems in on-board ships and apply tools and techniques such as programmable logic controllers, SCADA and CAD in marine industries and create passion for lifelong learning.
PSO1	Apply the knowledge of Marine Engineering to solve the problems in on-board ships to meet the needs of the maritime industries.
PSO2	Analyze complex engineering problems to formulate and develop solutions for the onshore and offshore shipping industries.

Declaration

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

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

Head of the Institute
Name : Dr. T. Sasilatha
Designation : Principal
Signature :



Seal of The Institution :

Place : Chennai
Date : 13-03-2023 10:16:55