

University Bachelor of Technology (B.U.T.)

Chemical and Process Engineering (GCGP)

The **B.U.T. GCGP – Bachelor of Technology in Chemical and Process Engineering** trains students in the design of new processes, in the optimal management of industrial plants dedicated to energy and the processing of materials, as well as quality control of raw materials and products, while ensuring safety and environmental protection. B.U.T. graduates are employed in a wide range of industries: chemical industry, petrochemicals, pharmaceuticals, cosmetics, food processing, biotechnologies, materials industries (stationery, metallurgy, glass processing, etc.), and the energy and environment sectors, water treatment, waste and effluents treatment.

Study tracks

• **Monitoring, Control and Optimisation of Processes:**

This programme allows graduates to be employed in the production plants of the industries mentioned above. They run and manage automated production facilities to optimise processes and ensure quality of products, safety and environmental preservation while limiting their consumption of resources (raw materials and energy).

Career prospects:

Job options: plant operation manager, production technician, process operator, team leader, manufacturing or packaging supervisor, production shift manager, automation and controls engineering technician

• **Process Design and Technological Innovation:** This study track more particularly allows graduates to be employed in design offices or research & development departments. Graduates participate in the design, the development and the sizing of new, clean and safe processes or in the upgrading of existing processes in order, specifically, to limit their energy consumption and promote the recycling of raw materials.

Career prospects:

Job options: engineer assistant, chemical process engineering technician, biotechnological process engineering technician, research & development technician, PID preparation technician (piping & instrumentation diagram), process development engineer, chemical or biotechnological process design engineer, industrial plant project designer

• **Control, Quality, Environment and Process Safety:**

Via this study track, graduates aim at reducing the environmental impact of an industrial or urban activity and ensure process safety and guarantee regulations and products compliance. The graduates carry out activities in the support services (fluid and energy management) or in quality control industrial laboratories or in the Environmental Quality & Safety departments of material processing companies.

Career prospects:

Job options: environmental technician; water, waste and air treatment technician; control laboratory technician, process safety manager, industrial risk safety manager, water quality measurement technician, water treatment plant manager

Skills

The B.U.T. GCGP equips students with **three core professional skills developed through the 3 study tracks:**

- Manufacturing
- Sizing of equipment
- Quality Control Processing

Furthermore, students will gain two additional skills when selecting their study track from year 2 of this Bachelor of Technology:

- Automated production line management & Production optimization
- Process development and improvement & Management of industrial projects
- Environmental protection & Quality Control and Safety management

Entry requirements

The B.U.T. GCGP is open to high school graduates from **general or technological backgrounds** or to those changing study path.

Admission is based upon examination of academic records. When considering applications, some departments might require an interview. The B.U.T. can also be prepared within the Lifelong education scheme or on a vocational basis (apprenticeship training or work-based learning). The diploma can also be delivered on Accreditation of Prior Experiential Learning (APEL).

