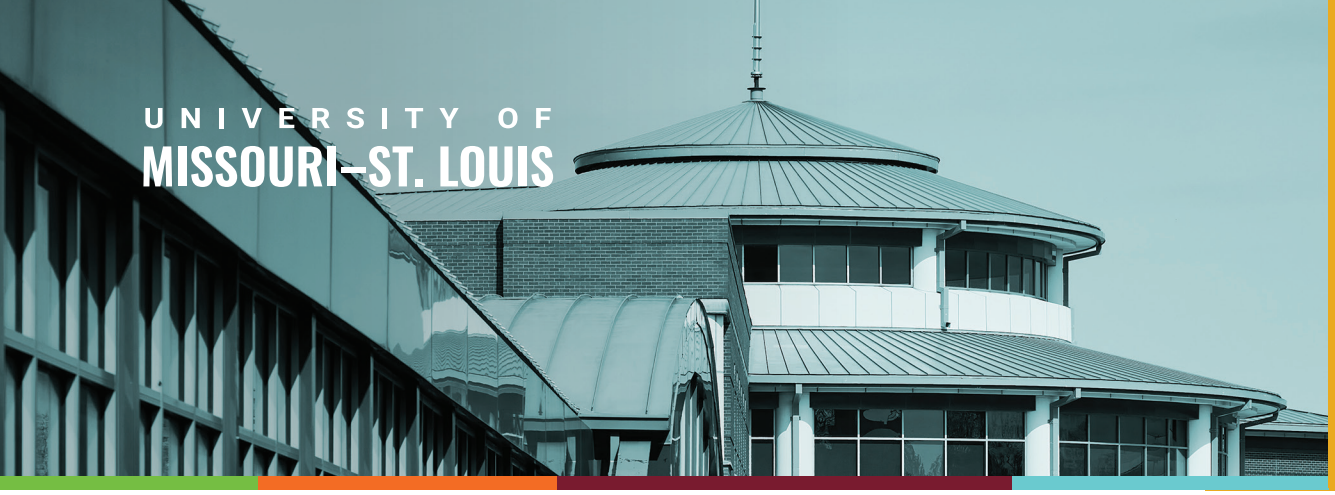

UNIVERSITY OF
MISSOURI–ST. LOUIS

4-YEAR
ACADEMIC
MAP

Chemistry BA

The St. Louis metropolitan area has long been a major center for industrial chemistry, and in the past decade it has also become vibrant in life sciences research and development. A bachelor's degree in chemistry provides a student with the professional training needed to contribute to this dynamic industry. The Bachelor of Arts degree provides a well-rounded academic background and includes a language requirement. Students who earn this degree are well-prepared for a career in the chemical industry, graduate work in the chemical sciences, health sciences, medicine, business, or law.

Career Outlook

Our graduates are heavily recruited by the chemical and life sciences industry. Our alumni have led innovation at large companies in the St. Louis region. Our graduates are regularly accepted into many of the top 20 chemistry graduate programs and into medical or dental schools. Still, others have forged their own way in business and law. This breadth reflects the value of chemistry training in a wide array of professional settings.

Future Career Options

- Applied Research and Product Development
- Chemical Engineering
- Chemical Technology
- Cheminformatics
- Crystallography
- Dyes, Pigments, and Inks
- Industrial Management
- Project Management
- Research and Development

Skills Developed By Degree Completion

- Understand essential principles of the foundational areas of chemistry and apply them to solve chemical problems
- Employ investigative and quantitative methods for chemistry research
- Critically evaluate existing scientific studies
- Design studies to test hypotheses addressing unsolved problems in chemistry
- Know scientific software, and statistical and regression analysis
- Work independently or as part of a small team
- Identify the need for, gather, and analyze information

Successful alumni have gone on to fulfill many of the opportunities above. Additional possibilities are taken from the Bureau of Labor Statistics. Contact an advisor to discuss additional future career options.

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Academic Advising
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2024-2025 4-YEAR ACADEMIC MAP

Bachelor of Arts in Chemistry*

Check once completed

Year 1

FALL SEMESTER (15 credit hours)
- CHEM 1000: Chemistry: The Central Science (1)
- CHEM 1111: Introductory Chemistry (5)
- ENGL 1100: First-Year Writing (3)
- MATH 1035: Trigonometry (2)
- GEN ED CORE: US History and Government (3)
- INTDSC 1003: University Studies (1)

SPRING SEMESTER (16 credit hours)
- CHEM 1121: Introductory Chemistry II (5)
- MATH 1800: Analytic Geometry and Calculus I (5)
- GEN ED EXPLORE: Humanities and Fine Arts (3)
- GEN ED EXPLORE: Social Sciences (3)

Year 2

FALL SEMESTER (14 credit hours)
- CHEM 2223: Quantitative Analysis (3)
- CHEM 2612: Organic Chemistry I (3)
- MATH 1900: Analytic Geometry and Calculus II (5)
- GEN ED CORE: Communication Proficiency (3)

SPRING SEMESTER (15 credit hours)
- CHEM 2622: Organic Chemistry II (3)
- CHEM 2633: Organic Chemistry Laboratory (2)
- MATH 2000: Analytic Geometry and Calculus III (5)
- PHYSICS 2111: Physics: Mechanics and Heat (4)
- PHYSICS 2111L: Physics: Mechanics and Heat Laboratory (1)

Year 3

FALL SEMESTER (15 credit hours)
- CHEM 3312: Physical Chemistry I (3)
- CHEM 3412: Basic Inorganic Chemistry (3)
- FGN LANG 1001: Language and Culture I (5)
- GEN ED EXPLORE: Humanities and Fine Arts (3)
- GEN ED EXPLORE: Social Sciences (3)

SPRING SEMESTER (15 credit hours)
- CHEM 3322: Physical Chemistry II (3)
- CHEM 3333: Physical Chemistry Laboratory I (2)
- FGN LANG 1002: Language and Culture II (5)
- PHYSICS 2112: Electricity, Magnetism, and Optics (4)
- PHYSICS 2112L: Electricity, Magnetism, and Optics Laboratory (1)

Year 4

FALL SEMESTER (15 credit hours)
- CHEM 3022: Introduction to Chemical Literature (1)
- CHEM 3643 or 4343: Advanced Chemistry Laboratory (2)
- ENGL 3160: Writing in the Sciences (3)
- FGN LANG 2101: Language and Culture III (3)
- Cultural Diversity Requirement (3)
- Elective (3)

SPRING SEMESTER (14 credit hours)
- CHEM 4897: Seminar (2)
- GEN ED EXPLORE: Humanities and Fine Arts (3)
- GEN ED EXPLORE: Social Sciences (3)
- Elective (3)
- Elective (3)

* assumes math placement into MATH 1035: Trigonometry

Last updated May 2024

IT STARTS RIGHT NOW

This is a sample academic map for the courses to take each academic semester/session. This map is not a substitute for academic advisement. Contact your advisor when making final selections.

UNIVERSITY STUDIES
University studies is required for all first-year students and those with less than 24 credit hours.

MILESTONE COURSES
Milestone courses should be taken in the order shown to ensure you stay on a timely and accurate path toward graduation.

SUMMER AND INTERSESSION COURSES
Don't forget that summers and winter breaks are a way to fast-track your route to degree completion – and lighten your load during fall and spring!

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