

Course Structure of
M. TECH. (MANUFACTURING AND AUTOMATION)

(2 Years Full Time Programme)

First Year

First Semester

Code	Subject	L-T-P	Credits
EMEL 101P	Foundry Technology	3-0-0	3
EMEL 113P	Optimization Techniques	3-0-0	3
EMEL 105P	Metal Forming Technology	3-0-0	3
EMEL 107P	Metrology & Industrial Inspections	3-0-0	3
EMEL 109P	CAD / CAM	3-0-0	3
E MEP 111P	Metrology Lab	0-0-4	2
E MEP 113P	CAD / CAM Lab	0-0-4	2
	Total	15-0-8	19

First Year

Second Semester

Code	Subject	L-T-P	Credits
EMEL 102P	Computer Integrated Manufacturing Systems	3-0-0	3
EMEL 104P	Industrial Automation	3-0-0	3
EMEL 106P	Product Design and Development	3-0-0	3
EMEL 108P	Advanced Machining Processes	3-0-0	3
	Elective -I	3-0-0	3
E MEP 116P	CIMS Lab	0-0-4	2
E MEP 118P	Production Engineering Lab	0-0-4	2
	Total	15-0-8	19

Second Year

Third Semester

Code	Subject	L-T-P	Credits
EMEL 201P	Simulation & Modelling	3-0-0	3
EMEL 203P	Mechatronics	3-0-0	3
	Elective-II	3-0-0	3
	Elective-III	3-0-0	3
E MEP 217P	Mechatronics Lab	0-0-4	2
E MEC 219P	Contemporary Lecture	3-0-0	3
EMED 221P	Minor Project	0-6-0	6
	Total	15-6-4	23

Second Year**Fourth Semester**

Code	Subject	L-T-P	Credits
EMEC 202P	Student Seminar	0-3-0	3
EMED 204P	Major Project	0-18-0	18
	Total	21	21

GRAND TOTAL CREDITS: 82**LIST OF ELECTIVES****Elective I**

1. EMEE 110P Computer Aided Process Planning
2. EMEE 111P Supply Chain Management
3. EMEE 114P Total Quality Management

Elective II

1. EMEE 206P Operational Research
2. EMEE 207P Maintenance Engineering
3. EMEE 208P Control Systems

Elective III

1. EMEE 211P Methods Engineering and Ergonomics
2. EMEE 213P Welding & Allied Processes
3. EMEE 215P Industrial Robotics

M.Tech. degree will be awarded on the basis of **82** earned credits. Successful completion of dissertation is essential for award of degree.