

**NEW CODES**  
**SEMESTER WISE COURSE STRUCTURE & EVALUATION SCHEME**  
**M.TECH. COMPUTER AIDED DESIGN**  
**(FULL TIME PROGRAMME)**

**EFFECTIVE FROM SESSION 2019-2020 (for new entrants)**

**SEMESTER I**

Sr. No.	Course Type	Subject Code	Course Title	Credits (L-T-P)	Sessional Marks				ESM	Total Mark
					MS E	TA	Lab	Total		
1	PCC	EME551	Numerical Methods & Computer Programming	5 (3-2-0)	30	20	-	50	50	100
2	PCC	EME553	Advance Mechanics of Solids	4 (3-1-0)	30	20	-	50	50	100
3	PCC	EME555	Computer Graphics & Geometric Modelling	5 (3-2-0)	30	20	-	50	50	100
4	PCC	EME557	Computer Aided Design of Mechanical System	4 (3-1-0)	30	20	-	50	50	100
<b>Total Credits</b>				<b>18</b>						

**SEMESTER II**

Sr. No.	Course Type	Subject Code	Course Title	Credits (L-T-P)	Sessional Marks				ESM	Total Mark
					MSE	TA	Lab	Total		
1.	PCC	EME 552	Optimization Methods for Engineering Design	4 (3-1-0)	30	20	-	50	50	100
2.	PCC	EME 554	Finite Element Method	4 (3-1-0)	30	20	-	50	50	100
3.	PEC	PEC I	PEC-I	4 (3-1-0)	30	20	-	50	50	100
4.	PEC	PEC II	PEC-II	4 (3-1-0)	30	20	-	50	50	100
<b>Total Credits</b>				<b>16</b>						

**SEMESTER III**

Sr. No.	Course Type	Subject Code	Course Title	Credits (L-T-P)	Sessional Marks				ESM	Total Mark
					MSE	TA	Lab	Total		
1.	PCC	EME 651	Product Design & Development	4 (3-1-0)	30	20	-	50	50	100
2.	PEC	PEC III	PEC-III	4 (3-1-0)	30	20	-	50	50	100
3.	Seminar	EME 671	Seminar	2 (0-0-4)	-	50	-	50	50	100
4.	Dissertation	EME 697	Dissertation	4 (0-0-8)	-	50	-	50	50	100
<b>Total Credits</b>				<b>14</b>						

**SEMESTER IV**

Sr. No.	Course Type	Subject Code	Course Title	Credits (L-T-P)	Sessional Marks				ESM	Total Mark
					MSE	TA	Lab	Total		
1.	Dissertation	EME 698	Dissertation	12 (0-0-24)	-	50	-	50	50	100
<b>Total Credits</b>				<b>12</b>						

**Total Programme Credits : 60**

EME 697 Dissertation will have Internal Evaluation while EME 698 Dissertation will have External Evaluation.

# NEW CODES

## DEPARTMENT OF MECHANICAL ENGINEERING LIST OF ELECTIVE COURSES M.TECH. COMPUTER AIDED DESIGN (FULL TIME PROGRAMME)

**Elective I** (EME-556 to EME-567) **4(3-1-0)**

EME 556/557: Theory of Elasticity & Plasticity

EME 558/559: Computational Fluid Dynamics

EME 560/561: Smart Material & Structures

EME 562/563: Industrial Design and Ergonomics

EME 564/565: Rapid Prototyping & Tooling

EME 566/567: Advanced Manufacturing Processes

Please refer to syllabi of electives.

**Elective II** (EME-580 to 589) **4(3-1-0)**

EME 580/581: Advanced Mechanical Vibrations

EME 582/583: Introduction to Robotics

EME 584/585: Flexible Manufacturing System

EME 586/587: Reliability & Maintenance

EME 588/589: Composite Materials

**Elective III** (EME-653 to EME-664) **4(3-1-0)**

EME 653/654: Computer Aided Manufacturing

EME 655/656: Fracture Mechanics

EME 657/658: Neural Network and Fuzzy Systems

EME 659/660: Design of Thermal System

EME 661/662: Advanced Machine Design

EME 663/664: Simulation Modelling & Analysis