

Chemistry Major - Science Option (BS)

Suggested Plan of Study

2019-2020 Catalog

Fall - Semester 1		Spring - Semester 2	
CHEM 1501 Background & Strategies in CHEM	1	ENGL 1123 Composition II	3
ENGL 1113 Composition I	3	MATH 1525 Calculus I	5
MATH 1045 Pre-Calculus Mathematics	5	*HIST 1003 or 1013 World History I or II OR HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National	3
CHEM 1023/1021 University Chemistry I/Lab	4	CHEM 1123/1121 University Chemistry II/Lab	4
GSTD 1002 Freshman Seminar	2		
Total Semester Hours	15	Total Semester Hours	15
Fall - Semester 3		Spring - Semester 4	
World Literature I/II (ENGL 2213 or ENGL 2223)	3	CHEM 2012/2001 Analytical Chemistry/Lab	3
BIOL 1203/1201 Principles of Biology I/Lab	4	MATH 1545 Calculus II	5
CHEM 3003/3001 Organic Chemistry I/Lab	4	CHEM 3103/3101 Organic Chemistry II/Lab	4
SPCH 1113 Introduction to Public Speaking	3	ENGL 3003 Advanced Professional Writing	3
Total Semester Hours	14	Total Semester Hours	15
Fall - Semester 5		Spring - Semester 6	
Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013, PHIL 2403, THEA 2003 or Foreign Language)	4	CHEM 3233/3231 Intermediate Inorganic Chemistry CHEM 3231 Intermediate Inorganic Chemistry Lab**	3-4**
CHEM 3313/3311 Instrumentation I/Lab or CHEM 4313/4311 Instrumentation II/Lab	4	CHEM 3073/3071 Biochemistry I CHEM 3071 Biochemistry I Lab **	3-4**
PHYS 2203/2201 University Physics I/Lab	4	PHYS 2213/2211 University Physics II/Lab	4
MATH 2563 Calculus III	3	CHEM Elective	2
Social Science choice (ECON 2103, FIN 2003, GEOG 2003, PSCI 2003, PSYC 2003, SOC 1003 or SOC 2003)	3	Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013, PHIL 2403, or THEA 2003)	3
Total Semester Hours	17	Total Semester Hours	16
Fall - Semester 7		Spring - Semester 8	
CHEM 4403/4401 Physical Chemistry: Thermodynamics/Lab	4	CHEM 4413/4411 Physical Chemistry: Quantum and Kinetics/Lab	4
CHEM 4051 Senior Seminar	1	CHEM 4701-2 Undergraduate Research	2
CHEM 4701 Undergraduate Research	1	Elective	6
Science and Engineering Elective	3	*HIST 1003 or 1013 World History I or II OR HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National	3
CHEM 3313/3311 Instrumentation I/Lab or CHEM 4313/4311 Instrumentation II/Lab	4		
Total Semester Hours	13	Total Semester Hours	15

Total hours required for major – 120

*Note: Must have six hours of history/government. Three hours must be World History I or II. Three hours must be U.S. History I, U.S. History II or American Government: National.

Chemistry Electives

**Either CHEM 3231 or CHEM 3071 is required for the chemistry core hours.

CHEM 4013 Advanced Organic Chemistry	CHEM 4701-3 Undergraduate Research
CHEM 4033 Advanced Inorganic Chemistry	CHEM 4791-3 Advanced Topics in Chemistry I
CHEM 4043/4041 Advanced Analytical Chemistry/Lab	CHEM 4891-3 Advanced Topics in Chemistry II
CHEM 4073 Biochemistry II	CHEM 4991-3 Advanced Topics in Chemistry III