

# Civil Engineering B.S.C.E.

## Civil Engineering B.S.C.E. Eight-Semester Degree Program

The Civil Engineering B.S.C.E. program is eligible for freshman students who want to participate in an Eight-Semester Degree Program. See the Eight-Semester Degree Policy (<http://catalog.uark.edu/undergraduatecatalog/academicregulations/eightsemesterdegreecompletionpolicy/>) for details of the program.

The following section contains the list of courses required for the Bachelor of Science in Civil Engineering degree and a suggested sequence. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites.

See the list of state minimum core (<http://catalog.uark.edu/undergraduatecatalog/gened/stateminimum/>) courses available for engineering students.

First Year	Units	
	Fall	Spring
MATH 2554 Calculus I (ACTS Equivalency = MATH 2405) (Satisfies General Education Outcome 2.1) <sup>1</sup>	4	
GNEG 1111 Introduction to Engineering I Satisfies General Education Outcome 3.4:	1	
GEOS 1113 Physical Geology (ACTS Equivalency = GEOL 1114 Lecture) & GEOS 1111L Physical Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)	4	
CHEM 1103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture)	3	
ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1)	3	
MATH 2564 Calculus II (ACTS Equivalency = MATH 2505)		4
GNEG 1121 Introduction to Engineering II		1
ENGL 1033 Technical Composition II (ACTS Equivalency = ENGL 1023) (Satisfies General Education Outcome 1.2)		3
Select one of the following to satisfy General Education Outcome 4.2:		3
PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003)		
HIST 2003 History of the American People to 1877 (ACTS Equivalency = HIST 2113)		
HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)		
Satisfies General Education Outcome 3.4:		
PHYS 2054 University Physics I (ACTS Equivalency = PHYS 2034)		4
Year Total:	15	15

Second Year	Units	
	Fall	Spring
MATH 2574 Calculus III (ACTS Equivalency = MATH 2603)	4	
CVEG 2013 Civil Engineering Mechanics I	3	
CVEG 2002 Introduction to Civil Engineering Plans and CADD	2	
CVEG 2053 Surveying Systems & CVEG 2051L Surveying Systems Laboratory	4	
Fine Arts Elective (Select a course to satisfy General Education Outcome 3.1) <sup>2</sup>	3	
MATH 2584 Elementary Differential Equations		4
CVEG 2023 Civil Engineering Mechanics II		3
CVEG 2113 Structural Materials		3
INEG 3313 Engineering Probability and Statistics Science Elective <sup>7</sup>		3
Year Total:	16	17

Third Year	Units	
	Fall	Spring
INEG 2413 Engineering Economic Analysis	3	
CVEG 3303 Structural Analysis	3	
CVEG 3213 Hydraulics	3	
STEM Elective	3	
CVEG 3413 Transportation Systems Engineering	3	
CVEG 2851 Engineering Professional Practice Issues	1	
CVEG 4303 Reinforced Concrete Design I		3
CVEG 3243 Environmental Engineering		3
CVEG 3132 Soil Mechanics & CVEG 3131L Soil Mechanics Laboratory		3
CVEG 3223 Hydrology		3
Social Sciences Elective (select one course to satisfy General Education Outcomes 3.3 and 4.1) <sup>3</sup>		3
Year Total:	16	15

Fourth Year	Units	
	Fall	Spring
Civil Engineering Elective <sup>4</sup>	3	
Civil Engineering Design Elective (Satisfies General Education Outcome 6.1)	2	
CVEG 4143 Foundation Engineering	3	
CVEG 4423 Transportation Infrastructure	3	
CVEG 4890 Fundamentals of Engineering Seminar	0	
Humanities Elective (select one course to satisfy General Education Outcomes 3.2 and 5.1) <sup>5</sup>	3	
Social Sciences Elective (select one course to satisfy General Education Outcome 3.3) <sup>6</sup>	3	
CVEG 4513 Construction Management		3
Civil Engineering Design Elective (Satisfies General Education Outcome 6.1)		2
CVEG 4243 Environmental Engineering Design		3
Civil Engineering Electives <sup>4</sup>		6

Social Sciences Elective (select one course to satisfy General Education Outcome 3.3) <sup>6</sup>		3
Year Total:	17	17

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Total Units in Sequence: 128

- <sup>1</sup> Students have demonstrated successful completion of the learning indicators identified for learning outcome 2.1, by meeting the prerequisites for MATH 2554.
- <sup>2</sup> The Fine Arts Elective courses which satisfy General Education Outcome 3.1 include: ARCH 1003, ARHS 1003, COMM 1003, DANC 1003, LARC 1003, MLIT 1003, MLIT 1003H, MLIT 1013, MLIT 1013H, MLIT 1333, THTR 1003, THTR 1013, or THTR 1013H.
- <sup>3</sup> The Social Sciences Elective courses which satisfy General Education Outcomes 3.3 and 4.1 include: ANTH 1023, COMM 1023, HDFS 1403, HDFS 2413, HIST 1113, HIST 1123, HIST 2093, HUMN 1114H, HUMN 2114H, INST 2013, INST 2813, INST 2813H, PLSC 2013, PLSC 2813, PLSC 2813H, RESM 2853, SOCI 2013, SOCI 2013H, or SOCI 2033.
- <sup>4</sup> See the elective list among the program requirements.
- <sup>5</sup> The Humanities Elective courses which satisfy General Education Outcomes 3.2 and 5.1 include: CLST 1003, CLST 1003H, CLST 1013, HUMN 1124H, PHIL 2003, PHIL 2003C, PHIL 2003H, PHIL 2103, or PHIL 2103C.
- <sup>6</sup> The Social Sciences Elective courses which satisfy General Education Outcome 3.3 include: AGECE 1103, AGECE 2103, ANTH 1023, COMM 1023, ECON 2013, ECON 2023, ECON 2143, EDST 2003, HDFS 1403, HDFS 2413, HDFS 2603, HIST 1113, HIST 1113H, HIST 1123, HIST 1123H, HIST 2003, HIST 2013, HIST 2093, HUMN 1114H, HUMN 2114H, INST 2013, INST 2813, INST 2813H, PLSC 2003, PLSC 2013, PLSC 2203, PLSC 2813, PLSC 2813H, PSYC 2003, RESM 2853, SOCI 2013, SOCI 2013H, SOCI 2033. Note, courses cannot be counted twice in degree requirements.
- <sup>7</sup> Chose one from the list below:  
 PHYS 2074, GEOS 3514, BIOL 1543 and BIOL 1541L, BIOL 2013 and BIOL 2011L, or  
 CHEM 1123 and CHEM 1121L.