

CHEMISTRY (AMERICAN CHEMICAL SOCIETY (ACS) APPROVED CONCENTRATION), BACHELOR OF SCIENCE

Summary

Code	Title	Hours
Core Curriculum Requirements (https://catalog.tsu.edu/undergraduate/general-education-core-curriculum/)		42
Major Requirements (30 hours)		
CHEM 111	Chemistry I Lab	1
CHEM 112	Chemistry II Lab	1
CHEM 231	Organic Chem I	3
CHEM 211	Organic Chem I Lab	1
CHEM 232	Organic Chem II	3
CHEM 212	Organic Chem II Lab	1
CHEM 332	Quan Analysis Lec	3
CHEM 322	Quan Analysis Lab	2
CHEM 431	Physical Chem I	3
CHEM 411	Physical Chem I Lab	1
CHEM 445	Biochemistry	3
CHEM 445L	Biochem Lab	1
CHEM 450	Inorganic Chemistry I	3
CHEM 453	Instrumental Analysis Methods	3
CHEM 453L	Instrumental Analysis Lab	0
CHEM 499	Seminar	1
Other Requirements (50 hours)		
BIOL 111	Biological Science Lab I	1
BIOL 112	Biological Science Lab II	1
BIOL 1306	Biological Science I	3
BIOL 1307	Biological Science II	3
CHEM 432	Physical Chem II	3
CHEM 412	Physical Chem II Lab	1
CHEM 451	Inorganic Chemistry II	3
CHEM 451L	Inorganic Chem Lab	0
CHEM 454	Research	3
CHEM 4XX		3
CS 117	Intro To Comp Science II	3
MATH 2413	Calculus & Analytic Geomtry I	4
MATH 2414	Calculus&Analytic Geometry II	4
MATH 243	Calculus & Analytic Geo III	4
MATH 251	Differential Equations	3
PHYS 2325	University Physics I	3
PHYS 217	University Physics Laboratory I	1
PHYS 2326	University Physics II	3
PHYS 218	University Physics Laboratory II	1
Elective		2

FS 102	Freshman Seminar/ first Year Experience	1
Total Hours		122
Course	Title	Hours
First Year		
First Semester		
CHEM 1311	Chemistry I	3
CHEM 111	Chemistry I Lab	1
BIOL 1306	Biological Science I	3
BIOL 111	Biological Science Lab I	1
ENGL 1301	Freshman English I	3
MATH 2312	Precalculus Math	3
FS 102	Freshman Seminar/ first Year Experience	1
Hours		15
Second Semester		
CHEM 1312	Chemistry II	3
CHEM 112	Chemistry II Lab	1
BIOL 1307	Biological Science II	3
BIOL 112	Biological Science Lab II	1
ENGL 1302	Freshman English II	3
MATH 2413	Calculus & Analytic Geomtry I	4
Hours		15
Second Year		
Third Semester		
CHEM 231	Organic Chem I	3
CHEM 211	Organic Chem I Lab	1
ENG 2XX Any 200-level English		3
COSC 1301	Intro To Compr Science I	3
HIST 1301	Soc & Pol Hist US to 1877	3
MATH 2414	Calculus&Analytic Geometry II	4
Hours		17
Fourth Semester		
CHEM 232	Organic Chem II	3
CHEM 212	Organic Chem II Lab	1
MATH 243	Calculus & Analytic Geo III	4
CS 117	Intro To Comp Science II	3
HIST 1302	Soc & Pol Hist US Since 1877	3
Elective		2
Hours		16
Third Year		
Fifth Semester		
CHEM 332	Quan Analysis Lec	3
CHEM 322	Quan Analysis Lab	2
MATH 251	Differential Equations	3
POLS 2305	American Government	3
PHYS 2325	University Physics I	3
PHYS 217	University Physics Laboratory I	1
Hours		15
Sixth Semester		
CHEM 445	Biochemistry	3
CHEM 445L	Biochem Lab	1
POLS 2306	Texas Government	3

PHYS 2326	University Physics II	3
PHYS 218	University Physics Laboratory II	1
PSYC 2301 or SOCI 1301	General Psychology or Introduction To Sociology	3
Creative Arts Course ¹		3
Hours		17

Fourth Year**Seventh Semester**

CHEM 431	Physical Chem I	3
CHEM 411	Physical Chem I Lab	1
CHEM 450	Inorganic Chemistry I	3
CHEM 454	Research	3
CHEM 499	Seminar	1
COMM 1321 or COMM 1315	Business & Professional Comm or Public Address	3
Hours		14

Eighth Semester

CHEM 432	Physical Chem II	3
CHEM 412	Physical Chem II Lab	1
CHEM 451	Inorganic Chemistry II	3
CHEM 451L	Inorganic Chem Lab	0
CHEM 453	Instrumental Analysis Methods	3
CHEM 453L	Instrumental Analysis Lab	0
CHEM 4XX		3
Hours		13
Total Hours		122

1

MUSI 1306 Music Appreciation, MUSI 1315 Fine Arts In Daily Living,
THEA 1310 Introduction to Theatre, ARTS 1315 Intro African Art