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. Focusing on raw materials selection, process and equipment design and operation, safety and environmental management, the programme offers both theoretical and application-oriented courses fostering skills and knowledge for sustainable engineering deployment in future society.

UNIVERSITÀ
DEGLI STUDI
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 2023
Engineering - Chemical
QS WORLD UNIVERSITY RANKINGS
BY SUBJECT

ENTRY REQUIREMENTS

- Bachelor's degree (or equivalent) in Chemical Engineering or related fields
- English language: B2 level (CEFR) or equivalent

PROGRAMME STRUCTURE

1st Year: Multiphase Thermodynamics; Separation Unit Operations; Chemical Reaction Engineering; Process and Fluid Dynamics Simulation; Industrial Process Safety and Risk Analysis; Industrial Chemical Processes.
2nd Year: Process Dynamics and Control; Process Design; Final Project.
Elective courses (short list): Machine Learning for Process Engineering; Electrochemical Energy Storage; Process Technologies for Carbon-Neutral Fuels; Membrane Separation Processes; Particle Technology for the Food and Pharmaceutical Industry; Polymer Processing and Recycling; Strategic Environmental Management; Business Management; Food and Bioproduct Technologies; Industrial Processes for Bio-based and Specialty Chemicals; Fundamentals of 3D Bioprinting.

TUITION FEES AND SCHOLARSHIPS

Annual fees: up to € 2,700 (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.