Exams for Fall/Winter 2025

Last updated April 2, 2025

04-BS-1 / 20-Gfund-5, Mathematics

04-BS-2 / 20-GFund-12, Probability and Statistics

04-BS-3, Statics and Dynamics

04-BS-4, Electric Circuits and Power

04-BS-5 / 20-GFund-4, Advanced Mathematics

04-BS-6, Mechanics of Materials

04-BS-7, Mechanics of Fluids

04-BS-8, Digital Logic Circuits

04-BS-9, Basic Electromagnetics

04-BS-10 / 20-GFund-7, Thermodynamics

04-BS-11, Properties of Materials

04-BS-12 / 20-GFund-10, Organic Chemistry

04-BS-13 / 20-GFund-8, Biology

04-BS-14, Geology

04-BS-15, Engineering Graphics & Design Process

04-BS-16, Discrete Mathematics

(see rest of GFund exams listed with the Prelim exams on the last page)

98-CS-1 (11-CS-1), Engineering Economics

98-CS-2, Engineering in Society - Health, Safety, and the Environment

98-CS-3, Management Concepts for Engineers

- **16-Chem-A1**, Process Balances and Chemical Thermodynamics
- **16-Chem-A2**, Unit Operations & Separation Processes
- 16-Chem-A3, Heat and Mass Transfer
- 16-Chem-A4, Chemical Reactor Engineering
- **16-Chem-A5**, Chemical Plant Design and Economics
- 16-Chem-A6, Process Dynamics and Control
- 16-Chem-B1, Transport Phenomena
- **16-Chem-B2**, Environmental Engineering
- 16-Chem-B4/04-Agric-B10, Biochemical Engineering
- **16-Chem-B5**, Pulp and Paper Technology
- **16-Chem-B6**, Petroleum Refining and Petrochemicals
- 16-Chem-B8, Polymer Engineering
- 16-Chem-B10, Life Cycle Assessment
- **16-Civ-A1/07-Str-A1**, Elementary Structural Analysis
- 16-Civ-A2/07-Str-A2, Elementary Structural Design
- **16-Civ-A3**, Elementary Environmental Engineering (national only)
- **16-Civ-A3/07-Wrse-A6**, Municipal and Environmental Engineering (PEO only)
- 16-Civ-A4/07-Str-A3/07-Tra-A6, Geotechnical Materials and Analysis
- **16-Civ-A5/07-Str-B11**, Hydraulic Engineering
- **16-Civ-A6**, Highway Design, Construction, and Maintenance
- 16-Civ-B1/07-Str-A4, Advanced Structural Analysis
- **16-Civ-B2/07-Str-A5**, Advanced Structural Design
- **16-Civ-B3/07-Str-B1**, Geotechnical Design
- **16-Civ-B4/07-Wrse-A2**, Engineering Hydrology
- 16-Civ-B5/07-Wrse-B3, Water Supply and Wastewater Treatment

- 16-Civ-B6, Urban and Regional Planning
- **16-Civ-B7**, Transportation Planning and Engineering
- **16-Civ-B8/07-Str-B2**, Management of Construction
- 16-Civ-B9/07-Str-A6-1, The Finite Element Method
- **16-Civ-B10**, Traffic Engineering
- 16-Civ-B11, Structural Materials
- **16-Civ-B12**, Risk & Safety in Civil Engineering
- **16-Civ-B13**, Numerical Methods
- 17-Comp-A4, Program Design and Data Structures
- 17-Comp-B3, Data Bases and File System
- **17-Comp-B12,** Computer Security
- 16-Elec-A1/16-Mex-A2, Circuits
- **16-Elec-A2/17-Phys-B5**, Systems and Control
- 16-Elec-A3/17-Phy-B4, Signals and Communications
- 16-Elec-A4/16-Mex-A3/17-Phys-B3, Digital Systems and Computers
- 16-Elec-A5/16-Mex-A2, Electronics
- **16-Elec-A6/16-Mex-B10**, Power Systems and Machines
- 16-Elec-A7/17-Phys-A3, Electromagnetics
- **16-Elec-B1**, Digital Signal Processing
- 16-Elec-B2/16-Mex-B3, Advance Control Systems
- **16-Elec-B3**, Digital Communications systems
- **16-Elec-B4**, Information Technology Networks
- **16-Elec-B5**, Advanced Electronics

- **16-Elec-B6**, Integrated Circuit Engineering
- **16-Elec-B7**, Power Systems Engineering
- **16-Elec-B8**, Power Electronics and Drives
- **16-Elec-B9**, Electromagnetic Field, Transmission
- 16-Elec-B10, Electro-Optical Engineering
- 18-Env-A1/07-Wrse-B11, Principles of Environmental
- 18-Env-A2, Hydrology and Municipal Hydraulics Engineering
- **18-Env-A3/ 07-Wrse-A3, Geotechnical & Hydrogeological Engineering**
- 18-Env-A4, Water and Wastewater Engineering
- **18-Env-A5**, Air Quality & Pollution Control Engineering
- **18-Env-B1/07-Wrse-B12**, Environmental Assessment & Management Systems
- 18-Env-B3/07-Wrse-B6, Contaminant Transport
- **18-Env-B5**, Industrial & Hazardous Waste Management
- **18-Env-B7**, Environmental Sampling and Analysis
- **18-Geol-A1 / 20-Glgy-1**, Mineralogy and Petrology
- **18-Geol-A2** // **20-Glgy-1**, Hydrogeology
- **18-Geol-A3 / 20-Glgy-2**, Sedimentation and Stratigraphy
- **18-Geol-A4 / 20-Glgy-6**, Structural Geology
- 18-Geol-A5 / 20-Glgy-23, Rock Mechanics
- 18-Geol-A6, Soil Mechanics
- 18-Geol-A7 / 20-Glgy-18, Applied Geophysics
- **18-Geol-B1 20-Glgy-27**, Contaminant Hydrogeology
- **18-Geol-B3**, Site Investigation
- 18-Geol-B6-1 / 20-Glgy-28, Petroleum Deposits

18-Geol-B10-1, Gravity & Magnetic Fields

2020-GFund-1a + 1b = APEGA Exam 04-Prelim-1 Calculus

2020-GFund-2a + 2b = APEGA Exam 04-Prelim-3 Physics

2020-GFund-3a + 3b = APEGA Exam 04-Prelim-4 Chemistry

2020-GFund-4 = NTExam 04-BS-5 Advanced Mathematics

2020-GFund-5 = NTExam 04-BS-1 Mathematics

2020-GFund-6 = APEGA Exam 04-Prelim-2 Computing

2020-GFund-7 = NTExam 04-BS-10 Engineering Thermodynamics

2020-GFund-8 = NTExam 04-BS-13 Biology

2020-GFund-10 = NTExam 04-BS-12 Organic Chemistry

2020-GFund-12 = NTExam 04-BS-2 Probability and Statistics

20-Glgy-4, Sedimentary Petrology

20-Glgy-7, Geochemistry

20-Glgy-8 / 20-Goph 2B-2a, Global Geophysics

20-Glgy-10, Glacial and Quaternary Geology

20-Glgy-13, Petroleum and Natural Gas

20-Glgy-14, Economic Geology

20-Glgy-20, Advanced Sedimentology

18-Geom-A1, Surveying

18-Geom-A3, Geodsey & Positioning

18-Geom-A5, Remote Sensing and Image Analysis

18-Geom-A6, Cadastral Studies

- 18-Geom-B1, Digital Terrain Modelling
- 18-Geom-B5, Survey Law
- **18-Geom-B6,** Land Use, Planning and Environmental Management
- 17-Ind-A1, Operations Research
- 17-Ind-A2/08-Mfg-A4, Analysis & Design of Work
- 17-Ind-A3/08-Mfg-A5, Facilities Planning
- 17-Ind-A4/08-Mfg-A3, Production Management
- 17-Ind-A5/08-Mfg-A6, Quality Planning, Control, and Assurance
- 17-Ind-A6/08-Mfg-B3/16-Mex-A6, System Simulation
- 17-Ind-B1, Applied Probability and Statistics
- 17-Ind-B2/08-Mfg-A2, Manufacturing Processes
- 17-Ind-B3/08-Mfg-B1, Computer Aided Design and Computer-Assisted Manufacturing
- 17-Ind-B5/04-Bio-B11/, 08-Mfg-B12, Ergonomics
- **17-Ind-B6**, Workplace Design
- 17-Ind-B10/08-Mfg-B9, Workplace Health and Safety
- **16-Mec-A1/17-Phys-B6/16-Nav-B1/16-Mex-A4**, Applied Thermodynamics and Heat Transfer
- 16-Mec-A2/16-Mex-A5, Kinematics and Dynamics of Machines
- **16-Mec-A3/16-Mex-A1**, System Analysis and Control
- **16-Mec-A4/08-Mfg-A1**, Design and Manufacture of Machine Elements
- 16-Mec-A5, Electrical and Electronics Engineering
- **16-Mec-A6**, Advanced Fluid Mechanics (Mec-B6 national)
- **16-Mec-A7/98-Mar-A5**, Advanced Strength of Materials
- **16-Mec-B1**, Advanced Machine Design

- **16-Mec-B2**, Environmental Control in Buildings
- **16-Mec-B3/08-Nuc-B9**, Energy Conversion and Power Generation
- 16-Mec-B4/16-Mex-B9, Integrated Manufacturing Systems
- **16-Mec-B5/08-Mfg-B4/16-Mex-B8**, Product Design and Development
- **16-Mec-B6/98-Mar-B5/08-Mfg-B11**, Fluid Machinery (Mec-A6 national)
- 16-Mec-B7, Aero and Space Flight
- **16-Mec-B8**, Engineering Materials
- **16-Mec-B9**, Advanced Engineering Structures
- **16-Mec-B10**, Finite Element Analysis
- 16-Mec-B12/08-Mfg-B8/16-Mex-B5, Robotics Mechanics
- 16-Mec-B13, Biomechanics
- **10-Met-A1**, Metallurgical Thermodynamics
- 10-Met-B1, Mineral Processing
- **18-MMP-A1**, General Geology and Exploration
- **18-Mmp-A5**, Surface Mining Methods and Design
- **18-Mmp-B1**, Applied Rock Mechanics
- 18-Mmp-B2, Rock Fragmentation
- **18-MMP-B4,** Occupational Health, Safety and Loss Management
- **18-Mmp-B9**, Rock Slope Engineering
- **17-Pet-A1**, Principles of Stratigraphy and Sedimentation
- 17-Pet-A2, Petroleum Reservoir Fluids
- 17-Pet-A3, Fundamental Reservoir Engineering
- 17-Pet-A4, Oil and Gas Well Drilling and Completion

17-Pet-A6, Reservoir Mechanics

17-Pet-A7, Secondary and Enhanced Recovery

17-Pet-B2, Natural Gas Engineering

17-Pet-B4, Petroleum Geology

17-Phys-A3/16-Elec-A7, Electromagnetics

17-Phys-A6, Solid State Physics

17-Phys-B3/16-Elec-A4/16-Mex-A3, Digital Systems and Computers

17-Phy-B4/16-Elec-A3, Signals and Communications

17-Phys-B5/16-Elec-A2, Systems and Control

17-Phys-B6/16-Mec-A1/16-Nav-B1/16-Mex-A4, Applied Thermodynamics and Heat Transfer

17-Phys-B7/10-Met-A4, Structure of Materials

20-Prelim-1 / 2020-GFund-1a + 1b, Calculus

20-Prelim-2, Computing

20-Prelim-3 / 2020-GFund-2a + 2b , Physics

20-Prelim-4 / 2020-GFund-3a + 3b, Chemistry

19-Soft-A1, Algorithms & Data Structures

19-Soft-A4, Real Time Systems

19-Soft-A5, Requirements and Specifications

19-Soft-A6, Software Quality Assurance

19-Soft-A7, Software Development Process

19-Soft-B6, Software Project Management

19-Soft-B14, Safety Critical Systems

19-Soft-B15, Artificial Intelligence