

SAMPLE CURRICULUM FOR B.S. CHEMISTRY (PROFESSIONAL OPTION)

→ FRESHMAN YEAR

FALL			SPRING		
CHEM 111	<i>Principles of chemistry I (incl. lab)</i>	4	CHEM 112	<i>Principles of chemistry II (incl. lab)</i>	5
MATH 170	<i>Calculus I</i>	4	MATH 175	<i>Calculus II</i>	4
ISEM 101	<i>Integrated seminar</i>	3	CS 112	<i>Intro to problem solving and programming</i>	3
ENGL 102	<i>College writing and rhetoric</i>	3	ENGL 317	<i>Technical writing (Comm.)</i>	3
ART 202	<i>Early modern art (Hum.)</i>	3			
Semester total:			Semester total:		
17			15		

→ SOPHOMORE YEAR

FALL			SPRING		
★CHEM 253	<i>Quantitative analysis</i>	3	◆CHEM 372/374	<i>Organic chemistry II with lab</i>	4
CHEM 254	<i>Quantitative analysis lab</i>	2	PHYS 211	<i>Engineering physics I (incl. lab)</i>	4
CHEM 277/278	<i>Organic chemistry I with lab</i>	4	ECON 202	<i>Principles of economics II (Soc. Sci.)</i>	3
MATH 275	<i>Calculus III</i>	3	PHIL 351	<i>Philosophy of science (Hum.)</i>	3
ECON 201	<i>Principles of economics I (Soc. Sci.)</i>	3	MATH 310	<i>Ordinary differential equations (elective)</i>	3
Semester total:			Semester total:		
15			17		

→ JUNIOR YEAR

FALL			SPRING		
★CHEM 305/307	<i>Physical chemistry I with lab</i>	4	◆CHEM 306/308	<i>Physical chemistry II with lab</i>	4
PHYS 212	<i>Engineering physics II (incl. lab)</i>	4	FLEN 307	<i>The European Union (Int.)</i>	3
★BIOL 380	<i>Intro to biochemistry</i>	4	MATH 330	<i>Linear algebra (elective)</i>	3
ISEM 301	<i>Integrated Seminar</i>	1	CHEM 491	<i>Research</i>	2
			●CHEM 463	<i>Inorganic chemistry I</i>	3
Semester total:			Semester total:		
13			15		

→ SENIOR YEAR

FALL			SPRING		
CHEM 409	<i>Proseminar (Sen. Exp.)</i>	1	●CHEM 464/465	<i>Inorganic chemistry II with lab</i>	4
●CHEM 495	<i>Statistical thermodynamics</i>	3	◆CHEM 454	<i>Instrumental analysis</i>	4
★CHEM 473	<i>Intermediate organic chemistry</i>	3	POLS 333	<i>American Political Culture (Am. Div.)</i>	3
STAT 251	<i>Principles of statistics (elective)</i>	3	◆CHEM 509	<i>Advanced physical chemistry (elective)</i>	3
CHEM 491	<i>Research</i>	2			
GEOL 423	<i>Principles of geochemistry (elective)</i>	3			
Semester total:			Semester total:		
15			14		

→ NOTES

- This sample curriculum totals 121 credits (120 are required to graduate).
- Courses listed in red are required.
- Courses listed in blue are required but have alternatives to choose from (e.g., ENGL 317 is one of any number of classes that will fulfill the "Communications" requirement).
- Courses labeled with a star (★) are only offered in the fall.
- Courses labeled with a diamond (◆) are only offered in the spring.
- Courses labeled with a circle (●) are offered in alternate years.