

Regular MTech		
Semester I		
Code	Course Name	Credits
ME5010	Mathematical Methods for Engineers	3.0
ME5310	Incompressible Fluid Flow	3.0
ME5320	Advanced Heat Transfer	3.0
ME5451	Computational Mathematics Lab	1.0
	Core Electives	6.0
Total Credits for semester I		16.0
Semester II		
	Core Electives	12.0
ME5441	CFD Lab	1.0
ME5971	Thermo Fluid Engineering Core Lab	1.0
Total Credits for semester II		14.0
Semester III		
ME6106	Seminar Course	1.0
ME6005	Thesis (Stage1)	11.0
Total Credits for semester III		12.0
Semester IV		
ME6505	Thesis (Stage2)	12.0
Total Credits for semester IV		12.0
Total Credits for MTech in TFE stream		54.0

List of Core Electives		
SEMESTER-I		
Course Code	Course Name	Credits
ME5010	Mathematical Methods for Engineers	3.0
ME5020	Elasticity & Plasticity	1.5
ME5050	Material Science & Material Selection	1.5
ME5070	Design for Manufacturability & Assembly	1.0
ME5080	Scaling Laws & Multi-scale Manufacture	1.0
ME5110	Advanced Mechanics of Solids	1.5
ME5120	Dynamics and Vibration	3.0
ME5130	Finite Element Method	3.0
ME5190	Manufacturing Processes	2.0
ME5260	Continuum Mechanics	3.0
ME5330	Computational Fluid Dynamics	3.0
ME5340	IC Engine Combustion and Pollution	3.0
SEMESTER-II		
ME7100	Advanced Topics in Mathematical Tools	3.0
ME5810	Advanced Computational Fluid Dynamics	3.0
ME5820	Turbulence	3.0
ME5830	Compressible Fluid Flow	3.0
ME5860	Introduction to Combustion and Reactor Models*	1.0
ME5870	Chemical Kinetics & Modeling in Reacting Flows*	2.0
ME5270	Interfacial Phenomena	3.0
ME5280	Hypersonic and High Temperature Aerodynamics	3.0