

**BSENV Environmental Engineering**  
**Fall 2023**

This document is an example of a BSENV program of study. Several factors can affect the course scheduling sequence. For a copy of the official curriculum, please go to the UGA Bulletin: <http://bulletin.uga.edu/>

**Major Requirements**

Students must earn a grade of "C" (2.0) or better in the courses indicated in **bold**.

**High Demand Entrance Requirements**

To be considered as a candidate for BSENV, students must complete any required courses listed in *italics* with a grade of "C" (2.0) or better. For more information on entrance requirements, please refer to the UGA Bulletin: <http://bulletin.uga.edu/> and our website.

<b>YEAR ONE</b>					
<u>Fall Semester</u>		<u>Hours</u>	<u>Spring Semester</u>		<u>Hours</u>
<i>MATH 2250</i>	<i>Calculus I</i>	4	<i>MATH 2260</i>	<i>Calculus II</i>	4
<b>CHEM 1211&amp;L</b>	<b>Freshman Chemistry I</b>	4	<b>CHEM 1212&amp;L</b>	<b>Freshman Chemistry II</b>	4
<i>ENGR 1120</i>	<i>Engineering Graphics</i>	2	<i>PHYS 1251</i>	<i>Physics for Engineers I</i>	3
<i>ENGL 1101</i>	<i>English Composition I</i>	3	<b>ENGR 1140</b>	<b>Computational Engr. Methods</b>	2
	Humanities & The Arts Elective	3	ENGL 1102	English Composition II	3
FYOS	First-Year Odyssey Seminar	1			
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>16</b>

<b>YEAR TWO</b>					
<u>Fall Semester</u>		<u>Hours</u>	<u>Spring Semester</u>		<u>Hours</u>
<b>MATH 2500</b>	<b>Multivariable Calculus</b>	3	<b>MATH 2700</b>	<b>Differential Equations</b>	3
<i>ENGR 2120</i>	<i>Statics</i>	3	<b>ENGR 3160</b>	<b>Fluid Mechanics</b>	3
<b>PHYS 1252</b>	<b>Physics for Engineers II</b>	3	<b>ENVE 2610</b>	<b>Intro ENVE &amp; Sustainability</b>	3
<b>CHEM 2211&amp;L</b>	<b>Organic Chemistry I</b>	4	<b>ENVE 2920</b>	<b>ENVE Design Methodology</b>	3
	World Lang & Culture Elective	3	<b>BIOL 1104</b>	<b>Organismal Biology</b>	3
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>15</b>

<b>YEAR THREE</b>					
<u>Fall Semester</u>		<u>Hours</u>	<u>Spring Semester</u>		<u>Hours</u>
ENVE 3210	Energy Analysis I	3	ENVE 3220	Energy Analysis II	3
ENVE 3320&L	ENVE – Urban Systems	4	<b>ENGR 2140</b>	<b>Strength of Materials</b>	3
ENVE 3510	Modeling, Stat. Analysis, Uncertainty	3	ECOL 3500&L	Ecology	4
ENVE 4435	Natural Resources Engineering	3		World Lang & Culture Elective	3
EHSC 4350&L	Environmental Chemistry	3		Social Sciences Elective	3
<b>Total Credit Hours</b>		<b>16</b>	<b>Total Credit Hours</b>		<b>16</b>

<b>YEAR FOUR</b>					
<u>Fall Semester</u>		<u>Hours</u>	<u>Spring Semester</u>		<u>Hours</u>
ENVE 4910	Capstone Design I	2	ENVE 4911	Capstone Design II	2
<b>ENGR 2110</b>	<b>Engineering Decision Making</b>	3		ENVE Elective	3
	ENVE Elective	3		ENVE Elective	3
	ENVE Elective	3		ENVE Elective	3
	ENVE Elective	3		World Lang & Culture Elective	3
	Social Sciences Elective	3		Social Sciences Elective	3
<b>Total Credit Hours</b>		<b>17</b>	<b>Total Credit Hours</b>		<b>17</b>

## Environmental Engineering (ENVE) Electives

Choose six (6) courses:

At least one (1) course must be taken from Elective Area B. At least three (3) design courses (indicated in *italics*) must also be selected.

### **A. Energy/Water Resources**

<i>AENG 3540</i>	<i>Physical Unit Operations</i>
<i>CVLE 3420</i>	<i>Introduction to Soil Mechanics</i>
<i>CVLE 3440</i>	<i>Hydraulics of Closed Conduit Flow</i>
<i>ENGR 4490/6490</i>	<i>Renewable Energy Engineering</i>
<i>CVLE/MCHE/LAND 4660/6660</i>	<i>Sustainable Building Design</i>
<i>ENVE 4230/6230</i>	<i>Energy in Nature, Civilization and Engineering</i>
<i>ENVE 4410/6410</i>	<i>Open Channel Hydraulics</i>
<i>ENVE 4450/6450</i>	<i>Engineering Hydrology and Hydraulics</i>
<i>ENVE 4470/6470</i>	<i>Environmental Engineering Unit Operations</i>
<i>MCHE 4400/6400</i>	<i>Air Pollution Engineering</i>

### **B. Infrastructure/Planning/Economics**

<i>ELEE 4710*</i>	<i>Fundamentals of Power Engineering</i>
<i>ELEE 4750</i>	<i>Power Systems Analysis</i>
<i>ENGR 3620</i>	<i>Introduction to E-Mobility</i>
<i>ENVE 4250/6250</i>	<i>Energy Systems and The Environment</i>
<i>ENVE 4530/6530</i>	<i>Energy &amp; Environmental Policy Analysis</i>
<i>ENVE 4550/6550</i>	<i>Environmental Life Cycle Analysis</i>
<i>ENVE 4710</i>	<i>GIS for Urban Engineering, Planning, Development</i>
<i>ENVE 4720</i>	<i>Urban Infrastructure Planning and Development</i>
<i>ENVE 4730</i>	<i>Environmental Justice: Evidence and Impact</i>

\*Students interested in taking ELEE 4710 must complete ENGR 2170 (Electrical Circuits) prior. ENGR 2170 is not part of the BSENV curriculum. ELEE 4710 is a prerequisite for ELEE 4750.