

Accelerated B.S. Chemistry

Accelerated BS to MS Program

Students accepted into an accelerated undergraduate program may take departmentally approved graduate coursework as part of their undergraduate curriculum. These credits will count towards both their bachelor's and master's degrees and can fulfill major requirements, upper-division requirements, and/or free electives. For details on accelerated programs at Idaho State University, please see (Degree Requirements (<http://coursecat.isu.edu/undergraduate/degreerequirements/>)).

Once accepted into an accelerated degree program, it is strongly recommended for students to stay in close communication with their advisor regarding pursuit of acceptance into the Graduate School and the master's degree program at Idaho State University. Acceptance into an accelerated program during the bachelor's degree program is the first step in the admissions process. A separate application to the Graduate School is necessary for all accelerated programs. For more information regarding application and admission to the Graduate School at Idaho State University, please see the Graduate Admissions section of the graduate catalog (<http://coursecat.isu.edu/graduate/graduateadmissions/>).

Chemistry Accelerated Criteria

Students may be admitted to the program after having completed 64 credit hours. Application for admission must be made to the Chemistry Department. Students may replace up to 6 credits of 4400-level CHEM lecture or laboratory requirements or electives (CHEM 4400, CHEM 4407, CHEM 4433, CHEM 4437, CHEM 4438, CHEM 4445, CHEM 4447, CHEM 4470, CHEM 4499) with 5500-level analogs of these courses. These credits will count simultaneously toward both BS and MS degree requirements for students in this program. In addition, the student should have completed the following courses or their equivalent:

Program Admission Requirements

Code	Title	Credits
One year General Chemistry lecture with laboratory (for example General Chemistry I and II with labs (CHEM 1111, CHEM 1111L, CHEM 1112, CHEM 1112L))		9
One year Organic Chemistry lecture with laboratory (for example Organic Chemistry I and II with labs (CHEM 3301, CHEM 3303, CHEM 3302, CHEM 3304))		8
One year Calculus (for example Calculus I and II (MATH 1170, MATH 1175))		8
One year Physics lecture with laboratory (for example Engineering Physics I & II with labs (PHYS 2211, PHYS 2212, PHYS 2213, PHYS 2214))		10
Suggested Preparatory Courses		
Students are encouraged, but not required, to complete the following courses prior to entering the program. These courses must be completed eventually to satisfy the BS degree requirements and also serve as prerequisites for advanced courses in the BS/MS degree.		
BIOL 1101 & 1101L	Biology I and Biology I Lab	4
CHEM 2211 & CHEM 2213	Inorganic Chemistry I and Inorganic Chemistry I Laboratory	4
CHEM 2232 & CHEM 2234	Quantitative Analysis and Quantitative Analysis Laboratory	4
Total Credits		47

Including the University General Education Requirements listed elsewhere (8 of the 9 General Education Objectives, a minimum of 36 credits--see the General Education Requirements (<http://coursecat.isu.edu/undergraduate/academicinformation/generaleducation/>) in the Academic Information section of this catalog), the program of study for the Bachelor of Science in Mechanical Engineering degree totals a minimum of 120 credits as follows:

General Education

The listing below includes program requirements that also fulfill General Education requirements.

Code	Title	Credits
Objective 1 - ENGL 1101, ENGL 1102		6
Objective 2 - COMM 1101		3
Objective 3 - MATH 1170		4
Objective 4		6
Objective 5 - BIOL 1101,1101L & CHEM 1111,1111L		9
Objective 6		6
Students must fulfill Objective 7 or Objective 8		3
Objective 7		
Objective 8		
Objective 9		3
Total Credits		40

Major Requirements

Code	Title	Credits
BIOL 1101 & 1101L	Biology I and Biology I Lab	4
CHEM 1111 & 1111L	General Chemistry I and General Chemistry I Lab	5
CHEM 1112 & 1112L	General Chemistry II and General Chemistry II Lab	4
MATH 1170	Calculus I	4
MATH 1175	Calculus II	4
PHYS 2211 & PHYS 2213	Engineering Physics I and Engineering Physics I Laboratory	5
PHYS 2212 & PHYS 2214	Engineering Physics II and Engineering Physics II Laboratory	5
CHEM 2211	Inorganic Chemistry I	3
CHEM 2213	Inorganic Chemistry I Laboratory	1
CHEM 2232 & CHEM 2234	Quantitative Analysis and Quantitative Analysis Laboratory	4
CHEM 3301 & CHEM 3303	Organic Chemistry I and Organic Chemistry Laboratory I	4
CHEM 3302 & CHEM 3304	Organic Chemistry II and Organic Chemistry Laboratory II	4
CHEM 3331 & CHEM 3334	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 3351 & CHEM 3352	Physical Chemistry I and Physical Chemistry II	6
CHEM 3365 & CHEM 3366	Synthetic Methods and Synthetic Methods Laboratory	4

BIOL 4432	Biochemistry	3
OR		
BIOL 4445 & BIOL 4447	Biochemistry I and Biochemistry II	6
OR		
CHEM 4445 & CHEM 4447	Biochemistry I and Biochemistry II	6
OR		
CHEM 5545 & CHEM 5547	Biochemistry I and Biochemistry II	6
CHEM 4451 & CHEM 4452	Physical Chemistry Laboratory I and Physical Chemistry Laboratory II	2
CHEM 4485	Senior Research (6 credits required)	
CHEM 4491	Seminar	1

Suggested Electives Eligible for 5500-level credit*

Code	Title	Credits
CHEM 4400/5500	Practicum in Physical Science	2
CHEM 4407/5507	Inorganic Chemistry II	2
CHEM 4433/5533	Environmental Chemistry	2
CHEM 4437/5537	Environmental Chemistry Laboratory	1
CHEM 4438/5538	Experimental Biochemistry	1
CHEM 4470/5570	Biorganic Chemistry	3
CHEM 4499/5599	Experimental Course	1-6

* Up to 6 credits at the 5500-level may simultaneously count toward both BS and MS degree requirements

Degree Totals

Code	Title	Credits
Program Admission Requirements		
General Education		40
Major Requirements (Required General Education credits removed)		60
Upper Division Free Electives		2
Free Electives		18
Total Credits		120

ISU Degree Requirements (<http://coursecat.isu.edu/undergraduate/degreerequirements/>)

ISU General Education (<http://coursecat.isu.edu/undergraduate/academicinformation/generaleducation/>)

Major Academic Plan (MAP) (<https://www.isu.edu/advising/maps/>)