FIU | Arts, Sciences & Education

Bachelor of Science in Chemistry

The Bachelor of Science (BS) in Chemistry (certified by the American Chemical Society) prepares students to take a leading role in industry, education, or government service. Graduates are equipped with a diverse set of skills and knowledge that are valued in professional fields.

Course Availability: This is when courses are typically offered and is subject to change: F (Fall), S (Spring), SS (Summer)

Chemistry BS Lower Division Prerequisite Coursework: Complete all of the following with a grade of "C" or better:

General Chemistry		Credits
CHM 1045	General Chemistry I- Prerequisites: MAC1105 or MAC1114 or MAC1140 or MAC1147 or any calculus course; or CHM1025 or adequate placement test score). Prerequisite or Corequisite: CHM1045L (F,S,SS)	3
CHM 1045L	General Chemistry Lab I- Prerequisite or Corequisite: CHM1045) (F,S,SS)	1
CHM 1046	General Chemistry II- Prerequisites: CHM1045, CHM1045L. (F,S,SS)	3
CHM 1046L	General Chemistry Lab II- Prerequisite or Corequisite: CHM1046. (F,S,SS)	1
Organic Chemistry		
CHM 2210	Organic Chemistry I- Prerequisites: CHM1046, CHM1046L. Prerequisite or Corequisite: CHM2210L. (F,S,SS)	4
CHM 2210L	Organic Chemistry Lab I- Prerequisite or Corequisite: CHM2210 (F,S,SS)	1
CHM 2211	Organic Chemistry II- Prerequisites: CHM2210, CHM2210L. Prerequisite or Corequisite: CHM2211L. (F,S,SS)	3
CHM 2211L	Organic Chemistry Lab II- Prerequisite or Corequisite: CHM2211 (F,S,SS)	1
Chemistry Math		
MAC 2311	Calculus I- Prerequisites: MAC1147 or MAC1140 and MAC1114 or appropriate score on placement exam (F,S,SS)	4
MAC 2312	Calculus II- Prerequisite: MAC2311 (F,S,SS)	4
Chemistry Math Continued	Choose 1 of the following:	
COP 2270	C For Engineers (F, S)	3
MAC 2313	Multivariable Calculus- Prerequisite: MAC2312 (F,S,SS)	4
MAP 2302	Differential Equations- Prerequisite: MAC2312 (F,S,SS)	3

Physics		
PHY 2048	Physics W/Calculus I- Prerequisite or Corequisite: MAC2311 or equivalent (F,S,SS)	4
PHY 2048L	General Physics Lab I- Prerequisite or Corequisite: PHY2048 (F,S,SS)	1
PHY 2049	Physics W/Calculus II- Prerequisite: PHY2048; Prerequisite or Corequisite: MAC2312 (F,S,SS)	4
PHY 2049L	General Physics Lab II- Prerequisite or Corequisite: PHY2049 (F,S,SS)	1

Chemistry BS Upper Division Core: Complete all of the following with a grade of "C" or better:

Course	Description	Credits
CHM 3120	Intro Analytical Chemistry- Pre-Requisites: CHM1046 and CHM1046L (F,S,SS)	3
CHM 3120L	Intro Analytical Chemistry Lab- Prerequisite or Corequisite: CHM3120 (F,S,SS)	1
CHM 3410	Physical Chemistry I- Pre-Requisites: MAC2311, MAC2312, PHY2048, PHY2048L, PHY2049, PHY2049L, CHM3120, CHM3120L. Prerequisite or Corequisite: CHM3410L. (F,S)	4
CHM 3410L	Physical Chemistry I Lab- Prerequisite or corequisite: CHM3410 (F,S)	1
CHM 3411	Physical Chemistry II- Prerequisite: CHM3410, CHM3410L (F,S)	4

CHM 3411L	Physical Chemistry II Lab- Prerequisite or Corequisite: CHM3411 (F,S)	2
CHM 4130	Instrumental Analysis- Pre-Requisites: CHM3120, CHM3120L, CHM2211, CHM2211L, CHM3410 or CHM3400, PHY2048, PHY2048L, PHY2049, PHY2049L or PHY2053, PHY2048L, PHY2054, PHY2049L (F,S)	3
CHM 4130L	Instrumental Analysis Lab- Prerequisite or corequisite: CHM4130 (F,S)	1
CHM 4220	Advanced Organic Chemistry- Prerequisites: CHM2211 and CHM2211L. (F)	3
CHM 4304	Biological Chemistry I- Prerequisites: CHM 2211 and CHM 2211L (F,S,SS)	3
CHM 3610	Fundamentals of Inorganic Chemistry- Prerequisites: CHM2211 and CHM2211L (S)	3
CHM 3610L	Fundamentals of Inorganic Chemistry Lab- Prerequisite: CHM 3610 (F,SS)	1

Upper Division Chemistry Lab: Complete 1 of these labs with a grade of "C" or better: (1 credit)

Course	Description	Credits
CHM4230L	Structure Determination Lab- Prerequisite: CHM2211, CHM2211L. (F,S)	1
CHM4304L	Biological Chemistry I Lab- Prerequisite or Corequisite: CHM4304 (F,S,SS)	1

Senior Chemistry Lecture Elective

Course	Description	Credits
CHM or CHS 4XXX	4000 level Chemistry Lecture (Refer to Panther Degree Audit for list of class options. CHM4911L may not be used to satisfy this requirement.)	3

Upper Division Chemistry Research Requirement

Course	Description	Credits
CHM 4910L	Undergrad Research- This requirement is completed over two-three semesters in collaboration with a Chemistry Faculty member. Please contact a chemistry faculty member for more information as early as your sophomore year of college. Students who do not enroll in this course by 90 credits will have an advising hold placed on their account. (F,S,SS)	3

Chemistry Senior Seminar

Course	Description	Credits
CHM 4930	Senior Seminar- Prerequisite: Senior standing in **last term of enrollment**. Advisor permission required. Please message advisor or schedule an appointment requesting permission. (F,S,SS)	1

Chemistry Graduation Exam

Description
Students are required to take a nationally normed chemistry examination in their last semester before graduation. Please contact the Chemistry Department for more information: 305.348.2606, CP 304

Other Graduation Requirements:

University Requirements

- ☐ UCC –University Core Curriculum (Note: Transfer students with an AA degree from a Florida College System or other Florida State University are exempt from the UCC).
- ☐ FLENT/FLEX Foreign Language requirement
- ☐ Civic Literacy Requirement
- ☐ Summer Enrollment: Students entering the University with fewer than 60 hours must complete 9 hours of coursework during the summer semester
- ☐ Global Learning Requirement
- ☐ 120 Total credit hours required

For more information on these requirements, please visit: https://transfer.fiu.edu/transfer-101/guides-resources/graduation-requirements/index.html

College of Arts, Sciences & Education Requirements

- ☐ Minimum of 45 Upper Division hours required (3000-4000 level courses)

Interested in Teaching? Students interested in Secondary Teacher Certification should contact the Center for Advising & Student Success at (305) 348-2978

Pre-Health Interest: Interested students should consult a Pre-Health Advisor (DM 337; 305-348-0515; preprofc@fiu.edu) for arranging a curriculum to enhance their potential to gain admission to these professional schools.

Transfer Students
FIU accepts transfer credits from regionally accredited institutions and nationally accredited institutions that participate in Florida's Statewide Course Numbering System (SCNS).
60 = Maximum number of lower-division credits applied toward the bachelor's degree.
30 = Maximum number of upper-division credits applied toward the bachelor's degree.

Academic Advising
You should see your advisor at least once a semester. To make an appointment with your advisor, log in to your MyFIU, click on Academic Advising tile, click on the Success Network.