



University of Oum El Bouaghi

Bachelor's degree in Engineering - Electrical & Electronic

Electronics

Program Description:

The Bachelor of Science in Electronics is an undergraduate engineering program offered at the University of Oum El Bouaghi, Faculty of Sciences and Applied Sciences, Department of Electrical Engineering. The bachelor's degree is a 3-year program designed for students who want to get a thorough technical grounding in Electronics.

This curriculum falls within the field of Science and Technology in fundamental subjects like maths, physics and computer science in the two first semesters; and on electronics related subjects, such as: analog and digital electronics, Microprocessor interfacing and programming, control systems, power electronics, signal processing, etc... Besides, students apply their theoretical knowledge in labs and projects, which

prepares them to pursue careers in electronics related fields, or pursue a master degree in Embedded Systems and IoT related fields

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	ForeignLanguage2 (English)
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Semester 3

Teaching unit	Title of the Subject
Fundamentalteaching unit	Mathematics 3
	Waves and vibrations
	Fundamental Electronics 1
	FundamentalElectrical Engineering 1
Methodologyteaching unit	Probability and statistics
	Informatics 3
	TP Electronics and Electrical Engineering TP
	TP Waves and vibrations
Discoveryteaching unit	State of the art in electrical engineering
	Energy and environment
Transversal teaching unit	Technical English

Semester 4

Teaching unit	Title of the Subject
Fundamentalteaching unit	Fundamental Electronics 2
	Combinatorial logic and sequential logic
	Numericalmethods
	Signal theory
Methodologyteaching unit	Electrical and electronic measurements
	TP Fundamental Electronics 2
	TP Combinatorial and Sequential Logic and sequential logic
	TP Combinatorial and Sequential Logic and sequential logic
Discoveryteaching unit	Electronic Component Technology 1
	Expression and communication techniques
	Elements of physics of electronic components
Transversal teaching unit	Expression and communication techniques

Semester 5

Teaching unit	Title of the Subject
Fundamentalteaching unit	Microprocessor Systems
	Electronics Functions
	Signal Processing
	Local Computer Networks
Methodologyteaching unit	TP Microprocessor Systems
	TP Functions of Electronics
	TP Signal and Local Networks
	Pre-Project Work
Discoveryteaching unit	Electronic Component Technology 2
	Integrated Circuit Technology and Manufacturing
Transversal teaching unit	Wave propagation and antennas

Semester 6

Teaching unit	Title of the Subject
Fundamentalteaching unit	Continuous Controls and Regulation
	Sensors and Instrumentation
	Power Electronics
	Pulse Electronics
Methodologyteaching unit	End of Cycle Project
	TP Controls and Regulation
	TP Sensors and Instrumentation
	TP Power Electronics and Pulses
Discoveryteaching unit	Optoelectronic Devices
	Professional project and business management
Transversal teaching unit	Professional project and business management