Chemistry M.S.

The plan in Chemistry leads to the master of science (M.S.) degree. Graduate students enrolled in the Chemistry plan may choose from high quality content courses in all of the traditional areas of Organic, Analytical, Physical and Inorganic Chemistry, as well as in the closely related fields of Biochemistry and Environmental Chemistry. Moreover, students are encouraged to further enhance their studies by undertaking research in the format of thesis option or non-thesis (extended coursework) option. The thesis option is strongly recommended for improving the competitiveness of our graduates in the current job market and in admission to Ph.D. school. M.S. students in the thesis option will undertake thesis research in any of the above areas and publish the results as appropriate. The non-thesis option substitutes thesis research with additional coursework, including additional Research Project and Seminar I and II courses.

In regard to such research, it should be noted that the Chemistry plan has received endowments from the Welch Foundation in the form of a Chemistry Departmental Research Grant. This fund has been expended in support of the research efforts carried out by the plan's faculty during the training of students. The Chemistry plan also has endowments from the Zeon Chemicals Company and Petrotecx.

All chemistry courses taken at UHCL more than one year prior to being admitted to the Chemistry plan are subject to faculty review before being accepted for degree credit. The GRE score (verbal + quantitative) should be a minimum of 290 points, with a minimum quantitative score of 150 and an essay of 3.0 or above. Further information on the Chemistry plan is available from the University's website.

Requirements

Chemistry Basic Requirements

Students seeking the master of science (M.S.) degree in Chemistry must have completed, at minimum, the following courses with grades of C- or better.

| Chemistry Basic Requirements | 8 hours of General (Freshman) Chemistry I and II with laboratory 11 hours of Organic Chemistry I and II with laboratory and Advanced Organic Chemistry 12 hours of upper-level Chemistry courses in any of the following areas: Inorganic Chemistry, Analytical Chemistry, Instrumental Analysis, Physical Chemistry, and Organic Chemistry. |

Students who do not fully meet the admission requirements may be admitted provisionally. They will be required to take missing undergraduate courses during their first year with grades of C or better; such remedial courses will not count toward the graduate coursework.

Chemistry Core Requirements

Students must successfully complete 36 hours of graduate career chemistry courses, including 15 hours of core courses and 6 hours of Research Project & Seminars or 9 hours in thesis option. All core requirements and chemistry electives must be completed with a grade of C or better.

<table>
<thead>
<tr>
<th>Chemistry Core Requirements areas</th>
<th>(A minimum of three hours must come from each of the following)</th>
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<tbody>
<tr>
<td>Organic Chemistry</td>
<td>CHEM 5337  Physical Organic Chemistry  Credit Hours: 3</td>
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<td>Analytical Chemistry</td>
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Chemistry Extended Course Work Option

Under the extended course work option, a minimum of 30 hours of formal course work 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). Students must have 15 hours of approved or specialization electives listed below.

Chemistry Thesis Option

Under the thesis option, a minimum of 24 hours of formal course work must be completed. In addition, students must complete a minimum of nine hours of Master’s Thesis Research (CHEM 6939). A maximum of twelve hours of CHEM 6939 can be applied toward graduation requirements. Remaining course work for a total of 36 hours may come from additional or specialization elective courses listed below.

Specialization Requirements

Chemistry Program currently has specialization in: Petrochemical & Process Chemistry. Students in the specialization area must complete the required courses with a grade of C or better.