

## Exams for Fall/Winter 2026

*Last updated March 30, 2026*

### Basic Studies

- 04-BS-1, Mathematics
- 04-BS-2, Probability and Statistics
- 04-BS-3, Statics and Dynamics
- 04-BS-4, Electric Circuits and Power
- 04-BS-5, 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, Thermodynamics
- 04-BS-11, Properties of Materials
- 04-BS-12, Organic Chemistry
- 04-BS-13, Biology
- 04-BS-14, Geology
- 04-BS-15, Engineering Graphics & Design Process
- 04-BS-16, Discrete Mathematics

### Complementary Studies

- 11-CS-1, Engineering Economics
- 11-CS-2, Engineering in Society - Health and Safety
- 11-CS-3, Sustainability, Engineering and the Environment
- 11-CS-4, Engineering Management

### Agricultural

- 04-Agric-A1, Applied Plant, Animal or Human Physiology
- 04-Agric-A2, Soil Physics and Mechanics
- 04-Agric-A3, Heat Engineering
- 04-Agric-A4, Fluid Flow
- 04-Agric-A5, Principles of Instrumentation
- 04-Agric-A7, Chemistry and Microbiology of Foods
- 04-Agric-B6/07-Wrse-A7-1, Irrigation, Drainage and Erosion Control
- 04-Agric-B7, Principles of Hydrology

### Biomedical/Biochemical

- 04-Bio-A3, Cellular and Molecular Biology and Biochemistry
- 04-Bio-A5, Enzyme and Microbial Kinetics
- 04-Bio-B10, Analytical Biochemistry

## Building

07-Bld-A1, Elementary Structural Analysis  
07-Bld-A2, Elementary Structural Design  
07-Bld-A3, Construction Engineering  
07-Bld-A4, Building Engineering Systems  
07-Bld-A5, Building Science  
07-Bld-A6, Geotechnical Materials and Analysis  
07-Bld-A7, Building Envelope Design  
07-Bld-B5, Fire and Smoke Control in Buildings  
07-Bld-B6, Guiding Energy Conservation Technologies  
07-Bld-B7, Indoor Air Quality  
07-Bld- B8, Control Systems in Buildings  
07-Bld-B9, Building Services

## Chemical

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-A6/08-Nuc-A7, 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

## Civil

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 (Nationals only)

### **Computer**

17-Comp-A3, Computer Architecture  
17-Comp-B6, Computer Control and Robotics  
17-Comp-B9, Artificial Intelligence and Expert Systems

### **Electrical**

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

### **Environmental**

18-Env-A1/07-Wrse-B11, Principles of Environmental Engineering  
18-Env-A2, Hydrology and Municipal Hydraulics Engineering  
18-Env-A3, Geotechnical and Hydrogeological Engineering  
18-Env-A4, Water and Wastewater Engineering  
18-Env-A6, Solid Waste Engineering and Management  
18-Env-B1/07-Wrse-B12, Environmental Assessment & Management Systems  
18-Env-B7, Environmental Sampling and Analysis  
18-Env-B9, Environmental Chemistry and Microbiology

## **Geological**

18-Geol-A1, Mineralogy and Petrology  
18-Geol-A2, Hydrogeology  
18-Geol-A3, Sedimentation and Stratigraphy  
18-Geol-A4, Structural Geology  
18-Geol-A5, Rock Mechanics  
18-Geol-A6, Soil Mechanics  
18-Geol-A7, Applied Geophysics  
18-Geol-B1, Contaminant Hydrogeology  
18-Geol-B6-1, Petroleum Deposits  
18-Geol-B10-1, Gravity & Magnetic Fields

## **Geomatics**

18-Geom-A1, Surveying  
18-Geom-A3, Geodesy and Positioning  
18-Geom-A5, Remote Sensing and Image Analysis  
18-Geom-A6, Cadastral Studies  
18-Geom-B1, Digital Terrain Modelling  
18-Geom-B2, Satellite Navigation  
18-Geom-B5, Survey Law  
18-Geom-B6, Land Use, Planning and Environmental Management

## **Industrial**

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

## **Marine**

98-Mar-A5/16-Mec-A7, Advanced Strength of Materials  
98-Mar-B5/16-Mec-B6/08-Mfg-B11, Fluid Machinery (Mec-A6 national)

## **Mechanical**

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-B13/04-Bio-A4, Biomechanics

## **Metallurgical**

10-Met-B6/12-Mtl-B6, Physical Metallurgy of Iron and Steel

## **Mechatronics**

16-Mex-A1/16-Mec-A3, System Analysis and Control  
16-Mex-A2/16-Elec-A1, Circuits  
16-Mex-A2/16-Elec-A5, Electronics  
16-Mex-A3/16-Elec-A4/17-Phys-B3, Digital Systems and Computers  
16-Mex-A4/16-Mec-A1/17-Phys-B6/16-Nav-B1, Applied Thermodynamics and Heat Transfer  
16-Mex-A5/16-Mec-A2, Kinematics and Dynamics of Machines  
16-Mex-A6/08-Mfg-B3/17-Ind-A6, System Simulation  
16-Mex-A7, Instrumentation, Measurements, Sensors and Actuators  
16-Mex-B3/16-Elec-B2, Advance Control Systems  
16-Mex-B5/16-Mec-B12/08-Mfg-B8, Robotics Mechanics  
16-Mex-B8/16-Mec-B5/08-Mfg-B4, Product Design and Development  
16-Mex-B9/16-Mec-B4, Integrated Manufacturing Systems  
16-Mex-B10/16-Elec-A6, Power Systems and Machines

## **Manufacturing**

08-Mfg-A1/16-Mec-A4, Design & Manufacture of Machine Elements  
08-Mfg-A2/17-Ind-B2, Manufacturing Processes  
08-Mfg-A3/17-Ind-A4, Production Management  
08-Mfg-A4/17-Ind-A2, Analysis & Design of Work  
08-Mfg-A5/17-Ind-A3, Facilities Planning  
08-Mfg-A6/17-Ind-A5, Quality Planning, Control, and Assurance  
08-Mfg-B1/17-Ind-B3, Computer Aided Design and Computer-Assisted Manufacturing  
08-Mfg-B3/16-Mex-A6/17-Ind-A6, System Simulation  
08-Mfg-B4/16-Mec-B5/16-Mex-B8, Product Design and Development  
08-Mfg-B5/16-Mec-B8, Engineering Materials  
08-Mfg-B6, Metrology  
08-Mfg-B8/16-Mec-B12/16-Mex-B5, Robotics Mechanics  
08-Mfg-B9/17-Ind-B10, Workplace Health and Safety  
08-Mfg-B10, Tooling, Jigs & Fixture Design  
08-Mfg-B11/16-Mec-B6/98-Mar-B5, Fluid Machinery (Mec-A6 national)

## **Mining & Mineral**

18-MMP-A1, General Geology and Exploration  
18-MMP-A2, Underground Mining Methods and Design  
18-MMP-A5, Surface Mining Methods and Design  
18-MMP-A6, Mining and the Environment  
18-MMP-B1, Applied Rock Mechanics  
18-MMP-B2, Rock Fragmentation  
18-MMP-B4, Occupational Health Safety and Loss Management  
18-MMP-B7, Extractive Metallurgy  
18-MMP-B9, Rock Slope Engineering

## **Materials**

12-Mtl-A2, Transport Phenomena in Materials Engineering  
12-Mtl-A3, Structure & Characterization of Materials  
12-Mtl-A5, Phase Transformations of Metals, Glasses & Ceramics  
12-Mtl-A6, Thermal Treatment of Metals, Glasses, Ceramics  
12-Mtl-B6/10-Met-B6, Physical Metallurgy of Iron and Steel  
12-Mtl-B15, Joining of Materials

## **Naval**

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

## **Nuclear**

08-Nuc-B9/16-Mec-B3, Energy Conversion and Power Generation

08-Nuc-B11/16-Elec-A6 /Mex-B10, Power Systems & Machines

## **Petroleum**

17-Pet-A2, Petroleum Reservoir Fluids

17-Pet-A3, Fundamental Reservoir Engineering

17-Pet-A4, Oil and Gas Well Drilling and Completion

17-Pet-A7, Secondary and Enhanced Recovery

17-Pet-B2, Natural Gas Engineering

## **Engineering Physics**

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

17-Phys-A5-B, Analog and Digital Electronic Circuits

17-Phys-A7, Optics

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

## **Software**

19-Soft-A1, Algorithms & Data Structures

19-Soft-A6, Software Quality Assurance

19-Soft-B6, Software Project Management

19-Soft-B8, Distributed Systems

19-Soft-B14, Safety Critical Systems

## **Structural**

07-Str-A1/16-Civ-A1, Elementary Structural Analysis

07-Str-A2/16-Civ-A2, Elementary Structural Design

07-Str-A3/07-Tra-A6/16-Civ-A4, Geotechnical Materials and Analysis

07-Str-A4/16-Civ-B1, Advanced Structural Analysis

07-Str-A5/16-Civ-B2, Advanced Structural Design

07-Str-A6-1/16-Civ-B9/07-Str-B3, The Finite Element Method

07-Str-A6-3/07-Str-B10, Earthquake Engineering

07-Str-B1/16-Civ-B3, Geotechnical Design

07-Str-B2/16-Civ-B8, Management of Construction

07-Str-B3/07-Str-A6-1/16-Civ-B9, Applications of the Finite Element Method

07-Str-B11/16-Civ-A5, Hydraulic Engineering

## **Transportation**

07-Tra-A1, Introduction to Transportation Engineering  
07-Tra-A2, Highway Design  
07-Tra-A3, Traffic Engineering  
07-Tra-A5, Transportation Planning and Demand Analysis  
07-Tra-A6/07-Str-A3/16-Civ-A4, Geotechnical Materials and Analysis  
07-Tra-B6, Highway Construction  
07-Tra-B9, Traffic Safety

## **Water Resources**

07-Wrse-A2/16-Civ-B4, Engineering Hydrology  
07-Wrse-A6 /16-Civ-A3, Municipal and Environmental Engineering (PEO only)  
07-Wrse-A7-1/04-Agric-B6, Irrigation, Drainage and Erosion Control  
07-Wrse-B3/16-Civ-B5, Water Supply and Wastewater Treatment  
07-Wrse-B11/18-Env-A1, Principles of Environmental Engineering