Outstanding **features**

The master's degree is developed through a methodology based on **20-20-20 philosophy**:

- ✓ 20% of **practical training** (computer science, laboratory and pilot plant)
- ✓ 20% of **lectures in English** (seminars and complete courses) - 80% Spanish
- ✓ 20% of **external teaching staff** from Companies and Research Centers

• • • Access to the master

Graduates and Engineers

Without additional leveling courses:

Bachelor in Chemical Engineering

Additional courses required:

- **Others Engineers**
- Graduates in Science

(Contact the Master Coordinator)

Department of Chemical and Environmental Engineering

The Master's Degree in Chemical Engineering from the University of Oviedo is an official face-to-face Master's Degree of 90 ECTS (one year and a half) linked to the **Chemical Engineer profession**

(BOE 2009-12977)

CONTACT INFORMATION

Information and registration:

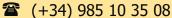
International Postgraduate Center Universidad de Oviedo Edificio Histórico, (+34) 985 10 49 17 Plaza del Riego, Oviedo (ASTURIAS)

Teaching Center:

Faculty of Chemistry (Campus del Cristo) Julián Clavería 8, Oviedo (ASTURIAS)

Master's Coordinator:

Fernando Díez





fds@uniovi.es



http://igtma.guimica.uniovi.es/masterig/

First year: 60 ECTS

Courses: Mon-Fr 15:00-20:00

Second year: 30 ECTS (1 semester)

- Internship
- Master's Thesis



MASTER'S DEGREE IN CHEMICAL ENGINEERING





FACULTY OF CHEMISTRY



University of Oviedo

Objectives

Acquire advanced skills in the professional field of the **Chemical Engineer**:

- Conceive, design and optimize processes, equipment, facilities and services using safety, quality, economy and environmental sustainability criteria.
- ✓ Supervise and manage teams, projects, facilities and companies in a national and international context.
- Research, analyze and develop engineering solutions, integrating multidisciplinary knowledge and new technologies.

Professional outcomes

Direction and management, production, engineering, maintenance, safety, environment, quality, or research and development (R+D), in sectors such as:

- Chemical and petroleum industry
- Pharmaceutical, biotechnology and food
- Materials, energy and environmental
- Consulting, auditing and administration



• • • Mandatory courses

Module: Process and Product Engineering

- Advanced transport phenomena
- Advanced separation processes
- Advanced chemical reactor design
- Chemical process simulation and optimization
- Applied chemical engineering computing
- Safety and risk analysis
- Analysis and synthesis of chemical processes
- Experimentation in Chemical Engineering

Module: Production and Sustainability Management and Optimization

- Production and plant management
- Integrated management of supplies and wastes
- Strategic direction of research and innovation

••• Elective courses

- Pollution prevention and sustainable technologies
- Advanced pollution control technologies
- Polymer processing operations
- Emulsion and suspension technology
- Solids and surface characterization
- Advanced methodologies in chemical analysis

Internship in Industry

• • • Master's Thesis

Collaboration with Companies

- 20% of lectures taught by professionals from Companies, Industries and Research Centers
- Internship in Industry (12 ECTS, compulsory) with the possibility of carrying out the Master's Thesis (18 ECTS) in national or foreign companies, industries or research centers (Erasmus agreements in Germany, Finland, Austria, Portugal, Poland).









GLENCORE







ArcelorMittal



Sacyr Fluor





