# Chemistry (MS, PhD)



# **PROGRAM OVERVIEW**

The Drexel University Department of Chemistry's graduate programs emphasize interdisciplinary research and practical applications of chemistry to address global challenges. The programs offer a collaborative environment where students work closely with faculty on pioneering research. With a focus on both fundamental and applied chemistry, Drexel prepares students for impactful careers in academia, industry and beyond.

Drexel's Chemistry programs are known for their strong emphasis on interdisciplinary collaboration, providing students with opportunities to work across departments and with external partners. The university's location in Philadelphia also offers access to a vibrant scientific community and numerous professional opportunities.

# **DEGREE CONCENTRATIONS**

Students in the Chemistry graduate programs have opportunities to tailor their curricula to focus on several areas of focus such as:

- ANALYTICAL CHEMISTRY
- ATMOSPHERIC CHEMISTRY
- BIOLOGICAL CHEMISTRY
- CHEMICAL EDUCATION
- MATERIALS CHEMISTRY
- CHEMICAL THEORY AND COMPUTATION
- INORGANIC CHEMISTRY
- ORGANIC CHEMISTRY
- PHYSICAL CHEMISTRY
- POLYMER CHEMISTRY

#### **RESEARCH AREAS AND LABS**

Faculty members in the Department of Chemistry are engaged in a wide range of research areas, including:

- ANALYTICS METHODS FOR TRACE CONSTITUENTS IN AIR AND WATER
- MOLECULAR STUDIES OF LIVING SYSTEMS
- EFFECT OF TOXIC CHEMICALS AND CARGINOGENS
- SYNTHESIS AND CHARACTERISZATION OF MEDICINAL AND INDUSTRIAL COMPOUNDS
- MACROMOLECULE STUDIES AND LASER
  CHARACTERISATION OF TRANSIENT SPECIES
- CHEMICAL BIOLOGY AND REDOX SIGNALING
- MEDICINAL CHEMISTRY AND PHARMACEUTICAL LEADS



#### **COURSE OFFERINGS**

Key courses in the graduate programs include:

- **ADVANCED ANALYTICAL CHEMISTRY**
- **ORGANIC SYNTHESIS**
- PHYSICAL CHEMISTRY
- **ENVIRONMENTAL CHEMISTRY**
- **CHEMICAL INFORMATION RETRIEVAL**
- **BIOLOGICAL CHEMISTRY**

Special topics courses are also available, focusing on cutting-edge research areas and emerging trends in chemistry.

# **GRADUATE ACTIVITIES & EVENTS**

The Department of Chemistry offers various activities and events to enhance the graduate student experience:

- **CHEMISTRY GRADUATE STUDENT ASSOCIATION (CGSA)**
- **SEMINAR SERIES FEATURING GUEST SPEAKERS** FROM ACADEMIA AND INDUSTRY
- **ANNUAL RESEARCH SYMPOSIUM**
- **PARTICIPATION IN NATIONAL AND INTERNATIONAL CONFERENCES**
- **NETWORKING EVENTS AND CAREER WORKSHOPS**

# **CAREERS**

Graduates of Drexel's Chemistry programs have pursued careers in U.S. government laboratories, pharmaceutical companies (e.g. Pfizer, Merck), chemical industries (e.g. DuPont, Dow Chemical), environmental agencies, biotechnology firms and academic and research institutions.



### MS PROGRAM

THESIS OPTIONS: Students in the MS program have the option of selecting to complete their degrees with or without a thesis. The THESIS OPTION is best for students who want to expand their background in research. This can be beneficial if the student expects to pursue their doctoral degree. The **NON-THESIS OPTION** allows the student to take more electives in lieu of conducting a research project.

**GRADUATE CO-OP:** As a leader in experiential education, Drexel enhances graduate MS Chemistry student training with its optional co-op. This program offers students a unique opportunity to earn valuable professional experience at top-rated companies that counts toward their Master's plan of study. The extensive networks developed by the Steinbright Career Development Center, the Department of Chemistry and area companies provide a wealth of opportunities for co-op employment in Philadelphia and beyond.

## **APPLICATION DEADLINES**

We accept new students each Fall. While we review applications on a rolling basis beginning in January, we recommend students submit applications by the following dates:

- PHD: December 1
- MS: May 15 (International), September 1 (Domestic)

Students wishing to begin full-time studies in the Winter, Spring or Summer may do so with department permission.

# **FINANCIAL AID**

**FOLLOW** 

Information about scholarships and aid is available on our program website. Several different funding options are available, which may include merit aid, discounts and assistantships. Tuition remission and stipend support is available to highly qualified applicants through teaching assistantships, research assistantships and/or fellowships.