

CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous)

NAAC Accreditation With A -Grade

DEPARTMENT OF MECHANICAL ENGINEERING COMPOSITION OF BOS BODY for A.Y.2019-20

2nd

Date: 19/07/2019

The following composition body of Board of studies of Mechanical Engineering Department is formed in view of deliberations on R18 B.Tech course Structure and syllabus. Chairman of the proposed body will take initiative to make it functional.

S No	Name	Position	Designation
1.	Dr.P.Ravi Kumar	Chairman	Professor & HoD ME, CMRCET
			E Mail Id: hodmech@cmrcet.org
			Ph NO. 9248727204
2.	Dr.M.T.Naik	Member	University Nominee & Professor of ME, JNTU
			Hyderabad.
			E Mail Id: mtnaik56@jntuh.ac.in, mtnaik56@gmail.com
			Ph. NO. 9848017547
3.	Dr AVSSKS Gupta	Member	Member invitee &
			Professor, Department of Mechanical Engineering,
			JNTUH College of Engineering,, JNTU, Hyderabad.
			E Mail Id: avs_gupta@jntuh.ac.in
	D 1 17 11 11		PH NO.9849427331
4.	Dr A.Krishnaiah	Member	Professor, Department of Mechanical Engineering
			University College of Engineering (A) Osmania
			University, Hyderabad.
			E Mail Id: arakanti@gmail.com
5.	Mr. A.V.Seshagiri	Member	Ph.No.: 9440834065
5.	Rao	Member	Chief Metallurgist, 90/C&D, Phase-1,
	Rau		I.D.A. Jeedimetla, Hyderabad-500055
			E Mail Id: info@azad.in Ph.No. 9848390120
6.	Mr.S.Ashwin	Member	
0.	Mr.S.Ashwin	Member	Distinguished Alumni of CMRCET and Director,
			Gautami Pipes Private Limited, IDA 45, Nacharam City, Hyderabad, Telangana State,
			E Mail Id: ashwin9959@gmail.com
			Ph No. 9849999304
7.	Dr B.Srinivasa	Member	Professor of ME, CMRCET
	Varma		E Mail Id: <u>bsvarma@cmrcet.org</u>
			Ph.No. 7893112644
8.	Dr.K.Srinivasa Rao	Member	Professor of ME, CMRCET
			E Mail Id : drvvkondaiah@cmrcet.org
			Ph.No. 8978013595
9.	Mr.Santosh V	Member	Associate Professor of ME, CMRCET.
	Kulkarni		E Mail Id: santosh082016@cmrcet.org
			Ph.No. 9448519391



(Dr. V.A. Narayana)
Principal
PRINCIPAL
R COLLEGE OF ENGG. & TE

CMR COLLEGE OF ENGG. & TECH. Kandlakoya (V), Medchal Road, Hyderabad-501401.



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DEPARTMENT OF MECHANICAL ENGINEERING

BOARD OF STUDIES (BoS) MEETING

The following members of BOS were present in the meeting of Board of Studies held on 21st September 2019.

S No	POSITION	BOS MEMBERS	SIGNATURE
1.	Chairman	Dr. P. Ravi Kumar Professor & HoD, ME, CMRCET	Deekeen
2.	Member	Dr.MT Naik,University nominee, Professor of ME, JNTU Hyderabad	My
3.	Member	Dr AVSSKS Gupta Institute Nominee, Professor of ME, JNTU Hyderabad	A 2816 2 7/9/19
4.	Member	Mr. A.V.Seshagiri Rao, Nominee from Industry, Chief Metallurgist, Azad Engineering Pvt Ltd, Jeedimetla, Hyderabad.	AGPL
5.	Member	Dr A.Krishnaiah, Institute Nominee, Professor of ME, Osmania University, Hyderabad	Colum 21/9/2019
6.	Member	Mr.S.Ashwin, Distinguished Alumni of CMRCET and Director, Gautami Pipes Private Limited, Nacharam City, Hyderabad.	Alun
7.	Member	Dr B.Srinivasa Varma Professor of ME, CMRCET	(810 Q w 21/9/2019.
8.	Member	Dr.K.Srinivasa Rao, Professor of ME & Controller of examinations, CMRCET.	Mo 21/9/19
9.	Member	Mr.Santosh V Kulkarni, Associate Professor of ME, CMRCET	June 24 19 189

Date: 21-09-2019

Hyderabad

(Dr.P.Ravi Kumar)

Professor & Head, ME

HEAD

Department of Mechanical Engineering CMR College of Engg. & Technology Kandlakoya, Medchal, Hyderabad-501401.



CMR COLLEGE OF ENGINEERING & TECHNOLOGY

(An UGC Autonomous)

Date: 22-09-2019

*Approved by AICTE *Permanently Affiliated to JNTUH Kandlakoya (V), Medchal Road, Hyderabad -501401

DEPARTMENT OF MECHANICAL ENGINEERING

CMRCET/ME/2019-20/ BOS/1

MINUTES OF MEETING OF BOARD OF STUDIES OF MECHANICAL ENGINEERING (ME) DEPARTMENT CONDUCTED ON 21st September 2019 AT 2.00 PM

1. The Board of Studies of ME Department held its meeting on **21**st **September 2019** and the following members were present:

S No	Name	Position	Designation
1.	Dr.P.Ravi Kumar	Chairman	HoD, ME, CMRCET
2.	Dr M.T.Naik	Member	University nominee, Professor of ME, JNTU Hyderabad
3.	Dr AVSSKS Gupta	Member	Professor of ME, JNTU Hyderabad.
4.	Dr.A.Krishnaiah	Member	Professor of ME, OU Hyderabad.
5.	Mr. A.V.Seshagiri Rao	Member	Chief Metallurgist, Azad Engineering Pvt Ltd, Jeedimetla, Hyderabad.
6.	Mr.S.Ashwin	Member	Distinguished Alumni of CMRCET and Director, Director, Gautami Pipes Private Limited, Hyderabad.
7.	Dr B.Srinivasa Varma	Member	Professor of ME, CMRCET
8.	Dr.K.Srinivasa Rao	Member	Professor of ME, CMRCET
9.	Mr.Santosh V Kulkarni	Member	Associate Professor of ME, CMRCET

- 2. Chairman welcomed the members for the meeting and proposed Curriculum of B.Tech (Mech.Engg.) from V Semester to VIII Semester of the Course Structure R18 for the batches from academic year 2018-19. He emphasized the need for finalization of curriculum for the UG program in Mechanical Engineering. He presented the curriculum followed by JNTUH and other prestigious institutions. He welcomed suggestions from all the members for finalization of the curriculum.
- 3. The members of the board had prolonged deliberations upon the issue and finally recommended the curriculum whose outlines are as given below.

	SEMESTER-I							
Course Code	rse Code Course Title Category				urs per Veek	r		
			L	T	P	С		
A30004	Linear Algebra and Calculus	BSC	3	1	0	4		
A30008	Engineering Physics	BSC	3	1	0	4		
A30311	Engineering Mechanics	ESC	3	1	0	4		
A30312	Engineering Graphics	ESC	1	0	4	3		

A30010	Engineering Physics Lab	BSC	0	0	3	1.5
A30505	Basic Internet of Things Lab	ESC	0	0	2	1
A30020	Introduction to Social Innovation	HSMC	0	0	2	1
	Tota	l:	10	3	11	18.5

	SEMESTER - II						
Course Code	Course	Category		Hours per Week		С	
			L	T	P		
A30001	English	HSMC	2	0	0	2	
A30005	ODEs and Multivariable Calculus	BSC	3	1	0	4	
A30011	Engineering Chemistry	BSC	3	0	0	3	
A30501	Programming for Problem Solving	ESC	3	0	0	3	
A30002	English Language Communication Skills Lab	HSMC	0	0	3	1.5	
A30012	Engineering Chemistry Lab	BSC	0	0	3	1.5	
A30502	C Programming Lab	ESC	0	0	3	1.5	
A30314	Engineering Workshop	ESC	0	0	3	1.5	
A30019	Engineering Exploration& Practice	BSC	0	0	3	1.5	
	Total: 11 1 15						
	Total Credits In I Year: 38						

	SEMESTER - III					
			Н	ours	per V	Veek
Course Code	Course Title	Category	L	T	P	С
A30226	Basic Electrical and Electronics Engineering	ESC	3	0	0	3
A30321	Materials Engineering	PCC	3	0	0	3
A30323	Thermodynamics	PCC	3	1	0	4
A30181	Mechanics of Solids	PCC	3	0	0	3
A30324	Machine Drawing	PCC	1	0	2	2
A30322	Materials Engineering Lab	PCC	0	0	3	1.5
A30227	Basic Electrical and Electronics Engineering Lab	ESC	0	0	3	1.5
A30107	Strength of Materials Lab	PCC	0	0	3	1.5
A30021	Social Innovation in Practice	HSMC	0	0	2	1
A30016	Gender Sensitization	MC	0	0	2	0
	Total:		13	1	15	20.5

	SEMESTER - IV					
			Н	ours	per V	Veek
Course Code	Course Title	Category	L	T	P	C

A30325 A30182	Applied Thermodynamics Fluid Mechanics & Hydraulic Machines	PCC	3	0	0	3	
	•			1			
A30329	Kinematics of Machinery	PCC	2	1	0	3	
A30007	Numerical Techniques & Probability Distributions	BSC	3	1	0	4	
A30327	Manufacturing Processes	PCC	3	0	0	3	
A30326	Applied Thermodynamics Lab	PCC	0	0	3	1.5	
A30113	Fluid Mechanics & Hydraulic Machines Lab	PCC	0	0	3	1.5	
A30328	Manufacturing Processes Lab	PCC	0	0	3	1.5	
A30015	Soft Skills & Professional Ethics	MC	0	0	2	0	
A30022	NSS/NCC	MC	0	0	2	0	
	Total:		14	2	13	20.5	
	Total Credits In II Year: 41						

	SEMESTER - V					
Course	Course Title	Catego		V	urs pe Veek	
Code		ry	L	T	P	C
A30331	Dynamics of Machinery	PCC	3	0	0	3
A30332	Manufacturing Technology	PCC	3	0	0	3
A30335	Machine Design	PCC	3	0	0	3
A30334	Thermal Engineering	PCC	3	0	0	3
	Professional Elective-I					
A30351	Non Destructive Testing Methods	PEC	3	0	0	3
A30361	Mechatronic Systems	PEC	3	0	0	3
A30371	Refrigeration & Air Conditioning	PEC	3	0	0	3
A30333	Manufacturing Technology Lab	PCC	0	0	3	1.5
A30003	Advanced English Communication Skills Lab	HSMC	0	0	3	1.5
A30339	Theory of Machines Lab	PCC	0	0	3	1.5
A30017	Indian Constitution	MG	2			
A30018	Essence of Indian Traditional Knowledge	MC	2	0	0	0
	Total:		17	0	9	19.5
A30391	Mini Project-I	MC			g Sun tion/I	nmer
A30393	Internship-I	MC			tion/1 Credit	

	SEMESTER – VI						
Course Code	Course Title	Category		Hours Weel		-	
			L	T	P	С	
A30013	Business Management and Financial Analysis	HSMC	4	0	0	4	

A30336	Engineering Metrology& Measurements	PCC	3	0	0	3
A30338	Heat Transfer	PCC	3	0	0	3
A30343	Automation in Manufacturing	PCC	3	0	0	3
	Professional Elective-II					
A30352	Plant Layout and Material Handling	PEC	3	0	0	3
A30362	Industrial Robotics	PEC	3	0	0	3
A30372	Automobile Engineering	PEC	3	0	0	3
A30337	Engineering Metrology & Measurements Lab	PCC	0	0	3	1.5
A30342	Heat Transfer Lab	PCC	0	0	3	1.5
A30344	Automation in Manufacturing Lab	PCC	0	0	3	1.5
A30014	Environmental Sciences	MC	2	0	0	0
A30395	Technical Seminar-I	PROJ	2	0	0	2
	Total:		20	0	9	22.5

Total Credits In III Year: 42

SEMESTER – VII							
Course Code	Course Title	Category	Hours per Week				
			L	T	P	С	
A30341	Operations Research	PCC	3	0	0	3	
	Professional Elective-III						
A30353	Micro Machining Processes	PEC	3	0	0	3	
A30363	Tribology	PEC	3	0	0	3	
A30373	Computational Fluid Dynamics	PEC	3	0	0	3	
	Professional Elective-IV						
A30354	Process Management Standards	PEC	3	0	0	3	
A30364	Mechanics of Composite Materials	PEC	3	0	0	3	
A30374	Non Conventional Sources of Energy	PEC	3	0	0	3	
	Professional Elective-V						
A30355	Surface Engineering	PEC	3	0	0	3	
A30365	Finite Element Methods	PEC	3	0	0	3	
A30375	Jet Propulsions & Rocket engineering	PEC	3	0	0	3	
	Open Elective-I	OEC	3	0	0	3	
	Open Elective-II	OEC	3	0	0	3	
A30397	Project Phase-I	PROJ	0	0	6	3	
			18	0	6	21	
A30392	Mini Project-II	MC	During Summer Vacation/ Non Credit				

Internship-II MC

SEMESTER - VIII						
Course Code	Course Title	Category	Hours per Week			
		, and gray	L	T	P	С
	Professional Elective-VI					
A30356	Quality Engineering & Management	PEC	3	0	0	3
A30366	Tool Design	PEC	3	0	0	3
A30376	Cryogenic Engineering	PEC	3	0	0	3
	Open Elective-III	OEC	3	0	0	3
	Open Elective-IV	OEC	3	0	0	3
A30396	Technical Seminar-II	PROJ	2	0	0	2
A30398	Project Phase-II	PROJ	0	0	14	7
Total	-1		11	0	14	18
Total Credits In IV Year: 39						

- **4.** The Board has decided to adapt the course structure and syllabus in respect of Environmental Studies, Business Management and Financial Analysis, Indian Constitution, Advanced English Communication Skills Lab, Essence of Indian Traditional Knowledge as per the decision of Boards of studies of respective subjects.
- 5. The board after deliberations recommended following courses as Open electives.

OPEN ELECTIVES OFFERED BY MECHANICAL ENGINEERNG DEPARTMENT IN VII AND VIII SEMESTERS							
Course Code	Course Title	Category	Hours per Week				
			L	Т	P	С	
A30383	Fundamentals of Engineering Materials	OE-I	3	0	0	3	
A30377	Basics of Thermodynamics	OE-I	3	0	0	3	
A30357	Fundamentals of Manufacturing Processes	OE-II	3	0	0	3	
A30379	Fundamentals of Automobile Engineering	OE-II	3	0	0	3	
A30382	Fundamentals of Mechanical Engineering	OE-III	3	0	0	3	
A30378	Waste to Energy	OE-III	3	0	0	3	
A30358	Industrial Safety Engineering	OE-IV	3	0	0	3	
A30360	Work System Design	OE-IV	3	0	0	3	

- 6. The detailed syllabus of above mentioned subjects is placed as Annexure-I to these minutes. The board recommended the above curriculum to the concerned Boards of studies and College Academic Council for necessary approval.
- 7. Paper setters list and paper valuators list for end semester examinations is examined by BoS Members and approved. It is placed as annexure-II to these minutes.
- 8. The chairman thanked all the members for sparing their valuable time and for their valuable contribution in framing the curriculum. There being no further points the meeting came to an end at 5.00 pm.

(Dr.P.Ravi Kumar) HoD, ME

HEAD

Department of Mechanical Engineering CMR College of Engg. & Technology Kandlakoya, Medchal, Hyderabad-501401.