

**BS CHEMISTRY: APPLIED TRACK, 2013-14 CATALOG**
**TOTAL HOURS REQUIRED: 123-125**

Area A Essential Skills	Semester	Grade	Area F Courses Related to Major	Semester	Grade	Area H Program Electives	Semester	Grade
ENGL 1101			CHEM 2115 Quantitative Analysis			Select 29 credit hours from the following:		
ENGL 1102			CHEM 2315 Quantitative Analysis Lab			MATH 1131 (one hour from Area D)		
MATH 1113			MATH 1132 Calculus with Analytical Geometry 2 (1 hour)			MATH 1132 (one hour from Area F)		
			PHYS 2211 Principles of Physics 1			Select 27 credit hours from the following:		
Area B Institutional Options			PHYS 2212 Principles of Physics 2			CHEM 3142 Biochemistry II		
COMM 1110			PHYS 2311 Principles of Physics 1 Lab			CHEM 3346 Biochemistry 2 Lab		
ITDS Seminar or Other			PHYS 2313 Principles of Physics 2 Lab			CHEM 3555 Selected Topics in Chemistry		
			STAT 1127 Introductory Statistics			CHEM 4899 Independent Study		
Area C Humanities						CHEM 5110 Advanced Organic Chemistry		
Humanities			Area G Program Requirements			CHEM 5116 Catalysis		
Fine Arts Appreciation			CHEM 3111 Organic Chemistry I			CHEM 5555 Selected Topics in Chemistry		
			CHEM 3112 Organic Chemistry II			CHEM 5565 Advanced Topics in Chemistry		
Area D Science/Math/Technology			CHEM 3141 Biochemistry I			CPSC 1301 Computer Science 1		
CHEM 1211			CHEM 3311 Organic Chemistry I Lab			CPSC 1301 L Computer Science 1 Lab		
CHEM 1211L			CHEM 3312 Organic Chemistry II Lab			OR		
CHEM 1212			CHEM 3135 Inorganic Chemistry			UTeach Columbus Teaching Option		
CHEM 1212L			CHEM 3335 Inorganic Chemistry Lab			ITDS 2125 Historical Perspectives		
MATH 1131			CHEM 3345 Biochemistry I Lab			SPED 4115 Teaching Math & Science to Exceptional Learners		
			CHEM 4115 Survey of Physical Chemistry			UTCH 1201 Step 1: Inquiry Approaches to Teaching		
Area E Social Sciences			CHEM 4175 Instrumental Analysis			UTCH 1202 Step 2: Inquiry Based Lesson Design		
HIST 2111			CHEM 4315 Survey of physical Chemistry lab			UTCH 2105 Knowing and Learning		
HIST 2112			CHEM 4375 Instrumental Analysis Lab			UTCH 2215 Research Methods		
POLS 1101			CHEM 5105 Polymer Chemistry			UTCH 3205 Classroom Interaction		
Behavioral Science			CHEM 5115 Spectroscopic Ident of Org Comp			UTCH 4205 Project-Based Instruction		
World Cultures						UTCH 4485 Student Teaching		
						UTCH 4795 Student Teaching Seminar		
Wellness Requirement						0-1 hour as approved by advisor		
PHED 1205								
PEDS								
						Courses may be selected in astronomy, biology, computer science, geology, mathematics, or engineering as approved by advisor and department chair.		