

Hassiba Benbouali University of Chlef (UHBC)

Faculty of Technology

Department of Process Engineering

License Process Engineering

Explore the programs and courses offered by Process Engineering

Program Overview:

The Process Engineering program covers fundamental courses in thermodynamics, heat and mass transfer, reactor engineering, and industrial process design. It includes tutorials focused on the modeling and optimization of chemical processes, as well as the analysis of material and energy balances. Practical work allows students to handle pilot installations, perform numerical simulations with software like Aspen Plus, and conduct experiments in separation engineering, process control, and effluent treatment. This program combines theory and experimentation to train engineers in designing, optimizing, and securing industrial processes in various sectors such as chemicals, petrochemicals, and food processing.

Teaching Language : French/English

Curriculum Highlights:

Core Courses:

Applied Thermodynamics

Chemical Kinetics

Mass and Heat Transfer

Unit Operations

Chemical Reactor Design

Separation Processes

Environmental Engineering

Process Simulation and Modeling

Advanced Topics:

The advanced topics include the modeling and simulation of processes with software such as Aspen Plus and Hysys, advanced design of production units, as well as process automation and control to improve safety and performance of installations. The training equally explores applied nanotechnology in materials and processes, industrial biotechnology for the development of eco-friendly processes, and systems engineering for better management of resources and environmental impacts. With this specialization, graduates are prepared to tackle the challenges of Industry 4.0 and the energy transition.

Admissions Information:

Access to higher education and training is open to holders of a baccalaureate or an equivalent internationally recognized qualification.

A new registration procedure has been implemented by the Ministry of Higher Education since the 2014/2015 academic year, whereby pre-registration, orientation, and appeals for new baccalaureate holders are conducted exclusively online.