

INSPIRING GLOBAL CHANGE SINCE 1222

SCHOOL OF ENGINEERING

CHEMICAL AND PROCESS ENGINEERING

The Master's degree programme trains professionals able to solve complex problems related to the design, operation and optimisation of industrial processes where chemical, physical and biochemical transformations of material and energy are carried out. Building on strong foundations and focusing on process design and operation, safety and environmental management, and innovation and new technologies, the programme offers both theoretical and application-oriented courses fostering skills and knowledge for sustainable engineering deployment and for addressing global challenges in future society.



UNIVERSITÀ
DI PADOVA

CHEMICAL AND PROCESS ENGINEERING

LEVEL Master

SCHOOL Engineering

DEPARTMENT Industrial Engineering

DURATION 2 years (120 ECTS)

START DATE October

LOCATION Padua, Italy

PROGRAMME COORDINATOR
Fabrizio Bezzo

WEB

www.unipd.it/en/chemical-process-engineering

APPLY.UNIPD.IT



TOP 200 2025
Chemical Engineering



ENTRY REQUIREMENTS

- Bachelor's degree (or equivalent) in Chemical Engineering, Biochemical Engineering, Petroleum Engineering, Process Engineering
- English language: B2 level (CEFR) or equivalent

PROGRAMME STRUCTURE

1st Year: Chemical Reaction Engineering; Multiphase Thermodynamics and Transport Phenomena; Separation Unit Operations; Industrial Process Safety and Risk Analysis; Industrial Chemical Processes; Process and Fluid Dynamics Simulation.
2nd Year: Process Dynamics and Control; Process Design; Final Project.

Elective courses (short list): Bioprocess Engineering; Business Management; Electrochemical Energy Storage; Food and Bioproduct Technologies; Fundamentals of 3D Bioprinting; Green Chemistry and Engineering; Industrial Processes for Bio-based and Specialty Chemicals; Life Cycle Engineering of Contaminated Sites; Machine Learning for Process Engineering; Membrane Separation Processes; Particle Technology for the Food and Pharmaceutical Industry; Polymer Processing and Recycling; Process Optimization and Scheduling; Process Technologies for Carbon-Neutral Fuels; Strategic Environmental Management.

TUITION FEES AND SCHOLARSHIPS

Annual fees: up to € 2,900 (3 instalments)

Scholarships and fee-waivers for international students available:
www.unipd.it/en/funding-and-fees

CAREER OPPORTUNITIES

Graduates can work in chemical, petrochemical, oil, food, pharmaceutical, biotechnological industries; production, processing, and recycling of materials; energy; engineering and construction; environmental protection, circular economy, process safety; patent offices, academic and research institutions.
European-accredited Master engineering programme according to the EUR-ACE system.