



University of Oum El Bouaghi

Bachelor's degree in Engineering – Chemical

1. Speciality: Engineering Process

2. Program Description:

The Bachelor of Science in Process Engineering is a graduation engineering program offered at the University of Oum El Bouaghi, Faculty of Science and Applied Science, Department of Process Engineering. The bachelor's degree is a 3-year program designed for students who wish to acquire an in-depth technical basis in Process Engineering.

The students in process engineering learn the feasibility conditions for a process and propose appropriate technical solutions that make it possible to extrapolate them on the scale of the chemical industry. All this is gained through an in-depth curriculum in several subjects such as mathematics, physics, computer science and programming. As well as specialization materials that deal with the process of converting matter, heat, energy and momentum in all chemical industries. In addition to conducting research and in-depth study to link the price of the product (quantity, product characteristics and costs) on the one hand, and the extent of respect for quality, safety, and the environment on the other hand.

This training qualifies them to pursue jobs in the field of methodology engineering and various related fields, or to pursue a master's degree in chemical engineering.

3. Entry Requirements (Other) :

The baccalaureate weighted rates accepted at Algerian universities are used to establish the required rate in order to enter the program.

Academic License Program

Semester 1

Teaching unit	Title of the Subject
Fundamental teaching unit	Mathematics 1
	Physics 1
	Structure of the material
Methodology teaching unit	TP Physics 1
	TP Chemistry 1
	Informatics 1
	Writing methodology
Discovery teaching unit	Careers in science and technology 1
Transversal teaching unit	Foreign Language 1 (English)

Semester 2

Teaching unit	Title of the Subject
Fundamental teaching unit	Mathematics 2

	Physics 2
	Thermodynamics
Methodology teaching unit	TP Physics 2
	TP Chemistry 2
	Informatics 2
	Methodology of the presentation
Discovery teaching unit	Careers in science and technology 2
Transversal teaching unit	Foreign Language 2 (English)

Semester 3

Teaching unit	Title of the Subject
Fundamental teaching unit	Mathematics 3
	Waves and vibrations
	Fluid mechanics
	Inorganic chemistry
Methodology teaching unit	Probability and statistics
	Informatics 3
	Technical design
	TP Waves and vibrations
Discovery teaching unit	HSE Industrial plants
	Regulations and standards
Transversal teaching unit	Technical English

Semester 4

Teaching unit	Title of the Subject
Fundamental teaching unit	Solution chemistry
	Organic chemistry
	Chemical thermodynamics
	Numerical methods
	Chemical kinetics
Methodology teaching unit	TP Solution Chemistry
	TP Organic Chemistry
	TP Fluid Mechanics
	TP Numerical Methods
	TP Chemical Kinetics
Discovery teaching unit	Introduction to refining and petrochemistry
	Concepts of transfer phenomena
Transversal teaching unit	Entrepreneurship and business management

Semester 5

Teaching unit	Title of the Subject
Fundamentalteaching unit	Heat Transfer
	Kinetics and homogeneous catalysis
	Matter Transfer
	Quantity of Motion Transfer
	Electrochemistry
	Instrumentation - Sensors
Methodologyteaching unit	Kinetics and homogeneous catalysis
	Analytical techniques
	TP Chemistry Physics 1 and Chemical Engineering 1
	Macroscopic balances
Discoveryteaching unit	pharmaceuticalprocesses
	Agri-foodprocesses
Transversal teaching unit	Pollution: Air, water, soil

Semester 6

Teaching unit	Title of the Subject
Fundamentalteaching unit	Unit operations
	Thermodynamics of equilibria
	Homogeneous reactors
	Surface phenomena and heterogeneous catalysis
Methodologyteaching unit	End of Cycle Project
	Physical chemistry 2 and chemical
	Physical chemistry 2 and chemical engineering 2
Discoveryteaching unit	Cryogenic processes
	Corrosion
Transversal teaching unit	Professional project and business management