

M.Tech. (Advanced Manufacturing Technology) 2019 Batch
Revised Curriculum
PROGRAMME STRUCTURE

S. No.	Course Component	Credits
1	Professional Core Courses	25
2	Professional Elective Courses	15
3	Open Courses – Electives from other technical and /or emerging courses	3
4	Mini Project / Industrial Training	2
5	Part & Full Semester Projects	23
6	Audit Courses I & II	(Non-Credit)
Total Credits		68

PROFESSIONAL CORE COURSES							
S. No	Code No.	Subject	Hours per week			Credits	Semester
			L	T	P		
1	18ME3010	Advanced Manufacturing Processes	3	0	0	3	I
2	18ME3011	Advanced Metal Cutting Theory	3	0	0	3	I
3	18ME3012	Design for Manufacturing and Assembly	3	0	0	3	II
4	19ME3004	Smart materials and Shape Memory Alloys	3	0	0	3	III
5	18ME3014	Advanced Metrology and Measurement Systems	3	0	0	3	III
6	18ME3006	Computer Aided Design Laboratory	0	0	4	2	I
7	18ME3007	Analysis and Simulation Lab	0	0	4	2	I
8	18ME3015	Advanced Computer Aided Manufacturing Lab	0	0	4	2	II
9	18ME3016	Mechatronics and Robotics Laboratory	0	0	4	2	II
10	18MS3107	Research Methodology and Intellectual Property Rights	2	0	0	2	I
Total Credits						25	

PROFESSIONAL ELECTIVE COURSES							
S. No	Code No.	Subject	Hours per Week			Credits	Semester
			L	T	P		
1	18ME3018	Finite Element Methods in Engineering	3	0	0	3	I
2	18ME3036	Quality Concepts in Design	3	0	0	3	I
3	18ME3037	Manufacturing System and Simulation	3	0	0	3	I
4	18ME3038	Flexible Manufacturing System	3	0	0	3	I
5	18ME3039	Computer Integrated Manufacturing systems	3	0	0	3	I
6	18ME3040	Computer Applications in Design	3	0	0	3	I
7	18ME3041	Design of Fluid Power Systems	3	0	0	3	II
8	18ME3043	Industrial Automation and Mechatronics	3	0	0	3	II
9	18ME3044	Control of CNC Machine tools	3	0	0	3	II
10	18ME3046	Advanced Tool Design	3	0	0	3	II
11	19ME3002	Robotics and Automation in Manufacturing	3	0	0	3	II

12	19ME3003	3D Printing Technology	3	0	0	3	II
13	18MA3001	Advanced Mathematical Methods in Engineering	3	0	0	3	III
14	19CS3001	Artificial Intelligence for Manufacturing Systems	3	0	0	3	III
Credits						18	

OPEN ELECTIVE COURSE							
S. No	Code No.	Subject	Hours per week			Credits	Semester
			L	T	P		
1		Open Elective Course-I	3	0	0	3	III
2		Open Elective Course-II	3	0	0	3	III
3		Open Elective Course-III	3	0	0	3	III
4		Open Elective Course-IV	3	0	0	3	III
5		Open Elective Course-V	3	0	0	3	III
6		Open Elective Course-VI	3	0	0	3	III
Credits						18	

AUDIT COURSE							
S. No	Code No.	Subject	Hours per week			Credits	Semester
			L	T	P		
1		Audit Course-I	2	0	0	0	I / II
2		Audit Course-II	2	0	0	0	I / II
Credits						0	

PROJECT							
S. No	Code No.	Subject	Hours per week			Credits	Semester
			L	T	P		
1	MP3951	Mini-Project	0	0	4	2	II
2	19ME3998	Dissertation Phase – I	0	0	16	8	III
3	19ME3999	Dissertation Phase – II (Internal / External)	0	0	30	15	IV
Credits						25	