Navajo Technical University

Name: _____ ID#:_____

Bachelor of Science in Chemistry

A Bachelor of Science degree in Chemistry requires **121** credit hours and the Chemistry is designed for a four-year program of study. The minimum credit load for a full-time student is 12 credit hours per semester. A student needs to complete general courses and general education electives within the first two years of study with a grade point average of 2.0 or better.

Semester ONE		**CREDITS**	**Prerequisite**	**Semester/ Transfer**	**Grade**
ENGL 1110	Composition I	3	ENGL100 or satisfactory placement scores		
MATH 1220	College Algebra	4	MATH1215 or satisfactory placement scores		
BCIS 1115	Introduction to Computers	3			
CHEM 1120C	Introduction to Chemistry	4			
SSC 100	College Success	1			
Semester TWO					
ENGL 1120	Composition II	3	ENGL 1210 OR 1110		
MATH 1230	Trigonometry	4	MATH 1220		
PHYS 1115C	Survey of Physics	4			
CHEM 1217C	Principles of Chemistry I	4	MATH 1220, CHEM 1120C		
Semester THREE					
ENGL 2310	Introduction to Creative Writing	3	ENGL098		
CHEM 1225C	General Chemistry II for STEM Majors	4	CHEM 1217C		
PHYS 1230C	Algebra Based Physics I	4	MATH 1215		
COMM 1130	Public Speaking	3			
Semester FOUR					
BIOL 2110C	Principles of Biology: Cellular & Molecular Biology	4			
CHEM 286	Inorganic Chemistry with Lab	4	CHEM 1217C		
PHYS 1230C	Algebra-Based Physics II	4	PHYS 1230C		
NAVA 2210	Navajo Culture	3			
Semester FIVE					
CHEM 2130C	Organic Chemistry I	4	CHEM 1225C		
BIOL 2130C	Introduction to Biochemistry	4	BIOL 302		
CHEM 3250C	Quantitative Analysis with Lab	4	CHEM 1225C		
CHEM 2325C	Environmental Chemistry	4	CHEM 1217C		
Semester SIX					
CHEM 2135C	Organic Chemistry II	4	CHEM 2130C		
CHEM 3500C	Food and Chemistry of Cooking with Lab	4	CHEM 1217, CHEM 1225, CHEM 286, CHEM 3620 & CHEM 2135		
CHEM 3545	Mathematical & Computational Methods in Chemistry	4	PHYS 1310, CHEM 3545, CHEM 1217, CHEM 1225C, MATH1220		
CHEM 3620C	Physical Chemistry I with Lab	4	CHEM 1217C, CHEM 1225C, CHEM 3545, PHYS 1310C, MATH 1220, CHEME 222		
Semester SEVEN					
CHEM 4750	Nanoscience and its Application in Chemistry	3			
CHEM 4225C	Industrial and Polymer Chemistry with Lab	4	CHEM 1217, CHEM 1225, CHEM 286, CHEM-3620, CHEM 2135		
CHEM 4330C	Analytical Chemistry with Lab	4	CHEM 1120, CHEM 1225, BIOL 1110. CHEM 3620, CHEM 4420C		
CHEM ELECTIVE	Chemistry Elective XXX	3			

Semester EIGHT					
CHEM 4530	Inorganic Chemistry II with Lab	4	CHEM 1217, CHEM 1225, CHEM 286, CHEM 3620, CHEM 4420, CHEM 2130,		
CHEM 4640C	Pharmaceutical Chemistry with Lab	4	CHEM 1217, CHEM 1225, CHEM 286, CHEM 3620, CHEM 2135		
CHEM ELECTIVE	Chemistry Elective XXX	3			
CHEM 4420C	Physical Chemistry II with Lab	4	CHEM 1217, CHEM 1225, CHEM 3620, PHYS 1310, CHEME 222		
CHEM 4445	Seminar in Chemistry	1			
TOTAL CREDIT HOURS REQUIRED		**121**			

Electives List

CHEM 4820A&B	Chemistry Research Projects
CHEM 4935C	Advanced Electrochemistry Studies & Energy Storage Research
CHEM 4950C	Advanced Topics in Organic Chemistry
CHEM 4500C	Forensic Chemistry
CHEM 4110C	Instrumental Analysis

	Signatures	Date
Student:		
Advisor:		
Registrar:		
Graduation Date:		

7/6/2022