

Bachelor's degree year 1 - semester 1

Analysis (6 ECTS)
Atoms and molecules (6 ECTS)
Physics: introduction (6 ECTS)
Programming 1 (3 ECTS)
Algorithm and computing: initiation (3 ECTS)
Language techniques (3 ECTS)
English (3 ECTS)

Bachelor's degree year 1 - semester 2

Reactivity of chemical systems (6 ECTS)
Physical mathematics (3 ECTS)
Geometrical optics (3 ECTS)
Electrokinetics (3 ECTS)
Chemical mathematics 1 (3 ECTS)
Origin and structure of materials (3 ECTS)
Transdisciplinary option (3 ECTS)
Language techniques and professional project (3 ECTS)
English (3 ECTS)

Bachelor's degree year 2 - semester 1

Organic chemistry 1: functions and reactions (6 ECTS)
Thermodynamics: basics (3 ECTS)
Electromagnetism: introduction (3 ECTS)
Energy and material flows (3 ECTS)
Chemical stability (3 ECTS)
Experimental chemistry (3 ECTS)
Chemical mathematics 2 (3 ECTS)
Transdisciplinary option (3 ECTS)
English (3 ECTS)

Bachelor's degree year 2 - semester 2

Separation and spectral analysis (6 ECTS), including:
** Spectral analysis techniques (3 ECTS)
** Chromatography (3 ECTS)
Chemical kinetics (6 ECTS)
Thermodynamics of chemical transformations (6 ECTS)
Mechanisms and theory of organic chemistry (3 ECTS)
Option (3 ECTS), choose between:
* Vibrations and waves (3 ECTS)
* Cospuscular and wave physics: initiation (3 ECTS)
Physical optics (3 ECTS)
English (3 ECTS)

Bachelor's degree year 3 - semester 1

Chemical catalysis (3 ECTS)
Equilibrium with phase change (3 ECTS)
Environmental physical chemistry (3 ECTS)
Chemical and electrochemical analysis (3 ECTS)
Molecular symmetry and coordination chemistry (3 ECTS)
Macromolecular chemistry (3 ECTS)
Option (3 ECTS), choose between:
* Biological molecules (3 ECTS)
* Statistical thermodynamics: introduction (3 ECTS)
Atomistics and quantum chemistry (3 ECTS)
Option (3 ECTS), choose between:
* Professional culture and integration (3 ECTS)
* School teacher internship (3 ECTS)
English (3 ECTS)

Bachelor's degree year 3 - semester 2

Material physics and chemistry (3 ECTS)
Molecular spectroscopy (3 ECTS)
Statistics and chemometrics (3 ECTS)
Cristallography (3 ECTS)
Organic synthesis (3 ECTS)
Option (3 ECTS), choose between:
* Polymers and nanochemistry (3 ECTS)
* Organometallic synthesis (3 ECTS)
* Industrial chemistry (3 ECTS)
Internship (6 ECTS)
Option (3 ECTS), choose between:
* Professional culture (3 ECTS)
* School teacher internship (3 ECTS)
English (3 ECTS)