

Annual Report for IQAC 2018-19

1. Name of the Department : Mechanical Engineering
a. NBA Accreditation Details : Nil
Accredited Programme : Nil
2. Degree Offered : UG: BE- Mechanical Engineering
3. Faculty Position :

Post	Sanctioned	Filled
Professor	1	1
Associate Professor	3	1
Assistant Professor including CIVIL	11	11

4. Odd Semester Subjects Offered : June 2018– Dec 2018

UG (Full Time)

SI No	Subject Code	Subject Name
1.	17MES302	Strength of Materials
2.	17MPC303	Machine Drawing
3.	17MPC304	Manufacturing Technology I
4.	17MPC305	Engineering Metallurgy
5.	17MPC306	Engineering Thermodynamics
6.	17MPC307	Manufacturing Technology Laboratory I
7.	17MES308	Strength of Materials Laboratory
8.	18ZES104	Engineering Graphics and Design 1st Mech
9.	18ZES104	Engineering Graphics and Design 1st ECE
10.	18ZES104	Engineering Graphics and Design 1st CSE
11.	18ZES108	Workshop Practice 1st EEE

5. Even Semester Subjects Offered : Jan 2019 – May 2019

UG (Full Time)

S.No	Subject Code	Subject Name
1.	17MES403	Fluid Mechanics and Machinery

2.	17MPC404	Kinematics of Machines
3.	17MPC405	Manufacturing Technology II
4.	17MPC406	Thermal Engineering
5.	17MPC407	Manufacturing Technology Laboratory II
6.	17MES408	Fluid Mechanics and Machinery Laboratory
7.	17MPC409	Thermal Engineering Laboratory
8.	18ZES104	Engineering Graphics and Design
9.	18ZES208	Work Shop Practice - ECE 1st year
10.	18ZES208	Work Shop Practice - CSC 1st year
11.	18ZES208	Work Shop Practice - Mech 1st year
12.	18ZES204	Engineering Graphics (EEE – 1st year)

6. Faculty & Student Development Programmes

a. SDP Conducted by Department

Sl. No	Name of the Coordinator / Designation / Department	Details	No of Participations (Students)	Date	Amount
1	I.Rahamathullah/ AP/MECH	Placement Crackers – TCS Ninja	74	20.08.2018 & 29.08.2018 to 31.08.2018	52,639
2	S.Ananthakumar/ AP/MECH Dept	Recent Trends in Renewable Energy	55	07.09.2018 to 08.08.2018	33,951
3	S.Ananthakumar /AP / MECH	Advanced in Heat Transfer	48	14.09.2018 to 15.09.2018	26,825
4	D.Thirumalaikumarasamy /AP /MECH	Materials Characterization Techniques	55	01.10.2018 to 02.10.2018	38,875
5	P.K.Palani/HOD/MECH	Academic Weak Support Programme – 1.Dynamics of Machines,2.Design of Machine Elements & 3.Engineering Metallurgy	28	01.03.2019 to 02.03.2019 & 08.03.2019 to 09.03.2019	37,590
6	I.Ashok Kumar/AP/MECH	Carrier Guidance Programme	120	25.03.2019 to 26.03.2019	59,998

7	S.Tamilprabakaran/AP/MECH	Introduction to Intellectual Property Rights (IPR)	124	22.03.2019 to 23.03.2019	63,315
8	S.Sankar Ganesh/AP/MECH	3D Printing	50	24.03.2019	19,729
9	M.Anabarsu/AP/MECH	Geometric Dimensioning and Tolerancing (GD & T)	50	29.03.2019 to 30.03.2019	46,052
10	M.Anantha Babu	Industrial Automation (PLC & DRIVERS)	47	29.03.2019 to 30.03.2019	45,576
11	P.Thirumal/Ass.Prof./MECH	Designing and Product Development	36	08.04.2019 to 09.04.2019	55,896
12	I.Ashok Kumar/AP/MECH	Carrier Guidance Programme All Mech students	120	25.03.2019 to 26.03.2019	59,998
13	I.Rahamathullah/AP/MECH	Placement Crackers - TCS Ninja Third & Final Year	74	20.08.2018 & 29.08.2018 to 31.08.2018	52,639

b. FDP Conducted by Department

S.No.	Coordinator	Title of The Workshop/FDP/Training program	Duration		Total No of Days
			From	To	
1	Dr.P.Thirumal	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2
5	M. Anantha Babu	OUTCOME BASED EDUCATION AND NBA ACCREDITATION	28/06/2018	30/06/2018	3
18	Dr. P. Thirumal Asso. Prof / MECH	Recent advance in mechanical science in technology (RAMSAT-2018)	29/11/2018	30/11/2018	2

c. FDP Attended by Faculty

S.No.	Name of the Faculty	Title of The Workshop/FDP/Training program	Duration		Total No of Days
			From	To	
1	Dr.P.Thirumal	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2
2	M. Anbarasu	FDP on, " Creation of interactive video lectures & use of ICT Tools in	20/06/2018	21/06/2018	2

		Teaching"			
3	M. Anantha Babu	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2
4	S.Tamil Prabakaran	Recent advances in mechanical science and technology	29/11/2018	30/11/2018	2
5	S.Tamil Prabakaran	Design and product developent	08/04/2019	09/04/2019	2
6	S.Tamil Prabakaran	Numerical analysis using MATLAB	15/05/2019	19/05/2019	5
7	Dr.A.Kajavali	RECENT TRENDS IN mechanical engg and CFD application	02/12/2018	03/12/2018	3
8					
9	M. Anantha Babu	OUTCOME BASED EDUCATION AND NBA ACCREDIATION	28/06/2018	30/06/2018	3
10	Dr. D. Thirumalaikumarasamy	Attended FDP on, "Advanced optimization Techniques" at NIT-Jaipur	12/10/2018	21/10/2018	12
11	M. Anbarasu	Methodology and best practices of vibration analysis in automotive industry	13/06/2019	19/06/2019	8
12	M. Anbarasu	Recent advance in mechanical science in technology (RAMSAT-2018)	29/11/2018	30/11/2018	2
13	Dr. P. Thirumal Asso. Prof / MECH	Cadd/cae /3DP PRACTICE	20/07/2018	21/07/2018	2
14	Dr. P. Thirumal Asso. Prof / MECH	ELECTRICAL LABORATORY EXPERIMENTS FOR STUDENTS OF BBEC kokrajhar,assam	25/01/2019	5/02/2019	12
15	Dr. P. Thirumal Asso. Prof / MECH	Effective engineering teaching in practice	01/2019	02/2019	3
16	Dr. P. Thirumal Asso. Prof / MECH	Patent drafting for beginners	01/2019	02/2019	3
17	Dr. P. Thirumal Asso. Prof / MECH	Emerging trends in advanced computing and communication	10/01/2019	-	1
18	Dr. P. Thirumal Asso. Prof / MECH	Recent advance in mechanical science in technology (RAMSAT-2018)	29/11/2018	30/11/2018	2
19	Dr. D. Thirumalaikumarasamy	Attended STTP on, "Biofuels and fuel cell -fundamentals and applications" at Annamalai univ	03/12/2018	9/12/2018	7
20	M. Anbarasu	GIAN COURSE ON ADVANCED INTERNAL COMBUSTION ENGINES	06/05/2019	17/05/2019	12
21	M. Anantha Babu	GIAN COURSE ON ADVANCED INTERNAL COMBUSTION ENGINES	06/05/2019	17/05/2019	12
22	S.Tamil Prabakaran	Numerical Analysis by Using MATLAB	15/05/2019	19/05/2019	5
23	S.Anathakumar	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2
24	D.Kulandaivel	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2

25	P.Natarajan	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2
26	Dr.I.Rahamathullah	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2
27	S.SankarGanesh	FDP on, " Creation of interactive video lectures & use of ICT Tools in Teaching"	20/06/2018	21/06/2018	2
28	M. Anantha Babu	Carrier guidance programme	25/03/2019	26/03/2019	2
29	M. Anantha Babu	Design and product development	08/04/2019	09/04/2019	2
30	M. Anantha Babu	Advanced internal combustion engine	06/05/2019	17/05/2019	11
31	M. Anbarasu	Carrier guidance programme	25/03/2019	26/03/2019	2
32	M. Anbarasu	Advanced internal combustion engine	06/05/2019	17/05/2019	11
33	M. Anbarasu	Design and product development	08/04/2019	09/04/2019	2
34	M. Anbarasu	Industrial automation (PLC AND DRIVE S)	29/04/2019	30/04/2019	2
35	M. Anbarasu	Geometrical dimensioning and tolarancing	29/04/2019	30/04/2019	2
36	M. Anbarasu	Introduction to intellectual properties rights	22/03/2019	23/03/2019	2
37	Dr. I. Ashok Kumar	Friction and wear of material :principles and case studies (NPTEL)	02/2019	04/2019	7
38	Dr. I. Ashok Kumar	INTRODUCTION to composites	01/2019	04/2019	10
39	Dr. I. Ashok Kumar	Manufacturing process technology 1 and 2 /NPTEL	01/2019	04/2019	10
40	Dr. I. Ashok Kumar	OUTCOME based pedagogic principles for effective teaching	-	-	-
41	Dr. I. Ashok Kumar	NAAC FOR QUALITY AND EXCELLENCE IN HIGHER EDUCATION	24/06/2019	28/06/2019	5
42	Dr. I. Ashok Kumar	Methodology and best practices of vibration analysis in automotive industry	13/06/2019	19/06/2019	8
43	Dr. I. Ashok Kumar	Design and product development	08/04/2019	09/04/2019	2
44	Dr. I. Ashok Kumar	Carrier guidance programme	25/03/2019	26/03/2019	2
45	Dr. I. Ashok Kumar	Advance composites	07/2018	10/2018	10
46	Dr. I. Ashok Kumar	ADVANCED IN DIGITAL ADDITIVE MANUFACTURING 3D PRINTING	04/01/2019	05/01/2019	2
47	E.Elango	DST/serb short term training programe	3/12/2019	09/12/2019	7

7. Online Courses attended NPTEL/MOOC/Course:

a. Attended by Faculty members: (NPTEL)

39	Dr. I. Ashok Kumar	Manufacturing process technology 1 and 2 /NPTEL	01/2019	04/2019	10
37	Dr. I. Ashok Kumar	Friction and wear of material :principles and case studies (NPTEL)	02/2019	04/2019	7

b. Attended by Students:

S.No.	Name of the students	Course Name	Month/Year Online Exam
1	V.Rajesh	IC engine and gas turbine	Apr-2019
2	V.Rajesh	Advance aircraft maintainance	Apr-2019

8. Result statistics of subjects offered by the Department in the academic year 2018-19

S.No	Subject Code	Name of the Subject	Pass Percentage	Course In charge
1.	17MES302	Strength of Materials	87.23	Dr J.Saravanan
2.	17MPC303	Machine Drawing	93.61	Dr.P.Thirumal
3.	17MPC304	Manufacturing Technology I	76.59	Dr. I.Ashok kumar
4.	17MPC305	Engineering Metallurgy	46.80	Dr. D. Thirumalaikumar asamy
5.	17MPC306	Engineering Thermodynamics	59.57	Mr. M.Anbarasu
6.	17MPC307	Manufacturing Technology Laboratory I	100	Dr. I.Ashok kumar
7.	17MES308	Strength of Materials Laboratory	100	Dr J.Saravanan
8.	18ZES104	Engineering Graphics and Design 1st Mech	93.47	Dr.P.Thirumal
9.	18ZES104	Engineering Graphics and Design 1st ECE	97.77	Mr. M.Anbarasu
10.	18ZES104	Engineering Graphics and Design 1st CSE	96	Mr. M.Anbarasu
11.	18ZES108	Workshop Practice 1st EEE	100	Dr.P.Thirumal
12.	17MES403	Fluid Mechanics and Machinery	76.59	Mr. M.Anbarasu
13.	17MPC404	Kinematics of Machines	76.59	Mr. S. Sankar Ganesh
14.	17MPC405	Manufacturing Technology II	72.34	Dr. I.Ashok kumar
15.	17MPC406	Thermal Engineering	44.68	Mr. M.Anantha

				Babu
16.	17MPC407	Manufacturing Technology Laboratory II	100	Dr. I.Ashok kumar/Mr. K. Mathivanan (Asst)
17.	17MES408	Fluid Mechanics and Machinery Laboratory	100	Mr. M.Anbarasu/Mr. K. ArunKumar (Asst)
18.	17MPC409	Thermal Engineering Laboratory	100	Mr. M.Anantha Babu/Mr. Bharathiraja (Asst)
19.	18ZES104	Engineering Graphics and Design	93.47	Dr.P.Thirumal
20.	18ZES208	Work Shop Practice - ECE 1st year	100	Mr. M.Anbarasu
21.	18ZES208	Work Shop Practice - CSC 1st year	100	Mr. M.Anbarasu
22.	18ZES208	Work Shop Practice - Mech 1st year	100	Dr.P.Thirumal
23.	18ZES204	Engineering Graphics (EEE - 1st year)	90.74	Dr.P.Thirumal

9. Remedial Classes Conducted

Sl. No	Name of the Coordinator / Designation / Department	Details	No of Participations (Students)	Date	Amount
1	P.K.Palani/HOD/MECH	Academic Weak Support Programme – 1.Dynamics of Machines,2.Design of Machine Elements & 3.Engineering Metallurgy	28	01.03.2019 to 02.03.2019 & 08.03.2019 to 09.03.2019	37,590

10. Publications 2018-2019

S.No	Faculty Name	Title Of Publication	Name Of Journal	Date Of Publication	Citation	Impact Factor
1	Dr .I. Ashok Kumar	A Study On Friction And Wear Of Glass Fibre Reinforced Plastics Filled With Nano Al2O3 Using Pin On Roller Method	International Innovative Research Journal Of Engineering And Technology	2018	-	-
2	Dr .I. Ashok Kumar	Effect Of NanoAl2O3 On Wear Characteristics Of GFRP Composites	International Innovative Research Journal	2018	-	-

			Of Engineering And Technology			
3	Dr .I. Ashok Kumar	Wear Behaviour Of Hybrid Fiber Reinforced Phenolic Composite Materials	International Innovative Research Journal Of Engineering And Technology	2018	-	-
4	Dr .I. Ashok Kumar	Investigation On Sisal Fiber Reinforced Polymer Composites	International Innovative Research Journal Of Engineering And Technology	2018	-	-
5	Dr .I. Ashok Kumar	Mechanical Characterization Of Chitosan Dispersed Poly Lactic Acid/ Basalt Fiber Hybrid Composites'	Journal Of Advanced Microscopy Research	2018	-	1.327
6	Dr .I. Ashok Kumar	Wear Study On Basalt, Flax And Hybrid Fiber Reinforced Phenolic Composites	Journal Of Advanced Microscopy Research	2018	1	1.327
7	Dr.P.K.Palani	Experimental investigation on electrical discharge machining of ceramic composites (Si3N4-TiN) using RSM	Int. J. Computational Materials Science and Surface Engineering	2018	8	-
8	S.Tamil Prabakaran	Optimization and characterization of friction stir welded NAB alloy using multi criteria decision making approach	Materials Today: Proceedings	2018	1	0.365
				31.05.2019		
9	Dr. D.Thirumalaikumarasamy	Electrochemical corrosion behavior of HVOF sprayed iron based amorphous metallic coatings on AISI 316 stainless steel in NaCl solution	Journal of the Mechanical Behavior of Materials (Degruyter)	2018		
10	Dr. D.Thirumalaikumarasamy	Predicting the deposition efficiency of plasma sprayed alumina coatings on AZ31B magnesium alloy by Response surface methodology	Applied Mechanics and Materials (Trans Tech Publications)	2018	1	
11	Dr. P. THIRUMAL	Indoor air quality investigations in hospital patient room	International Journal of Biomedical Engineering and Technology	2018	2	-

11. List of Patterns filled

S.No	Publication Date	Journal No	Application Number	Classification (IPC)	Invention Title
1	16/02/2018	07/2018	201841003971	F24F 11/42	Wearable device for curing eye problems
2	19/04/2019	16/2019	201741036461	B29C 67/00	Method and system for reclaiming serviceable parts of e-waste for development of 3d printer

12. Research Projects 2018-2019

S . N o	Principal Investigator	Research Associates	Title of the Projects	Durati on of the Project	Name of the Funding Agency	Amount in Lakhs	Status
1	Dr. D.Thirumalaiku marasamy, Ph.D., Assistant Professor (SG)	M. Ashokkumar, M.E., Junior Research Fellow	Performance Evaluation of Cold Spray Deposition for Metal Matrix Composite Coatings on AZ31B Magnesium Alloy by Friction Stir Processing	2019-2022	DST-SERB, New Delhi	₹ 45,07000	Ongoing
2	Dr. D.Thirumalaiku marasamy, Ph.D., Assistant Professor (SG)	M. Mathanbabu, M.E., Junior Research Fellow & A. Arunkumar, B.E , Project Assistant	Effect of Pore size, Shape and Distribution on Performance of the Lanthanum Zirconate based Thermal Barrier Coatings	2019-2022	DRDO-ER&IPR, New Delhi	₹ 31,66,000	Ongoing