

# **COURSE STRUCTURE AND DETAILED SYLLABUS**

**for**

**M.Tech.**

**in**

**CAD/CAM**

**With Effective from the academic year**

**2018-2019**



**M.Tech. COURSE STRUCTURE****Mechanical Engineering****I SEMESTER**

S.No	Course Code	Name of the Subject	L	P	C
1	18MECC101	Advanced Optimization Techniques	3	0	3
2	18MECC102	Geometric Modeling	3	0	3
3	18MECC103	Computer Integrated Manufacturing	3	0	3
4	18MECC104	Industrial Robotics	3	0	3
5	18MECC105X	Elective –I	3	0	3
6	18MECC106X	Elective - II	3	0	3
7	18MECC151	Modeling and Analysis of Manufacturing Processes Lab	0	3	1.5
<b>Total Credits</b>					<b>19.5</b>

**II SEMESTER**

S.No	Course Code	Name of the Subject	L	P	C
1	18MECC201	Computational Methods in Engineering	3	0	3
2	18MECC202	Finite Element Methods	3	0	3
3	18MECC203	Computer Graphics	3	0	3
4	18MECC204	Mechanics and Manufacturing Methods of Composites	3	0	3
5	18MECC205X	Elective –III	3	0	3
6	18MECC206X	Elective - IV	3	0	3
7	18MECC251	Term Paper with Seminar	0	0	3
8	18MECC252	FEA Lab	0	3	1.5
<b>Total Credits</b>					<b>22.5</b>

**III SEMESTER**

S.No	Course Code	Name of the Subject	L	P	C
1	18MECC301	Self-Learning Course: CNC Technology & Programming	3	0	3
2	18MECC351	Internship with Seminar	0	0	4
3	18MECC352	Project Work Phase-I	0	0	5
<b>Total Credits</b>					<b>12</b>

**IV SEMESTER**

S.No	Course Code	Name of the Subject	L	P	C
1	18MECC451	Project Phase-II	-	-	10
<b>Total Credits</b>					<b>10</b>

**Number of Credits for each semester:**

SEMESTER	CREDITS
I	19.5
II	22.5
III	12
IV	10
<b>TOTAL</b>	<b>64</b>

**Program Electives:**

Program Elective-1	18MECC105A	Special Manufacturing Processes
	18MECC105B	Nano Technology
	18MECC105C	Mechatronics
Program Elective-2	18MECC106A	Intelligent Manufacturing Systems
	18MECC106B	Computational Fluid Dynamics
	18MECC106C	Non-Destructive Evaluation
Program Elective-3	18MECC205A	Quality Engineering in Manufacturing
	18MECC205B	Fracture Mechanics
	18MECC205C	Simulation Modeling of Manufacturing Systems
Program Elective-4	18MECC206A	Mechanical Vibrations
	18MECC206B	Design for Manufacturing
	18MECC206C	Computer Aided Process Planning