Biochemistry- Bachelor of Arts

For information, contact the Department of Chemistry and Biochemistry, 160 Hughes Laboratories, 513-529-2813.

This program is for students interested in a career in the life or health sciences or biochemistry. Students who anticipate graduate study in biochemistry should elect the B.S. Biochemistry program. Chemistry and required related courses cannot be taken on a credit/no-credit basis.

Program Requirements

(38-39 semester hours, plus 23-27 related hours)

Code	Title	Credit Hours
Core Courses		
Select one of the following:		3-4
CHM 141	College Chemistry	
CHM 141H	College Chemistry	
CHM 141R	College Chemistry	
Select one of the following:		3
CHM 142	College Chemistry	
CHM 142M	College Chemistry for Majors	
CHM 142H	College Chemistry	
Select one of the following:		2
CHM 144M	College Chemistry Laboratory for Majors	
CHM 144	College Chemistry Laboratory (with approval)	
Select one of the following:		2
CHM 145M	College Chemistry Laboratory	
CHM 145	College Chemistry Laboratory (with approval)	
Select the following:		
CHM 251 & CHM 252	Organic Chemistry for Chemistry Majors and Organic Chemistry for Chemistry Majors	6
or CHM 241 & CHM 242	Organic Chemistry and Organic Chemistry	
CHM 254 & CHM 255	Organic Chemistry Laboratory for Chemistry Majors and Organic Chemistry Laboratory for Chemistry Majors	4
CHM 375	Analytical Chemistry for Majors	3
CHM 432	Fundamentals of Biochemistry	4
CHM 438	Biochemistry Laboratory	2
CHM 471	Biophysical Chemistry I	3
or CHM 451	Physical Chemistry for Chemistry Majors	
CHM 472	Biophysical Chemistry II	3
or CHM 452	Physical Chemistry for Chemistry Majors	
CHM 491	Chemistry in Societal Issues	3
or CHM 492	Independent Research Capstone in Chemistry	
Related Hours		
MTH 151	Calculus I	4
MTH 251	Calculus II	4-5
or MTH 249	Calculus II	
PHY 181 & PHY 183	General Physics I and General Physics Laboratory I	4-5
or PHY 161	Physics for the Life Sciences with Laboratory I	
PHY 182 & PHY 184	General Physics II and General Physics Laboratory II	4-5
or PHY 162	Physics for the Life Sciences with Laboratory II	
Additional Course		
Select one of the following:		3-4
BIO 203	Introduction to Cell Biology	
BIO 305	Human Physiology	
BIO 342	Genetics	
STA 301	Applied Statistics	
or STA 333	Nonparametric Statistics	
or STA 363	Introduction to Statistical Modeling	
Three credit hours at a 200 level or above in the following departments: BIO, CHM, CPB, CSE, GLG, ISA, MBI, MME, PHY and STA.		3
Choices can also be made from:		
MTH 222	Introduction to Linear Algebra	
MTH 231	Elements of Discrete Mathematics	
MTH 245	Differential Equations for Engineers	
MTH 252	Calculus III	
MTH 347	Differential Equations	
Total Credit Hours		**60-65**

[1] CHM 471 & CHM 472 are preferred

Students seeking the Bachelor of Arts in Biochemistry meet the College of Arts and Science writing in the major requirement by completing the following course: CHM 375.