M.S., CHEMISTRY

M.S. Degree
• Complete the following admission requirements:
  a. Submit GRE General Test scores.
  b. If English is not your native language, submit scores from both
     the Test of Spoken English and the Test of Written English,
     as well as TOEFL scores. Requests, including justification, for
     exceptions to this requirement should be made to the chair of
     the department.

M.S. Degree – Biochemistry and Neuroscience Concentration
• Complete the following admission requirements:
  a. Submit GRE General Test scores.
  b. If English is not your native language, submit scores from both
     the Test of Spoken English and the Test of Written English,
     as well as TOEFL scores. Requests, including justification, for
     exceptions to this requirement should be made to the chair of
     the department.

M.S. Degree – Environmental Chemistry concentration
• Complete the following admission requirements:
  a. Submit GRE General Test scores.
  b. If English is not your native language, submit scores from both
     the Test of Spoken English and the Test of Written English,
     as well as TOEFL scores. Requests, including justification, for
     exceptions to this requirement should be made to the chair of
     the department.

Minimum Requirements for Degree: 30 credits

General University Requirements
Complete the general university requirements. (http://catalog.uaf.edu/graduate)

Master’s Degree Requirements
Complete the master’s degree requirements. (http://catalog.uaf.edu/graduate/#Masters)

Program Requirements
Select three from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM F654</td>
<td>Protein Structure and Function</td>
</tr>
<tr>
<td>CHEM F657</td>
<td>Molecular Foundations of Gene Expression</td>
</tr>
<tr>
<td>CHEM F674</td>
<td>Membrane Biochemistry and Biophysics</td>
</tr>
<tr>
<td>CHEM F670</td>
<td>Cellular and Molecular Neuroscience</td>
</tr>
<tr>
<td>CHEM F675</td>
<td>Cellular Signaling</td>
</tr>
</tbody>
</table>

Complete a research thesis.

Total Credits 9

M.S. DEGREE – ENVIRONMENTAL CHEMISTRY CONCENTRATION
Minimum Requirements for Degree: 30 credits

General University Requirements
Complete the general university requirements. (http://catalog.uaf.edu/graduate)

Master’s Degree Requirements
Complete the master’s degree requirements. (http://catalog.uaf.edu/graduate/#Masters)

Program Requirements
Select two from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM F605</td>
<td>Aquatic Chemistry</td>
</tr>
<tr>
<td>CHEM F606</td>
<td>Atmospheric Chemistry</td>
</tr>
<tr>
<td>CHEM F631</td>
<td>Environmental Fate and Transport</td>
</tr>
<tr>
<td>CHEM F655</td>
<td>Environmental Toxicology</td>
</tr>
<tr>
<td>CHEM F691</td>
<td>Research Presentation Techniques</td>
</tr>
<tr>
<td>CHEM F692</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

Complete approved electives 1 3-6
Complete a research thesis 12

Total Credits 23-26

1 Approved electives are specified by the student’s committee. The following tracks are defined as a guide. Within these tracks students will be expected to complete as part of the core and electives:
   i. Atmospheric Chemistry: CHEM F601, CHEM F605, CHEM F606 and CHEM F631
   ii. Aquatic/Environmental Geochemistry: CHEM F605, CHEM F606 or CHEM F631, GEOS F618 and CHEM F609/GEOS F633.
   iii. Environmental Toxicology and Contaminant Fate: CHEM F605 or CHEM F606, CHEM F631 and CHEM F655

A customized focus area may be developed based on an appropriate sequence of core and elective courses, subject to approval by the student’s advisory committee.

Optional Concentrations: Biochemistry and Neuroscience, Environmental Chemistry

M.S. DEGREE – BIOCHEMISTRY AND NEUROSCIENCE CONCENTRATION
Minimum Requirements for Degree: 30 credits

General University Requirements