

STUDY PLAN

HEAT AND MASS TRANSFER		RAC		Production engineering		Fluid Mechanics	
Title	Timing	Title	Timing	Title	Timing	Title	Timing
Basic Introduction (Heat Transfer)	Recording-1	Basic Introduction	Recording-1	Welding-1	Recording-1	Introduction	Recording-1
Conduction-1	Recording-2	VCRS Intro + Ideal Refrigeration Cycle	Recording-2	Welding-2	Recording-2	Fluid Properties - Part 1	Recording-2
Conduction-2	Recording-3	VCRS Cycle Analysis (COP etc.)	Recording-3	Welding-3	Recording-3	Fluid Properties - Part 2	Recording-3
Conduction-3	Recording-4	VCRS Performance Analysis	Recording-4	Welding-4	Recording-4	Newton's Law of Viscosity	Recording-4
Fins	Recording-5	Reverse Brayton (Bell-Coleman) Cycle	Recording-5	Welding-5	Recording-5	Fluid Classification	Recording-5
Convection-1	Recording-6	Cascade Refrigeration System	Recording-6	Casting-1	Recording-6	MCQ Practice (Basics)	Recording-6
Convection-2	Recording-7	Refrigerants Definition	Recording-7	Casting-2	Recording-7	Surface Tension & Capillarity - 1	Recording-7
Convection-3	Recording-8	Properties of Refrigerants	Recording-8	Casting-3	Recording-8	Surface Tension & Capillarity - 2	Recording-8
Radiation-1	Recording-9	Psychrometry Introduction	Recording-9	Casting-4	Recording-9	Pressure Measurement - Basics	Recording-9
Radiation-2	Recording-10	Psychrometric Chart Processes	Recording-10	Casting-5	Recording-10	Pressure Laws	Recording-10
Radiation-3	Recording-11	Psychrometric Chart Numericals	Recording-11	Metal Forming-1	Recording-11	Pressure Measuring Devices	Recording-11
		Refrigeration Devices (Working & Material)	Recording-12	Metal Forming-2	Recording-12	Pressure MCQ	Recording-12
				Metal Forming-3	Recording-13	Buoyancy & Floatation - 1	Recording-13
				Metal Forming-4	Recording-14	Buoyancy & Floatation - 2	Recording-14
				Metal Forming-5	Recording-15	Buoyancy & Floatation - 3	Recording-15
				Metrology-1	Recording-16	Hydrostatic Forces - Plane Surface	Recording-16
				Metrology-2	Recording-17	Hydrostatic Forces - Curved Surface	Recording-17
				Concept of MMT-1	Recording-18	Kinematics Intro + Types + Continuity	Recording-18
				Concept of MMT-2	Recording-19	Velocity Potential & Stream Function - 1	Recording-19

				Concept of MMT-3	Recording-20	Velocity Potential & Stream Function - 2	Recording-20
				Concept of MMT-4	Recording-21	Velocity Potential & Stream Function - 3	Recording-21
				Concept of MMT-5	Recording-22	Fluid Dynamics Intro + Bernoulli	Recording-22
				Unconventional Machining-1	Recording-23	Bernoulli Applications	Recording-23
				Unconventional Machining-2	Recording-24	Orifice Meter & Pitot Tube	Recording-24
				Jigs & Fixtures	Recording-25	Laminar Flow - 1	Recording-25
				Metal Cutting-1	Recording-26	Laminar Flow - 2	Recording-26
				Metal Cutting-2	Recording-27	Laminar Flow - 3	Recording-27
				Metal Cutting-3	Recording-28	Laminar vs Turbulent - 1	Recording-28
				Concept of MMT-1	Recording-29	Laminar vs Turbulent - 2	Recording-29
				Concept of MMT-2	Recording-30	Laminar vs Turbulent - 3	Recording-30
						Boundary Layer Theory	Recording-31
						Vortex Flow (Free & Forced)	Recording-32
						Flow Through Pipes - 1	Recording-33
						Flow Through Pipes - 2	Recording-34
						Flow Through Pipes - 3	Recording-35
						Dimensional Analysis & Modelling	Recording-36
						OCF - 1	Recording-37
						OCF - 2	Recording-38
						OCF - 3	Recording-39
						Impact of Jets - 1	Recording-40
						Impact of Jets - 2	Recording-41
						Hydraulic Turbine Intro & Classification - 1	Recording-42

						Hydraulic Turbine Intro & Classification - 2	Recording-43
						Types of Turbines - 1	Recording-44
						Types of Turbines - 2	Recording-45
						Modeling & Similitude MCQ	Recording-46
						Pumps - 1	Recording-47
						Pumps - 2	Recording-48
						Pumps - 3	Recording-49

