

DEPARTMENT OF MECHANICAL ENGINEERING
Master of Technology in 'Mechanical Engineering'- (2022-23)
M.Tech(Mechanical Engg.) full time with 2 years exit

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	MEL-510 Introduction to FEM 2-1-0 (3)	MEL-613-IP Project Management 3-0-2 (4)	PE-1 3-0-2 (4)	PE-2 3-0-2 (4)	MEC-620 Seminar 0-0-4 (2)	MES-500 Community Service	11	1	10	22	17
II	MEL-550 Advanced Heat and Mass Transfer 3-1-0 (4)	MEL-560 Advanced Machine Design 3-0-2 (4)	MEL-570 Production and Operation Management 3-1-0 (4)	PE-3 3-0-2 (4)	MED502 Minor Project 0-0-10 (5)	MES-502 Community Service (140 hrs=2 credit)*	12	2	14	28	23
III	OE 2-0-2 (3)	MAL616 Research Methodology 2-1-0 (3)	PE-4 3-0-2 (4)	MED-600 Dissertation-I 0-0-12 (6)		MES-600 Community Service	7	1	16	12	16
IV	MED-610 Dissertation-II 0-0-24 (12)					MES-602 Community Service (140 hours = 2 credit) *	0	0	24	--	14
TOTAL CREDITS OF THE M.TECH DEGREE PROGRAMME = 70											70

*Students can utilize the summer/winter break period to complete the remaining 140 Community Service hours every year

PG Diploma (Mechanical Enng.) with 1 year exit

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	Subject 6	L	T	P	Weekly Contact Hours	Credits
I	MEL-510 Introduction to FEM 2-1-0 (3)	MEL-613-IP Project Management 3-0-2 (4)	PE-1 3-0-2 (4)	PE-2 3-0-2 (4)	MEC-620 Seminar 0-0-4 (2)	MES-500 Community Service	11	1	10	22	17
II	MEL-550 Advanced Heat and Mass Transfer 3-1-0 (4)	MEL-560 Advanced Machine Design 3-0-2 (4)	MEL-570 Production and Operation Management 3-1-0 (4)	PE-3 3-0-2 (4)	MED502 Minor Project 0-0-10 (5)	MES-502 Community Service (140 hrs=2 credit)*	12	2	14	28	23
Summer	MEV-500 Skill Based course (3)	MET-502 Industrial Internship (7)									10
EXIT OPTION: PG DIPLOMA; CREDITS = 50											50

*Students can utilize the summer/winter break period to complete the remaining 140 Community Service hours every year

M.Tech (Mechanical Engg.) Part Time with 3 years exit

Sem	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5	L	T	P	Weekly Contact Hours	Credits
I	MEL-510 Introduction to FEM 2-1-0 (3)	MEL-613-IP Project Management 3-0-2 (4)	PE-1 3-0-2 (4)		MES-500 Community Service	8	1	4	13	11
II	MEL-550 Advanced Heat and Mass Transfer 3-1-0 (4)	MEL-560 Advanced Machine Design 3-0-2 (4)	PE-2 3-0-2 (4)	MEC-620 Seminar 0-0-4 (2)	MES-502 Community Service (140 hrs=2 credit)*	9	1	8	18	16
III	MEL-570 Production and Operation Management 3-1-0 (4)	OE 2-0-2 (3)	MAL616 Research Methodology 2-1-0 (3)		MES-600 Community Service	7	2	2	11	10
IV	PE-3 3-0-2 (4)	MED502 Minor Project 0-0-10 (5)			MES-602 Community Service (140 hours = 2 credit)*	3		12	15	11
V	PE-4 3-0-2 (4)	MED-600 Dissertation-I 0-0-12 (6)				3		14	17	10
VI	MED-610 Dissertation-II 0-0-24 (12)							24		12
TOTAL CREDITS OF THE M.TECH DEGREE PROGRAMME = 70										

*Students can utilize the summer/winter break period to complete the remaining 140 Community Service hours every year

Programme Electives (PE)

PROGRAMME ELECTIVE-1, 2, 3 & 4 (For Specialization in Mechanical Engineering Design)	PROGRAMME ELECTIVE-1, 2, 3 & 4 (For Specialization in Thermal Engineering)	PROGRAMME ELECTIVE-1, 2,3 & 4 (For Specialization in Production and Industrial Engineering)
MEL603-MD Design for manufacturing assembly (3-0-2) 4	MEL601-TH Computational Fluid Dynamics and Heat Transfer (3-0-2) 4	MEL-617-IP Manufacturing Economics and Costing (3-0-2) 4
MEL607-MD Advanced Mechanics of Solids (3-0-2) 4	MEL609-TH Modern Power Plants (3-0-2) 4	MEL-603-MD Design for manufacturing & Assembly (3-0-2) 4
MEL617-MD Composite Materials (3-0-2) 4	MEL-611-TH Renewable Energy Systems (3-0-2) 4	MEL-609-IP Concurrent Engineering (3-0-2) 4
MEL625-MD Vibration & Noise Engineering (3-0-2) 4	MEL621-TH Analysis of IC Engine systems (3-0-2) 4	MEL677-IP Optimization Techniques (3-0-2) 4
MEL627-MD Mechatronics (3-0-2) 4	MEL520-Advanced Thermodynamics (3-0-2) 4	MEL-611-IP Product Life cycle Management (3-0-2) 4