URV
UNIVERSITAT ROVIRA i VIRGILI

Bachelor's Degree in Chemical Engineering

Duration: 4 years
ECTS credits: 240
Places: 80
Timetable 1st year: mornings and afternoons
Languages: Catalan, Spanish and English
Cut-off grade: 7,692

With the Bachelor's Degree in Chemical Engineering you will be trained as a multidisciplinary professional and expert in the field of chemical engineering, with skills in the analysis, conception, calculation, design, construction, monitoring, control, optimization and operation of installations, equipment and products in the chemical industry. At the same time, you will be qualified to exercise the regulated profession of industrial engineer.

This degree responds to the growing demand for professionals in the field of chemical engineering. The School applies a unique learning method that focuses on the completion of advanced projects in each academic year to enhance your professional and teamworking skills and abilities, team leadership and personal relationships.

Why study the Bachelor's Degree in Chemical Engineering at the URV?

You will qualify from a leading school that is known for it excellence and which has obtained the EUR-ACE® accreditation for engineering and research in the world of chemical engineering.

The ARWU (Academic Ranking of World Universities) places us among the 300 best in the world in the field of Chemical Engineering.

The DOW company regards the URV as one of its 8 strategic universities in Europe.

If you choose to do an in-company internship, you will be able to choose from among the most important companies in the chemical and petrochemical sector, including Dow Chemical, BASF or Repsol.

You will participate in a unique learning method that will enhance your skills and abilities. You will participate in many laboratory and project activities, and have the chance to do

company internships, where you will gain first-hand experience of the chemical engineering industry. You will become a capable, versatile and problem-solving engineer, values that are essential in a professional career.

You will specialize in a sector with a growing demand for professionals both at home and abroad. You will also be professionally qualified to work as an engineer.

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Career opportunities

You will be able qualified to work in:

- Chemical and petrochemical companies.

And as part of multidisciplinary teams in the:

- Food industry.
- Pharmaceutical industry.
- Energy and environmental industry.
- Engineering companies.
- Water treatment and purification industry.
- Electric and nuclear industry.

Recommended profile

It is recommended that you have a good knowledge of Physics, Mathematics, Computer Science and Chemistry. You must also have an interest in technology, be creative and know how to work in a team.

The most important thing is that you are motivated and have an open mind regarding the theoretical and practical aspects essential for success in a technical career.

Assignatures

Distribution of credits across the degree course

Basic training: 63 ECTS
Compulsory training: 135 ECTS
Optional subjects: 30 ECTS
External internships (optional): 12 ECTS
Final thesis: 12 ECTS

1st year

ASSIGNATURA	ECTS
Fundamentals of Process Engineering	9
Mathematics I	9
Graphic Expression	6
Physics	6
Chemistry I	6
Computing in Process Engineering	6
Fluid Mechanics Engineering	6
Physicochemistry	6
Chemistry II	6

2nd year

ASSIGNATURA	ECTS
Chemical Kinetics and Reactor Design	9
Integrated Laboratory of Transport Phenomena and Fluid Mechanics	3
Integrated Laboratory of Thermodynamics and Chemical Kinetics	3
Chemical Processes and Products	9
Transport Phenomena	6
Mathematics II	6
Thermodynamics	6
Industrial Economics and Organization	6
Electrotechnics	6
Mathematics III	6

3rd year

ASSIGNATURA	ECTS
Design of Separation Operations	9
Integrated Laboratory of Unit Operations	6
Environmental Technology	6
Simulation and Analysis of Chemical Processes	9
Materials Science	3
Control and Instrumentation	6
Industrial Safety	3
Technical Thermodynamics	4
Biotechnology	3
Design of Heat Recovery Operations	5

Project Management	3
Materials Resistance	3

4th year

ASSIGNATURA	ECTS
Equipment and Installation Design	6
Electronics	3
Machines and Mechanisms	3
Technical Office	6
Optional subjects	12
Optional subjects (including external internships)	18
Bachelor's Thesis	12