

University Master's Degree in CHEMICAL ENGINEERING

This master's degree aims to take graduates beyond their bachelor's degree and acquire a higher level of expertise in chemical engineering. Graduates will be highly trained in designing products and processes related to chemical engineering. They will also have a strong professional grounding because their work placement and master's theses will be conducted primarily in the chemical industry (i.e. in companies and organisations outside the university).

Aimed at

The profile of the ideal candidate is that of an engineering graduate in an industrial discipline, preferably chemical engineering, who wishes to work as a project leader.

Associated doctoral programme:
Nanoscience, Materials and Chemical Engineering

Academic coordination: Dr. Frank Erich Stüber

Career opportunities

- Industries such as petrochemicals, pharmaceuticals and food processing.
- Engineering companies (advising on new projects).
- Auditing (energy, environmental, etc.).
- Wastewater treatment plants.
- Public administration.
- Service sector and commercial sector.
- R&D laboratories and institutes (public and private).



WHERE
Escola Tècnica Superior d'Enginyeria Química
Av. dels Països Catalans, 26 43007 Tarragona

LANGUAGE
English

DURATION
90 ECTS
From September 2017 to January 2019

TIMETABLE
Face-to-face
Monday to Friday from 3 pm to 7 pm.

PROGRAMME

FIRST YEAR: compulsory subjects

First semester

· Advanced Transport Phenomena	6
· Advanced Thermodynamics and Molecular Simulation	6
· Product and Process Design I (*)	4,5
· Management and Administration of Companies	4,5
· Industrial Leadership (*)	3
· Optional subjects	6

Second semester

· Advanced Separation Processes	6
· Reactor Engineering	6
· Product and Process Design II (*)	4,5
· Advanced Control of Processes	3
· Auditing and Industrial Certification	4,5
· Managing Change (*)	3
· Optional subjects	3

SECOND YEAR: compulsory subjects

First semester

· External Practicals (*)	15
· Final Master's Project (*) (**)	15

(**) In order to pass the Final Master's Degree Project, you must have passed all the subjects that form of the Master's degree.

OPTIONAL SUBJECTS

· Polymers	3
· Materials and Nanostructures	3
· Biomaterials (*)	3

(*) These subjects make up the competences required for the subject Career Counselling Citizenship.

BRIDGING COURSES:***

· Thermodynamics	6
· Chemical Kinetics and Reactor Design	9
· Transport Phenomena	6
· Unitary Operations and Processes Laboratory	6
· Fundamentals of Chemical Engineering	3

(***) After checking the candidate's transcript, the body responsible for admission can decide that the student must attend and satisfactorily complete some of the subjects that are programmed as bridging courses.

Grants

- As part of the action "Work Experience" designed and launched by the School of Chemical Engineering, several scholarships, awards and projects are offered by companies in the chemicals sector of Tarragona, including DOW, BASF, CLARIANT, LYONDELBASELL, MESSER, TECHNIP, SCA.
- Teaching Assistant grants
- URV Master's Degrees Grants

Mobility

ERASMUS+

Work placement

Compulsory in industry (AEQT, DOW, Repsol, BASF, BSP, Bayer, Clariant, Lyondelbasell, Messer, Technip, SCA, Ercros, TEPESA, Cepsa, P&G. etc.)