# Master of Science in Engineering Management

**Eligibility Criteria:** The candidate must have a CGPA of at least 2 or 50% aggregate marks in BSc / BE in any Engineering discipline (16 years of formal education).

Duration: 1.5 years (3 semesters for Business Background)

## **Selection Criteria:**

- Academic Qualification: 30%
- Test/ Interview: 70%

Credit Hours: 36

Class Timings: (Evening & Weekend)

Scholarships: Need & merit-based scholarships

#### **Program Structure:**

| No.              | Category/ Area             | No. of<br>Course | No. of Credit<br>Hours |
|------------------|----------------------------|------------------|------------------------|
| A.               | Core Courses               | 08               | 24                     |
| B.               | Elective/ Specialization   | 02               | 06                     |
| C.               | Project/Thesis/Two Courses | 02               | 06                     |
| Total Credit Hrs |                            |                  | 36                     |

## **Core Courses:**

- 1. Total Quality Management
- 2. Engineering Project Management
- 3. Operation Management
- 4. Marketing for Engineers
- 5. Advanced Research Methods
- 6. Finance for Engineers
- 7. HRM & Organization Behavior in Engineering Firms
- 8. Professional Ethics & Decision Making

# **Elective Courses:**

- 1. Strategic Supply Chain Management
- 2. Technology Management
- 3. Management Information System
- 4. Production Systems Design and Analysis
- 5. Industrial Management
- 6. Engineering Ergonomics
- 7. Production Planning and Control
- 8. Engineering Management

- 9. Engineering Economic Analysis
- 10. Techniques of Risk Analysis and Management
- 11. Design Patent, Trademarks, WTO, PEC Regulations
- 12. Operation Research

## **Energy Management**

- 1. Sources of energies and its technologies
- 2. Energy Generation, distribution and conservation
- 3. Operation and maintenance Management
- 4. Alternate energy sources and technologies

## **Total Quality Management**

- 1. Concepts and Philosophy of TQM
- 2. Tools and Techniques of TQM
- 3. Products and System Standards Management
- 4. TQM Awards

## **Production Management**

- 1. Operation Management
- 2. Productivity Management
- 3. Maintenance and Safety Management
- 4. Logistics Management

## **Project Management**

- 1. Global Engineering project management
- 2. Project HR and communication
- 3. Project procurement and contract
- 4. Project planning and controlling
- 5. Seminar in project management

## **Construction Management**

- 1. Construction management and contracting
- 2. Cost estimation and contracting
- 3. Business and construction laws
- 4. Special topics in construction management

## **Supply Chain Management**

- 1. Supplier Relationship Management
- 2. Logistics Management in the Supply Chain
- 3. Planning and Controlling Supply Chain Systems
- 4. Strategic Supply Chain Management
- 5. Sales and Distribution Management

## **Environmental Management**

- 1. Air quality
- 2. Water quality
- 3. Pollution control of earth systems
- 4. Solid waste management
- 5. Environmental Regulations and Agencies

## **General Elective**

- 1. Advance Business Analytics
- 2. Corporate Governance

- 3. Green Management & Sustainability
- 4. Occupational Health & Workplace safety
- 5. Public Sector Management
- 6. International Business
- 7. Global Integration: an Economic Perspective
- 8. Media and Business
- 9. Energy Management
- 10. Project Quality Assurance (PQA)
- 11. Ergonomic and Time Management
- 12. Project Technology Management
- 13. Advanced Manufacturing Management
- 14. Computer Simulation
- 15. Modeling and Analysis of Manufacturing Systems
- 16. Multivariate Data Analysis