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CHEMISTRY, BACHELOR OF SCIENCE WITH A CONCENTRATION IN CHEMISTRY (B.S.)

Program Requirements

CIP Code: 40.0501

Summary Checklist for General Education

Code litle	Hours
Element 1	
A: Written Communication (http://catalogs.eku.edu/undergradua general-academic-information/general-education-requirements/ element-1/)	ate/ 3
B: Written Communication (http://catalogs.eku.edu/undergradua general-academic-information/general-education-requirements/ element-1/)	ate/ 3
C: Oral Communication (http://catalogs.eku.edu/undergraduate/ general-academic-information/general-education-requirements/ element-1/)	′ 3
Element 2	
Quantitative Reasoning (http://catalogs.eku.edu/undergraduate/ general-academic-information/general-education-requirements/ element-2/)	/ 3
Element 3	
A: Arts (http://catalogs.eku.edu/undergraduate/general-academ information/general-education-requirements/element-3/)	ic- 3
B: Humanities (http://catalogs.eku.edu/undergraduate/general- academic-information/general-education-requirements/element-	-3/)
Element 4	
Natural Sciences (http://catalogs.eku.edu/undergraduate/generacademic-information/general-education-requirements/element-	
Element 5	
A: Historical Science (http://catalogs.eku.edu/undergraduate/ general-academic-information/general-education-requirements/ element-5/)	3
B: Social Behavioral Science (http://catalogs.eku.edu/ undergraduate/general-academic-information/general-education requirements/element-5/)	3
Element 6	
Diversity of Perspectives Experiences (http://catalogs.eku.edu/ undergraduate/general-academic-information/general-education requirements/element-6/)	6
Total Hours	36
Students are expected to complete Elements 1 and 2 within their hours of college credit.	first 60
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Code	Title	Hours
University G	raduation Requirements	
General Edu	cation	36
Student Succ	ess Seminar	

transfers with 30+ hrs.)Upper division courses (42 hrs. distributed throughout Major/ Supporting/Gen Ed/Free Electives categories)Major RequirementsCore CoursesCHE 111General Chemistry& 111Land General Chemistry Lab ICHE 112General Chemistry Lab ICHE 112General Chemistry Lab ICHE 250Descriptive Inorganic ChemistryCHE 325Analytical Chemistry LabCHE 361Organic Chemistry LabCHE 361Organic Chemistry Lab ICHE 362Organic Chemistry Lab ICHE 362Organic Chemistry Lab IICHE 362Organic Chemistry Lab IICHE 430Biochemistry Of MacromoleculesStudents must select one of the following Concentrations: BiochemistryBiochemistry (ACS Certification Optional)Pre-Health (Pre-Medical, Pre-Dental, Pre-Optometry, Pre-Physician Associate)Chemistry (ACS Certification Optional)Pre-Pharmacy Chemistry TeachingFree Electives	Total Hours		120
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SCO 100C Student Success Seminar in Chemistry (waived for	SCO 100C	Student Success Seminar in Chemistry (waived fo transfers with 30+ hrs.)	r 1

Concentration

With all specified courses, this program option produces a degree certified by the American Chemical Society (ACS).

Code	Title	Hours	
Concentration Co	urses		
CHE 385W	Chemical Literature	3	
CHE 425 & 425L	Instrumental Analysis and Instrumental Analysis Lab	4	
CHE 450	Inorganic Chemistry	3	
CHE 485	Chemistry Seminar	1	
CHE 570	Biophysical Chemistry I	4	
Choose from one	hour of the following:	1	
CHE 411	Practicum		
CHE 432	Biochemistry Laboratory		
CHE 495A	Independent Chemical Research		
CHE 495B	Chemistry Laboratory Independent Research:	_	
CHE 501L	Chemtopics Lab:		
or CHE 502	Polymers & Particles		
Choose from nine hours of either 400- or 500-level CHE or FOR electives			
Supporting Course Requirements			

Total Hours		30
or PHY 202	University Physics II	
PHY 132	College Physics II	5
or PHY 201	University Physics I	
PHY 131	College Physics I (Element 4) ^G	
MAT 234	Calculus I (Element 2) ^{G,1}	
BIO 111	Cell and Molecular Biology (Element 4) ^G	

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Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.

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Preparatory courses in mathematics may be required before admission to MAT 122 Precalculus Mathematics or MAT 234 Calculus I.