

Catalog Year: 2017-2018, Total Credits: 60

0 - 31 credits – Montgomery College

(Courses may be taken in any order, pending prerequisites)

Fall Semester	Cr
ENGL101 or ENGL101A (ENGL Foundation)	3
CHEM131 Principles of Chemistry I	4
MATH181 Calculus I	4
BIOL202 Interdisciplinary Bioinformatics	3
Total Credits	14

Spring Semester	Cr
BIOL150 Principles of Biology I	4
CHEM132 Principles of Chemistry II (GEEL)	4
CMSC140 Intro to Programming	3
COMM108 (HUMD)	3
Arts Distribution	3
Total Credits	17

32 - 60 credits – Montgomery College

Fall Semester	Cr
BIOL151 Principles of Biology II	4
CHEM203 Organic Chemistry	5
MATH217 Biostatistics	3
ENGL102 Critical Reading, Writing and Research	3
Total Credits	15

Spring Semester	Cr
BIOL222 Principles of Genetics	4
CMSC203 Computer Science I or CMSC204	4
Behavioral and Social Sciences Distribution **	3
Behavioral and Social Sciences Distribution ** (Except HLTH course)	3
Total Credits	14

Apply to graduate from Montgomery College with an A.S. in Bioinformatics

** BSSD courses must come from different disciplines

Year Three – Bowie State University

Fall Semester	Cr
PHYS271 Physics I	5
CHEM 202 Organic Chemistry II	5
BIOL 204 Cell Biology	4
COSC 214 Data Structures and Algorithms	4
Total Credits	15

Spring Semester	Cr
MATH 226 CALCULUS II	4
CHEM 309 Biochemistry I	3
BIOL 303 Molecular Biology	4
COSC474 Data Structures and Algorithms	3
BIOL Advanced Biology Elective	3
Total Credits	17

Year Four – Bowie State University

Fall Semester	Cr
BIOL309 Microbiology I	4
Bioinformatics II	4
CHEM Elective	3
BIOL/ COSC/ MATH ELECTIVE (400)	4
Total Credits	15

Spring Semester	Cr
HIST 114 OR HIST 115 African American History	3
BIOL Investigations in Bioinformatics	3
BIOL/ COSC/ MATH Elective (400 Level)	4
HEED102 Life and Health	3
Total Credits	14

MC Contact:

Dr. James Sniezek, Instructional Dean for Chemical and Biological Sciences,
james.sniezek@montgomerycollege.edu

Bowie Contact:

Dr. Alan Anderson, Department Chair and Associate Professor of Chemistry, aanderson@bowiestate.edu

Dr. Lucia Santacruz, Associate Professor, Natural Sciences, lsantacruzkozarinas@bowiestate.edu

MC [A.S. in Bioinformatics](#) to Bowie State University [B.S. in Bioinformatics](#)

Catalog Year: 2017-2018, Total Credits: 60

Name:	Date:	ID#	
Foundation Courses	COURSE	HRS	GRADE
English Foundation, ENGL102 Critical Reading, Writing and Research	ENGL102	3	
Math Foundation, MATH181 Calculus I	MATH181	4	
Distribution Courses	COURSE	HRS	GRADE
Arts Distribution		3	
Humanities Distribution, COMM108 Foundations of Human Communication	COMM108	3	
Behavioral and Social Sciences Distribution **		3	
Behavioral and Social Sciences Distribution ** (Except HLTH course)		3	
Natural Sciences Lab Distribution, BIOL150 Principles of Biology I	BIOL150	4	
Natural Sciences Lab Distribution, CHEM131 Principles of Chemistry I	CHEM131	4	
General Education Elective	COURSE	HRS	GRADE
CHEM132 Principles of Biology II (GEEL)	CHEM132	4	
Program Requirements	COURSE	HRS	GRADE
ENGL101 or ENGL101A (if needed for ENGL102, CMSC204 if not)		3-4	
Principles of Biology II	BIOL151	4	
Interdisciplinary Bioinformatics – An Introduction	BIOL202	3	
Principles of Genetics	BIOL222	4	
Organic Chemistry I	CHEM203	5	
Intro to Programming	CMSC140	3	
CMSC203 Computer Science I or CMSC204 Computer Science II	CMSC	4	
Biostatistics	MATH217	3	

** BSSD courses must come from different disciplines

Apply to graduate from Montgomery College with an [A.S. in Bioinformatics](#)

www.bowiestate.edu/academics-research/colleges/college-arts-sciences/departments/natural-sciences/undergraduate-programs/bioinformatics-major