



Estd : 2008

METHODIST

COLLEGE OF ENGINEERING AND TECHNOLOGY

Approved by AICTE New Delhi | Affiliated to Osmania University, Hyderabad

Abids, Hyderabad, Telangana, 500001

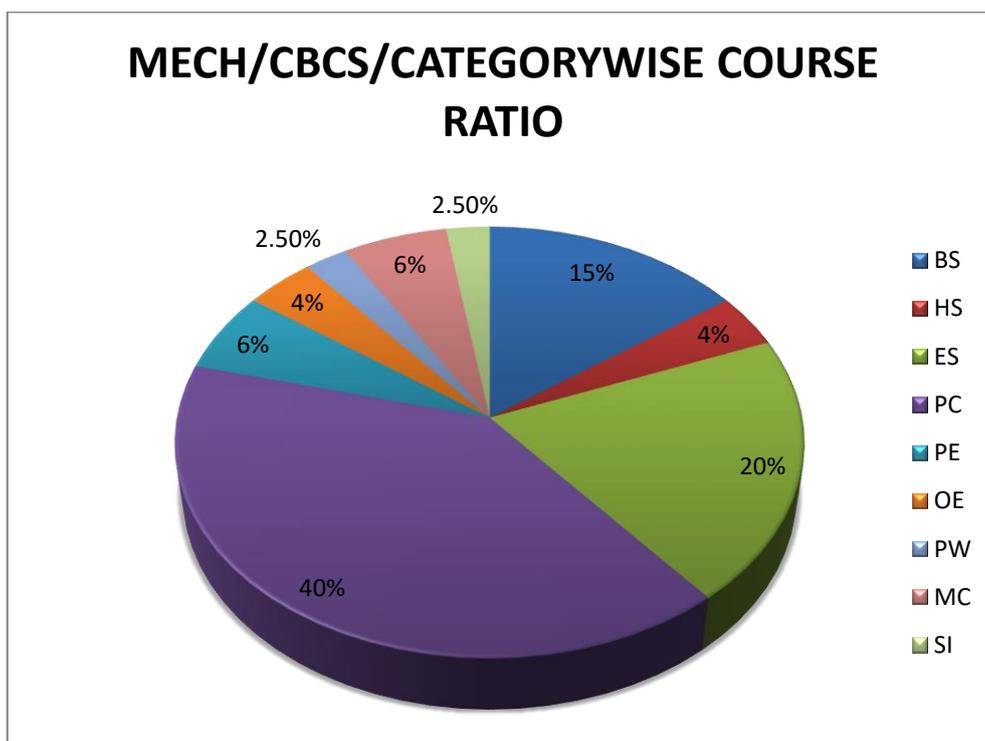
1.2.2 Percentage of programs in which CBCS/Elective course system has been implemented								
TIME LINE:2016-17 TO 2019 -20								
DEPARTMENTS	2019-20		2018-19		2017-18		2016-17	
	CBCS COURSES	TOTAL COURSES	CBCS COURSES	TOTAL COURSES	CBCS COURSES	TOTAL COURSES	CBCS COURSES	TOTAL COURSES
CIVIL	73	73	55	70	42	75	23	74
CSE	77	77	55	69	42	74	23	71
ECE	73	73	53	68	41	76	23	74
EEE	75	75	61	75	40	71	23	70
MECH(UG)	75	75	53	68	42	74	24	73
MECH(PG-CAD/CAM)	0	14	0	14	0	14	0	14
MBA	26	26	26	26	26	26	12	28
TOTAL CBCS COURSES	399	413	303	376	233	396	128	390
AVG. PERC. OF CBCS COURSES (%)	100.00		80.59		58.84		32.82	

SUMMARY

- The yearwise percentage of CBCS courses under 5- Engineering programs & DBM are summarised in above table
- In 2016-17 , CBCS curriculum was implemented for I yr students and subsequently in 2017-18 for II Yrs, 2018-19 for III & 2019-20 for IV Yr students
- In 2016-17, CBCS curriculum was implemented for I yr DBM students, and subsequently for II yrs 2017-18
- In 2018-19, AMC curriculum was implemented for I yr BE
- The uploaded PDF includes : Official CBCS implementation related document, scanned Elective details for CBCS curriculum in V VI , & VII semesters of Engg , I to IV semesters for MBA & ME(CAD CAM) programs

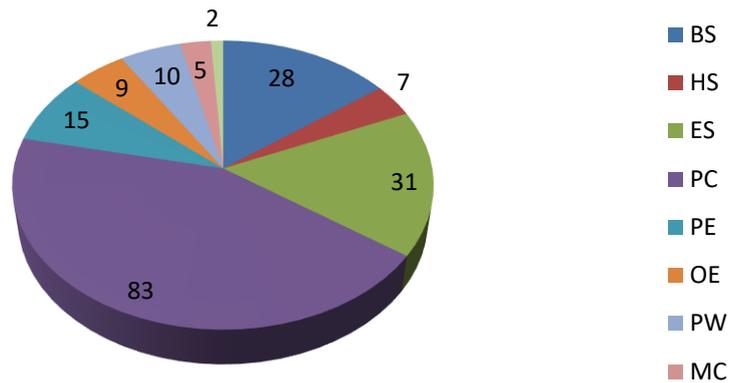
E METHODIST COLLEGE OF ENGG & TECHNOLOGY, HYD
DEPT OF MECH ENGG
CBCS CURRICULUM – ANALYSIS
TIMELINE:2016-17 TO 2019-20

DEPT OF MECH ENGG - CBCS CURRICULUM ANALYSIS CHART					
Sl. No	COURSE CATEGORY	COURSE RATIO		CREDITS DISTRIBUTION	HRS/WEEK
		Number	Percentage		
1	BS-Basic sciences	28	15%	28	36
2	H&SS-Humanities & Soc sciences	7	4%	07	5
3	ES-Engg Science	31	16%	31	42
4	PC-Prof. Course	83	44%	83	97
5	PE-Prof. Elective	15	8%	15	15
6	OE-Open Elective	09	5%	09	06
7	PW-Project Work	10	5%	10	20
8	MC-mandatory Course	05	3%	05	14
9	SI-Summer Internship	2	1%	02	2

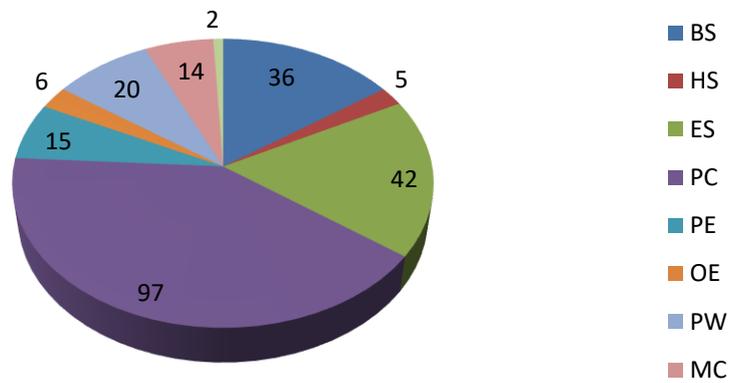


E METHODIST COLLEGE OF ENGG & TECHNOLOGY, HYD
DEPT OF MECH ENGG
CBCS CURRICULUM – ANALYSIS
TIMELINE:2016-17 TO 2019-20

**MECH/CBCS/CATEGORYWISE CREDITS
DISTRIBUTION**



**MECH/CBCS/CATEGORYWISE HOURS PER
WEEK**



2019

Minutes of the meeting of the Faculty of Engineering, Osmania University held on 25th June, 2019 at 10.30am in the committee room, Administrative Building, Osmania University.

III & IV Sem AICTE

Members Present:

1. Prof. P. Laxminarayana, Dean, Faculty of Engineering, Osmania University
2. Prof. P. Premchand, Dean, Faculty of Informatics, OU
3. Prof. P. Raja Sekhar, CBoS, Dept. of Civil Engineering, OU
4. Prof. P.V. Sudha, CBoS, Dept. of CSE, OU.
5. Dr. R. Hemalatha, CBoS, Dept. of ECE, OU.
6. Prof. B. Mangu, CBoS, Dept. of Electrical Engineering, OU
7. Prof. M.C.S. Reddy, CBoS, Dept. of Mechanical Engineering, OU
8. Prof. M. Malini, CBoS, Dept. of BME, OU.
9. Prof. P. V. N. Prasad, Dept. of EE, UCE, OU
10. Prof. G. Mallesham, Head, Dept. of Electrical Engineering, OU
11. Prof. Prof. M Gopal Naik, Head, Dept. of Civil Engineering, UCE, OU
12. Prof. P. Chandra Sekhar, Head, Dept. of ECE, UCE, OU
13. Prof. M. Malini, Head, Dept. of BME, OU.
14. Prof. K. Shamala, Dept. of CSE, OU
15. The Principal, CBIT, Hyderabad.
16. The Principal, MVSR Engg. College, R.R. Dist
17. The Principal, MJCET, Hyderabad.
18. The Principal, DCET, Hyderabad.
19. The Principal, Methodist College of Engg. Hyderabad.
20. The Principal, Matrusri College of Engg. Hyderabad.
21. Prof. D. Jaya Prakash, NGIT, Hyderabad, (Spl. Invitee)
22. Dr. K. Regin Bose, Principal, Swathi Institute of Tech&Sc, Hyderabad (Spl. Invitee)
23. Prof. Syed Abdul Sattar, Principal, NSAKCET, Hyderabad(Spl. Invitee)
24. Prof. Mohd. Yousuf Ali, Principal, Lords Engg., College, Hyderabad(Spl. Invitee)
25. Prof. Mir Iqbal Faheem, Vice Principal, DCET, Hyderabad (Spl. Invitee)
26. Prof. N.V. Koteswara Rao, CBIT, Hyderabad. (Spl. Invitee)

Agenda for the meeting:

1. To consider the CBCS Scheme and Syllabus for B.E. (4th - Year) VII & VIII - Semesters in the Osmania University Affiliated Engineering Colleges.
2. To consider the revised Scheme for B.E. (1st - Year) I & II - Semester as per AICTE Model Curriculum with from effect the academic Year 2019-2020 in the Osmania University Affiliated Engineering Colleges.
3. To consider the Scheme and Syllabus for B.E. (2nd - Year)-III & IV - Semesters as per AICTE Model Curriculum with effect from the academic Year 2019-2020 in the Osmania University Affiliated Engineering Colleges.
4. To consider the Scheme for B.E. (3rd & 4th - Yrs) - V, VI, VII and VIII - Semesters as per AICTE Model Curriculum in the Osmania University Affiliated Engineering Colleges.
5. To consider the Scheme and Syllabus for M.E. (AICTE Model Curriculum) to be initiated with effect from the academic Year 2019-2020 in the Osmania University Affiliated Engineering Colleges.
6. Any other matter with the permission of the chair.


HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
METHODIST COLLEGE OF ENGG. & TECH.
ABIDS, HYDERABAD

At the outset Dean, Faculty of Engineering, Osmania University welcomed all the members and the special invitees to the meeting.

- Dean, Faculty of Engineering, began the meeting with a power point presentation to apprise the members about the agenda for the meeting and the related issues pertaining to the finalization of scheme and syllabi for B.E. (4th - Year-CBCS) VII & VIII Semesters and the scheme and syllabi for B.E. (2nd - Year) III & IV semesters and for all M.E. /M.Tech., courses as per the AICTE model curriculum.
- The respective Chairpersons-BoS of the Departments of Civil Engineering, Computer Science Engineering, Electronics and Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering respectively presented the details of the subjects and syllabus for all the engineering streams, including Information Technology, Electrical and Instrumentation Engineering, Production Engineering and Automobile Engineering.

The following resolutions were taken after thorough discussion amongst the members present:

- B.E. (4th - Year, CBCS) VII and VIII - Semester for the academic year 2019-2020.
 - Summer Internship of 4 weeks duration is included after the completion of the Semester-VI, which shall be evaluated internally by respective colleges in Semester-VII.
 - All open elective courses are placed in the Semester-VII only and Professional Elective courses are placed in the Semester-VIII.
 - Those of the students willing to register for MOOCs in semester-VIII instead of Professional Electives III, IV & V, should register for those courses approved by the CBoS, OU and respective college MOOCs Coordinators. Such students are strictly not permitted to appear for either CIE or SEE of Professional Electives, if they abstain from attending the semester class work. Further, the students who choose to appear for both MOOCs and Professional Electives must fulfill the minimum attendance criteria in the Professional Electives.
 - The responsibility of passing the MOOCs lies entirely on the student. If he/she fails the MOOCs, she is not eligible to write the supplementary exam for the corresponding Professional Elective. He/she has to clear another MOOC course of the same number of credits in the following semester or year.
 - **The members of the faculty of Engineering unanimously approved the CBCS scheme and syllabi of all the Departments.**
- B.E. III and IV - Semester as per AICTE Model Curriculum with from effect the academic Year 2019-2020.
 - The four Mandatory Courses as prescribed in the AICTE model curriculum, namely, the Induction program, Environmental Science, Indian Constitution and Essence of Indian Traditional Knowledge, shall be covered for all branches within the first two semesters only, starting from this Academic Year 2019-20, and henceforth continue for future

admissions as well. This is done so as to reduce the burden of coursework for students in the further semesters.

- However, as the above mandatory courses were not offered to the students admitted during the Academic Year 2018-19, except for the Induction Program, the students have to complete the mandatory courses in the B.E. III and IV - Semesters. Thus, for this particular academic year, the mandatory courses have to be simultaneously offered to both the first year (I & II - Semesters) and second year (III & IV - Semesters) students.
 - The three mandatory courses as prescribed in the AICTE model curriculum, namely, Environmental Science, Indian Constitution and Essence of Indian Traditional Knowledge, shall be compulsorily offered for all branches within the third and fourth semesters only.
 - The common courses under various heads such as Humanities & Social Sciences, Basic Sciences, Engineering Sciences and Mandatory Courses were listed and their distribution across various branches in the III and IV- Semesters was listed.
 - **The members of the faculty of Engineering unanimously approved the AICTE-MC UG scheme and syllabi of all the Departments.**
- M.E. /M.Tech. I, II, III and IV - Semesters as per AICTE Model Curriculum with from effect the academic Year 2019-2020.
- The distribution of professional core, professional electives, open electives, mandatory courses and project work over the four semesters was listed by respective Departments and the same was approved.
 - **The members of the faculty of Engineering unanimously approved the AICTE-MC P.G. scheme and syllabi of all the Departments.**
 - ✓ The members unanimously approved the rules and regulations for both UG and PG courses, the same rules will be followed by the College of Engineering, Osmania University and all the OU affiliated Engineering Colleges & OU affiliated Engineering Colleges (Autonomous).
 - ✓ Dean, Faculty of Engineering and the members, while thanking all the Chairperson, Board of Studies for all their efforts.
 - ✓ The proposal put forth by a representative from CBIT pertaining to the award of B.E.(Hons.) degree after the student obtains 20 additional Credits as per the AICTE norms and OU rules and regulations was agreed upon unanimously by the members and the same was approved by the members of the faculty of Engineering.

he meeting ended with Dean, Faculty of Engineering thanking all the members for their active participation and in turn all the members present profusely thanked the Dean, Faculty of Engineering for all his efforts in finalizing the scheme and syllabi for the UG and PG courses in faculty of Engineering.

Dean
Faculty of Engineering
Osmania University


4 HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
METHODIST COLLEGE OF ENGG. & TECH.
ABIDS, HYDERABAD

SCHEME OF INSTRUCTION & EXAMINATION
B.E. VI - Semester
(MECHANICAL ENGINEERING)

S.No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hr/Wk	CIE	SEE	Duration in Hours	
Theory Courses										
1.	PC601ME	Metal Cutting & Machine Tools	3	-	-	3	30	70	3	3
2.	PC602ME	Refrigeration & Air Conditioning	4	-	-	4	30	70	3	4
3.	PC603ME	Hydraulic Machinery & Systems	4	-	-	4	30	70	3	4
4.	PC604ME	Metrology & Instrumentation	3	-	-	3	30	70	3	3
5.	PC605ME	Automobile Engineering	3	-	-	3	30	70	3	3
6.	PE - I	Professional Elective-I	3	-	-	3	30	70	3	3
7.	OE - I	Open Elective - I	3	-	-	3	30	70	3	3
Practical / Laboratory Courses										
7.	PC651ME	Metrology & Machine Tools Lab			2	2	25	50	3	1
8.	PC652ME	Hydraulic Machinery Lab			2	2	25	50	3	1
9.	MC	Mandatory Course	-	-	3	3	50	-	3	0
10.	SI 671ME	Summer Internship*								
Total			23		7	30	310	590		25

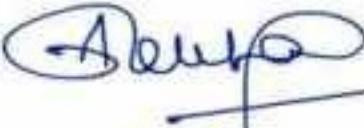
PE: Professional Elective MC: Mandatory Course OE: Open Elective SI: Summer Internship
 L: Lecture T: Tutorial P: Practical D: Drawing
 CIE: Continuous Internal Evaluation SEE: Semester End Examination (Univ. Exam)

Note -1:

- Each contact hour is a Clock Hour
- The duration of the practical class is two clock hours, however it can be extended wherever necessary, to enable the student to complete the experiment

Note-2:

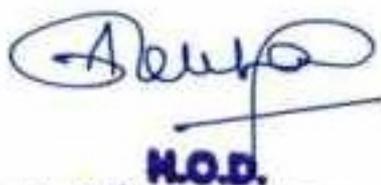
- * The students have to undergo a Summer Internship of four weeks duration after VI semester and credits will be awarded in VII semester after evaluation.
- ** Subject is not offered to the students of Mechanical Engineering, Production Engineering and Automobile Engineering Department.


H.O.D.

Open Elective-I:		
S.No	Course Code	Course Title
1	OE601CE	Disaster Management
2	OE602CE	Geo Spatial Techniques
3	OE601CS	Operating Systems
4	OE602CS	OOP using Java
5	OE601IT	Database Systems
6	OE601EC	Principles of Embedded Systems
7	OE602EC	Digital System Design using Verilog HDL
8	OE601EE	Reliability Engineering
9	OE602EE	Basics of Power Electronics
10	OE601ME	Industrial Robotics**
11	OE602ME	Material Handling**
12	OE632AE	Automotive Safety & Ergonomics**

Professional Elective – I		
S.No	Course Code	Course Title
1	PE601ME	Non-Conventional Energy Sources
2	PE602ME	Modern Machining and Forming Methods

Mandatory Course		
S.No	Course Code	Course Title
1	MC951SP	Yoga Practice
2	MC952SP	National Service Scheme
3	MC953SP	Sports



H.O.D.

Mechanical Engineering Department
Methodist College of Engg & Tech
 King Kottl, Hyderabad-500 001.

SCHEME OF INSTRUCTION & EXAMINATION
B.E. VII - Semester
(MECHANICAL ENGINEERING)

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	PC 701 ME	Thermal Turbo Machines	3	1	-	4	30	70	3	3
2	PC 702 ME	Finite Element Analysis	3	1	-	4	30	70	3	3
3	PC 703 ME	Industrial Engineering	3	-	-	3	30	70	3	3
4	PC 704 ME	Production And Operations Management	3	-	-	3	30	70	3	3
5	HS 901 MB	Managerial Economics and Accountancy	3	-	-	3	30	70	3	3
6		Open Elective-II								
7		Open Elective-III	3	-	-	3	30	70	3	3
Practical/ Laboratory Courses										
8	PC 751 ME	Thermal Engineering Lab	-	-	2	2	25	50	3	1
9	PC 752 ME	CAE Lab	-	-	2	2	25	50	3	1
10	PW 761 ME	Project Work - I	-	-	4	4	50	-	-	2
11	SI 762 ME	Summer Internship	-	-	-	-	50	-	-	2
			21	02	08	31	360	590		27

Open Elective - II			Open Elective - III		
S. No.	Course Code	Course Title	S. No.	Course Code	Course Title
1	OE 771 CE	Green Building Technologies	1	OE 781 CE	Road Safety Engineering
2	OE 772 CS	Data Science Using R Programming	2	OE 782 IT	Software Engineering
3	OE 773 EC	Fundamentals of IoT	3	OE 783 EC	Principles of Electronic Communications
4	OE 774 EE	Non-Conventional Energy Sources	4	OE 784 EE	Illumination and Electric Traction systems
5	OE 775 ME**	Entrepreneurship	5	OE 785 ME**	Mechatronics

PC: Professional Course

PE: Professional Elective

L: Lectures

T: Tutorials

P: Practical

D: Drawing

CIE: Continuous Internal Evaluation

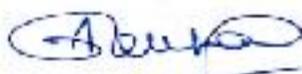
SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

Note-2: * The students have to undergo a Summer Internship of four weeks' duration after VI semester and credits will be awarded in VII semester after evaluation.

** Subject is not offered to the students of Mechanical Engineering Department.



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Mechanical Engineering Department
Methodist College of Engg & Tech
 King Kod, Hyderabad-500 001.

**SCHEME OF INSTRUCTION & EXAMINATION
B.E. VIII - SEMESTER
(MECHANICAL ENGINEERING)**

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1		Professional Elective – II	3	-	-	3	30	70	3	3
2		Professional Elective – III	3	-	-	3	30	70	3	3
3		Professional Elective – IV	3	-	-	3	30	70	3	3
4		Professional Elective – V	3	-	-	3	30	70	3	3
Practical/ Laboratory Courses										
5	PW 961 ME	Project Work – II	-	-	16	16	50	100	-	8
			12	-	16	28	170	380		20

Professional Elective – II			Professional Elective – III		
S. No.	Course Code	Course Title	S. No.	Course Code	Course Title
1	PE 821 ME	Design of Solar Energy System	1	PE 826 ME	Power Plant Engineering
2	PE 822 ME	Mechanical Vibrations	2	PE 827 ME	Robotic Engineering
3	PE 823 ME	Composite Materials	3	PE 828 ME	Tool Design
4	PE 824 ME	Non-Destructive Testing	4	PE 829 ME	Product Design And Process Planning
Professional Elective – IV			Professional Elective – V		
1	PE 831 ME	Intellectual Property Rights	1	PE 841 ME	Energy Conservation and Management
2	PE 832 ME	Additive Manufacturing Technology	2	PE 842 ME	Advanced Propulsion and Space Science
3	PE 833 ME	Machine Tool Engineering and Design	3	PE 843 ME	Waste Heat Recovery and Co-Generation
4	PE 834 ME	Entrepreneurship Development	4	PE 844 ME	Aerodynamic Design of Thermal Turbines

PC: Professional Course

L: Lectures

T: Tutorials

PE: Professional Elective

P: Practical

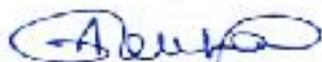
D: Drawing

CIE: Continuous Internal Evaluation

SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

2) The duration of the practical class is two clock hours, however it can be extended wherever necessary, to enable the student to complete the experiment


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**Mechanical Engineering Department
Methodist College of Engg & Tech
King Kott, Hyderabad-500 001.**

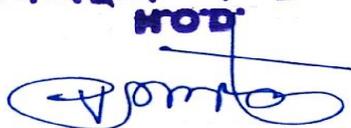
**DEPARTMENT OF
MECHANICAL ENGINEERING**

Scheme of Instruction and Syllabus



H.O.D.

King Kod' Hyderabad-500 001.
Method: Code of Engg & Tech
Mechanical Engineering Department



**ing Department
of Engg & Tech
abad-500 001.**



**UNIVERSITY COLLEGE OF ENGINEERING
(Autonomous)**

Osmania University

Hyderabad — 500 007, Telangana, INDIA

Scheme of Instruction & Examination
M.E. (Mechanical Engineering) 4 Semesters (Full Time)

Sl. No	Subject	Hours per week		Duration (Hrs)	Max. Marks		Credits
		L/T	D/P		SEE	CIE	
Semester - I							
1.	Core	3	--	3	70	30	3
2.	Core	3	--	3	70	30	3
3.	Core / Elective	3	--	3	70	30	3
4.	Core / Elective	3	--	3	70	30	3
5.	Elective	3	--	3	70	30	3
6.	Elective	3	--	3	70	30	3
7.	Laboratory - I	--	3	3	--	50	2
8.	Seminar – I	--	3	3	--	50	2
	Total	18	6	24	420	280	22
Semester - II							
1.	Core	3	--	3	70	30	3
2.	Core	3	--	3	70	30	3
3.	Core / Elective	3	--	3	70	30	3
4.	Core / Elective	3	--	3	70	30	3
5.	Elective	3	--	3	70	30	3
6.	Elective	3	--	3	70	30	3
7.	Laboratory - II	--	3	3	--	50	2
8.	Seminar - II	--	3	3	--	50	2
	Total	18	6	24	420	280	22
Semester - III							
1.	Project+ Seminar*	--	4	4	--	100**	8
Semester – IV							
1.	Dissertation	--	6	6	200	-	16

Note: Six core subjects, six elective subjects, two laboratory courses and two seminars should normally be completed by the end of semester II.

* One project seminar presentation.

** 50 marks to be awarded by guide and 50 marks to be awarded by viva-voice committee comprising Guide and two internal senior faculty members (subject experts)


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 Mechanical Engineering Department
 Methodist College of Engg & Tech
 King Kott, Hyderabad-500 001.

M. E. Mechanical Engineering (CAD/CAM)

Syllabus Ref. No. (Code)	Subject Title	Contact hrs Per week	Scheme of Examination		Credits
			CIE	SEE	
Core Subjects:					
ME2301	Automation	3	30	70	3
ME2401	Finite Element Techniques	3	30	70	3
ME2402	Computer Aided Modeling and Design	3	30	70	3
ME2403	Computer Integrated Manufacturing	3	30	70	3
ME2404	Failure Analysis and Design	3	30	70	3
ME2306	Computer Aided Mechanical Design and Analysis	3	30	70	3
Elective Subjects:					
ME2302	Control of Dynamic Systems	3	30	70	3
ME2303	Robotic Engineering	3	30	70	3
ME2308	Optimization Techniques	3	30	70	3
ME2309	Vibrations Analysis and Condition Monitoring	3	30	70	3
ME2001	Engineering Research Methodology	3	30	70	3
ME2311	Neural Networks and Fuzzy Logic	3	30	70	3
ME2312	Artificial Intelligence and Expert Systems	3	30	70	3
ME2107	Mechanics of Composite Materials	3	30	70	3
ME2109	Theory of Elasticity and Plasticity	3	30	70	3
ME2110	Experimental Techniques and Data Analysis	3	30	70	3
ME2601	Design for Manufacture	3	30	70	3
ME2405	Data Base Management Systems	3	30	70	3
ME2406	Fracture Mechanics	3	30	70	3
ME2505	Design of Press Tools	3	30	70	3
ME2506	Design of Dies	3	30	70	3
ME2206	Computational Fluid Dynamics	3	30	70	3
ME2112	Additive Manufacturing Technologies and Applications	3	30	70	3
ME2113	Flexible Manufacturing Systems	3	30	70	3
ME2111	Product Design and Process Planning	3	30	70	3
Departmental Requirements:					
ME2431	CAD/CAM Lab (Lab –I)	2	50	-	2
ME2032	Computation Lab (Lab –II)	2	50	-	2
ME2033	Seminar I	2	50	-	2
ME2034	Seminar II	2	50	-	2
ME2035	Project Seminar	6	150	-	12
ME2036	Dissertation	4	100	-	8

CIE : Continuous Internal Evaluation SEE : Semester End Examination


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