STUDY PLAN

Rahul Sir : Material Science		
Date	**Title**	**Timing**
Friday, July 10, 2026	Introduction-1	3 PM - 4.00 PM
Monday, July 13, 2026	Crystalline Materials-1	3 PM - 4.00 PM
Tuesday, July 14, 2026	Crystalline Materials-2	3 PM - 4.00 PM
Wednesday, July 15, 2026	Steel-1	3 PM - 4.00 PM
Thursday, July 16, 2026	Heat treatment of steel-1	3 PM - 4.00 PM
Friday, July 17, 2026	Cast Iron	3 PM - 4.00 PM

Rahul Sir : Thermodynamics		
Date	**Title**	**Timing**
Monday, July 20, 2026	Basic Introduction (System, Surroundings, Properties)	3 PM - 4.00 PM
Tuesday, July 21, 2026	Properties & Types of System	3 PM - 4.00 PM
Wednesday, July 22, 2026	First Law of Thermodynamics - Part 1	3 PM - 4.00 PM
Thursday, July 23, 2026	First Law of Thermodynamics - Part 2	3 PM - 4.00 PM
Friday, July 24, 2026	First Law of Thermodynamics - Part 3	3 PM - 4.00 PM
Monday, July 27, 2026	First Law MCQ	3 PM - 4.00 PM
Tuesday, July 28, 2026	Steady Flow Energy Equation (SFEE) - Part 1	3 PM - 4.00 PM
Wednesday, July 29, 2026	Steady Flow Energy Equation (SFEE) - Part 2	3 PM - 4.00 PM
Thursday, July 30, 2026	Second Law Introduction	3 PM - 4.00 PM
Friday, July 31, 2026	Kelvin Planck & Clausius Statements	3 PM - 4.00 PM
Monday, August 3, 2026	Heat Engine / Refrigerator / Heat Pump (COP, Efficiency)	3 PM - 4.00 PM

Rahul Sir : Fluid mechanics		
Date	**Title**	**Timing**
Thursday, July 16, 2026	Introduction	7 PM - 8.30 PM
Friday, July 17, 2026	Fluid Properties - Part 1	7 PM - 8.30 PM
Monday, July 20, 2026	Fluid Properties - Part 2	7 PM - 8.30 PM
Tuesday, July 21, 2026	Newton's Law of Viscosity	7 PM - 8.30 PM
Wednesday, July 22, 2026	Fluid Classification	7 PM - 8.30 PM
Thursday, July 23, 2026	MCQ Practice (Basics)	7 PM - 8.30 PM
Friday, July 24, 2026	Surface Tension & Capillarity - 1	7 PM - 8.30 PM
Monday, July 27, 2026	Surface Tension & Capillarity - 2	7 PM - 8.30 PM
Tuesday, July 28, 2026	Pressure Measurement - Basics	7 PM - 8.30 PM
Wednesday, July 29, 2026	Pressure Laws	7 PM - 8.30 PM
Thursday, July 30, 2026	Pressure Measuring Devices	7 PM - 8.30 PM
Friday, July 31, 2026	Pressure MCQ	7 PM - 8.30 PM
Monday, August 3, 2026	Buoyancy & Floatation - 1	7 PM - 8.30 PM
Tuesday, August 4, 2026	Buoyancy & Floatation - 2	7 PM - 8.30 PM
Wednesday, August 5, 2026	Buoyancy & Floatation - 3	7 PM - 8.30 PM
Thursday, August 6, 2026	Hydrostatic Forces - Plane Surface	7 PM - 8.30 PM
Friday, August 7, 2026	Hydrostatic Forces - Curved Surface	7 PM - 8.30 PM

Rahul Sir : Heat & Mass Transfer		
Date	**Title**	**Timing**
Friday, July 10, 2026	Basic Introduction (Heat Transfer)	4 PM - 5.00 PM
Monday, July 13, 2026	Conduction-1	4 PM - 5.00 PM
Tuesday, July 14, 2026	Conduction-2	4 PM - 5.00 PM
Wednesday, July 15, 2026	Conduction-3	4 PM - 5.00 PM
Thursday, July 16, 2026	Fins	4 PM - 5.00 PM
Friday, July 17, 2026	Convection-1	4 PM - 5.00 PM
Monday, July 20, 2026	Convection-2	4 PM - 5.00 PM
Tuesday, July 21, 2026	Convection-3	4 PM - 5.00 PM
Wednesday, July 22, 2026	Radiation-1	4 PM - 5.00 PM
Thursday, July 23, 2026	Radiation-2	4 PM - 5.00 PM
Friday, July 24, 2026	Radiation-3	4 PM - 5.00 PM

Rahul Sir : Production Engineering		
Date	**Title**	**Timing**
Thursday, June 25, 2026	Welding-1	4 PM - 5.00 PM
Friday, June 26, 2026	Welding-2	4 PM - 5.00 PM
Monday, June 29, 2026	Welding-3	4 PM - 5.00 PM
Tuesday, June 30, 2026	Welding-4	4 PM - 5.00 PM
Wednesday, July 1, 2026	Welding-5	4 PM - 5.00 PM
Thursday, July 2, 2026	Casting-1	4 PM - 5.00 PM

Tuesday, August 4, 2026	Numericals (Second Law)	3 PM - 4.00 PM	Monday, August 10, 2026	Kinematics Intro + Types + Continuity	7 PM - 8.30 PM	Friday, July 3, 2026	Casting-2	4 PM - 5.00 PM
Wednesday, August 5, 2026	Clausius Inequality & Entropy Intro	3 PM - 4.00 PM	Tuesday, August 11, 2026	Velocity Potential & Stream Function - 1	7 PM - 8.30 PM	Monday, July 6, 2026	Casting-3	4 PM - 5.00 PM
Thursday, August 6, 2026	Entropy Derivation - Part 1	3 PM - 4.00 PM	Wednesday, August 12, 2026	Velocity Potential & Stream Function - 2	7 PM - 8.30 PM	Tuesday, July 7, 2026	Casting-4	4 PM - 5.00 PM
Friday, August 7, 2026	Entropy Derivation - Part 2	3 PM - 4.00 PM	Thursday, August 13, 2026	Velocity Potential & Stream Function - 3	7 PM - 8.30 PM	Wednesday, July 8, 2026	Casting-5	4 PM - 5.00 PM
Monday, August 10, 2026	Revision - Thermodynamics	3 PM - 4.00 PM	Friday, August 14, 2026	Fluid Dynamics Intro + Bernoulli	7 PM - 8.30 PM	Thursday, July 9, 2026	Metal Forming-1	4 PM - 5.00 PM
Tuesday, August 11, 2026	Revision - Thermodynamics	3 PM - 4.00 PM	Monday, August 17, 2026	Bernoulli Applications	7 PM - 8.30 PM	Friday, July 10, 2026	Metal Forming-2	4 PM - 5.00 PM
Wednesday, August 12, 2026	Properties of Pure Substance - Part 1	3 PM - 4.00 PM	Tuesday, August 18, 2026	Orifice Meter & Pitot Tube	7 PM - 8.30 PM	Monday, July 13, 2026	Metal Forming-3	4 PM - 5.00 PM
Thursday, August 13, 2026	Properties of Pure Substance - Part 2	3 PM - 4.00 PM	Wednesday, August 19, 2026	Laminar Flow - 1	7 PM - 8.30 PM	Tuesday, July 14, 2026	Metal Forming-4	4 PM - 5.00 PM
Rahul Sir : Hydraulic Machines			Thursday, August 20, 2026	Laminar Flow - 2	7 PM - 8.30 PM	Wednesday, July 15, 2026	Metal Forming-5	4 PM - 5.00 PM
			Friday, August 21, 2026	Laminar Flow - 3	7 PM - 8.30 PM	Thursday, July 16, 2026	Metrology-1	4 PM - 5.00 PM
Date	**Title**	**Timing**	Monday, August 24, 2026	Laminar vs Turbulent - 1	7 PM - 8.30 PM	Friday, July 17, 2026	Metrology-2	4 PM - 5.00 PM
Friday, August 14, 2026	Impact of jet	3 PM - 4.00 PM	Tuesday, August 25, 2026	Laminar vs Turbulent - 2	7 PM - 8.30 PM	Monday, July 20, 2026	Concept of MMT-1	4 PM - 5.00 PM
Monday, August 17, 2026	Turbine basic , classification	3 PM - 4.00 PM	Wednesday, August 26, 2026	Laminar vs Turbulent - 3	7 PM - 8.30 PM	Tuesday, July 21, 2026	Concept of MMT-2	4 PM - 5.00 PM
Tuesday, August 18, 2026	Pelton wheel , francis , kaplan turbine	3 PM - 4.00 PM	Thursday, August 27, 2026	Boundary Layer Theory	7 PM - 8.30 PM	Wednesday, July 22, 2026	Concept of MMT-3	4 PM - 5.00 PM
Wednesday, August 19, 2026	Pump-1	3 PM - 4.00 PM	Friday, August 28, 2026	Vortex Flow (Free & Forced)	7 PM - 8.30 PM	Thursday, July 23, 2026	Concept of MMT-4	4 PM - 5.00 PM
Thursday, August 20, 2026	Pump-2	3 PM - 4.00 PM	Monday, August 31, 2026	Flow Through Pipes - 1	7 PM - 8.30 PM	Friday, July 24, 2026	Concept of MMT-5	4 PM - 5.00 PM
Friday, August 21, 2026	Live doubt and miscellaneous-1	3 PM - 4.00 PM	Tuesday, September 1, 2026	Flow Through Pipes - 2	7 PM - 8.30 PM	Monday, July 27, 2026	Unconventional Machining-1	4 PM - 5.00 PM
Monday, August 24, 2026	Live doubt and miscellaneous-2	3 PM - 4.00 PM	Wednesday, September 2, 2026	Flow Through Pipes - 3	7 PM - 8.30 PM	Tuesday, July 28, 2026	Unconventional Machining-2	4 PM - 5.00 PM
Tuesday, August 25, 2026	Live doubt and miscellaneous-3	3 PM - 4.00 PM	Thursday, September 3, 2026	Dimensional Analysis & Modelling	7 PM - 8.30 PM	Wednesday, July 29, 2026	Jigs & Fixtures	4 PM - 5.00 PM
Rahul Sir : Power Plant Engineering			Friday, September 4, 2026	OCF - 1	7 PM - 8.30 PM	Thursday, July 30, 2026	Metal Cutting-1	4 PM - 5.00 PM
Date	**Title**	**Timing**	Monday, September 7, 2026	OCF - 2	7 PM - 8.30 PM	Friday, July 31, 2026	Metal Cutting-2	4 PM - 5.00 PM
Wednesday, August 26, 2026	Basic Introduction	3 PM - 4.00 PM	Tuesday, September 8, 2026	OCF - 3	7 PM - 8.30 PM	Monday, August 3, 2026	Metal Cutting-3	4 PM - 5.00 PM

Thursday, August 27, 2026	Types of Coal & Fuels	3 PM - 4.00 PM
Friday, August 28, 2026	Coal Detailed Study	3 PM - 4.00 PM
Monday, August 31, 2026	Steam Power Plant (Thermal) - Analysis-1	3 PM - 4.00 PM
Tuesday, September 1, 2026	Steam Power Plant (Thermal) - Analysis-2	3 PM - 4.00 PM
Wednesday, September 2, 2026	Steam Power Plant (Thermal) - Analysis-3	3 PM - 4.00 PM
Thursday, September 3, 2026	Rankine Cycle-1	3 PM - 4.00 PM
Friday, September 4, 2026	Rankine Cycle-2	3 PM - 4.00 PM
Monday, September 7, 2026	Boilers-1	3 PM - 4.00 PM
Tuesday, September 8, 2026	Boilers-2	3 PM - 4.00 PM
Wednesday, September 9, 2026	Boilers-3	3 PM - 4.00 PM
Thursday, September 10, 2026	Steam Turbine	3 PM - 4.00 PM
Friday, September 11, 2026	Nozzle & Compressor-1	3 PM - 4.00 PM
Monday, September 14, 2026	Nozzle & Compressor-2	3 PM - 4.00 PM
Tuesday, September 15, 2026	Nozzle & Compressor-3	3 PM - 4.00 PM
Wednesday, September 16, 2026	Miscellaneous Numericals-1	3 PM - 4.00 PM
Thursday, September 17, 2026	Miscellaneous Numericals-2	3 PM - 4.00 PM

Rahul Sir : RAC

Date	Title	Timing
Recordings will be added on 10th July	Basic Introduction	Recording-1
	VCRS Intro + Ideal Refrigeration Cycle	Recording-2
	VCRS Cycle Analysis (COP etc.)	Recording-3
	VCRS Performance Analysis	Recording-4

Wednesday, September 9, 2026	Impact of Jets - 1	7 PM - 8.30 PM
Thursday, September 10, 2026	Impact of Jets - 2	7 PM - 8.30 PM
Friday, September 11, 2026	Hydraulic Turbine Intro & Classification - 1	7 PM - 8.30 PM
Monday, September 14, 2026	Hydraulic Turbine Intro & Classification - 2	7 PM - 8.30 PM
Tuesday, September 15, 2026	Types of Turbines - 1	7 PM - 8.30 PM
Wednesday, September 16, 2026	Types of Turbines - 2	7 PM - 8.30 PM
Thursday, September 17, 2026	Modeling & Similitude MCQ	7 PM - 8.30 PM
Friday, September 18, 2026	Pumps - 1	7 PM - 8.30 PM
Monday, September 21, 2026	Pumps - 2	7 PM - 8.30 PM
Tuesday, September 22, 2026	Pumps - 3	7 PM - 8.30 PM

Rahul sir : Strength of Materials

Date	Title	Timing
Recordings will be added on 10th July	Bending in Beam-1	Recording-1
	Bending in Beam-2	Recording-2
	Bending in Beam-3	Recording-3
	Torsion in Shaft-1	Recording-4
	Torsion in Shaft-2	Recording-5
	Combined Stresses-1	Recording-6
	Combined Stresses-2	Recording-7
	Combined Stresses-3	Recording-8
	Mohr Circle-1	Recording-9

Tuesday, August 4, 2026	Concept of MMT-1	4 PM - 5.00 PM
Wednesday, August 5, 2026	Concept of MMT-2	4 PM - 5.00 PM

Rahul sir : IC Engine

Date	Title	Timing
Recordings will be added on 10th July	Basic Introduction & Terminology	Recording-1
	Air Standard Cycle + Otto Cycle Intro	Recording-2
	Otto Cycle Detailed	Recording-3
	Diesel Cycle	Recording-4
	Dual Cycle + Numericals	Recording-5
	Efficiency Comparison of Cycles-1	Recording-6
	Efficiency Comparison of Cycles-2	Recording-7
	Performance Analysis-1	Recording-8
	Performance Analysis-1	Recording-9
	SI Engine Combustion-1	Recording-10
	SI Engine Combustion-2	Recording-11
	CI Engine Combustion-1	Recording-12
	CI Engine Combustion-2	Recording-13
	Carburetor	Recording-14
	Fuel Quality & A/F Ratio	Recording-15
	Octane & Cetane Number	Recording-16
	Cooling System	Recording-17
	Lubrication System	Recording-18

	Reverse Brayton (Bell-Coleman) Cycle	Recording-5		Mohr Circle-2	Recording-10			
	Cascade Refrigeration System	Recording-6		SFD & BMD-1	Recording-11			
	Refrigerants Definition	Recording-7		SFD & BMD-2	Recording-12			
	Properties of Refrigerants	Recording-8		SFD & BMD-3	Recording-13			
	Psychrometry Introduction	Recording-9		SFD & BMD-4	Recording-14			
	Psychrometric Chart Processes	Recording-10		Slope & Deflection-1	Recording-15			
	Psychrometric Chart Numericals	Recording-11		Slope & Deflection-2	Recording-16			
	Refrigeration Devices (Working & Material)	Recording-12		Columns & Struts	Recording-17			
Rahul Sir : Theory of Machines				Thin & Thick Cylinder	Recording-18			
Date	**Title**	**Timing**		Theory of Failure-1	Recording-19			
	Basic Introduction	Recording-1		Theory of Failure-2	Recording-20			
	Kinematic Pair & Classification-1	Recording-2		Springs	Recording-21			
	Kinematic Pair & Classification-2	Recording-3		Basic Introduction	Recording-22			
	Degree of Freedom (DOF)	Recording-4		Types of Loads & Classification-1	Recording-23			
	DOF Numericals-1	Recording-5		Types of Loads & Classification-2	Recording-24			
	DOF Numericals-2	Recording-6		Stress & Strain (Basics)-1	Recording-25			
Recordings will be added on 10th July	Grashof's Law	Recording-7		Stress & Strain (Basics)-2	Recording-26			
	Inversions (Four Bar & Slider)-1	Recording-8		Stress & Strain (Basics)-3	Recording-27			
	Inversions (Four Bar & Slider)-2	Recording-9		Stress-Strain Curve	Recording-28			
	Instantaneous Center	Recording-10		Failure under Different Loading	Recording-29			
	Flywheel-1	Recording-11		Elastic Constants	Recording-30			
	Flywheel-2	Recording-12		Deformation (Series & Parallel)-1	Recording-31			
	Governor Intro	Recording-13		Deformation (Series & Parallel)-2	Recording-32			

	Governor Classification	Recording-14		Strain Energy due to Self Weight	Recording-33				
	Governor Performance	Recording-15		Strain Energy-1	Recording-34				
	Gears Intro & Classification-1	Recording-16		Strain Energy-2	Recording-35				
	Gears Intro & Classification-2	Recording-17		Moment of Inertia-1	Recording-36				
	Gear Terminology	Recording-18		Moment of Inertia-2	Recording-37				
	Gear Analysis	Recording-19		Thermal Stress-1	Recording-38				
	Gear Interference	Recording-20		Thermal Stress-2	Recording-39				
	Balancing-1	Recording-21		Beams (CRM)-1	Recording-40				
	Balancing-2	Recording-22		Beams (CRM)-2	Recording-41				
	Vibrations-1	Recording-23		Beams (CRM)-3	Recording-42				
	Vibrations-2	Recording-24							
	Vibrations-3	Recording-25							
	Cam & Follower-1	Recording-26							
	Cam & Follower-2	Recording-27							