Institutionally accredited

AQU Catalunya registered on EQAR

Pre-enrolment code: 21022

Vacancies: 45

Bachelor's degree in Industrial Organization

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).

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.

Industrial Organization

Study plan

Certificate: 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 (TFG)	132
Optional (OT)	-	-	-	48	48

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1st semestre	FB	Calculus	6
	FB	Physics	6
	FB	Introduction to Business Management	6
	FB	Computer Science	6
	OB	Anthropology	3
	OB	Environmental Engineering	3
2nd semestre	FB	Mathematical analysis	6
	FB	Engineering Design Graphics	6
	FB	Electrical Physics	6
	FB	Chemistry	6
	FB	Applied Mathematics	6

2

1st semestre	OB	Professional ethics	3
	OB	Electrical and electronic technology	7
	FB	Statistic	6
	OB	Manufacturing methods	7
	OB	Automation and industrial control methods	7
2nd semestre	OB	Materials science and technology	6
	OB	Fundamentals of thermal and fluid engineering	6
	OB	Information and communications technology	6
	OB	Technical office and project management	6
	OB	Economic and financial engineering	6

3

1st semestre	OB	Mechanical technology	6
	OB	Business Management	6
	OB	Proyectos de ingeniería en organización industrial	6
	OB	Quantitative methods for management	6
	OB	Economy	6
2nd semestre	OB	Verdad, bondad y belleza	3
	OB	Investigación de operaciones	9
	OB	Control estadístico del producto y del proceso	6
	OB	Gestión de la calidad, seguridad y medio ambiente	6
	OB	Política tecnológica y de la innovación	6

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OB	Bachelor's Degree Final Project	12
OT	Advanced engineering design graphics	6
OT	Electrotechnics	6
OT	CNC Manufacture and simulation	6
OT	Knowledge and innovation management	6
OT	Human factor management	6
OT	Fluids and thermal engineering	6
OT	Industrial marketing	6
OT	Manufacturing processes	6
OT	Automatic control	6
OT	Didactics of industrial organisation engineering	6
OT	Language - English	6
OT	Language - German	6

4th YEAR SPECIALISATIONS:

Specialisation in Industrial Production

OT	Project management	6
OT	Supply chain management	6
OT	Localisation and design of industrial plants	6
OT	Product and process engineering	6
OT	Management information systems	6
OT	Industrial automation	6
OT	Work placement	12

Dual Specialisation

OT	Internship I	18
OT	Internship II	18
OT	Optional subject 1st semester*	6
OT	Optional subject 2nd semester*	6
OB	Bachelor's Degree Final Project	12

*To be defined during the development of the formative project.
**A minimum of 20% of the degree's subjects are offered in English