Biochemistry Doctorate

Department Information

- **Program Information:**
  ndsu.edu/programs/graduate/biochemistry (http://ndsu.edu/programs/graduate/biochemistry/)
- **Department Web Site:**
  ndsu.edu/chemistry (http://ndsu.edu/chemistry/)
- **Application Deadline:**
  Fall semester- April 15; Spring semester- October 31. Spring admissions depend on the availability of fellowships and faculty interests. If there are no spring openings, spring applications are automatically considered for the subsequent fall semester.
- **Credential Offered:**
  Ph.D.
- **Test Requirement:**
  GRE required for applicants who have not earned a degree in the U.S. GRE (general and subject recommended for domestic applicants, but not required)
- **English Proficiency Requirements:**
  RA - TOEFL 71, IELTS 6, Duolingo 105; TA Grader - TOEFL 79, IELTS 6.5, Duolingo 110; TA Instructor - TOEFL 81, IELTS 7, Duolingo 115

Apply Now (https://ndsugrad.my.site.com/Application/TX_SiteLogin/?startURL=/Application/TargetX_Portal__PB)

Candidates for the PhD degree are required to earn at least 90 semester credits, which can include credits for seminar and research. No fewer than 27 of these 90 semester credits shall be earned in courses carrying graduate credit (courses numbered 601 to 789), and of these 27 credits, a minimum of 20 must be from courses numbered 701 to 789. Of these 20 credits, the requirement is 8 total credits in at least two fields of study other than the major area, selected from:

- Analytical Chemistry
- Biochemistry & Molecular Biology
- Coatings and Polymeric Materials
- Inorganic Chemistry
- Materials & Nanotechnology
- Microbiology
- Organic Chemistry
- Physical Chemistry
- Other related area (e.g., Physics, Math, Pharmacy, Engineering, Zoology)

A student matriculating with a Master's Degree, including one earned at an international institution, must earn not fewer than 60 graduate credits at NDSU. Of these credits, not fewer than 15 credits must be NDSU courses numbered from 701 to 789. Courses numbered 601-689 may be used for the Plan of Study as long as they have not been taken in an undergraduate or previous graduate program. Approved courses are Department of C&B 625, 626, 627, 628 and 630.

Code	Title	Credits
Required Courses		
CHEM 720	Introduction to Chemical Research	
BIOC 790	Graduate Seminar (second year seminar)	
or CHEM 790	Graduate Seminar	
BIOC 790	Graduate Seminar (proposal seminar)	
or CHEM 790	Graduate Seminar	
BIOC 790	Graduate Seminar (public presentation)	
or CHEM 790	Graduate Seminar	
BIOC 790	Graduate Seminar (defense seminar)	
or CHEM 790	Graduate Seminar	
MICR 720	Scientific Integrity	
As part of total semester credits, the following departmental courses are required for students based on program:		
CHEM 725	Advanced Survey of Inorganic Chemistry	

BIOC 673	Methods of Biochemical Research
BIOC 674	Methods of Recombinant DNA Technology
BIOC 701	Comprehensive Biochemistry I
BIOC 702	Comprehensive Biochemistry II
CHEM 732	Advanced Survey of Analytical Chemistry
CHEM 741	Physical Organic Chemistry I
CHEM 759	Advanced Survey of Physical Chemistry
BIOC 899	Doctoral Dissertation

Admission and Application Requirements

- Graduate School admission and application requirements are found on the Admission Information (https://catalog.ndsu.edu/graduate/admission-information/) page.