

MSc Chemical & Energy Engineering

9 FUNDAMENTAL SUBJECTS (45 CREDIT POINTS)

- Chemistry; Advanced Fluid Dynamics; Advanced Heat and Mass Transfer; Mechanical Process Engineering; Chemical Reaction Engineering; Thermal Process Engineering; Process System Engineering; Combustion Engineering; Plant Design

9 TO 12 ELECTIVE SUBJECTS (40 CREDIT POINTS)

- Chemical/Process Engineering: Dispersed Phase Systems in Chemical Engineering; Machine Learning for Computational Biology; Micro Process Engineering and flexible production concepts; Molecular Modelling / Computational Biology and Chemistry; Multiphase flow fundamentals; Nanoparticle Technology; Process Engineering of Metals and Ceramics;... (see PDF for a full list)
- Energy Engineering: Computational Fluid Dynamics; Fuel Cells; Industrial Energy Management; Renewable Energies: Materials, Components, Function; Sustainability Assessment for Biofuels
- Environmental Engineering: Environmental Biotechnology; Control of Toxic Trace Elements; Waste Water and Sludge Treatment
- Safety Engineering: Consequences of Accidents in Industries; Dispersion of Hazardous Materials

LABORATORY WORK & EXCURSION (5 CREDIT POINTS)

MASTER THESIS (30 CREDIT POINTS)