

Industrial Organization

Study plan

Qualification: Official Bachelor's Degree

Duration: 4 years

Total credits: 240 ECTS

	1st year	2nd year	3rd year	4th year	TOTAL (ECTS)
Basic Training (FB)	54	6	-	-	60
Compulsory (OB)	6	54	60	12	132
Optional (OT)	-	-	-	48	48

ECTS

1st period	FB	OB	OT	ECTS
	Physics			8
	Mathematics			7
	Computer Science			6
	Introduction to Business Management			6
	Anthropology			3
2nd period	Chemistry ¹			6
	Calculus			8
	Engineering Design Graphics			6
	Electrical Physics			7
	Environmental Engineering ¹			3

ECTS

1st period	OB	FB	OT	ECTS
	Professional Ethics ¹			3
	Electrical and Electronic Technology			7
	Statistic			6
	Manufacturing Methods ¹			7
	Automation and Industrial Control Methods ¹			7
2nd period	Materials Science and Technology ¹			6
	Fundamentals of Thermal and Fluid Engineering			6
	Information and Communications Technology			6
	Technical Office and Project Management			6
	Economic and Financial Engineering			6

ECTS

1st period	OB	FB	OT	ECTS
	Mechanical Technology			6
	Business Management			6
	Statistical Control of Products and Processes			6
	Quantitative Methods for Management ²			6
	Economy			6
2nd period	Truth, Kindness and Beauty			3
	Operations Research ²			9
	Quality, Security and Environmental Management			6
	Technology and Economic Innovation Policy			6
	Industrial Organization Engineering Projects			6

OT	Bachelor's Degree Final Project	12
OT	Work Placement	12
OT	Foreign Language (English)	6
OT	Foreign Language (German)	6
OT	Communicative and Social Skills	6
OT	Science, Technology and Society	6

4th YEAR SPECIALIZATIONS:

SPECIALIZATION: Business Administration

ECTS

OT	Knowledge and Innovation Management	6
OT	Management Information Systems	6
OT	Human Factor Management	6
OT	Industrial Marketing	6
OT	Project Management	6

SPECIALIZATION: Operations

ECTS

OT	Supply Chain Management	6
OT	Plant Layout and Design	6
OT	Product and Process Engineering	6
OT	Management Information Systems	6
OT	Project Management	6

SPECIALIZATION: Industrial Engineering

ECTS

OT	Fluids and Thermal Engineering	6
OT	Manufacturing Processes	6
OT	Advanced Engineering Design Graphics	6
OT	CNC Manufacture and Simulation	6
OT	Industrial Automation	6
OT	Automatic Control	6
OT	Electrotechnics	6

(1) Tuition in English available
(2) Tuition only in English

BACHELOR'S DEGREE IN INDUSTRIAL ORGANIZATION

DESCRIPTION

As a graduate in Engineering in Industrial Organization, you will be prepared to design, develop, implement and improve integrated systems that include people, materials, information, equipment and energy in a way that is in keeping with the business strategy and based on criteria of efficiency and sustainability. You will have an advanced vision of the relationship between engineering and management, planning, administration, control, research and organization of services, and also have to be able to integrate these

management systems in different technological environments. The training you receive in this bachelor's degree will allow you to consolidate the tradition of engineering in the industrial area with the new paradigm represented by the 4.0 industry.

This bachelor's degree has been officially recognised as having the professional attributes of a Technical Industrial Engineer. (AQU) (2500263-70106-17).

Degree Indicators:

Academic performance:	88,5%
Graduation rate:	65,4%
Dropout rate:	23,4%
Satisfaction rate:	7,8/10
Occupancy rate:	93,3%

TEACHING PROPOSAL

After graduating, you will:

- 1 Be proficient in industrial technologies, production management and organization.
- 2 Analyze, diagnose and solve automation and industrial electronics problems with a high degree of professionalism.
- 3 Collect and interpret relevant data on technology, economic and financial, and production processes indicators to provide judgments, studies or reports.
- 4 Write and direct projects in the field of management, as well as operation organization and processes in compliance with the mandatory specifications, regulations and rules.
- 5 Develop a degree of autonomy that will allow them to undertake high-level specialized studies, and subsequent further learning.

CAREER OPTIONS

Plant management, quality, safety and the environment management, purchasing and supplies management, organization management, continuous improvement management, processes management, or junior consultancy.

In the longer term, depending on your professional and academic career, you will opt for general company management, innovation management, production management, system management or research management in technology centers.