

Major requirements to complete a B.S. degree in Chemistry (2009-2010)

Course No.	Hrs.	Course Name	Prerequisites
MATH 150, 250	4, 4	Calculus I, Calculus II	Math 111, 150 respectively
MATH 221 or 305	3	Linear Algebra or Differential Equations	Math 150, 250 respectively
PHYS 205A&B	3,3	University Physics	MATH 150, 250 respectively
PHYS 255A&B	1,1	Physics Laboratory	co-requisite: corresponding lecture
CHEM 200, 201	3,1	Introduction to Chem Principles + lab	high school chemistry & Math 108
CHEM 210, 211	3,1	General and Inorganic Chemistry + lab	CHEM 200, 201
CHEM 230	4	Quantitative Analysis (Fall only)	CHEM 210, 211
CHEM 340, 341	3,2	Organic Chemistry I + laboratory (Fall)	CHEM 210, 211
CHEM 342, 343	3,2	Organic Chemistry II + laboratory (Spring)	CHEM 340, 341
CHEM 350	3	Intro to Biological Chemistry (Spring)	CHEM 342
CHEM 351	2	Biochemistry Laboratory (Spring)	co-requisite: CHEM 350
CHEM 410	2	Inorganic Synthesis & Characterization Lab	(required beginning summer, 2002)
CHEM 411	3	Intermediate Inorganic Chemistry (Spring)	CHEM 456 or 462 or concurrent
CHEM 434	4	Instrumental Analytical Chemistry (Fall)	CHEM 230; 461 or 462
CHEM 461	3	Quantum Mechanics & Spectroscopy (Fall)	230, 342, 343; Math 250; 221 or 305
CHEM 462	3	Classical Physical Chemistry (Spring)	230, 342, 343; Math 250; 221 or 305
CHEM 466A, B	1, 1	Physical Chemistry Laboratory	co-requisite: corresponding lecture

Total hours = 62

An optional curriculum specialization may be chosen from the following:

Biochemistry Specialization - Total hours = 71

9 hours of 300-400 level course work in biochemistry, microbiology, physiology, plant biology or zoology approved by the department, including one biology lab.

Business Specialization - Total hours = 80

ACCT 220-3 Accounting I
ACCT 230-3 Accounting II
ECON 240-3 Introduction to Microeconomics
FIN 330-3 Introduction to Finance
MGMT 304-3 Introduction to Management
MKTG 304-3 Marketing Management

Forensic Chemistry Specialization - Total hours = 67

CHEM 439-3 Forensic Chemistry (Spring only)
CHEM 396-2 Chemical Problems

Environmental Specialization - Total hours = 74

MATH 282-3 or 483-4 Statistics
CHEM 431-3 Environmental Chem (Spring even yrs)
Plus 6 hours of 300- or 400-level chemistry, civil engineering, forestry, geography, geology, mechanical engineering, plant biology, or plant and soil science approved by the department.

American Chem Society Cert - Total hrs = 73

CHEM 396 or 496-2 Chemical Problems
MATH 251-3 Calculus III
Plus two of the following:
CHEM 431-3 Environmental Chem (Spring even years)
CHEM 439-3 Forensic Chemistry (Spring only)
CHEM 444-3 Intermediate Organic (Fall even years)
CHEM 451B-3 Biochemistry (Spring only)
CHEM 468-3 Application of Symmetry to Chemistry (Spring odd years)

C OR BETTER MUST BE EARNED IN ALL PREREQUISITE CHEM, MATH, PHYSICS COURSES

Supportive Skills requirement - at least 6 credit hours chosen from: CS 105 or 200B, 201, 202; ENGL 290 or 291; MATH 483; or a 2-semester sequence of a foreign language.

Chemistry majors must see their department advisor before registering for EACH semester. The Chemistry Department is located in Neckers C224, phone 618-453-5721, fax 618-453-6408, email chemistry@chem.siu.edu Make an appointment with your Chemistry faculty advisor by calling the department.

The College of Science Advisement office is located in Neckers A185, phone 618-536-5537, fax 618-453-7067, email us at advise@cos.siu.edu, or see our web site at <http://www.science.siu.edu/advisement/index.html> The College of Science advisors are Dana McKenzie, Jean McPherson, and Becky Reed. (Updated 5/8/09)