

Scheme Codes

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|--------------------|---|
| NON DIPLOMA STREAM | 2 |
| DIPLOMA STREAM | 3 |
| SECTION B | 4 |

Branch Code

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| ARCHITECTURAL ENGINEERING (AR) | 03 |
| CHEMICAL ENGINEERING (CH) | 04 |
| CIVIL ENGINEERING (CV) | 05 |
| COMPUTER SCIENCE & ENGINEERING (CP) | 06 |
| ELECTRICAL ENGINEERING (EL) | 07 |
| ELECTRONICS AND COMMUNICATION ENGG. (EC) | 08 |
| MECHANICAL ENGINEERING (MC) | 11 |
| MATERIALS & METALLURGICAL ENGG. (MM) | 12 |
| MINING ENGINEERING (MN) | 13 |
| PRODUCTION ENGINEERING (PR) | 14 |
| TEXTILE ENGINEERING (TX) | 15 |

Subject Codes

Section A

SECTION A (DIPLOMA STREAM)

AD 301 Fundamentals of Design and manufacturing

AD 302 Material Science and Engineering

AD 303 Computing and Informatics

AD 304 Society and Environment

SECTION A (NON DIPLOMA STREAM)

AN 201 Fundamentals of Design and Manufacturing

AN 202 Material Science and Engineering

AN 203 Computing and Informatics

AN 204 Society and Environment

AN 205 Mechanical Science

AN 206 Engineering Physics and Chemistry

AN 207 Engineering Drawing and Graphics

AN 208 Electronics and Instrumentation

AN 209 Engineering Mathematics

AN 210 Electrical Science

Civil Engineering

Compulsory Subjects

- IC 402 Engineering Management
- CV 403 Civil Engineering Materials and Construction Practices
- CV 404 Geo-technical and Foundation Engineering
- CV 405 Water Resources Systems
- CV 406 Principles of Geo-informatics
- CV 407 Analysis and Design of Structures

Optional Subjects (Any three from any one Group)

Group I Structural Engineering

- CV 411 Advanced Structural Analysis
- CV 412 Design of RCC and Pre-stressed Concrete Structures
- CV 413 Design of Steel Structures
- CV 414 Structural Dynamics
- CV 415 Seismic Design of Structures

Group II Environmental Engineering

- CV 421 Principles of Environmental Engineering
- CV 422 Environmental Engineering — Processes and Management
- CV 423 Air Pollution and Its Control
- CV 424 Design of Water and Wastewater Treatment Systems
- CV 425 Waste Management and Environmental Impact Assessment

Group III Infrastructure and Urban Development

- CV 431 Transportation Engineering
- CV 432 Traffic and Transportation Systems
- CV 433 Town Planning and Urban Development
- CV 434 Design of Water and Wastewater Treatment Systems
- CV 435 Construction Management Systems

Computer Science & Engineering

Compulsory Subjects

- IC 402 Engineering Management
- CP 403 Data Structures
- CP 404 Programming Languages
- CP 405 Pulse and Digital Circuits
- CP 406 Computer Architecture
- CP 407 Systems Analysis and Design

Optional Subjects (*Any three from any one Group*)

Group I Computer Applications

- CP 411 Graph Theory and Combinatorics
- CP 412 Computer Networks
- CP 413 Operating Systems
- CP 414 Artificial Intelligence
- CP 415 Database Management Systems

Group II Hardware Engineering

- CP 421 Parallel Processing
- CP 422 Computer Networks
- CP 423 Operating Systems
- CP 424 Computer Graphics
- CP 425 Micro-processors and Micro-controllers

Group III Information Technology

- CP 431 Pattern Recognition and Image Processing
- CP 432 Theory of Computation
- CP 433 Operating Systems
- CP 434 Computer Graphics
- CP 435 Software Engineering

Electrical Engineering

Compulsory Subjects

- IC 402 Engineering Management
- EL 403 Power Systems
- EL 404 Circuit and Field Theory
- EL 405 Electrical Machines
- EL 406 Measurements and Control
- EL 407 Design of Electrical Systems

Optional Subjects (Any three from any one Group)

Group I Power Systems

- EL 411 Energy Systems
- EL 412 Power Electronics
- EL 413 High Voltage Engineering and Power Apparatus
- EL 414 Power System Performance
- EL 415 Micro-processors and Micro-controllers

Group II Electrical Machines and Drives

- EL 421 Advanced Aspects of Electrical Machines
- EL 422 Power Electronics
- EL 423 Electrical Drives
- EL 424 Electrical Power Utilization
- EL 425 Micro-processors and Micro-controllers

Group III Control and Instrumentation

- EL 431 Control Theory
- EL 432 Power Electronics
- EL 433 Process Control Systems
- EL 434 Instrumentation Systems
- EL 435 Micro-processors and Micro-controllers

Electronics & Communication Engg.

Compulsory Subjects

- IC 402 Engineering Management
- EC 403 Communication Engineering
- EC 404 Circuit Theory and Control
- EC 405 Micro-processors and Micro-controllers
- EC 406 Electronic Circuits
- EC 407 Design of Electronic Devices and Circuits

Optional Subjects (Any three from any one Group)

Group I Telecommunication Engineering

- EC 411 Broadcast and Television Engineering
- EC 412 Radar and Antenna Engineering
- EC 413 Microwave Engineering
- EC 414 Optical and Satellite Communication
- EC 415 Computer Networks and Communication

Group II Integrated Circuits & Systems Engineering

- EC 421 Digital Hardware Design
- EC 422 Pulse and Digital Circuits
- EC 423 IC Design Techniques
- EC 424 Solid State Physics and Semiconductor Devices
- EC 425 Software Engineering

Group III Control and Instrumentation

- EC 431 Sensors and Transducers
- EC 432 Industrial Instrumentation and Computer Control
- EC 433 Biomedical Electronics
- EC 434 Signal Processing
- EC 435 Control Systems

Mechanical Engineering

Compulsory Subjects

- IC 402 Engineering Management
- MC 403 Mechanics of Solids
- MC 404 Mechanics of Fluids
- MC 405 Thermal Science and Engineering
- MC 406 Manufacturing Technology
- MC 407 Design of Machine Elements

Optional Subjects (*Any three from any one Group*)

Group I Thermal Engineering

- MC 411 Refrigeration and Air-conditioning
- MC 412 Power Plant Engineering
- MC 413 Non-conventional Energy Systems
- MC 414 Internal Combustion Engines
- MC 415 Turbo-machinery

Group II Engineering Design

- MC 421 Design of Mechanical Systems
- MC 422 Optimization — Theory and Applications
- MC 423 Analysis and Synthesis of Mechanisms and Machines
- MC 424 Design of Machine Tools
- MC 425 Computer Aided Engineering Design

Group III Manufacturing Engineering

- MC 431 Manufacturing Science
- MC 432 Computer Aided Manufacturing
- MC 433 Tool and Die Design
- MC 434 Manufacturing Automation
- MC 435 Production Management