VISION

- To Facilitate Transformation of Students into Good Human Beings, Responsible Citizens and Competent Professionals, focusing on Assimilation, Generation and Dissemination of Knowledge.

MISSION

- Impart Quality Education to Meet the Needs of Profession and Society and Achieve Excellence in Teaching-Learning and Research.
- Attract and Develop Talented and Committed Human Resource and Provide an Environment Conducive to Innovation, Creativity, Team-spirit and Entrepreneurial Leadership
- Facilitate Effective Interactions Among Faculty and Students and Foster Networking with Alumni, Industries, Institutions and Other Stakeholders.
- Practice and Promote High Standards of Professional Ethics, Transparency and Accountability.
B.Tech. Programme

• Metallurgical and Materials Engineering
  (Core, Elective and Basic Science Courses)
B. Tech Programme---3rd Semester---CORE COURSES

- Mechanical Testing
- Metallurgical Thermodynamics
- Physical Metallurgy
- Polymer Science & Technology
- Mineral Dressing
- Instrumental Analysis Lab
B. Tech Programme---4th Semester---CORE COURSES

• Process Engineering
• Phase Diagram
• Principles of Extractive Metallurgy
• X-ray & Electron Metallography
• Testing of Materials Lab
• Electronic Properties of Materials
• Instrumental Methods of Analysis
• Machine Design
• Mineral Dressing Lab
B. Tech Programme---5th Semester---CORE COURSES

• Production of Iron & Ferro Alloys
• Heat Treatment
• Physical Metallurgy Lab
• Extractive Metallurgy Lab
• Principles of Management
• Fatigue, Fracture and Creep
• Fuels, Furnaces and Refractories
B. Tech Programme---6th Semester---CORE COURSES

• Production of Steel
• Powder Metallurgy & Joining of Metal
• Professional Practice
• Metallographic Lab
• Ceramic and Polymer Lab
• Heat Treatment Lab
• Metal Forming
B. Tech Programme---7th Semester---CORE COURSES

- Phase Transformation
- Foundry Technology
- Corrosion Engineering
- Extraction of Non Ferrous Metals
- Advanced Welding Technology
- Surface Engineering
- Metal Finishing Lab
B. Tech Programme---8th Semester---CORE COURSES

- Secondary Refining of Steels
- Composite Materials
- Metal Processing Lab
1. Mechanical Testing
2. Metallurgical Thermodynamics
3. Physical Metallurgy
4. Polymer Science & Technology
5. Mineral Dressing
6. Process Engineering
7. Phase Diagram
8. Principles of Extractive Metallurgy
9. X-ray & Electron Metallography
10. Testing of Materials Lab
11. Production of Iron & Ferro Alloys
12. Heat Treatment
14. Physical Metallurgy Lab
15. Extractive Metallurgy Lab
B. Tech. Programme – CORE COURSES

16. Fuels, Furnaces and Refractories
17. Fatigue, Fracture and Creep
18. Production of Steel
19. Powder Metallurgy & Joining of Metal
20. Professional Practice
21. Metallographic Lab
22. Ceramic and Polymer Lab
23. Heat Treatment Lab
24. Phase Transformation
25. Metal Forming
26. Foundry Technology
27. Corrosion Engineering
28. Metal Finishing Lab
29. Metal Processing Lab
30. Mineral Dressing Lab
31. Instrumental Analysis Lab
B. Tech. Programme – Engineering Sciences -- CORE COURSES

• Mechanics of Materials
B. Tech. Programme—4th Semester--ELECTIVE COURSES

• Electronic Properties of Materials
• Instrumental Methods of Analysis
B. Tech. Programme—7th Semester--ELECTIVE COURSES

• Extraction of Non Ferrous Metals
• Advanced Welding Technology
• Surface Engineering
B. Tech. Programme—7th Semester--ELECTIVE COURSES

• Secondary Refining of Steels
• Composite Materials
B. Tech. Programme—ELECTIVE COURSES

1. Electronic Properties of Materials
2. Instrumental Methods of Analysis
3. Extraction of Non Ferrous Metals
4. Advanced Welding Technology
5. Surface Engineering
6. Secondary Refining of Steels
7. Composite Materials
M.Tech. Programme

• Materials Engineering
• Process Metallurgy
• Nanotechnology
M. Tech Programme—CORE COURSES

1. Introduction to Nanoscience & Nanotechnology
2. Quantum Theory of Nanoscale Materials
3. Synthesis Techniques for Nanomaterials
4. Thermodynamics of Solids
5. Nanomaterials Synthesis Laboratory
6. Materials Characterisation
7. Materials Characterization Laboratory
8. Plastics Engineering
9. Design & Analysis of Experiments
10. Ceramics Engineering
M.Tech. Programme—ELECTIVE COURSES

1. Nanophotonics
2. Nanoelectronics
3. Carbon Nano Structures & Applications
4. Nanocomposites
5. Nano Biotechnology
6. Microstructure & Mechanical properties of Nano-structures
7. MEMS/NEMS Devices and Systems
8. Steels & Their Heat Treatment
9. Advanced Welding Technology
10. Corrosion Engineering
EVALUATION SYSTEM

• Every Course comprises of specific Lecture-Tutorial-Practical (L-T-P) Schedule.

---A theory course with a L-T-P schedule of 3-1-0 is assigned 4 credits.

---A laboratory practical course with a L-T-P schedule of 0-0-3 is assigned 2 credits.
## EVALUATION SYSTEM

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EVALUATION SYSTEM

✓ End-Semester Examination: 40 to 50% (3 - 4 hours duration)

✓ Mid-Semester Examination: 20 to 25% (1 – 1½ hours duration)

✓ Quizzes, Tutorials, Assignments, etc.: 25 to 40%
  (continuous evaluation--to make up for 100%)

Note: Any variation, other than the above distribution, requires the approval of the pertinent DUGC/DPGC/DRPC.
Thank you