

Department of Environmental, Geographical, and Geological Sciences  
 Bloomsburg University of Pennsylvania  
**PROGRAM COURSE CHECKLIST**

**ENVIRONMENTAL GEOSCIENCE MAJOR -- Bachelor of Science Degree**

<b>Core Requirements</b> – All courses required (10 credits toward the major)		Credits	Semester Taken
EGGS 100	Introduction to Environmental Science (revised)	3	
EGGS 120	Physical Geology	4	
EGGS 150	Quantitative Methods *	3	
EGGS 242	Map Use and Analysis	3	
		<b>10</b>	

\*Quantitative Methods is a Foundational math course, so it counts toward your General Education goals, rather than the major.

<b>Cognate Science/Math Requirements</b> (8 credits toward the major)		Credits	Semester Taken
BIOL 114	Concepts in Biology 1*	4	
CHEM 115	Chemistry for the Sciences 1*	4	
PHYS 201	Introductory Physics I or PHYS 211 - General Physics 1*	4	
and 1 of the following courses: <i>(TWO courses are strongly recommended. Ex: BIOL 115 + CHEM 116 for Soil focus and CHEM 116 + PHYS 202 or PHYS 212 for Hydrology focus)</i>			
BIOL 115	Concepts in Biology 2	4	
CHEM 116	Chemistry for the Sciences 2	4	
PHYS 202	Introductory Physics 2 or PHYS 212 - General Physics 2	4	
<b>Pick 1 of 3</b> quantitative courses listed below			
MATH 123	Essentials of Calculus*	3	
MATH 125	Calculus 1* <i>(Both MATH 125 and 126 recommended for graduate school)</i>	3	
MATH 141	Introduction to Statistics* (or other approved Statistics course)	3	
		<b>8</b>	

\*BIOL 114, CHEM 115, PHYS 201 or 212 and MATH 123, 125, and 141 will count toward your General Education goals, rather than the major.

<b>Required Environmental Geoscience Courses</b> – All courses required (23 credits toward the major)		Credits	Semester Taken
EGGS 105	Environmental Issues & Choices	3	
EGGS 213	Fundamentals of Soil Science	3	
EGGS 255	Meteorology <i>or</i> EGGS 259 Oceanography	3	
EGGS 260	Earth Materials	4	
EGGS 265	Geomorphology	4	
EGGS 271	Fundamentals of Hydrology	3	
EGGS 360	Principles of GIS 1	3	
		<b>23</b>	

<b>Skills Courses</b> - Select at least 3 courses (10+ credits toward the major)		Credits	Semester Taken
EGGS 413	Advanced Soil Science	4	
EGGS 460	Aqueous Geochemistry	4	
EGGS 470	Groundwater Hydrology	4	
EGGS 471	Applied Surface Hydrology	3	
EGGS 480	Applied Geophysics	4	
MARSCI ###	any <i>approved</i> Marine Science course**	3	
		<b>10</b>	

<b>General Electives</b> - Select at least 6 credits (skills courses not used above may also be used as electives)		Credits	Semester Taken
BIOL 242	Microbiology***	4	
BIOL 351	Ecology	4	
BIOL 421	Ecosystem Management	3	
BIOL 456	Ecology of Streams and Rivers	3	
EGGS 301	Water Resources Management	3	
EGGS 302	Land Resources Management	3	
EGGS 304	Environmental Valuation	3	
EGGS 313	Soil Morphology Practicum (new) - <i>May be taken three times for credit toward the major</i>	1	
EGGS 320	Remote Sensing	3	
EGGS 330	Special Topics in Field Geology	3	
EGGS 351	Sustainable Food Systems	3	
EGGS 358	Environmental Conservation	3	
EGGS 361	GIS II	3	
EGGS 380	Dams, Reservoirs, and Rivers	3	
EGGS 386	National Parks, Wilderness, and Public Lands Management	3	
EGGS 390	any <i>approved</i> Special Topics course**	3	
EGGS 493	Research in Env'l, Geographical, and Geological Sciences	3	
EGGS 496	Internship in Env'l, Geographical, and Geological Sciences	3+	
LAW 350	Environmental Law	3	
MARSCI ###	any <i>approved</i> Marine Science course**	3	
		<b>6</b>	

<b>Capstone Experience</b> - Select 1 (3+ credits toward the major)		Credits	Semester Taken
EGGS 450	Field Experience in EGGS or other <i>approved</i> field experience**	3+	

\* Indicates course counts for General Education Credit

\*\*The subject matter of these courses varies, so the specific course must be approved by the department chair prior to registration to ensure the course will be counted toward the major. The same course may NOT be counted in both skills and elective categories. \*\*\* This course is required for the 3+2 Biology M.S. program.

**TOTAL CREDITS: 60**

**General Education Requirements:**  
**Environmental Geoscience**

<p><b>Goal 1: Communication – 7 points; 3 departments</b></p> <p>ENG 101 Foundations of Writing 3  <i>COMMSTUD 103 Public Speaking*</i> 3  <i>INTSTUDY 231 Technical Writing*</i> 2</p> <p>____ 3            ____ 3</p>	<p><b>Goal 6: Social Sciences – 5 points; 2 departments</b></p> <p>EGGS 105 Environmental Issues and Choices 1</p> <p>____ 3            ____ 3            ____ 3</p>
<p><b>Goal 2: Information Literacy – 2 points; 1 department</b></p> <p>EGGS 105 Environmental Issues and Choices 1  <i>INTSTUDY 231 Technical Writing*</i> 1</p> <p>____ 3            ____ 3</p>	<p><b>Goal 7: Arts and Humanities – 5 points; 2 departments</b></p> <p>____ 3            ____ 3            ____ 3</p>
<p><b>Goal 3: Analytical and Quantitative Skills – 5 points; 2 departments</b></p> <p>BIOL 114 Concepts in Biology 1            CHEM 115 Chemistry for the Sciences 1            CHEM 116 Chemistry for the Sciences 2            MATH 123 Essentials of Calculus <b>OR</b> 3            MATH 141 Introduction to Statistics 3  <i>EGGS 150 Quantitative Methods*</i> 3</p>	<p><b>Goal 8: Second Language – 2 points; 1 department</b></p> <p>____ 3            ____ 3            ____ 3</p>
<p><b>Goal 4: Cultures and Diversity – 5 points; 2 departments</b></p> <p>____ 3            ____ 3            ____ 3</p>	<p><b>Goal 9: Healthy Living – 2 points; 1 department</b></p> <p>____ 3            ____ 3            ____ 3</p>
<p><b>Goal 5: Natural Sciences – 5 points; 2 departments</b></p> <p>BIOL 114 Concepts in Biology 1            CHEM 115 Chemistry for the Sciences 1            CHEM 116 Chemistry for the Sciences 2            EGGS 100 Introduction to Environmental Science 3            EGGS 105 Environmental Issues and Choices 1            EGGS 255 Meteorology 3            EGGS 259 Oceanography 3</p>	<p><b>Goal 10: Citizenship – 2 points; 1 department</b></p> <p>____ 3            ____ 3            ____ 3</p>
<p><b>Foundational Math</b></p> <p>____ MATH 123 Essentials of Calculus <b>OR</b>            ____ MATH 141 Introduction to Statistics</p> <p><i>*Recommended courses are italicized.</i></p>	<p><b>Notes</b></p>