

Syllabus for Mechanical Engineering Bachelor's

Section 1: Subject Knowledge

Please Note: A Total of 40 Questions will be asked, combining the following topics, with the difficulty level commensurate to a Bachelor's Candidate.

Unit I: Engineering Mathematics

Linear Algebra, Calculus, Differential equations, Complex variables, Probability and Statistics, Numerical Methods.

Unit II: Applied Mechanics and Design

Engineering Mechanics, Mechanics of Materials, Theory of Machines, Vibrations, Machine Design.

Unit III: Fluid Mechanics and Thermal Sciences

Fluid Mechanics, Heat-Transfer, Thermodynamics, Applications: Power Engineering, I.C. Engines, Refrigeration and air-conditioning, Turbomachinery.

Unit IV: Materials, Manufacturing and Industrial Engineering

Engineering Materials, Casting, Forming, and Joining Processes, Machining and Machine Tool Operations, Metrology and Inspection, Computer Integrated Manufacturing, Production Planning and Control, Inventory Control, Operations Research.

Section 2: Fundamental Skills

Please Note: A Total of 28 Questions will be asked, combining the following topics, with the difficulty level commensurate to a Bachelor's Candidate.

Unit I: Data Analysis

Unit II: Math and Statistics

Unit III: Reasoning and Aptitude

Unit IV: Reading and Writing

Section 3: Specific Skill Proficiency

This section has multiple skills. You can select the ones you are proficient in from the enrollment form. You can select a maximum of 2 skills.