|  |  |  |
| --- | --- | --- |
| **Mechanical Engineering**  Military Institute of Science and Technology | | |
| **CORE: ME** | | |
| 01 | ME | Introduction to Mechanical Engineering |
| 02 | ME | Engineering Mechanics 1 |
| 03 | ME | Engineering Mechanics 2 |
| 04 | ME | Mechanics of Solids (with Sessional) |
| 05 | ME | Mechanics of Machinery (with Sessional) |
| 06 | ME | Fluid Mechanics 1 |
| 07 | ME | Fluid Mechanics 2 (with Sessional) |
| 08 | ME | Fluid Machinery |
| 09 | ME | Engineering Thermodynamics (with Sessional) |
| 10 | ME | Heat and Mass Transfer (with Sessional) |
| 11 | ME | Numerical Analysis (with Sessional) |
| 12 | ME | Instrumentation and Measurement |
| 13 | ME | Engineering Materials (with sessional) |
| 14 | ME | Manufacturing Technology (with Sessional) |
| 15 | ME | Control Engineering (with Sessional) |
| 16 | ME | Engineering Simulation Sessional |
| 17 | ME | Machine Design |
| 18 | ME | Heat Transfer Equipment Design |
| 19 | ME | IC Engine (with Sessional) |
| 20 | ME | Noise and Vibration |
| 21 | ME | Heating, Ventilation and Air Conditioning |
| 22 | ME | Power Plant Engineering (with Sessional) |
| 23 | ME | Automobile Engineering (with Sessional) |
| 24 | ME | Mechanical Engineering Drawing 1 Sessional |
| 25 | ME | Mechanical Engineering Drawing 2 Sessional |
| 26 | ME | Industrial Training |
| 27 | ME | Design and Research Project 1 |
| 28 | ME | Design and Research Project 2 |
| **CORE: SCINECE AND TECHNOLOGY** | | |
| 01 | MATH | Differential and Integral Calculus |
| 02 | MATH | Differential Equations and Matrix |
| 03 | MATH | Vector Analysis, Laplace Transform, Co-ordinate Geometry |
| 04 | MATH | Complex Variables, Harmonic Function, Fourier Analysis |
| 05 | PHY | Waves and Oscillation, Optics and Modern Physics (with Sessional) |
| 06 | PHY | Structure of Matter, Electricity and Magnetism, Modern Physics |
| 07 | CHE | Fundamentals of Chemistry (with Sessional) |
| 08 | EEE | Fundamentals of Electrical Engineering |
| 09 | EEE | Electrical and Electronics Technology (with Sessional) |
| 10 | CSE | Computer Programming Language (with Sessional) |
| 11 | GERM | Fundamentals of Research Methodology |
| 12 | GEEM | Engineering Ethics and Moral Philosophy |
| 13 | IPE | CAD/CAM (with Simulation Sessional) |
| 14 | SHOP | Workshop Practice Sessional |
| **ELECTIVES (Any Four Courses)** | | |
| 01 | ME | Advanced Thermodynamics |
| 02 | ME | Renewable Energy |
| 03 | Me | Combustion and Pollution |
| 04 | ME | Energy and Environment |
| 05 | ME | Advanced Programming with MATLAB |
| 06 | ME | Multiphase Flows |
| 07 | ME | Introduction to Nanomaterials and Nanotechnology |
| 08 | ME | Fluids Engineering |
| 09 | ME | Aerodynamics |
| 10 | ME | Applied Engineering Mathematics |
| 11 | ME | Gas Dynamics |
| 12 | ME | Finite Element Method |
| 13 | ME | Fluid Power and Control |
| 14 | ME | Introduction to CFD |
| 15 | ME | Design of Fluid Machines |
| 16 | ME | Biomedical Fluid Mechanics |
| 17 | ME | Theory of Structures |
| 18 | ME | Robotics |
| 19 | ME | Composite Materials |
| 20 | ME | Aircraft and Aero-engine Structure |
| 21 | ME | Applied Aerodynamics |
| 22 | ME | Fire Safety and Engineering |
| 23 | ME | Preventive Maintenance |
| 24 | ME | Petroleum Engineering |
| 25 | ME | Automotive Chassis Engineering |
| 26 | ME | Vehicle Dynamics |
| 27 | ME | Bio-Engineering |
| 28 | ME | Plastic Process Technology |
| 29 | ME | Modern Manufacturing Technology |
| 30 | ME | Metal Cutting Process |
| 31 | ME | Occupational Health and Safety Engineering |
| 32 | ME | Standards and Inspection |
| 33 | ME | Introduction to Nuclear Engineering |
| 34 | ME | Tools Engineering |
| 35 | ME | Automobile Maintenance Engineering |
| 36 | ME | Mems Devices – Design and Fabrication |
| 37 | ME | Material Handling |
| 38 | ME | Mechatronics |
| 39 | ME | Textile Technology |
| 40 | ME | Weapon Engineering |