WHY SCRANTON?
Excellence in academic and professional competencies. Jesuit values. Successful outcomes. You’ll find all of this—and more—when you choose The University of Scranton for your Master of Science degree in chemistry. Our dedicated faculty will work alongside you as you pursue a higher level of education through our graduate programs in chemistry.

JESUIT VALUES
• Fosters academic, professional and personal development
• Contribution of transformative scientific work in the chemical sciences

AT A GLANCE
• Offers three distinct Master’s degree programs: biochemistry, chemistry and clinical chemistry
• Students exposed to faculty with a wide range of experience and expertise
• Embraces the traditions of Ignatian identity
• Preparation for a successful career, whether it be in industry, secondary education or research

FILLING A GROWING NEED
Data from the ACS Committee on Professional Training Annual Report indicate that the University was tied for 18th in the nation in producing master’s graduates (17) in 2013-2014 as noted in the 2014 edition of the ACS Directory of Graduate Research. We were 8th among all terminal programs in the number of master’s graduates. We are the leader among Jesuit universities in the United States and have granted more master’s degrees in the chemical sciences during this time period.

OUTCOMES
BIOCHEMISTRY:
• Graduates have found employment with Sanofi Pasteur, Merck and with the federal government, enrolled in Ph.D. programs at Thomas Jefferson University, the University of Florida, the University of Arkansas and the University of Notre Dame, and have been admitted into medical, dental, pharmacy and podiatry programs.

CHEMISTRY:
• Graduates have found employment with Sanofi Pasteur and have enrolled in Ph.D. programs at Yale University and Princeton University.

CLINICAL CHEMISTRY:
• Graduates have found employment with Sanofi Pasteur and have been admitted into medical, dental, pharmacy, podiatry or optometry programs.

96% of recent graduates are currently employed or are enrolled in doctoral programs.

Faculty Engagement
PERSONAL ATTENTION
• Learn from an incomparable faculty comprised of skillful educators who pride themselves in their teaching, research and service.
• Gain practical knowledge from faculty that bring significant work experiences to the class room experience.
• Work alongside a faculty mentor who will assist with personal academic planning throughout the program.

LOYOLA SCIENCE CENTER
The Loyola Science Center is designed to serve as a center for collaborative learning for all members of the campus and community. It is our goal to make science accessible and welcome to all, and to highlight science as a human endeavor.

The facility incorporates today’s most innovative science teaching techniques into a dynamic, modern design that includes inviting spaces for student/faculty collaboration, visible glass-walled laboratories and the efficiencies of using shared instrumentation. This center will encourage collaborative learning and promote effective intellectual collisions between and among faculty, students, and members of the community.

Designed for silver Leadership in Energy and Environmental Design (LEED) certification, the Loyola Science Center includes a nearly 150,000-square foot, four story structure that is designed to serve as the home for all natural sciences research and instruction. The Loyola Science Center promotes innovative graduate teaching and research.
**Course Requirements**

**CHEMISTRY** - 36 credits for degree

**Required Core Courses:**
- CHEM 530 - Structural Organic Chemistry
- CHEM 531 - Mechanistic Organic Chemistry
- CHEM 540 - Advanced Inorganic Chemistry
- CHEM 562 - Advanced Quantum Chemistry
- CHEM 563 - Advanced Thermodynamics and Equilibrium
- CHEM 570 - Advanced Analytical Chemistry
- CHEM 571 - Analytical Methods

*May be waived for those individuals who have previously taken an equivalent instrumental analysis laboratory course.

**Elective Courses:** Students take nine elective credits. Electives may be taken from any of the following categories:

- Thesis: Students in the Thesis track will take one credit of CHEM 509 – Introduction to Research and two to eight credits of thesis work CHEM 599. The number of thesis credits will be determined in consultation with the student’s mentor, depending on the scope of the thesis project. Normally, eight thesis credits are devoted to the project.

- Other Chemistry courses: Students may select other graduate courses offered by the Chemistry department, in consultation with their mentor, to complete their electives.

**CLINICAL CHEMISTRY** - 36 credits for degree

**Required Core Courses:**
- CHEM 531 - Mechanistic Organic Chemistry
- CHEM 550 - Biochemical Structure and Function
- CHEM 551 - Biocatalysis and Metabolism
- CHEM 554 - Biochemistry of Disease
- CHEM 555 - Chemical Toxicology
- CHEM 556 - Clinical Quality Control
- CHEM 565 - Instrumental Electronics
- CHEM 570 - Advanced Analytical Chemistry
- CHEM 571 - Analytical Methods

*May be waived for those individuals who have previously taken an equivalent instrumental analysis laboratory course.

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- Other Chemistry courses: Students may select other graduate courses offered by the Chemistry department, in consultation with their mentor, to complete their electives.

**BIOCHEMISTRY** - 30 credits for degree

**Required Core Courses:**
- CHEM 550 - Biochemical Structure and Function
- CHEM 551 - Biocatalysis and Metabolism
- CHEM 563 - Advanced Thermodynamics and Equilibrium
- CHEM 570 - Advanced Analytical Chemistry

*May be waived for those individuals who have previously taken an equivalent instrumental analysis laboratory course.

**Elective Courses:** Students take elective credits to get to the thirty credit level required for the degree. Electives may be taken from any of the following categories:

- Thesis: Students in the Thesis track will take one credit of CHEM 509 – Introduction to Research and two to eight credits of thesis work CHEM 599. The number of thesis credits will be determined in consultation with the student’s mentor, depending on the scope of the thesis project. Normally, eight thesis credits are devoted to the project.

- Other Chemistry courses: Students may select other graduate courses offered by the Chemistry department, in consultation with their mentor, to complete their electives.

**OTHER CHEMISTRY COURSES:**

**Programs of Study**

**WHAT NEXT? HOW TO PROCEED FROM HERE >>**

**ADMISSION**

**Admission Criteria for Acceptance**

Admission to the Chemistry programs is based on a combination of indicators including previous academic performance with the completion of a bachelor’s degree and three professional letters of recommendation.

**SCHEDULE A VISIT**

Personal appointments with an Admissions representative are offered Monday through Friday and can provide insight to the application and admission process. Sign up online to register for your visit at: [scranton.edu/gradvisit](http://scranton.edu/gradvisit)

**CONTACT**

Office: 570.941.4416
gradadmissions@scranton.edu
scranton.edu/gradeducation

**LOCATION**

The University of Scranton
Office of Graduate Admissions
The Estate, Scranton, PA, 18510-4899

**DO MORE**

**Graduate Assistantships**

Graduate assistantships are available on a competitive basis to graduate students who seek to strengthen the breadth and quality of the educational experience. Graduate assistants work with faculty and staff in the areas of teaching, research and/or administration. The graduate assistant is awarded a tuition scholarship as well as a stipend. More at: [scranton.edu/ga](http://scranton.edu/ga)

**Career Development Services**

Students have full access to the services of the Gerard R. Roche Center for Career Development, which include resume and cover letter writing, interview and job search techniques, and participation in employer on-campus recruiting visits and Career Expos. Students and alumni can access a wide range of employment opportunities through the office’s online job posting system. The career team is available to consult for advice and support throughout your career. More at: [scranton.edu/careers](http://scranton.edu/careers)

**APPLY NOW**

We welcome applications on a rolling basis for all available terms. To apply to a graduate Chemistry program and for additional admission requirements, please visit: [scranton.edu/gradapply](http://scranton.edu/gradapply)

**CONTACT THE PROGRAM DIRECTOR**

You are encouraged to contact the Program Director, Dr. Christopher Baumann, for additional information on the academic components of the graduate Chemistry programs. To contact Dr. Baumann, please email christopher.baumann@scranton.edu or call 570.941.6389.

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