CHEMISTRY - M.A.

College of Arts and Sciences
Department of Chemistry and Biochemistry
www.kent.edu/chemistry

Contact Information
• Program Coordinator: Erin Michael-McLaughlin | enmichae@kent.edu | 330-672-0032
• Chat with an Admissions Counselor

Fully Offered
• Delivery:
  • In person
• Location:
  • Kent Campus

Admission Terms
• Fall
• Spring
• Summer

Examples of Possible Careers*
Chemical technicians
• 2.8% slower than the average
• 68,100 number of jobs
• $49,820 potential earnings

Chemistry teachers, postsecondary
• 4.3% about as fast as the average
• 26,400 number of jobs
• $80,400 potential earnings

Chemists
• 4.7% about as fast as the average
• 86,700 number of jobs
• $79,300 potential earnings

Food scientists and technologists
• 4.4% about as fast as the average
• 14,200 number of jobs
• $73,450 potential earnings

Forensic science technicians
• 14.1% much faster than the average
• 17,200 number of jobs
• $60,590 potential earnings

Secondary school teachers, except special and career/technical education
• 3.8% about as fast as the average
• 1,050,800 number of jobs
• $62,870 potential earnings

Project management specialists and business operations specialists, all other
• 5.9% faster than the average
• 1,361,800 number of jobs
• $77,420 potential earnings

Additional Careers
• Quality control
• Quality Assurance

*Note
Source of occupation titles and labor data is from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

Description
The Master of Arts degree in Chemistry is for students interested in gaining additional knowledge of chemistry and biochemistry beyond the bachelor’s degree. This non-thesis degree program is flexible and can be taken on a full-time or part-time basis. Several course sequences have been designed for students interested in career advancement. The biochemistry interest area is recommended for students seeking to further develop their academic background in biochemistry and chemistry prior to applying to medical school or dental school. The industrial chemistry interest area is ideal for students seeking additional preparation for employment in the chemical industry. Current and future K-12 educators may pursue the chemical education interest area for advance chemical instruction including chemistry pedagogy.

Admission Requirements
• Bachelor’s degree from an accredited college or university
• Completion of undergraduate courses consisting of one year each in analytical chemistry or biochemistry, organic chemistry, physical chemistry, calculus and physics is expected
• Minimum 2.750 undergraduate GPA on a 4.000 point scale
• Official transcript(s)
• Goal statement
• English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  • Minimum 525 TOEFL PBT score (paper-based version)
  • Minimum 71 TOEFL IBT score (Internet-based version)
  • Minimum 74 MELAB score
  • Minimum 6.0 IELTS score
  • Minimum 50 PTE score
  • Minimum 100 Duolingo English Test score
For more information about graduate admissions, please visit the Graduate Studies admission website. For more information on international admission, visit the Office of Global Education’s admission website.

**Program Learning Outcomes**

Graduates of this program will be able to:

1. Demonstrate a core knowledge and understanding of chemical and/or biochemical concepts.
2. Demonstrate a depth of knowledge of specific topics in chemistry and/or biochemistry and/or chemical education.
3. Demonstrate critical thinking and problem solving skills in chemistry and/or biochemistry.
4. Effectively and clearly communicate chemical and/or biochemical concepts and knowledge.

**Program Requirements**

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>CHEM 60099</td>
<td>MASTERS CAPSTONE PROJECT</td>
<td>6</td>
</tr>
<tr>
<td>Approved 50000 level Chemistry (CHEM) Courses</td>
<td>10-15</td>
<td></td>
</tr>
<tr>
<td>Approved 60000 level Courses</td>
<td>9-14</td>
<td></td>
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</tbody>
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Minimum Total Credit Hours: 30

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1. Minimum 21 credit hours of classroom courses are required. Students select courses with their advisor.
   - Suggested coursework for the biochemistry interest area includes CHEM 50109, CHEM 50261, CHEM 50262, CHEM 50263, and CHEM 50365.
   - Suggested coursework for the chemical education interest area includes CHEM 50093 and CHEM 50795.
   - Suggested coursework for the industrial chemistry interest area includes CHEM 50093, CHEM 50352, CHEM 50451, CHEM 50571 and CHEM 50559.

2. At least half of the required credit hours must be taken at the 60000 level.
   - Suggested coursework for the chemical education interest area includes CHEM 60894.