

Graduate Certificate Analytical Chemistry

Program Requirements:

A minimum of 12 credit hours are required for the degree program.

- It provides the skills and training necessary to advance in growing areas of analytical chemistry, with fields such as environmental sample testing, or verifying the quality and safety of food as well as pharmaceutical and cosmetic products. Analytical chemists also work in clinical areas, supporting the development of assays needed for disease diagnosis, assuring compliance with environmental and other regulations, or supporting the legal process. The certificate requires three analytical chemistry lecture courses (CHEM 5212, CHEM 5652, CHEM 5294). Research credits taken towards the certificate in the Department of Chemistry and Biochemistry must be completed in a research group using experimental analytical techniques. Research credits can be taken in the same or in different research groups. All students must take the three required courses subject to the Graduate School regulations.
- A minimum of three of the courses must be taken at UMSL. Research credits must be taken at UMSL. Courses may be substituted with the permission of the Certificate coordinator. For more information, students can contact the Department of Chemistry and Biochemistry.
- Certificate applicants must meet the general University of Missouri-St. Louis Graduate School admissions requirements to be admitted to the Certificate program. Students admitted to the Chemistry M.S. program are automatically eligible to pursue the Certificate; however, they must apply separately to the Certificate program. Students must maintain a minimum GPA of 3.0 to remain in the Certificate program. The certificate is awarded after completion of the 12 credit hours of courses listed below. Students must apply to be awarded the Certificate. Courses taken while enrolled as an undergraduate may not be repeated nor will they count towards the Certificate.
- This 12-credit-hour certificate program also counts toward the 30-credit-hour Master of Science in Chemistry degree program requirements. Students may choose to combine this certificate with other courses and/or certificates to obtain the Master of Science in Chemistry degree.

Application Requirements:

1. [Online Graduate Application](#)
2. Statement of Purpose: A 1-2 page essay explaining your interest in the program and why you are a strong candidate.
 - a. Description of individual goals and areas of interest.
3. Official transcripts from all universities attended.
 - a. By the time of enrollment, prospective students must have obtained a baccalaureate degree or the equivalent from an accredited college or university.
4. Entrance examinations:
 - a. International Students must document English proficiency by providing scores from an internationally accepted standardized examination. See [International Admissions](#) for more information.
5. **Minimum GPA of 3.0 on 4.0 scale**
6. Letters of Recommendation: 2 letters of recommendation are required from individuals who can evaluate your recent academic performance.

Optional:

The [Graduate Record Examination \(GRE\)](#) General Test is optional for applicants; scores can be considered part of an application but are not required from any applicant.

Application Deadlines:

Domestic Applicants: Fall - July 1 ♦ Spring - December 1 ♦ Summer - May 1

Application Fees:

\$50 for domestic applicants

\$40 for international applicants

Graduate Program Director:

Contact Dr. Michael Nichols by nicholsmic@umsl.edu or by phone (314) 516-7345

Advising

Contact Department of Chemistry and Biochemistry by email at chemistry@umsl.edu or by phone (314) 516-5311