



Diploma in Chemical Process Engineering Technology

Course outline

Flexible schedules: Contact us for start dates

Duration: 48 Weeks (Part Time)

Fluid Mechanics

In this course, students will learn about the concept of fluid and flow, flow equations, compressible fluids, hydraulics and piping calculations, packed bed and fluidized bed flow, Newtonian and non-Newtonian fluids, laminar and turbulent flows, and mixing.

Heat Transfer

Here heat transfer and role of heat transfer in chemical industries is studied. Students will learn how to calculate and evaluate temperature distribution and heat flow.

Separation Processes

This course focuses on the fundamentals of mass transfer and diffusion concept, interphase mass transfer and more. Here, Distillation, Extraction, Leaching, Humidification, Sedimentation, Evaporation, Drying, Adsorption, Filtration, Membrane Technology, Centrifuge and many other topics are explained.

Pumps and Compressors

Students will be introduced to basic design and maintenance of pumps and compressors.

Heat Transfer Equipment

This course focuses on heat transfer equipment such as boilers, furnaces, air coolers, heat exchangers and more.

PFD and PID

Here, students will learn about block flow diagram, process flow diagram, piping and instrumentation diagram that are developed in chemical industries.

Section Process Control and Instrumentation

In this course, basic concepts of process control, control loops, feedback and feed forward control are studied that are required in chemical industries for heat exchangers, towers and pumps.

Chemical Industries

This course gives an introduction to a variety of chemical processes such as processes in polymers, plastic industry, food industry, refinery processes, mineral processing, food industry and biochemical processes.

Mass and Energy Balance

Here, basic principles and calculations of chemical engineering are explained. This course provides extensive knowledge about liquids, gases and vapors, basic calculations in chemical engineering.

Thermodynamics

All the concepts and calculations included in thermodynamics are studied here. Concepts of enthalpy, entropy, work, heat, phase equilibrium is covered in this course.

Chemical Reactors and Kinetics

In this course basic principles of chemical reactions, kinetics and chemical reactors are studied. Different types of chemical reactions, reactors and their operations are explained.

At Citi College, we aim to ensure that our students get the right knowledge and skills to succeed in their respective fields. Our experienced and qualified tutors are here to help you in every way possible. With flexible classes and E-learning modules, we make learning easy and simple.