

BROADFIELD SCIENCE BACHELOR OF SCIENCE DEGREE

Code	Title	Credits
General Education Requirements (https://catalog.msubillings.edu/undergraduate/general-education-requirements)		31
Note: 10 credits will be filled from below – 7 Natural Science and 3 Mathematics – leaving 21 needed here.		
Biology		
BIOB 160	Principles of Living Systems *	3
BIOB 161	Principles Living Systems Lab *	1
BIOB 170	Principles of Bio Diversity	3
BIOB 171	Principles Bio Diversity Lab	1
BIOB 260	Cellular & Molecular Biology	3
BIOB 261	Cellular & Molecular Biol Lab	1
BIOB 375	General Genetics	3
BIOB 376	General Genetics Lab	1
BIOE 370	General Ecology	3
BIOE 371	General Ecology Lab	1
Subtotal		20
Chemistry		
CHMY 141	College Chemistry I *	3
CHMY 142	College Chemistry I Lab *	1
CHMY 143	College Chemistry II	3
CHMY 144	College Chemistry II Lab	1
CHMY 321	Organic Chemistry I	3
CHMY 322	Organic Chemistry Lab I	1
CHMY 323	Organic Chemistry II	3
CHMY 324	Organic Chemistry Lab II	1
BCH 380	Biochemistry	3
BCH 381	Biochemistry Lab	1
Subtotal		20
Earth Science		
GEO 101	Intro to Physical Geology *	3
GEO 102	Intro to Physical Geology Lab *	1
GEO 205	Mineralogy	4
GEO 211	Earth History & Evolution	3
GEO 212	Earth History & Evolution Lab	1
GEO 309	Sedimentation and Stratigraphy	3
Select one course from the following:		3-4
ERTH 303	Weather and Climate	
ERTH 401	Geologic Field Methods	
ERTH 491	Special Topics	
Subtotal		18-19
Physics		
ASTR 110	Introduction to Astronomy *	3
ASTR 111	Introduction to Astronomy Lab	1
PHSX 220	Physics I	3
PHSX 221	Physics I Lab	1

PHSX 232	Physics II & Thermo	3
PHSX 233	Physics II & Thermo Lab	1
PHSX 343	Modern Physics	3
PHSX 391	Special Topics	3
PHSX 491	Special Topics	3
Subtotal		21
Electives in Biological or Physical Sciences. At least 3 credits must be upper division		12
Mathematics		
M 171	Calculus I *	4
M 172	Calculus II	4
Subtotal		8
Total Minimum Credits		120

* May satisfy General Education requirements.

Certain courses in this program have prerequisites; students should check course descriptions for required prerequisites.

Suggested Plan of Study

Code	Title	Credits
First Year		
Fall		
BIOB 160 & BIOB 161	Principles of Living Systems and Principles Living Systems Lab	4
CHMY 141 & CHMY 142	College Chemistry I and College Chemistry I Lab	4
M 171	Calculus I	4
General Education		v
Total		Varies
Spring		
BIOB 170 & BIOB 171	Principles of Bio Diversity and Principles Bio Diversity Lab	4
CHMY 143 & CHMY 144	College Chemistry II and College Chemistry II Lab	4
M 172	Calculus II	4
General Education		v
Total		Varies
Second Year		
Fall		
BIOB 260 & BIOB 261	Cellular & Molecular Biology and Cellular & Molecular Biol Lab	4
CHMY 321 & CHMY 322	Organic Chemistry I and Organic Chemistry Lab I	4
GEO 101 & GEO 102	Intro to Physical Geology and Intro to Physical Geology Lab	4
General Education		v
Total		Varies
Spring		
BIOB 375 & BIOB 376	General Genetics and General Genetics Lab	4
CHMY 323 & CHMY 324	Organic Chemistry II and Organic Chemistry Lab II	4
GEO 211 & GEO 212	Earth History & Evolution and Earth History & Evolution Lab	4

General Education		v
Total		Varies
Third Year		
Fall		
BIOE 370 & BIOE 371	General Ecology and General Ecology Lab	4
GEO 205	Mineralogy	4
PHSX 220 & PHSX 221	Physics I and Physics I Lab	4
PHSX 343	Modern Physics	3
Elective		3
Total		18
Spring		
PHSX 232 & PHSX 233	Physics II & Thermo and Physics II & Thermo Lab	4
General Education		v
Elective		3
Total		Varies
Fourth Year		
Fall		
BCH 380 & BCH 381	Biochemistry and Biochemistry Lab	4
GEO 309	Sedimentation and Stratigraphy	3
PHSX 391	Special Topics	3
General Education		v
Elective		3
Total		Varies
Spring		
ASTR 110 & ASTR 111	Introduction to Astronomy and Introduction to Astronomy Lab	4
Earth Science Elective		3
PHSX 491	Special Topics	3
Elective		3
Total		13