

Bachelor's Program Curriculum Map

Required (59)

Freshman (22)

General Chemistry A (I) (II) / General Physics B (I) (II) / Calculus B (I) (II) /
General Chemistry Laboratory (I) (II) / General Physics Laboratory (I) (II)

Sophomore (21)

Organic Chemistry (I) (II) / Organic Chemistry Laboratory(I) (II) /
Analytical Chemistry (I) (II) / Analytical Chemistry Laboratory (I) (II) /
Physical Chemistry- Quantum Chemistry

Junior (16)

Physical Chemistry- Kinetics / Physical Chemistry- Thermodynamics /
Physical Chemistry Laboratory (I) (II) /
Studies in Advanced Chemistry (I) (II) / Inorganic Chemistry (I) (II)

Electives (16)

Organic Chemistry

Organic Chemistry Laboratory Techniques (I) (II) / Topics in Biochemistry /
Organic Reaction Mechanism / Advanced Biochemistry (I) (II) /
Organic Spectroscopy / Biochemistry / Topics in Organic Chemistry

Inorganic Chemistry

Introduction to Coordination Chemistry / Photochemistry / Chemical Bonding /
Inorganic Chemistry Laboratory / Syntheses and Characterizations of Nanomaterials /
Chemical Applications of Group Theory / Symmetry and Spectroscopy /
Computer Modeling for the Inorganic Chemistry Application /
Chemical Applications of Machine Learning Algorithms

Physical Chemistry

Mathematics for Chemistry / Chemical Kinetics / Quantum Chemistry
Atomic and Molecular Spectroscopy / Molecular Simulation
Nanomaterials and Sustainable Chemistry / Special Topics in Physical Chemistry

Analytical Chemistry

Conservation of Cultural Relics Based on Instruments and Chemistry (I) (II) /
Polymer Chemistry / Instrumental Analytical Chemistry / Instrumental Analysis Laboratory (I) (II) /
Industrial Chemistry Special Topics in Analytical Chemistry

Others

Scientific Literature Study (I) (II) / Operation of Scientific Cases (I) (II) /
Teaching Plan Design for High School Chemistry (I) (II) / Industry Internship /
Teaching Materials and Methods: Chemistry (I) (II) / Frontiers in Chemistry (I) (II) /
English for Science and Technology / Teaching Practicum: Chemistry (I) (II) /
English for Science and Technology: Practice and Training / Seminar(I) (II)