

Course Structure for Pre Ph.D. (ME)

**Department of Mechanical
Engineering
DIT University, Dehradun**



**Course Structure
for
Pre Ph.D. (ME) Course Work
Session: 2017-18**

Course Structure for Pre Ph.D. (ME)

Sr. No.	Course Code	Course Title	L	T	P	Credit
1		Research Methodology	4	0	0	4
2		Elective-I	4	0	0	4
3		Elective-II	4	0	0	4
4		Seminar	0	0	2	1
		Total Credits				13

List of Electives

ME651	Computer Graphics
ME652	Management Information Systems
ME653	Machine Tool Design
ME654	Artificial Intelligence
ME655	Advanced Mechanics of Solids
ME656	Modeling And Simulation
ME657	Rapid Prototyping
ME658	Industrial Safety Management
ME659	Tribology In Design
ME751	Mechanism Design
ME752	Mechanical Vibrations
ME753	Computational Fluid Dynamics
ME754	Advanced Optimization Techniques
ME755	Composite Materials
ME756	Work Engineering And Ergonomics
ME757	Product Design And Development
ME758	Fracture And Failure Analysis
ME759	System Design And Analysis
ME641	Design of Heat Exchangers
ME642	Solar Energy systems
ME643	Computational Methods for Heat Transfer and Fluid Flow
ME644	Fuel and Combustion Technology
ME645	I.C. Engines Combustion Process & Modeling
ME646	Advanced Refrigeration and Air Conditioning
ME647	Advanced Mechanics of Solids
ME648	Advanced Engineering Materials
ME649	Instrumentation and Measuring Systems
ME741	Energy Efficient Buildings
ME742	Gas turbines and Compressors
ME743	Wind Energy Engineering

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ME744	Energy Management, Audit and Conservation
ME745	Convective Heat and Mass Transfer
ME746	Power Plant Design
ME747	Finite Element Methods
ME748	Optimal Design of Thermal Systems
ME749	Advanced Optimization Techniques

Note: Apart from above listed Elective courses, Research Scholar may choose any course across departments being offered at PG level, if it is required/suggested by the Research Committee.