

CHEM BS Upper Division Elective Options (8 units required):

Core Electives I (5-6 units required, depending on research/preceptor/seminar/colloquium):

ASTR 488A, Astrochemistry

BIOC 462B, Biochemistry

BIOC 466, Biochemistry of Nucleic Acids

CE 439, Developing Next Generation Li-ion Batteries

CHEE/CHEM/MSE 437, Surface Science

CHEM 404B, Inorganic Chemistry II

CHEM 446, Organic Preparations (lab)

CHEM 447, Organic Structural Analysis Laboratory

CHEM 450, Synthetic and Mechanistic Organic Chemistry

GEOS 400, Introduction to Geochemistry

MSE 460, Materials Science of Polymers

PHYS 426, Thermal Physics

PHYS 484, Nuclear Magnetic Resonance Spectroscopy

PLS 448A, Plant Biochemistry and Metabolic Engineering

PTYS 407, Chemistry of the Solar System

Course descriptions/pre-requisites found [HERE](#).

500 level CHEM courses also approved.
Form for permission to enroll in 500 level courses found [HERE](#).

Core Electives II (2-3 units):

All above Core Elective I courses AND

CHEM 396D, Chemistry Discovery

CHEM 392/492, Directed Research *

CHEM 399/499, Independent Study*

CHEM 399H/499H, Honors Independent Study*

CHEM 405, Chemical Safety

CHEM 491, Preceptorship*

CHEM 491H, Honors Preceptorship*

CHEM 493, Internship*

CHEM 498, Senior Capstone*

CHEM 498H, Honors Thesis*

* Requires completion of appropriate forms in order to add units. Forms can be found [HERE](#).