BSCE Civil Engineering
Fall 2024

This document is an example of a BSCE 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/**

General Education Coursework
All students entering an undergraduate major in the College of Engineering must either (i) complete the following courses with a grade of "C" (2.0) or better, or (ii) have received AP credits for the following courses: ENGL 1101, MATH 2250, MATH 2260, PHYS 1211-1211L or PHYS 1251

Major Specific Coursework
To be accepted into the Civil Engineering (BSCE) major, students must complete the courses indicated in **bold** with a grade of "C" (2.0) or better and a minimum GPA of 2.75 in the major specific coursework.

Resume and Career Goals
Students will submit a current resume and Career Goals Statements that 1) describes the student's career goals, 2) strengths that help the student achieve their career goals, 3) challenges that the student is/will be facing that hinder them from achieving their career goals, 4) how the student plans to overcome the challenges to achieve their career goal, and 5) how the College may assist the student to overcome the challenges, and the student's plan for participating in experiential learning outside of the classroom by time of graduation (internship, co-op, research, study away, other).

YEAR ONE

Fall Semester		Hours	Spring Semester		Hours
MATH 2250	***Calculus I***	4	***MATH 2260***	***Calculus II***	4
ENGR 1920	Intro to Engineering	1	***PHYS 1251***	***Physics for Engineers I***	3
ENGR 1120	***Engineering Graphics***	2	ENGL 1102	English Composition II	3
ENGR 1140	***Computational Engr. Methods***	2	COMM 1110[1]	Intro to Public Speaking	3
ENGL 1101	***English Composition I***	3		Life Science Elective[2]	3
	Social Sciences Elective	3			
FYOS	First-Year Odyssey Seminar	1			
Total Credit Hours		**16**	**Total Credit Hours**		**16**

YEAR TWO

Fall Semester		Hours	Spring Semester		Hours
MATH 2500	**Multivariable Calculus**	3	**MATH 2700**	**Differential Equations**	3
ENGR 2120	***Statics***	3	**ENGR 2140**	**Strength of Materials**	3
PHYS 1252	**Physics for Engineers II**	3	**ENGR 3140**	**Thermodynamics I**	3
CHEM 1211&L	**Freshman Chemistry I**	4	**ENGR 3160**	**Fluid Mechanics**	3
	Social Sciences Elective	3	**ENGR 2110**	**Engineering Decision Making**	3
			CVLE 2210	Surveying and Geomatics	2
Total Credit Hours		**16**	**Total Credit Hours**		**17**

YEAR THREE

Fall Semester		Hours	Spring Semester		Hours
ENGR 2130	**Dynamics**	3	CVLE 3420	Introduction to Soil Mechanics	3
ENVE 4435	Natural Resources Engineering	3	CVLE 2710	Numerical Methods for Engineers	2
CVLE 3610	Structural Design	3	CVLE 3310	Civil Engineering Materials	3
ENVE 3510	Modeling, Stat.Analysis, Uncertainty	3	CVLE 3730	Civil Engineering Project Mgmt	2
CVLE 3460	Civil Engineering Lab - Hydraulics	1	CVLE 3450L	Civil Engineering Lab – Soils	1
	World Lang & Culture Elective	3	CVLE 4210	Transportation Engineering	3
			ENVE 4450	Engineering Hydrology/Hydraulics	3
Total Credit Hours		**16**	**Total Credit Hours**		**17**

YEAR FOUR					
Fall Semester		**Hours**	**Spring Semester**		**Hours**
CVLE 4910	Capstone Design Project I	2	CVLE 4911	Capstone Design Project II	2
CVLE 3470L	Civil Engineering Lab - Structural	1		Civil Engineering Elective	3
	Civil Engineering Elective	3		Civil Engineering Elective	3
	Civil Engineering Elective	3		Civil Engineering Elective	3
	Civil Engineering Elective	3		World Lang & Culture Elective	3
	World Lang & Culture Elective	3		Social Sciences Elective	3
Total Credit Hours		**15**	**Total Credit Hours**		**17**

[1]COMM 1110 is required for BSCE; it will also satisfy the Area Humanities & The Arts requirement.
[2]Life Science Elective: Select from ECOL 1000 or MARS 1100 or BIOL 1103 or BIOL 1104.

Civil Engineering Electives
Choose six (6) courses from at least two (2) of the following tracks (18 credit hours). At least three (3) design courses (indicated in *italics*) must be selected.

Geotechnical	
CVLE 4420	Advanced Soil Mechanics
CVLE 4430	Groundwater Engineering
CVLE 4440	*Design with Geosynthetics*
CVLE 4450	*Geotechnical Structures – Foundations and Retaining Walls*
CVLE 4470/6470	*Pavement Design*
GEOL 4360/6360	Intro to Rock Mechanics

Hydraulics	
CVLE 3440	*Hydraulics of Closed Conduit Flow*
ENVE 4410/6430	*Open Channel Hydraulics*
WASR 4500/6500	Quantitative Methods in Hydrology

Infrastructure Engineering	
CVLE 4220	*Highway Design and Traffic Safety*
CVLE 4730	Project Estimating and Planning
CVLE 4750	Building Information Modeling (BIM)
CVLE 4760	*Commercial Building Systems*
CVLE/MCHE/LAND 4660/6660	Sustainable Building Design
CVLE 4780/6780	*Advanced Computer-Aided Design Civil 3D*
ENGR 3620	Introduction to E-Mobility
ENVE 4470/6470	Environmental Engineering Unit Operations
ENVE 4550/6550	Environmental Life Cycle Analysis
ENVE 4710	GIS for Urban Engineering, Planning, Development
ENVE 4720	Urban Infrastructure Planning and Development
MCHE 4400/6400	*Air Pollution Engineering*

Structural Engineering	
CVLE 4330/6330	Advanced Structural Analysis
CVLE 4340/6340	*Design of Bridges*
CVLE 4530	*Design of Reinforced Concrete Structures*
CVLE 4610	*Design of Light Steel Structures*
CVLE/MCHE 4720	*Engineering Design of Residential Structures*
CVLE 4810	*Design of Wood Structures*
ENGR 4350/6350	Intro to Finite Element Analysis