

Chemistry M.S. 2016-2017

Chemistry Core Requirements

Students must successfully complete a minimum of 18 hours of graduate career chemistry courses, 12 hours of which must be taken at UHCL. All core requirements and chemistry electives must be completed with a grade of "B-" or better.

A minimum of three hours must come from each of the following areas:

Organic Chemistry

[CHEM 5134](#) Synthetic Organic Chemistry

[CHEM 5336](#) Organometallic Chemistry

[CHEM 5337](#) Physical Organic Chemistry

Analytical Chemistry

[CHEM 5133](#) Spectroscopic Identification of Organic Compounds

[CHEM 5636](#) Gas Chromatography - Mass Spectrometry

Physical Chemistry

[CHEM 5130](#) Mathematical Methods and Physical Concepts in Chemistry

[CHEM 5235](#) Kinetics of Chemical Reactions

[CHEM 5637](#) Modern Spectroscopy

[CHEM 5639](#) Symmetry in Chemistry

Inorganic Chemistry

[CHEM 5335](#) Advanced Inorganic Chemistry

[CHEM 5336](#) Organometallic Chemistry

Graduate Seminar

[CHEM 6731](#) Graduate Seminar

and

Extended Course work option courses

(or)

Thesis option courses

Chemistry Extended Course Work Option

Under the extended course work option, a minimum of 30 hours of formal course work (including three hours [CHEM 6731](#) Graduate Seminar) must be completed. In addition, students

must choose an adviser and complete a total of six hours credit in the two Research Project and Seminar courses ([CHEM 6837](#) and [CHEM 6838](#)).

Chemistry Thesis Option

Under the thesis option, a minimum of 24 hours of formal course work (including three hours of [CHEM 6731](#) Graduate Seminar) must be completed. In addition, students must complete a minimum of six hours of [CHEM 6939](#), Master's Thesis Research. A maximum of nine hours of [CHEM 6939](#) can be applied toward graduation requirements. Remaining course work for a total of 36 hours may come from [CHEM 6838](#) Research Project and Seminar or additional formal courses.

Chemistry Specializations

Students in the Specialization Area must complete the required courses with grades of "B-" or better.

Specialization in Biochemistry and Medicinal Chemistry

In addition to the M.S. Chemistry core requirements, students are required to take the following courses:

[CHEM 5134](#) Synthetic Organic Chemistry

[CHEM 5136](#) Biofuel

[CHEM 5931](#) Research Topics in Chemistry

And choose one of the following:

[CHEM 5931](#) Research Topics in Chemistry

[CHEM 5939](#) Independent Study in Chemistry

[CHEM 5919](#) Independent Study in Chemistry

Specialization in Petrochemical & Process Chemistry

In addition to the M.S. Chemistry core requirements, the following courses must be selected:

[CHEM 5931](#) Research Topics in Chemistry

[CHEM 5635](#) Introduction to Polymer Chemistry

[CHEM 5235](#) Kinetics of Chemical Reactions