

Chemistry

Typical Career Fields:

Chemistry General (projected growth 8% - 14%)

- Product/Process Development
- Testing
- Consulting
- Quality Control

Agricultural Chemistry (projected growth 8% - 14%)

- Production
- Agrichemical Development
- Environmental Testing

Analytical Chemistry (projected growth 15% - 21%) ☀️

- Qual./ Quantitative Analysis
- Instrumentation Design

Biochemistry (projected growth 3% - 7%)

- Healthcare
- Food Science
- Agriculture
- Pharmaceuticals
- Cosmetics

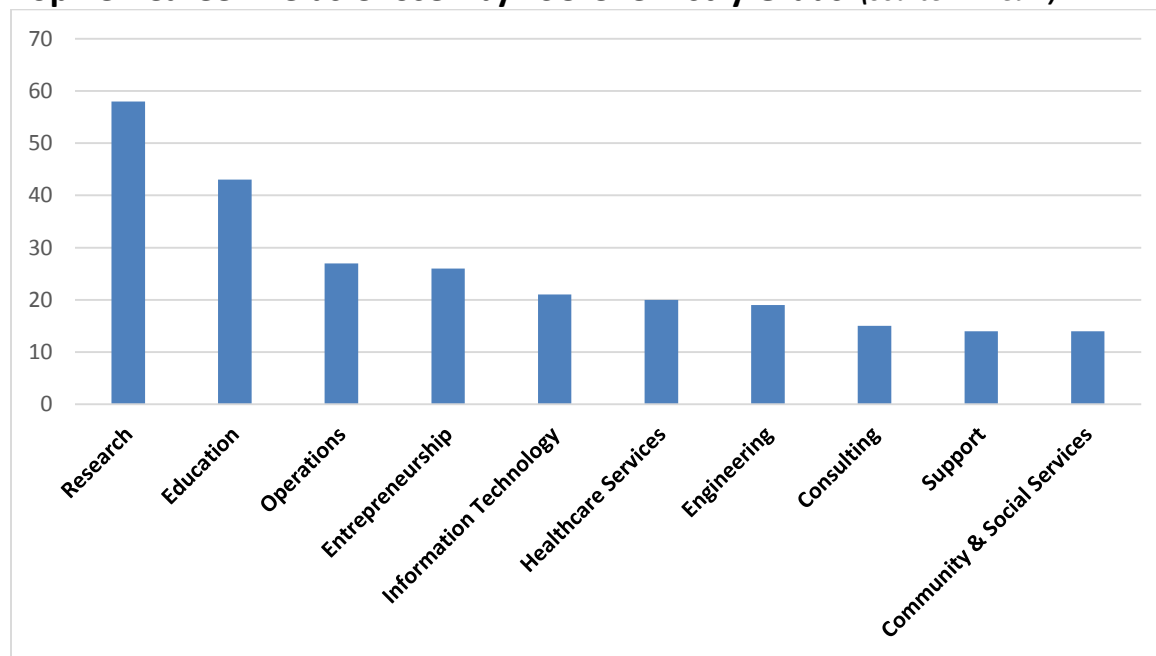
Chemical Engineering (projected growth 3% - 7%)

- Consumer Products
- Pharmaceuticals
- Fuels & Energy
- Bulk Chemicals

☀️ = Bright Outlook

Source: O*NET

Top Ten Career Fields Chosen by ESU Chemistry Grads: (Source: LinkedIn)



Where Our Grads Go (top ten)

- K. State Univ.
- Cerner Corp.
- KC Power & Light
- Wolf Creek
- Thermo Fisher Sci.
- Pace analytical
- LabCorp
- Quest Diagnostics
- Sigma-Aldrich
- Westar Energy

View a list of required courses for this major at: <http://www.emporia.edu/sac/list-of-majors.html>.

Career Services

career@emporia.edu

620-341-5407

www.emporia.edu/careerservices

Chemistry Majors

Strategies on how to become more marketable at graduation

Chemistry General (Product/Process Development, Testing, Quality Control, Consulting)

- Develop strong verbal, written, teamwork and problem-solving skills.
- Choose courses with laboratory components to build experimental and instrumentation skills.
- Gain experience in area of interest through internships, research with professors and/or complete a senior research project.
- Consider taking a course in grant writing.
- Earn master's degree in chemistry for advanced positions, greater responsibility and higher pay.
- Obtain Ph.D. to direct research projects and lead research teams.

Agricultural Chemistry (Production, Agrichemical Development, Environmental Testing)

- Maintain awareness of environmental issues including policy, conservation, and industry trends.
- Pursue coursework in biology, biochemistry, water chemistry, soil chemistry, geology, etc. to support understanding of environmental impact.
- Develop strong verbal and written communication skills for work with interdisciplinary teams.
- Seek related experience through co-ops, internships, or part-time jobs in specialized area of interest.

Analytical Chemistry (Qualitative/Quantitative Analysis, Instrumentation Design)

- Analytical chemistry focuses on determining the composition and structure of matter and has applications to all areas of chemistry.
- Seek extensive laboratory and research experience along with courses in quantitative, qualitative and instrumental analyses.
- Pursue advanced instrumentation and computer skills along with knowledge of statistics.
- Take electives in your field of interest, as some employers seek candidates with expertise in particular areas of analysis such as environment or pharmaceuticals.

Biochemistry (Healthcare, Pharmaceuticals, Food Science, Cosmetics, Agriculture)

- Biochemistry references the study of chemical properties within living systems.
- Consider taking courses to specialize in biology, molecular biology, genetics, biophysics or biophysical methods, as this field is often linked to other disciplines.
- Develop excellent laboratory and computer skills. Strong oral and written communications skills are necessary for working with teams of scientists.
- Seek undergraduate research opportunities with professors and plan to complete internships related to your area of interest.
- Join related professional organizations such as the American Society for Biochemistry and Molecular Biology.

Chemical Engineering (Consumer Products, Fuels and Energy, Pharmaceuticals, Bulk Chemicals)

- Discipline combines chemistry and engineering to solve problems involving the use or production of chemicals.
- Consider double majors in chemistry and engineering.
- Develop exceptional communication and interpersonal skills for work on multidisciplinary teams. Attention to detail is crucial.
- Pursue experimental design, data interpretation and problem solving competence through coursework and research with professors.
- Seek internship or co-op experiences in the chemical engineering field.
- Join professional associations such as American Institute of Chemical Engineers to maintain current knowledge of opportunities in the field.
- Research Fundamentals of Engineering (FE) exam requirements, as this exam is typically the first step in becoming a Professional Engineer (PE).