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