MAHENDRA ENGINEERING COLLEGE,

(AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY CHENNAI)

Internal Quality Assurance Cell (IQAC)



Report on Academic Audit & Action Taken (2021-2022)







MAHENDRA ENGINEERING COLLEGE

(Autonomous)

Accredited by NAAC 'A' Grade & NBA Tier-I (WA) UG: CSE,ECE,EEE

Mahendhirapuri, Mallasamudram, Namakkal Dt. - 637 503.



ACADEMIC AUDIT SCHEDULE 2021-22 (ODD & EVEN SEMESTER)

Introduction

The Academic Audit of the Department was conducted from 28.07.2022 to 30.07.2022. The Purpose of the Audit is to provide the opportunity for a regular strategic overview of the entirety of a Department's Teaching and Learning activity. The Self Evaluation Document (SED) of the Department was presented to the Peer Committee Experts. The Expert Members investigated the different aspects of the Document, and authenticated them with the supporting evidences. This report consolidates the findings of the Experts and put forth the suggestions and area of improvements possible in the future.

Academic Audit Expert Committee members:

1. Dr.G.Appa Rao

Professor, Department of Civil Engineering Structural Engineering Division IIT Madras

2. Dr.V.Anandakrishnan,

Associate Professor,

Department of Production Engineering

NIT-Trichy

3. Dr.K.Srinivasan

Associate Professor,

Department of Instrumentation and Control Engineering

NIT-Trichy

4. Dr.A.M.Kalpanna

Professor

Department of Computer Science Engineerig

GCE, Salem

5. Dr.Saranya

Asst.Professor (Sr.Grade)
Department of Physics
GCE, Salem

Schedule of the Academic Audit on 28^{th} July 2022

1. Auditor 1 : Dr.A.M.Kalpanna

Professor

Department of Computer Science Engineerig

GCE, Salem

2. Auditor 2: Dr.Saranya

Asst.Professor (Sr.Grade)

Department of Physics

GCE, Salem

S.No	Time	Auditor -l Departments	Auditor-II Departments
1	10.30 AM to 11.30AM	IT	English
2	11.30 AM to 01.00 PM	CSE	Maths
4	01.00 PM to 02.00 PM	Lur	nch
5	02.00 PM to 03.00 PM	MBA	Physics
6	03.00 PM to 04.00 PM	Library	Chemistry
7	04.00 PM to 4.30 PM	Report writing an	d Closing Meeting

Schedule of the Academic Audit on 29th July 2022

Auditor 1: Dr.V.Anandakrishnan,

Associate Professor,

Department of Production Engineering

NIT-Trichy

Auditor 2: Dr.K.Srinivasan

Associate Professor,

Department of Instrumentation and Control

Engineering

NIT-Trichy

S.No	Time	Auditor -l Departments	Auditor-II Departments
1	10.30 AM to 11.30AM	Mechatronics	EEE
2	11.30 AM to 01.00 PM	Mechanical	ECE
4	01.00 PM to 02.00 PM	Lui	nch
5	02.00 PM to 03.00 PM	Mech & Auto	E & I
6	03.00 PM to 04.00 PM	Aeronautical	NSS & NCC
7	04.00 PM to 4.30 PM	Report writing an	d Closing Meeting

Schedule of the Academic Audit on 30th July 2022

1. Auditor 1 : Dr.G.Appa Rao

Professor, Department of Civil Engineering

Structural Engineering Division

IIT Madras

S.No	Time	Auditor -I Departments
1	10.30 AM to 11.30AM	Civil
2	11.30 AM to 01.00 PM	Agri
4	01.00 PM to 02.00 PM	Lunch
5	02.00 PM to 03.00 PM	MCA
6	03.00 PM to 04.00 PM	General Amenities
7	04.00 PM to 4.30 PM	Report writing and Closing Meeting

List of Files Audited: Evaluation of each component may be done on 10 point scale (0 to 10) and mention the points awarded in appropriate column

F. No	Description	Evaluation	Comments	Points
	I- Curi	ricular Aspects		
AE/F1.1	Department Vision, Mission, POs, PEO, PSOs			
	Board of Studies Minutes,			
	Regulations, Curriculum and			
	Syllabus for all Regulations			
	1. Percentage of Programmes			
	where syllabus revision was			
	carried out during the AY			
	2021-22			
	2. Courses having focus on employability/ entrepreneurship/ skill development offered by the			
	institution during the AY 2021-22			
AE /F 1.2	3. Percentage of new courses introduced of the total number of courses across all programs offered during the AY 2021-22			
	4. Elective course system has been implemented (Data for the latest completed academic year)			
	5. Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, Human Values into the Curriculum			

	Number of value-added courses			
AE /F 1.3	for imparting transferable and			
	life skills offered during the AY			
	2021-22 and students enrolled			
	in the courses			
	Students undertaking field			
AE /F 1.4	projects/ internships / student			
	Projects during the AY 2021-22			
	Structured feedback for design			
	and review of syllabus			
AE /F 1.5	(semester wise /year wise) is			
AE/F 1.3	obtained from 1) Students, 2)			
	Teachers, 3) Employers, 4)			
	Alumni			
	II- Teaching Le	arning and Evalua	ation	
	1. Students Admitted in AY			
	2021-22			
	2. Seats filled against reserved			
	categories (SC, ST,OBC,			
	Divyangjan, etc. as per			
AE/F2.1	applicable reservation policy			
) during the AY 2021-22			
	3. Student - Full time teacher			
	ratio			
	4. Record of Teaching and			
	Non-Teaching staff profile			
	Students mentor file for			
	academic and other related			
<i>AE/F2.2</i>	issues			

	PO and CO for all	
AE/F2.3	Programmes. Attainment of	
	PO and CO are evaluated	
	Internal Test Analysis for all	
AE/F2.4	classes	
	End Semester Exam Result	
	Analysis for all classes.	
AE/F2.5	Out gone Pass percentage of	
	students (2021-22 passed out)	
	Feedback on Teaching	
AE/F2.6	Learning process . Remedial	
	coaching class for AY 2021-22	
	Course file (Theory and	
	laboratory courses)	
AE/F2.7	(Please verify Internal Test	
	Note (Theory) ,Class note ,	
	Assignment)	
	Students' attendance	
AE/F2.8	(Please verify the Master	
	attendance)	
	III-Research, Innovation and Extension	
	1.Institution provides seed money	
AE/F3.1	for research projects and	
	consultancy to the teachers	
	(Please verify the proof)	
AE/F3.2	1.No. of Research Supervisors	
	and Scholar details and Ph.D	
	awarded	
	(Please verify the proof)	

international fellowship for advanced studies/research during AY 2021-22 Major / Minor / Other research projects (Please verify Ongoing, Completed and Submitted details) 1.Research paper publications International / National Journal and Conference) (Please verify No. of Publication and Quality of publication) 2.Books and chapters published by faculty (Please verify the documents) 1. Department programmes organized AY 2021-22 2. Highlight Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during		2. Teachers awarded national /		
AY 2021-22 Major / Minor / Other research projects (Please verify Ongoing, Completed and Submitted details) 1.Research paper publications International / National Journal and Conference) (Please verify No. of Publication and Quality of publication) 2.Books and chapters published by faculty (Please verify the documents) 1. Department programmes organized AY 2021-22 2. Highlight Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		international fellowship for		
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International / National Journal and Conference) (Please verify No. of Publication and Quality of publication) 2.Books and chapters published by faculty (Please verify the documents) I. Department programmes organized AY 2021-22 2. Highlight Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		Completed and Submitted details)		
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AE/F 3.6 publication) 2.Books and chapters published by faculty (Please verify the documents) I. Department programmes organized AY 2021-22 2. Highlight Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		and Conference) (Please verify		
2.Books and chapters published by faculty (Please verify the documents) 1. Department programmes organized AY 2021-22 2. Highlight Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		No. of Publication and Quality of		
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(Please verify the documents) 1. Department programmes organized AY 2021-22 2. Highlight Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		2.Books and chapters published		
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organized AY 2021-22 2. Highlight Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		1. Department programmes		
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entrepreneurship and skills development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for	112,1010	Methodology, Intellectual		
development 1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		Property Rights (IPR),		
1. Record of Consultancy 2. Total amount spent on developing facilities, training teachers and staff for		entrepreneurship and skills		
2. Total amount spent on developing facilities, training teachers and staff for		development		
developing facilities, training teachers and staff for		1. Record of Consultancy		
AE/F 3.6 teachers and staff for		2. Total amount spent on		
teachers and staff for		developing facilities, training		
undertaking consultancy during	AE/F 3.6	teachers and staff for		
		undertaking consultancy during		
the AY 2021-22				

	Record of MOU Files (Please			
AE/F3.7	verify the activities)			
	Extension Activities			
	1. NSS students list			
	2. NCC students list			
AE/F3.8	3. Club activities			
	4. Subject related extension			
	activity			
	5. Societal activity			
	IV-Infrastructure a	and Learning reso	urce	
	Danastment Budget			
AE/F 4.1	Department Budget (Please verify 2021-22 Budget)			
	ICT – enabled facilities			
AE/F 4.2	such as smart class, LMS,			
	etc. E-Content developed by			
AE/F 4.3	the faculties			
	V-Student Supp	ort and Progressio	n	
	1. Students' Bio-Data			
	2. Students benefited by			
	scholarships and freeships			
AE/F 5.1	provided by the Government			
	and Management during the			
	AY 2021-22			
	Department Class committee			
AE/F 5.2	meeting			
	Student Participation (Co-			
AE/F 5.3	Curricular & Extra Curricular)			
	(Please verify Number of			
AL/I' J.J	participation) Awards and prizes			
	earned by the students			
	earned by the students			

AE/F 5.5	development and skills enhancement activities Placement training, Yoga and Recent Technologies Placement, Higher Studies and Entrepreneurship (Please verify No of placement, Higher studies GATE,GRE, TOEFL, etc., score, and			
	Placement training, Yoga and Recent Technologies Placement, Higher Studies and Entrepreneurship (Please verify No of placement, Higher studies GATE, GRE, TOEFL, etc., score, and			
AE/F 5.5	Recent Technologies Placement, Higher Studies and Entrepreneurship (Please verify No of placement, Higher studies GATE, GRE, TOEFL, etc., score, and			
AE/F 5.5	Placement, Higher Studies and Entrepreneurship (Please verify No of placement, Higher studies GATE, GRE, TOEFL, etc., score, and			
AE/F 5.5	Entrepreneurship (Please verify No of placement, Higher studies GATE,GRE, TOEFL, etc., score, and			
AE/F 5.5	(Please verify No of placement, Higher studies GATE,GRE, TOEFL, etc., score, and			
AE/F 5.5	Higher studies GATE,GRE, TOEFL, etc., score, and			
AL/1 5.5	TOEFL, etc., score, and			1
	T			
	Entrepreneur list)			
	Alumni Interaction			
AE/F 5.6	(Please verify Alumni Lecture			
	and Alumni mentoring support)			
	VI- Governance , Lead	dership and Mana	gement	
	Teachers provided with financial			
	support to attend conferences /			
AE/F 6.1	workshops and towards			
7112/7 0.1	membership fee of professional			
	bodies during the year (please			
	verify eh documents)			
AE/F 6.2	Record of Staff Meeting			
	Number of professional			
	development / administrative			
	training programs organized by			
AE/F 6.3	the Institution for teaching and			
	non teaching staff during AY			
	2021-22			

	Average percen	tage of teache	rs		
	undergoing onlin	ne/ face-to-face			
	Faculty	Developme	nt		
	Programmes	during tl	ne		
AE/F 6.4	AY2021-22	(Profession	al		
	Development	Programme	s,		
	Orientation / Inc	luction			
	Programmes, R	efresher Cours	e,		
	Short Term Cou	rse etc.,)			
	VI	I- Institutional	Values and Best pra	ctices	
AE/F 7.1	Department Futu	ıre plan			
AE/F /.I	(Strategic plan f	or 2022-23)			

1. Overall assessment:

- All Audit Files were maintained properly.
- Research and Development activities are appreciable
- Student's participation in Value Added Courses, Internship and Field projects are appreciable
- Students are given good training and placements and it may further be improved.
- Centre of Excellence activities are improved and appreciable.
- IIC related activities are appreciable.
- Basic amenities and infrastructures in the college is very good
- More Academicians and Industry Experts visited college for knowledge transfer
- Alumni meeting is conducted regularly and many Alumnus are supported for knowledge transfer

- All the departments conducted technical programmes effectively.
- All IQAC formats are good and regularly updated.
- Curriculum and Syllabus revision done through all stake holders feedback

2. Suggestions for Improvement:

- Providing seed money for innovative research work may be increased.
- Faculties with Ph.D can be encouraged to register as supervisors.
- More startup idea must be encourage among the students
- Students can be motivated to participate in Project and coding competitions.
- Faculty members may be motivated to publish more research papers in Indexed Journals.
- More workshops can be organized for students to motivate them to become entrepreneurs.
- Students may be motivated to prepare for higher studies and Competitive
 Exams.
- Students are motivated to start star-up Company.
- Curriculum maybe expanded by including recent technology like IoT, Digital and sustainable Engineering.

Note: Corrective Action Plan of individual department is attached.

Expert Peer Team members signature

Gorab

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IIT Madras

Dr.V.Anandakrishnan,

Associate Professor,

Department of Production Engineering

NIT-Trichy

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