SAVEETHA ENGINEERING COLLEGE

AUTONOMOUS

NAAC A GRADE

Affiliated to Anna University | Approved by AICTE

REGULATIONS 2019

DEPARTMENT OF MECHANICAL ENGINEERING

M.E - CADD/CAM

CURRICULUM and SYLLABUS

S.No.	Category	Course Code	Course Title	Contact Hours per Week			Credits	Prerequisite
				L	T	P		
1	FC	19MMA03	Applied Mathematics for Engineers	4	0	0	4	
2	PC	19MCD01	Computer Applications in Design	3	0	0	3	-
3	PC	19MCD02	Computer Aided Tools for Manufacturing	3	0	0	3	-
4	PC	19MCD03	Competitive Manufacturing Systems	3	0	0	3	-
5	PC	19MCD04	Advanced Finite Element Analysis	3	0	0	3	-
6	PC	19MCD05	CAD Laboratory	0	0	4	2	-
7	PC	19MCD06	Advanced Analysis and Simulation Laboratory	0	0	4	2	-
8	PC	19MCD07	Design for Manufacture, Assembly and Environments	4	0	0	4	-
9	PC	19MCD08	Additive Manufacturing and Tooling	3	0	0	3	-
10	PC	19MCD09	Mechanical Behavior of Materials	3	0	0	3	-
11	PC	19MCD10	Integrated Product Design and Process Development	3	1	0	4	-
12	PC	19MCD11	CAM Laboratory	0	0	2	1	-
13	PC	19MCD13	Product Lifecycle Management	3	0	0	3	-
14	PE	19MCD16	Computer Control in Process Planning	3	0	0	3	-
15	PE	19MCD17	Optimization Techniques in Design	3	0	0	3	-
16	PE	19MCD18	Advanced Mechanics of Materials	3	0	0	3	-
17	PE	19MCD19	Information Analytics	3	0	0	3	-
18	PE	19MCD20	Mechatronics Applications in Manufacturing	3	0	0	3	-
19	PE	19MCD21	Industrial Safety Management	3	0	0	3	-
20	PE	19MCD22	Advanced Tool Design	3	0	0	3	-
21	PE	19MCD23	Mechanisms Design and Simulation	3	0	0	3	-
22	PE	19MCD24	Computational Fluid Dynamics	3	0	0	3	-
23	PE	19MCD25	Reliability in Engineering Systems	3	0	0	3	-
24	PE	19MCD26	Integrated Mechanical Design	3	0	0	3	-
25	PE	19MCD27	Performance Modeling and Analysis of Manufacturing System	3	0	0	3	-
26	PE	19MCD28	Metrology and Non Destructive Testing	3	0	0	3	-
27	PE	19MCD29	Quality Management Techniques	3	0	0	3	-
28	PE	19MCD30	Design for Cellular Manufacturing Systems	3	0	0	3	-
29	PE	19MCD31	Composite Materials and Mechanics	3	0	0	3	-
30	PE	19MCD32	Design of Material Handling Equipments	3	0	0	3	-
31	PE	19MCD33	Industrial Robotics and Expert Systems	3	0	0	3	-
32	PE	19MCD34	Design for Internet of Things	3	0	0	3	-
33	EEC	19MCD12	Design Project	0	0	4	2	-
34	EEC	19MCD14	Project Work Phase I	0	0	12	6	-
35	EEC	19MCD15	Project Work Phase II	0	0	24	12	-

SEMESTER I							
			Contact Hours per Week				

S.No.	Course Code	Course Title	L	T	P	Credits	Prerequisite
1	19MMA03	Applied Mathematics for Engineers	4	0	0	4	-
2	19MCD01	Computer Applications in Design	3	0	0	3	-
3	19MCD02	Computer Aided Tools for Manufacturing	3	0	0	3	-
4	19MCD03	Competitive Manufacturing Systems	3	0	0	3	-
5	19MCD04	Advanced Finite Element Analysis	3	0	0	3	-
6		Professional Elective I	3	0	0	3	-
7	19MCD05	CAD Laboratory	0	0	4	2	-
8	19MCD06	Advanced Analysis and Simulation Laboratory	0	0	4	2	-
		Total	**19**	**0**	**8**	**23**	

SEMESTER II

S.No.	Course Code	Course Title	Contact Hours per Week			Credits	Prerequisite
			L	T	P		
1	19MCD07	Design for Manufacture, Assembly and Environments	4	0	0	4	-
2	19MCD08	Additive Manufacturing and Tooling	3	0	0	3	-
3	19MCD09	Mechanical Behavior of Materials	3	0	0	3	-
4	19MCD10	Integrated Product Design and Process Development	3	1	0	4	-
5		Professional Elective II	3	0	0	3	-
6		Professional Elective III	3	0	0	3	-
7	19MCD11	CAM Laboratory	0	0	2	1	-
8	19MCD12	Design Project	0	0	4	2	-
		Total	**18**	**1**	**6**	**23**	

SEMESTER III

S.No.	Course Code	Course Title	Contact Hours per Week			Credits	Prerequisite
			L	T	P		
1	19MCD13	Product Lifecycle Management	3	0	0	3	-
2		Professional Elective IV	3	0	0	3	-
3		Professional Elective V	3	0	0	3	-
4	19MCD14	Project Work Phase I	0	0	12	6	-
		Total	**9**	**0**	**12**	**15**	

SEMESTER IV

S.No.	Course Code	Course Title	Contact Hours per Week			Credits	Prerequisite
			L	T	P		
1	19MCD15	Project Work Phase II	0	0	24	12	-
		Total	**0**	**0**	**24**	**12**	

TOTAL CREDITS:73