

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MECHANICAL ENGINEERING DEPARTMENT

TWO YEAR M TECH STRUCTURE of Manufacturing Engineering (ME 3)

Semester I		Semester II		Semester III	Semester IV	Total Credits
2 Core Courses	12 (2 x 6)	5 Elective Courses	30 (5 x 6)	MTP Stage II 40	MTP Stage III 40	158
Seminar	4	Communication Skill	P / NP			
Mfg. Laboratory	4	MTP Stage I	10			
3 Elective Courses	18 (3 x 6)					
Total	38	Total	40	Total 40	Total 40	158

DETAILED PROGRAMME

First Semester (Autumn)					Second Semester (Spring)				
	L	T	P	C		L	T	P	C
MES 603 Seminar	0	0	4	4	HS 699 Communication Skills				P/NP
ME 643 Manufacturing Process Lab	0	0	4	4	Elective IV	3	0	0	6
ME 649 Advanced Mfg Processes I	3	0	0	6	Elective V	3	0	0	6
ME 659 Advanced Mfg Processes II	3	0	0	6	Elective VI	3	0	0	6
Elective I	3	0	0	6	Elective VII	3	0	0	6
Elective II	3	0	0	6	Elective VIII / Institute Elective	3	0	0	6
Elective III / Institute Elective	3	0	0	6	ME 696 M Tech Project – Stage I				10
Total Credits				38	Total Credits				40
<u>Electives I, II and III</u> ME 617 Rapid Product Development ME 637 Manufacturing Automation ME 669 Design for Manufacturing ME 642 Advanced Tool Design ME 711 Manufacturing Planning & Control ME 735 Computer Graphics and Product Modeling ME 613 Finite and Boundary element method					<u>Electives IV, V, VI, VII</u> ME 604 Robotics ME 636 Advanced Joining Technology ME 645 MEMS – Design, Fabrication & Characterization ME 676 Collaborative engineering ME 712 CNC and Programming ME 714 Computer Integrated Manufacturing ME 750 Sheet Metal engineering ME 756 Numerical methods for Mfg. processes ME 728 Intelligent Product Design and Mfg. ME 730 Ultra-precision Machining ME 732 Selected Application of Operational Research and AI in Mfg. Systems IE 646 Quality Engineering and Management IE 702 Neural Network and Fuzzy Systems				

Third Semester (Autumn)					Fourth Semester (Spring)				
	L	T	P	C		L	T	P	C
ME 697 M Tech Project – Stage II				40	ME 698 M Tech Project – Stage II				40
Total Credits				40	Total Credits				40