



SEMESTER I

No	Title	Credit	Cat
CY1002	Chemistry Lab I	3	SCY
GN1100	Life Skills	2	HPF
ID1100	Concepts in Engineering Design	2	BET
MA1010	Calculus I Functions of One Variable	4	SMA
ME1100	Thermodynamics	3	BET
ME1110	Introduction to Mechanical Engineering	2	PMT
ME1120	Engineering Drawing	3	BES
PH1010	Physics I	3	SPH
PH1030	Physics Laboratory I	2	SPH
	TOTAL	24	

Remarks

SEMESTER II

No	Title	Credit	Cat
AM1100	Engineering Mechanics	4	BET
CS1100	Computational Engineering	3	BET
CY1001	Chemistry: Structure, Bonding & Reactivity	4	SCY
MA1020	Calculus II Functions of Several Variables	4	SMA
PH1020	Physics II	3	SPH
PH1040	Physics Laboratory II	2	SPH
	TOTAL	20	

SEMESTER III

No	Title	Credit	Cat
AM2200	Strength of Materials	4	PMT
BT1010	Life Sciences	2	SLS
EE1100	Basic Electrical Engineering	3	BET
ID1200	Ecology and Environment	2	BET
ME2050	Machine Drawing Practice	5	PML
HSE1	Humanities Elective 1	3	HSS
MAE1	Mathematics Elective 1	3	SMA
	TOTAL	22	



SEMESTER IV

No	Title	Credit	Cat
AM2530	Foundations of Fluid Mechanics	4	PMT
AM2540	Applied Mechanics Lab	2	PML
EE2100	Electrical Sciences	3	PMT
ME2220	Kinematics and Dynamics of Machinery	4	PMT
ME2240	Instrumentation and Control	4	PMT
ME2260	Materials and Design	4	PMT
ME2280	Manufacturing Technology	4	PMT
MAE4	Mathematics Elective 4	3	SMA
	TOTAL	28	

SEMESTER V

No	Title	Credit	Cat
ME3170	Heat Transfer	4	PMT
ME3190	Machine Tools & Metrology	4	PMT
ME3270	Mechanical Engg Lab I	2	PML
ME3310	Turbomachines	4	PMT
ME3330	Internal Combustion Engines	3	PMT
ME3350	Design of Machine Elements	4	PMT
MNS1	Minor Elective 1	3	MNS
	TOTAL	24	

SEMESTER VI

No	Title	Credit	Cat
ME3250	Refrigeration & Airconditioning	3	PMT
ME3260	Thermal Power Engineering	4	PMT
ME3280	Mechanical Engineering Lab II	2	PML
ME3300	Mechanical Engg. Lab III	2	PML
ME3500	Summer Training	2	PIT
DPE1	Department Elective 1	3	PMT
FRE1	Free Elective 1	3	
HSE2	Humanities Elective 2	3	HSS
MNS2	Minor Elective 2	3	MNS
	TOTAL	25	

SEMESTER VII

No	Title	Credit	Cat
HS3050	Professional Ethics	2	HPF
IL4020	Industrial Lecture	1	PIL
ME4545	Viva voce	2	PMP
ME4550	Project I	3	PMP
DPE2	Department Elective 2	3	PMT
DPE3	Department Elective 3	3	PMT
FRE2	Free Elective 2	3	
MNS3	Minor Elective 3	3	MNS
SSE1	Self Study Elective 1	3	PSS
	TOTAL	23	



SEMESTER VIII

No	Title	Credit	Cat
ME4560	Project II	6	PMP
DPE4	Department Elective 4	3	PMT
HSE3	Humanities Elective 3	3	HSS
	TOTAL	12	



Electives

No.	Course Title	Credit
AM5840	Rotor Dynamics	3
ID5020	Multi Body Dynamics & Applications	3
ID6010	Constitutive Modelling in Continuum Mechanics	3
ID6030	An introduction to Nanoscience and Nanotechnology	3
ID6070	Mechanics of Viscoelastic Materials	3
ME3330	Internal Combustion Engines	3
ME3380	Trends in Manufacturing	3
ME3480	CNC Machining	3
ME3520	Mechanical Handling Equipment	3
ME4020	Combustion Engineering	3
ME4080	Modelling of Heat Transfer Processes	3
ME4100	Quality Control	3
ME4120	Hydroturbomachines Appln.Engg	3
ME4130	Combustion I	3
ME4140	Axial Flow Hydroturbomachines	3
ME4150	Utilisation of Solar Energy	3
ME4160	Design of Pumps	3
ME4180	Automobile Engineering	3
ME4190	Industrial Heat Transfer Equipment	3
ME4230	Design Practice	3
ME4240	Vehicle Mechanism and Dynamics	3
ME4250	Advanced Refrigeration & AC	3
ME4260	Cryogenic Systems	3
ME4270	Solar Heating and Cooling	3
ME4290	Fans, Blowers and Compressors	3
ME4310	Mechanisms and Transmissions	3
ME4320	Gas Turbine Engineering	3
ME4340	Steam Turbines & Their Accessories	3
ME4360	Failure Analysis & Design	3
ME4390	Metal Cutting & Cutting Tool Design	3
ME4400	Manufacturing Planning	3
ME4410	Tooling for Production	3
ME4420	Unconventional Mfg Techniques	3
ME4430	Oil Hydraulics & Pneumatic Sys. & Circuits	3
ME4440	Gear Manufacture and Inspection	3
ME4450	Fluid Mechanics in Turbomachines	3
ME4460	Control of Production Systems	3
ME4470	Automated Manufacturing	3
ME4480	Advances in Machine Tools	3
ME4510	Systems Design & Optimization in Thermal Engg	3
ME5520	Explosion & Safety	3
ME5530	Introduction to Atmospheric Science	3
ME5550	Flow and Thermal Instabilities	3
ME5560	Heat and Mass Transfer in Biological Systems	3
ME5570	Jet Flow and Acoustics	3



Electives

ME6000	Computational Methods in Engg	3
ME6001	Theory of Fire Propagation	3
ME6002	Turbomachinery Noise and Control	3
ME6003	Variational Principles in Mechanics	3
ME6004	Micro & Nanoscale Energy Transport	3
ME6005	Solar Energy For Process Heat & Power Generation	3
ME6006	Computational Heat & Fluid Flow	3
ME6008	Microfluidics and Microsystems	3
ME6020	IC Engine Combustion and Pollution	3
ME6040	Incompressible Fluid Flow	3
ME6080	Measurement in Thermal Engg	4
ME6100	Rocket Technology	3
ME6110	Combustion Technology	3
ME6120	Air Breathing Engines	3
ME6130	Transport Phenomena	3
ME6140	Applied Thermodynamics	3
ME6150	Numerical Methods in Thermal Engg	4
ME6180	Energy & Environment	3
ME6200	Conduction & Radiation	3
ME6220	Heat Exchanger Design	3
ME6230	Convection & Two Phase Flow	3
ME6250	Heat Transfer in Ener. Sys	3
ME6270	Design of Power Plant Sys	3
ME6280	Design & Optimisation of Energy Systems	3
ME6320	Pump Application Engg.	3
ME6330	Cavitation	3
ME6340	Vortex Element Method	3
ME6350	Mech Design of Hydroturbomachines	3
ME6360	Standards in Hydroturbomachines	3
ME6370	Exp. Methods in Hydroturbomachines	3
ME6390	Micro Hydro Power	3
ME6400	Design of Combustion Engines	3
ME6410	Two Stroke Engines	3
ME6420	Simulation of IC Engine Processes	3
ME6430	Engine Systems & Performance	3
ME6440	Alternate Fuels for IC Engines	3
ME6450	Gas Turbines	3
ME6460	CFD & its Applications to Engine Processes	3
ME6470	Engine Inst. & Elec.Mgmt	3
ME6480	Transport Process in IC Engines	3
ME6490	Laser Diagnostics in Engines	3
ME6500	Airconditioning & Ventilation	3
ME6510	Refrigeration Machinery & Components	3
ME6520	Sorption,Refrn & Heating Systems	3
ME6530	HVAC Systems & Applications	3



Electives

ME6540	Food Processing, Storage & Transport	3
ME6550	Vacuum Engineering	3
ME6560	Advanced Cryogenics Systems	3
ME6570	Thermal Energy Conservation	3
ME6580	Utilisation of Solar Energy	3
ME6590	Renewable Energy Technology	3
ME6600	Aerodyn. Design of Axial Compressors & Turbines	3
ME6610	Theory of Steam and Gas Turbines	3
ME6620	Theory & Des. of Cen. Mach.	3
ME6630	Theory of Axial Compressors	3
ME6640	Advanced Topics in Turbomachinery	3
ME6650	Computational Fluid Dynamics of Turbomachinery	3
ME6660	Fans, Blowers & Compressors	3
ME6670	Gas Turbine Engineering	3
ME6680	Meas. Tech. in Ther. Turbomachinery	3
ME6700	Advanced Mechanics of Solids	3
ME6710	Theory of Mechanisms	3
ME6740	Computer Aided Machine Design	3
ME6750	Gear Design	3
ME6760	Design of Mechanical Transmission systems	3
ME6770	Design of Pressure Vessels & Piping	3
ME6780	Design Synthesis	3
ME6800	Finite Element Analysis	3
ME6810	Transmission Mechanism & Manipulators	3
ME6840	Design for Manufacture and Assembly	3
ME6850	Product Reliability	3
ME6870	CAD/CAM for Product Design	3
ME6910	Diagnostic Methods in Combustion Systems	3
ME6920	Performance Analysis of Hydroturbomachines	3
ME6930	Engine Tribology	3
ME6940	Engine Noise and Vibrations	3
ME6960	Design of Materials Handling Equipment	3
ME6970	Flow of Bulk Solids	3
ME7020	Robotics and Robot Applications	3
ME7021	Nonlinear Finite Element Analysis of Solid Continua	3
ME7040	CAD in Manufacturing	3
ME7080	Compact Heat Exchangers	3
ME7100	Prod. Sys. Des. & Control	3
ME7110	Handling Systems Design & Tooling for Auto.Mfg.Ass	3
ME7120	Sensors for Intelligent Manufacturing	3
ME7150	Artificial Intelligence in Mfg.	3
ME7160	Computational Methods in Design & Mfg.	3
ME7170	Flexible Manufacturing Systems	3
ME7180	Machine Vision & its Applns.	3



Electives

ME7190	Introduction to Fracture Mechanics	3
ME7200	Treatment of Material	3
ME7210	Machine Tool Dynamics	3
ME7220	Metal Removal Processes	3
ME7240	Modelling and Simulation in Manufacturing	3
ME7250	Rapid Response Manufacturing	3
ME7270	Microscale Fluid Flow & Machinery	3
ME7300	Friction and Wear in Machinery	3
ME7330	Geometric Modelling	3
ME7360	Theory of Vibration	3
ME7400	Mechatronic Systems	3
ME7420	Manufacturing Methods in Precision Engg.	3
ME7430	Oil Hyd. & Pneumatic Systems	3
ME7450	Precision Electric Drives & Actuators	3
ME7460	Inertial Instrumentation	3
ME7470	Industrial Instrumentation	3
ME7480	Optical Instrumentation	3
ME7490	Design & Packaging of Elec Equipment	3
ME7500	Measurement Systems	3
ME7510	Precision Engg. Design	3
ME7520	Prop. & Servo Hyd. Controls	3
ME7530	Design of Robotic Manipulators	3
ME7540	Horological Instruments	3
ME7550	Control System Design:a Computer Aided Approach	3
ME7560	Precision Engg. Elements & Instruments	3
ME7640	Tribology in Design	3
ME7660	Nonlinear Solid Mechanics	3
ME7680	Optimization Methods for Mechanical Design	3
ME7710	Advanced Vibration and Acoustics	3
ME7740	Structural Health and Integrity Monitoring	3
ME7770	Theory and Technology of Fuel Cells	3
ME7790	Heat and Mass Transport in Porous Media	3
ME7820	Rotor Dynamics	3
ME7830	Random Vibrations	3
ME7840	Signal Processing of Mechanical Systems	3
ME7850	Modal Analysis of Mechanical Systems	3
ME7860	Tribo-Instrumentation	3
ME7870	Diagnostic Maintenance	3
ME7880	Vehicular Vibration	3
ME7890	Advanced Applied Finite Element	3
ME7910	Acoustics and Noise Control	3
ME7920	Applied Finite Element Analysis	3
ME7930	Chaotic Vibrations	3
ME7970	Vehicle Systems Design	3
NE6360	Radiation Effects on Materials	3