

Natural Science Program

The Program in Natural Science offers an interdisciplinary major in Natural Science. For this major, students must have the approval of both the Academic Dean and the Chair of the department in which they would have the heaviest concentration of science courses. Natural Science majors who plan to teach at the primary or secondary level are required to also consult with the Chair of the Education Department.

Requirements for Natural Science Major

Degree of Bachelor of Science

Choose a Subject I List of courses from: Biology, Chemistry, Computer Science, Mathematics, or Physics ¹	24-26
Choose a Subject II List of courses from: Biology, Chemistry, Computer Science, Mathematics, Psychology, or Physics ¹	14-16
Choose a Subject III List of courses from: Biology, Chemistry, Computer Science, Mathematics, Psychology, or Physics ¹	8-9
Choose a Subject IV List of courses from: Biology, Chemistry, Computer Science, Mathematics, Psychology, or Physics	6-9
Total Credits	52-60

¹ A different subject must be chosen for each of the four Subject List. Additional completion of three credits of Independent Study at the senior level in Subject I to enhance development of the student's science program is encouraged.

Subject I Lists to Choose From

Biology

BI-183	General Biology I	3
BI-185	General Biology I Lab	1
BI-184	General Biology II	3
BI-186	General Biology II Lab	1
BI-215	Principles of Anatomy and Physiology	4
BI-215L	Principles of Anatomy and Physiology Lab	0
BI-240	Cell and Molecular Biology	4
BI-240L	Cell & Molecular Bio Lab	0
BI-310	Ecology	4
BI-310L	Ecology Lab	0
BI-350	Genetics	4
BI-350L	Genetics Lab	0
Total Credits		24

Chemistry

CH-131	General Chem and Qualitative Analysis 1	3
CH-131L	Gen Chem and Qualitative Analysis 1 Lab	1
CH-132	General Chem and Qualitative Analysis 2	3
CH-132L	Gen Chem and Qualitative Analysis 2 Lab	1
CH-251	Organic Chemistry I	3
CH-251L	Organic Chemistry I Lab	1
CH-252	Organic Chemistry II	3
CH-252L	Organic Chemistry II Lab	1
CH-329	Analytical Chemistry	3
CH-329L	Analytical Chemistry Lab	1

Choose one of the following 4

CH-442 Biochemistry I
& 442L and Biochemistry 1 Lab

BC-492 Biological Chemistry
& CH-442L and Biochemistry 1 Lab

Total Credits 24

Computer Science

CS/IS-180 Introduction to Programming 3

CS-231 Software Engineering 3

CS/IS- 5 CS or IS Electives (CS-200 or higher or IS-300 or higher) 15

CS-332 Advanced Computing 3

Total Credits 24

Mathematics

MA-143 Differential Calculus 4

MA-144 Integral Calculus 4

MA-247 Introductory Linear Algebra 3

MA-273 Multivariable Calculus I 4

MA- 2 MA Electives at 300-level or above 6

Total Credits 21

Physics

PC-185 General Physics I 3

PC-187 General Physics Laboratory I 1

PC-186 General Physics II 3

PC-188 General Physics Laboratory II 1

PC- Physics Electives, 300-level or above 16

Total Credits 24

Subject II Lists to Choose From

Biology

BI-183 General Biology I 3

BI-185 General Biology I Lab 1

BI-184 General Biology II 3

BI-186 General Biology II Lab 1

BI-240 Cell and Molecular Biology 4

BI-240L Cell & Molecular Bio Lab 0

BI-350 Genetics 4

BI-350L Genetics Lab 0

Total Credits 16

Chemistry

CH-131 General Chem and Qualitative Analysis 1 3

CH-131L Gen Chem and Qualitative Analysis 1 Lab 1

CH-132 General Chem and Qualitative Analysis 2 3

CH-132L Gen Chem and Qualitative Analysis 2 Lab 1

CH- 2 CH Electives, CH-130 or higher 6

Total Credits 14

Computer Science

CS/IS-180	Introduction to Programming	3
CS-231	Software Engineering	3
CS/IS-	2 CS or IS Electives (CS-200 or higher or IS-300 or higher)	6
CS-332	Advanced Computing	3
Total Credits		15

Physics

PC-185	General Physics I	3
PC-187	General Physics Laboratory I	1
PC-186	General Physics II	3
PC-188	General Physics Laboratory II	1
PC-	Physics Electives, 300-level or above	6
Total Credits		14

Psychology

PS-151	Introduction to Psychology	3
PS-200	Statistics & Research Methods	3
PS-205	Experimental Psychology	3
Choose one of the following courses with capstone laboratory		6
PS-310 & PS-311	Social Experimental Psychology and Capstone: Seminar Lab Social Experiment	
PS-320 & PS-321	Learning and	
PS-350 & PS-351	Cognitive Processes and	
PS-430 & PS-431	Industrial-Organizational Psy and Capstone: Lab & Sem Industr Org Psych	
PS-480 & PS-481	Special Topics in Psychology and Capstone: Seminar & Lab St	
Total Credits		15

Subject III and Subject IV Lists to Choose From**Biology**

BI-183	General Biology I	3
BI-185	General Biology I Lab	1
BI-184	General Biology II	3
BI-186	General Biology II Lab	1
Total Credits		8

Chemistry

CH-131	General Chem and Qualitative Analysis 1	3
CH-131L	Gen Chem and Qualitative Analysis 1 Lab	1
CH-	1 CH Elective, CH-130 or higher	3
Total Credits		7

Computer Science

CS/IS-180	Introduction to Programming	3
Choose 1 of the following:		3

CS-231	Software Engineering	
Total Credits		6
Physics		
PC-185	General Physics I	3
PC-187	General Physics Laboratory I	1
PC-186	General Physics II	3
PC-188	General Physics Laboratory II	1
Total Credits		8
Psychology		
PS-151	Introduction to Psychology	3
PS-200	Statistics & Research Methods	3
PS-205	Experimental Psychology	3
Total Credits		9