

STUDY PLAN

Rahul sir : IC Engine			Rahul sir : Strength of Materials		
Date	Title	Timing	Date	Title	Timing
Friday, May 22, 2026	Basic Introduction & Terminology	3 PM - 4.30 PM	Friday, May 22, 2026	Types of Loads & Classification-1	7 PM - 8.30 PM
Monday, May 25, 2026	Air Standard Cycle + Otto Cycle Intro	3 PM - 4.30 PM	Monday, May 25, 2026	Types of Loads & Classification-2	7 PM - 8.30 PM
Tuesday, May 26, 2026	Otto Cycle Detailed	3 PM - 4.30 PM	Tuesday, May 26, 2026	Stress & Strain (Basics)-1	7 PM - 8.30 PM
Wednesday, May 27, 2026	Diesel Cycle	3 PM - 4.30 PM	Wednesday, May 27, 2026	Stress & Strain (Basics)-2	7 PM - 8.30 PM
Thursday, May 28, 2026	Dual Cycle + Numericals	3 PM - 4.30 PM	Thursday, May 28, 2026	Stress & Strain (Basics)-3	7 PM - 8.30 PM
Friday, May 29, 2026	Efficiency Comparison of Cycles-1	3 PM - 4.30 PM	Friday, May 29, 2026	Stress-Strain Curve	7 PM - 8.30 PM
Monday, June 1, 2026	Efficiency Comparison of Cycles-2	3 PM - 4.30 PM	Monday, June 1, 2026	Failure under Different Loading	7 PM - 8.30 PM
Tuesday, June 2, 2026	Performance Analysis-1	3 PM - 4.30 PM	Tuesday, June 2, 2026	Elastic Constants	7 PM - 8.30 PM
Wednesday, June 3, 2026	Performance Analysis-1	3 PM - 4.30 PM	Wednesday, June 3, 2026	Deformation (Series & Parallel)-1	7 PM - 8.30 PM
Tuesday, May 26, 2026	SI Engine Combustion-1	3 PM - 4.30 PM	Thursday, June 4, 2026	Deformation (Series & Parallel)-2	7 PM - 8.30 PM
Wednesday, May 27, 2026	SI Engine Combustion-2	3 PM - 4.30 PM	Friday, June 5, 2026	Strain Energy due to Self Weight	7 PM - 8.30 PM
Thursday, May 28, 2026	CI Engine Combustion-1	3 PM - 4.30 PM	Monday, June 8, 2026	Strain Energy-1	7 PM - 8.30 PM
Friday, May 29, 2026	CI Engine Combustion-2	3 PM - 4.30 PM	Tuesday, June 9, 2026	Strain Energy-2	7 PM - 8.30 PM
Monday, June 1, 2026	Carburetor	3 PM - 4.30 PM	Wednesday, June 10, 2026	Moment of Inertia-1	7 PM - 8.30 PM
Tuesday, June 2, 2026	Fuel Quality & A/F Ratio	3 PM - 4.30 PM	Thursday, June 11, 2026	Moment of Inertia-2	7 PM - 8.30 PM
Wednesday, June 3, 2026	Octane & Cetane Number	3 PM - 4.30 PM	Friday, June 12, 2026	Thermal Stress-1	7 PM - 8.30 PM
Thursday, June 4, 2026	Cooling System	3 PM - 4.30 PM	Monday, June 15, 2026	Thermal Stress-2	7 PM - 8.30 PM
Friday, June 5, 2026	Lubrication System	3 PM - 4.30 PM			

Rahul Sir : RAC			Tuesday, June 16, 2026	Beams (CRM)-1	7 PM - 8.30 PM
Date	Title	Timing	Wednesday, June 17, 2026	Beams (CRM)-2	7 PM - 8.30 PM
Monday, June 8, 2026	Basic Introduction	3 PM - 4.30 PM	Thursday, June 18, 2026	Beams (CRM)-3	7 PM - 8.30 PM
Tuesday, June 9, 2026	VCRS Intro + Ideal Refrigeration Cycle	3 PM - 4.30 PM	Friday, June 19, 2026	Bending in Beam-1	7 PM - 8.30 PM
Wednesday, June 10, 2026	VCRS Cycle Analysis (COP etc.)	3 PM - 4.30 PM	Monday, June 22, 2026	Bending in Beam-2	7 PM - 8.30 PM
Thursday, June 11, 2026	VCRS Performance Analysis	3 PM - 4.30 PM	Tuesday, June 23, 2026	Bending in Beam-3	7 PM - 8.30 PM
Friday, June 12, 2026	Reverse Brayton (Bell-Coleman) Cycle	3 PM - 4.30 PM	Wednesday, June 24, 2026	Torsion in Shaft-1	7 PM - 8.30 PM
Monday, June 15, 2026	Cascade Refrigeration System	3 PM - 4.30 PM	Thursday, June 25, 2026	Torsion in Shaft-2	7 PM - 8.30 PM
Tuesday, June 16, 2026	Refrigerants Definition	3 PM - 4.30 PM	Friday, June 26, 2026	Combined Stresses-1	7 PM - 8.30 PM
Wednesday, June 17, 2026	Properties of Refrigerants	3 PM - 4.30 PM	Monday, June 29, 2026	Combined Stresses-2	7 PM - 8.30 PM
Thursday, June 18, 2026	Psychrometry Introduction	3 PM - 4.30 PM	Tuesday, June 30, 2026	Combined Stresses-3	7 PM - 8.30 PM
Friday, June 19, 2026	Psychrometric Chart Processes	3 PM - 4.30 PM	Wednesday, July 1, 2026	Mohr Circle-1	7 PM - 8.30 PM
Monday, June 22, 2026	Psychrometric Chart Numericals	3 PM - 4.30 PM	Thursday, July 2, 2026	Mohr Circle-2	7 PM - 8.30 PM
Tuesday, June 23, 2026	Refrigeration Devices (Working & Material)	3 PM - 4.30 PM	Friday, July 3, 2026	SFD & BMD-1	7 PM - 8.30 PM
Rahul Sir : Production Engineering			Monday, July 6, 2026	SFD & BMD-2	7 PM - 8.30 PM
Date	Title	Timing	Tuesday, July 7, 2026	SFD & BMD-3	7 PM - 8.30 PM
Wednesday, June 24, 2026	Welding-1	3 PM - 4.30 PM	Wednesday, July 8, 2026	SFD & BMD-4	7 PM - 8.30 PM
Thursday, June 25, 2026	Welding-2	3 PM - 4.30 PM	Thursday, July 9, 2026	Slope & Deflection-1	7 PM - 8.30 PM
Friday, June 26, 2026	Welding-3	3 PM - 4.30 PM	Friday, July 10, 2026	Slope & Deflection-2	7 PM - 8.30 PM
Monday, June 29, 2026	Welding-4	3 PM - 4.30 PM	Monday, July 13, 2026	Columns & Struts	7 PM - 8.30 PM
Tuesday, June 30, 2026	Welding-5	3 PM - 4.30 PM	Tuesday, July 14, 2026	Thin & Thick Cylinder	7 PM - 8.30 PM
Wednesday, July 1, 2026	Casting-1	3 PM - 4.30 PM	Wednesday, July 15, 2026	Theory of Failure-1	7 PM - 8.30 PM

Thursday, July 2, 2026	Casting-2	3 PM - 4.30 PM	Thursday, July 16, 2026	Theory of Failure-2	7 PM - 8.30 PM
Friday, July 3, 2026	Casting-3	3 PM - 4.30 PM	Friday, July 17, 2026	Springs	7 PM - 8.30 PM
Monday, July 6, 2026	Casting-4	3 PM - 4.30 PM	Monday, July 20, 2026	Basic Introduction	7 PM - 8.30 PM
Tuesday, July 7, 2026	Casting-5	3 PM - 4.30 PM	Rahul Sir : Fluid mechanics		
Wednesday, July 8, 2026	Metal Forming-1	3 PM - 4.30 PM			
Thursday, July 9, 2026	Metal Forming-2	3 PM - 4.30 PM			
Friday, July 10, 2026	Metal Forming-3	3 PM - 4.30 PM			
Monday, July 13, 2026	Metal Forming-4	3 PM - 4.30 PM			
Tuesday, July 14, 2026	Metal Forming-5	3 PM - 4.30 PM	Date	Title	Timing
Wednesday, July 15, 2026	Metrology-1	3 PM - 4.30 PM	Recordings will be added by 22nd May	Introduction	Recording-1
Thursday, July 16, 2026	Metrology-2	3 PM - 4.30 PM		Fluid Properties - Part 1	Recording-2
Friday, July 17, 2026	Concept of MMT-1	3 PM - 4.30 PM		Fluid Properties - Part 2	Recording-3
Monday, July 20, 2026	Concept of MMT-2	3 PM - 4.30 PM		Newton's Law of Viscosity	Recording-4
Tuesday, July 21, 2026	Concept of MMT-3	3 PM - 4.30 PM		Fluid Classification	Recording-5
Wednesday, July 22, 2026	Concept of MMT-4	3 PM - 4.30 PM		MCQ Practice (Basics)	Recording-6
Thursday, July 23, 2026	Concept of MMT-5	3 PM - 4.30 PM		Surface Tension & Capillarity - 1	Recording-7
Monday, July 27, 2026	Unconventional Machining-1	3 PM - 4.30 PM		Surface Tension & Capillarity - 2	Recording-8
Tuesday, July 28, 2026	Unconventional Machining-2	3 PM - 4.30 PM		Pressure Measurement - Basics	Recording-9
Wednesday, July 29, 2026	Jigs & Fixtures	3 PM - 4.30 PM		Pressure Laws	Recording-10
Thursday, July 30, 2026	Metal Cutting-1	3 PM - 4.30 PM		Pressure Measuring Devices	Recording-11
Friday, July 31, 2026	Metal Cutting-2	3 PM - 4.30 PM		Pressure MCQ	Recording-12
Monday, August 3, 2026	Metal Cutting-3	3 PM - 4.30 PM		Buoyancy & Floatation - 1	Recording-13
				Buoyancy & Floatation - 2	Recording-14
			Buoyancy & Floatation - 3	Recording-15	

Tuesday, August 4, 2026	Concept of MMT-1	3 PM - 4.30 PM		Hydrostatic Forces - Plane Surface	Recording-16
Wednesday, August 5, 2026	Concept of MMT-2	3 PM - 4.30 PM		Hydrostatic Forces - Curved Surface	Recording-17
Rahul Sir : Material Science				Kinematics Intro + Types + Continuity	Recording-18
Date	Title	Timing		Velocity Potential & Stream Function - 1	Recording-19
Thursday, August 6, 2026	Introduction-1	3 PM - 4.30 PM		Velocity Potential & Stream Function - 2	Recording-20
Friday, August 7, 2026	Crystalline Materials-1	3 PM - 4.30 PM		Velocity Potential & Stream Function - 3	Recording-21
Monday, August 10, 2026	Crystalline Materials-2	3 PM - 4.30 PM		Fluid Dynamics Intro + Bernoulli	Recording-22
Tuesday, August 11, 2026	Steel-1	3 PM - 4.30 PM		Bernoulli Applications	Recording-23
Wednesday, August 12, 2026	Heat treatment of steel-1	3 PM - 4.30 PM		Orifice Meter & Pitot Tube	Recording-24
Thursday, August 13, 2026	Cast Iron	3 PM - 4.30 PM		Laminar Flow - 1	Recording-25
Rahul Sir : Thermodynamics				Laminar Flow - 2	Recording-26
Date	Title	Timing		Laminar Flow - 3	Recording-27
Recordings will be added by 22nd May	Basic Introduction (System, Surroundings, Properties)	Recording-1		Laminar vs Turbulent - 1	Recording-28
	Properties & Types of System	Recording-2		Laminar vs Turbulent - 2	Recording-29
	First Law of Thermodynamics - Part 1	Recording-3	Laminar vs Turbulent - 3	Recording-30	
	First Law of Thermodynamics - Part 2	Recording-4	Boundary Layer Theory	Recording-31	
	First Law of Thermodynamics - Part 3	Recording-5	Vortex Flow (Free & Forced)	Recording-32	
	First Law MCQ	Recording-6	Flow Through Pipes - 1	Recording-33	
	Steady Flow Energy Equation (SFEE) - Part 1	Recording-7	Flow Through Pipes - 2	Recording-34	
	Steady Flow Energy Equation (SFEE) - Part 2	Recording-8	Flow Through Pipes - 3	Recording-35	
	Second Law Introduction	Recording-9	Dimensional Analysis & Modelling	Recording-36	
	Kelvin Planck & Clausius Statements	Recording-10	OCF - 1	Recording-37	

	Heat Engine / Refrigerator / Heat Pump (COP, Efficiency)	Recording-11		OCF - 2	Recording-38
	Numericals (Second Law)	Recording-12		OCF - 3	Recording-39
	Clausius Inequality & Entropy Intro	Recording-13		Impact of Jets - 1	Recording-40
	Entropy Derivation - Part 1	Recording-14		Impact of Jets - 2	Recording-41
	Entropy Derivation - Part 2	Recording-15		Hydraulic Turbine Intro & Classification - 1	Recording-42
	Revision - Thermodynamics	Recording-16		Hydraulic Turbine Intro & Classification - 2	Recording-43
	Revision - Thermodynamics	Recording-17		Types of Turbines - 1	Recording-44
	Properties of Pure Substance - Part 1	Recording-18		Types of Turbines - 2	Recording-45
	Properties of Pure Substance - Part 2	Recording-19		Modeling & Similitude MCQ	Recording-46
Rahul Sir : Power Plant Engineering					
Date	Title	Timing			
Recordings will be added by 22nd May	Basic Introduction	Recording-1			
	Types of Coal & Fuels	Recording-2	Rahul Sir : Engineering Mechanics		
	Coal Detailed Study	Recording-3	Date	Title	Timing
	Steam Power Plant (Thermal) - Analysis-1	Recording-4	Recordings will be added by 22nd May	Basic of forces-1	Recording-1
	Steam Power Plant (Thermal) - Analysis-2	Recording-5		Basic of forces-2	Recording-2
	Steam Power Plant (Thermal) - Analysis-3	Recording-6		Basic of forces-3	Recording-3
	Rankine Cycle-1	Recording-7		Basic of forces-4	Recording-4
	Rankine Cycle-2	Recording-8		Basic of forces-5	Recording-5
	Boilers-1	Recording-9		Types of beam-1	Recording-6
	Boilers-2	Recording-10		Types of beam-2	Recording-7
	Boilers-3	Recording-11		Concepts of friction-1	Recording-8

	Governor Performance	Recording-15		PERT & CPM-3	Recording-12
	Gears Intro & Classification-1	Recording-16		PERT & CPM-4	Recording-13
	Gears Intro & Classification-2	Recording-17		PERT & CPM-5	Recording-14
	Gear Terminology	Recording-18		PERT & CPM-6	Recording-15
	Gear Analysis	Recording-19		Forecasting-1	Recording-16
	Gear Interference	Recording-20		Forecasting-2	Recording-17
	Balancing-1	Recording-21		Forecasting-3	Recording-18
	Balancing-2	Recording-22		Forecasting-4	Recording-19
	Vibrations-1	Recording-23		Queing Theory-1	Recording-20
	Vibrations-2	Recording-24		Queing Theory-2	Recording-21
	Vibrations-3	Recording-25		Linear programming-1	Recording-22
	Cam & Follower-1	Recording-26		Linear programming-2	Recording-23
	Cam & Follower-2	Recording-27		Linear programming-3	Recording-24
Rahul Sir : Heat & Mass Transfer			Transportation-1	Recording-25	
Date	Title	Timing	Transportation-2	Recording-26	
Recordings will be added by 22nd May	Basic Introduction (Heat Transfer)	Recording-1	Assignment-1	Recording-27	
	Conduction-1	Recording-2	Assignment-2	Recording-28	
	Conduction-2	Recording-3	MRP-1	Recording-29	
	Conduction-3	Recording-4	MRP-2	Recording-30	
	Fins	Recording-5	Rahul Sir : Machine Design		
	Convection-1	Recording-6	Date	Title	Timing
	Convection-2	Recording-7			

	Convection-3	Recording-8	Recordings will be added by 22nd May	Basic Introduction	Recording-1
	Radiation-1	Recording-9		Design against Static Loading	Recording-2
	Radiation-2	Recording-10		Design against Fluctuating Loading-1	Recording-3
	Radiation-3	Recording-11		Design against Fluctuating Loading-2	Recording-4
				Bolted Joints-1	Recording-5
				Bolted Joints-2	Recording-6
				Riveted Joints-1	Recording-7
				Riveted Joints-2	Recording-8
				Belt Drive-1	Recording-9
				Belt Drive-2	Recording-10
				Belt Drive-3	Recording-11
				Clutches-1	Recording-12
				Clutches-2	Recording-13
				Brakes-1	Recording-14
				Brakes-2	Recording-15
				Bearings-1	Recording-16
				Bearings-2	Recording-17
				Bearings-3	Recording-18
				Design of Gears	Recording-19
				Miscellaneous-1	Recording-20
				Miscellaneous-2	Recording-21

				Rahul Sir : Hydraulic Machines		
				Date	Title	Timing
				Recordings will be added by 22nd May	Impact of jet	Recording-1
					Turbine basic , classification	Recording-2
					Pelton wheel , francis , kaplan turbine	Recording-3
					Pump-1	Recording-4
					Pump-2	Recording-5
					Live doubt and miscellaneous-1	Recording-6
					Live doubt and miscellaneous-2	Recording-7
					Live doubt and miscellaneous-3	Recording-8

