Chemical Technology A.A.S.
Curriculum Code: 0163
Effective: Fall 2019 – Summer 2024

Description
Graduates with associate degrees in Chemical Technology are in great demand by the chemical industry. This program prepares students to work with chemists and chemical engineers in many settings. Research, development, and production of pharmaceuticals, agricultural chemicals, and plastics as well as related functions such as sales and technical writing are some of the opportunities that are available to persons with this type of training. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

Contact Information
Contact the Science Department in the Arts and Sciences Building, Room 3203, telephone number 517-483-1092, or the Academic Advising Department, Gannon Building - StarZone, telephone number 517-483-1904.

General Education Core Courses, Recommended Choices
(For the full list of options, see General Education Core)

- Communication – Select one
  COMM 120, Dynamics of Communication, 3 credits / 3 billing hours
  COMM 130, Fund of Public Speaking, 3 credits / 3 billing hours

- Global Perspective and Diversity – Select one
  ECON 120, Power, Authority and Exchange, 4 credits / 4 billing hours
  GEOG 200, World Regional Geography, 4 credits / 4 billing hours
  HUMS 213, World Civilizations to 1600, 4 credits / 4 billing hours
  PHIL 211, Philosophy: Ancient & Medieval, 4 credits / 4 billing hours
  POLS 260, Comparative Political Systems, 3 credits / 3 billing hours
  SOCL 120, Introduction to Sociology, 4 credits / 4 billing hours

- Math – Select one
  MATH 121, Precalculus I, 4 credits / 4 billing hours

- Science
  Program of Study Required Courses will meet this requirement.

- Writing – Select one
  ENGL 121, Composition I, 4 credits / 4 billing hours
  ENGL 131, Honors Composition I, 4 credits / 4 billing hours
  ENGL 122, Composition II, 4 credits / 4 billing hours
  ENGL 132, Honors Composition II, 4 credits / 4 billing hours
### Program of Study Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit / Billing Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 127</td>
<td>Cell Biology</td>
<td>4 / 6</td>
</tr>
<tr>
<td>CHEM 151</td>
<td>General Chemistry Lecture I</td>
<td>4 / 4</td>
</tr>
<tr>
<td>CHEM 152</td>
<td>General Chemistry Lecture II</td>
<td>3 / 3</td>
</tr>
<tr>
<td>CHEM 161</td>
<td>General Chemistry Lab I</td>
<td>1 / 3</td>
</tr>
<tr>
<td>CHEM 162</td>
<td>General Chemistry Lab II</td>
<td>1 / 3</td>
</tr>
<tr>
<td>CHEM 251</td>
<td>Organic Chemistry Lecture I</td>
<td>4 / 4</td>
</tr>
<tr>
<td>CHEM 252</td>
<td>Organic Chemistry Lecture II</td>
<td>4 / 4</td>
</tr>
<tr>
<td>CHEM 262</td>
<td>Quantitative Analysis</td>
<td>3 / 6</td>
</tr>
<tr>
<td>CHEM 272</td>
<td>Organic Chemistry Laboratory</td>
<td>2 / 6</td>
</tr>
<tr>
<td>ISCI 245</td>
<td>S.T.E.M. Workplace Practices</td>
<td>4 / 6</td>
</tr>
<tr>
<td>MATH 122</td>
<td>Precalculus II</td>
<td>4 / 4</td>
</tr>
<tr>
<td>PHYS 221</td>
<td>Introductory Physics I</td>
<td>4 / 6</td>
</tr>
<tr>
<td>STAT 215</td>
<td>Intro to Probability and Stats</td>
<td>4 / 4</td>
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</tbody>
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#### Program of Study Required Courses, Limited Choice

*Select two or three courses, minimum of 6 credits*

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credit / Billing Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOL 203</td>
<td>Microbiology</td>
<td>3 / 3</td>
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<tr>
<td>BIOL 204</td>
<td>Microbiology Laboratory</td>
<td>1 / 3</td>
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<tr>
<td>ENVR 121</td>
<td>Environmental Rules and Regs</td>
<td>3 / 3</td>
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<tr>
<td>ENVR 122</td>
<td>Enviro Sampl &amp; Instrumentation</td>
<td>4 / 6</td>
</tr>
<tr>
<td>ENVR 131</td>
<td>Industrial Process Safety</td>
<td>3 / 3</td>
</tr>
<tr>
<td>MUSC 108</td>
<td>Concert Choir</td>
<td>1 / 3</td>
</tr>
<tr>
<td>MUSC 122</td>
<td>Rock Bank</td>
<td>1 / 3</td>
</tr>
<tr>
<td>MUSC 123</td>
<td>Jazz Ensemble</td>
<td>1 / 3</td>
</tr>
<tr>
<td>MUSC 124</td>
<td>Multi-Instrumental Music Ensem</td>
<td>1 / 3</td>
</tr>
<tr>
<td>PHYS 222</td>
<td>Introductory Physics II</td>
<td>4 / 6</td>
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<tr>
<td>SCIN 287</td>
<td>Science Technology Internship</td>
<td>2-4 / 2-4</td>
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### Total Credit Hours

62-65 credits / 79-86 billing hours

### Recommended Course Sequence

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Semester II</th>
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<tbody>
<tr>
<td>Math Core</td>
<td>CHEM 152</td>
</tr>
<tr>
<td>Writing Core</td>
<td>CHEM 162</td>
</tr>
<tr>
<td>BIOL 127</td>
<td>ISCI 245</td>
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<tr>
<td>CHEM 151</td>
<td>MATH 122</td>
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<tr>
<td>CHEM 161</td>
<td>Limited Choice</td>
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<tr>
<td>Semester III</td>
<td>Semester IV</td>
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<td>--------------------------------------------------</td>
<td>--------------------------------------------------</td>
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<tr>
<td>Communication Core</td>
<td>CHEM 252</td>
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<tr>
<td>Global Perspectives and Diversity Core</td>
<td>CHEM 272</td>
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<tr>
<td>CHEM 251</td>
<td>PHYS 221</td>
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<tr>
<td>STAT 215</td>
<td></td>
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