Diploma in Chemical Engineering

Eligibility	S.S.C with Work Experience
Duration	1 - 3 Year
Fees	27,500.00
Syllabus	**SEM – I** 1. Applied Mathematics – I 2. English Communication 3. Basic Electrical & Electronics Engineering 4. Inorganic Chemistry 5. Applied Chemistry – I **SEM – II** 1. Communication Skills 2. Engineering Mechanics 3. Engineering Drawing 4. Fundamentals of Chemical Engineering 5. Engineering Mathematics **SEM – III** 1. Applied Mathematics – II 2. Industrial Chemistry 3. Mechanical Operation 4. Chemical Process Technology – I 5. Stoichiometry **SEM -- IV** 1. Physical Chemistry & Materials of Construction 2. Electrical & Electronics 3. Plant Utility 4. Fluid Flow Operation 5. Chemical Process Technology – II **SEM - V** 1. Plant Safety & Maintenance 2. Energy Management

	3. Heat Transfer Operation 4. Chemical Process Instrumentation & Control 5. Chemical Reaction Engineering **SEM - VI** 1. Environmental Technology 2. Chemical Engineering Drawing 3. Mass Transfer Operation 4. Petro Chemical Engineering 5. Alcohol Technology

Bachelors Program in Chemical Engineering

Eligibility	3 Years Diploma or HSC with 3 years Work Experience
Duration	1 - 4 Year
Fees	37,500.00
Syllabus	**SEM – I** 1. Calculus 2. Physics 3. Mechanics of Solids 4. Engineering Graphics 5. English 6. Linear Algebra **SEM – II** 1. Chemistry 2. Environment & Energy Studies 3. Art of Programming 4. Elements of Electrical Engineering 5. Communication Skills

6. Electronic Devices & Circuit

SEM – III

1. Chemical Engineering Thermodynamics
2. Chemical Engineering Calculation
3. Process Information & Analysis
4. Mathematics – III
5. Basic Electronic Engineering
6. Production Engineering

SEM – IV

1. Fluid Mechanics
2. Mechanical Operation
3. Organic Chemical Technology
4. Chemical Engineering Thermodynamics – II
5. Strength of Materials
6. Basic Electronic Engineering

SEM -- V

1. Heat Transfer
2. Mass Transfer – I
3. Process Equipment Design (Mechanical) – I
4. Inorganic Chemical Technology
5. Numerical Analysis & Computer Application
6. Chemical Process Instrumentation & Control

SEM -- VI

1. Mass Transfer – II
2. Process Equipment Design – II
3. Process Dynamics & Control
4. Chemical Reaction Engineering
5. Engineering Materials
6. Petro Chemical Engineering

SEM -- VII

1. Project Engineering, Economics & Management
2. Process Equipment Design – III
3. Fuel Combustion Energy Technology
4. Transport Phenomena
5. Petroleum Refinery Engineering

	6. Polymer Technology – I **SEM -- VIII** 1. Process Utilities & Safety 2. Optimization Techniques in Chemical Engineering 3. Environmental Pollution Control Engineering 4. Process Modeling & Simulation 5. Polymer Technology – II 6. Polymer Technology – III

Master Program in Chemical Engineering

Eligibility	Graduate or Diploma with 5 years Work Experience
Duration	1 - 2 Year
Fees	34,500.00
Syllabus	**SEM – I** 1. Mathematical Methods in Chemical 2. Advanced Fluid Mechanics Engineering 3. Advanced Mass Transfer 4. Chemical Engineering Thermodynamics 5. Advanced Transport Phenomena 6. Advanced Heat Transfer 7. Distillation **SEM – II** 1. Chemical Reaction Engineering 2. Advanced Process Dynamics & Control 3. Process Modeling & Simulation 4. Research Methodology 5. Project Management 6. Optimization Techniques

7. Safety & Hazards

SEM -- III

1. Analytical Techniques
2. Composite Materials
3. Nuclear Fuel Cycles
4. Bio-fuels
5. Biomedical Engineering & Engineering Health Care
6. Health Physics
7. Power Plant Design

SEM -- IV

1. Renewable Energy Engineering
2. Biochemical Process Design
3. Enzyme Engineering & Technology
4. Bioreactor Analysis
5. Food Technology
6. Chemical Plant Safety & Occupational Hazards
7. Specialization