

# Chemistry - Biochemistry, B.S. - Certified by the American Chemical Society - Minor in Biology

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This program qualifies a graduate for certification to the American Chemical Society as a chemist meeting the professional standards of that organization. Consult departmental chair for information on minor programs.

Course	Title	Semester Credit Hours
<b>Freshman Year</b>		
<b>Semester 1</b>		
BIOL 1306 & BIOL 1106	General Biology I and General Biology Laboratory I	4
CHEM 1311 & CHEM 1111	Gen Inorganic Chemistry I and Gen Inorganic Chem Lab I	4
ENGL 1301	Rhetoric and Composition	3
MATH 2413	Calculus I	4
UNIV 1201	Learning in Global Context	2
<b>Semester Credit Hours</b>		<b>17</b>
<b>Semester 2</b>		
CHEM 1312 & CHEM 1112	Gen Inorganic Chemistry II and Gen Inorganic Chem Lab II	4
ENGL 1302	Rhetoric and Composition	3
MATH 2414	Calculus II	4
Communications		3
<b>Semester Credit Hours</b>		<b>14</b>
<b>Sophomore Year</b>		
<b>Semester 1</b>		
BIOL 1307 & BIOL 1107	General Biology II and General Biology Laboratory II	4
CHEM 3323 & CHEM 3123	Organic Chemistry I and Organic Chemistry Lab I	4
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4
POLS 2301	Government and Politics of US	3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Semester 2</b>		
CHEM 3181	Chemical Literature	1
CHEM 3325 & CHEM 3125	Organic Chemistry II and Organic Chemistry Lab II	4
HIST 1301	American History to 1877	3
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
POLS 2302	Government and Politics of TX	3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Junior Year</b>		
<b>Semester 1</b>		
CHEM 2401	Inorg Quantitative Analysis	4
CHEM 3331	Physical Chemistry I	3
CHEM 4341	Biochemistry I	3
HIST 1302	American History since 1877	3
Lang/Phil/Culture		3
<b>Semester Credit Hours</b>		<b>16</b>

**Semester 2**

BIOL 2421	Elementary Microbiology	4
CHEM 3332	Physical Chemistry II	3
CHEM 4342	Biochemistry II	3
STAT 4301	Biostatistics	3
<b>Semester Credit Hours</b>		<b>13</b>

**Senior Year****Semester 1**

BIOL 3402	Genetics	4
CHEM 4111	Adv Inorganic Chemistry Lab	1
CHEM 4131	Physical Chem Measurements I	1
CHEM 4311	Advance Inorganic Chemistry	3
Creative arts		3
Social/Behavioral		3
<b>Semester Credit Hours</b>		<b>15</b>

**Semester 2**

BIOL 4426	Cellular Physiology	4
CHEM 4132	Physical Chem Measurements II	1
CHEM 4181	Chemical Seminar	1
CHEM 4401	Mod Meth of Instrumental Anal	4
BIOL, adv.		4
Elective, adv. <sup>1</sup>		1
<b>Semester Credit Hours</b>		<b>15</b>

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**Total Credit Hours Required: 120**

<sup>1</sup> Advanced electives: Students must select at least one hour of advanced Chemistry electives. Please note: CHEM 3385 and CHEM 4385 are variable-hour, WI courses that are both suitable for electives.