## CHEMISTRY - M.A.

#### College of Arts and Sciences

Department of Chemistry and Biochemistry www.kent.edu/chemistry

## **About This Program**

The Master of Arts in Chemistry program offers an advanced education for students looking to take their careers in chemistry to the next level. With a focus on research, you'll gain the skills needed to design and execute experiments, analyze data, and make groundbreaking discoveries in the field. Our program also offers opportunities for interdisciplinary studies in areas such as materials science, nanotechnology, and environmental science. Read more...

#### **Contact Information**

- Program Coordinator. Erin Michael-McLaughlin | enmichae@kent.edu | 330-672-0032
- Connect with an Admissions Counselor. U.S. Student | International Student

## **Program Delivery**

- · Delivery:
  - · In person
- · Location:
  - Kent Campus

# **Examples of Possible Careers and Salaries\***

#### 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
- \* Source of occupation titles and labor data comes 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.

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

## **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.

## **Application Deadlines**

· Fall Semester

· Priority deadline: December 15

· Spring Semester

· Priority deadline: September 15

Applications submitted by these deadlines will receive the strongest consideration for admission.

## **Program Requirements**

#### **Major Requirements**

Code	Title	Credit Hours
Major Requiremen	ts	
CHEM 60099	MASTERS CAPSTONE PROJECT	6
Approved 50000 level Chemistry (CHEM) Courses <sup>1</sup>		10-15
Approved 60000 level Courses <sup>2</sup>		9-14
Minimum Total Credit Hours:		30

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.

At least half of the required credit hours must be taken at the 60000 level

Suggested course work for the chemical education interest area includes CHEM 60894.

## **Program Learning Outcomes**

Graduates of this program will be able to:

- Demonstrate a core knowledge and understanding of chemical and/ or biochemical concepts.
- 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.
- Effectively and clearly communicate chemical and/or biochemical concepts and knowledge.

## **Full 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-tine 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.