

Chemistry, Ph.D.

Degree Requirements

- **Completed Plan of Study**
- **Credit Hours:** Students are required to complete a minimum of 50 graduate credit hours in Chemistry at the 500, 600, and 700 level.
- **Grade Point Average:** Students must earn a minimum cumulative GPA of 3.0 and a minimum grade of B- in all courses applied to the degree.
- **Additional Requirements:** Students are required to enroll in the departmental seminar program and attend special lectures and seminars offered by visiting scientists. In addition, each major area in chemistry requires students in that area to enroll in basic graduate courses presenting the essentials of that discipline on an advanced level.
- **Benchmarks:** For details, go to the Chemistry Degree Progress tab (<http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/chemistry/#degreeprogress>)

MAJOR REQUIREMENTS

Code	Title	Hours
Minimum GPA of 3.0 is required.		
Chemistry Coursework (500, 600, 700-level) *		18
Graduate Research		24
CHEM 797	Research (Repeated)	
Research Seminar		4
CHEM 789	Research Seminar (Repeated)	
Graduate Seminar		4
CHEM 796	Graduate Seminar (Repeated)	
Total Hours		50

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Excluded courses include CHEM 789, 790, 795, 796, 797.

Major Learning Outcomes

CHEMISTRY

The graduate programs in the C. Eugene Bennett Department of Chemistry provide rigorous training in chemistry. The central mission of the Graduate Program is to train the next generation of Chemists for productive careers in the global economy. Some of the learning outcomes below were adapted from the 2013 American Chemical Society Presidential Commission on Graduate Education in the Chemical Sciences. Students earning a Ph.D. in Chemistry will be able to:

- Communicate chemical concepts orally and in writing.
- Explain advanced chemical principles as they pertain to their specific field of research.
- Analyze and critically evaluate the existing literature published within their field of research.
- Independently design and execute original research that can address important scientific questions.
- Generate quality data using a variety of experimental and/or computational techniques and interpret the meaning and implication of their data.
- Effectively communicate their research in oral and written formats, including the ability to author manuscripts suitable for publication in peer reviewed scientific journals.
- Inquire about and prepare for various career opportunities with their advanced degree.
- Learn and adopt best safety practices (chemical hygiene, personal protective wear, proper handling of chemical waste streams, etc.) in chemical research.
- Learn and apply the ethical impact of personal and professional behavior.