

# 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 24004 Calculus I (ACTS Equivalency = MATH 2405) (Satisfies General Education Outcome 2.1) <sup>1</sup>	4	
GNEG 11101 Introduction to Engineering I Satisfies General Education Outcome 3.4:	1	
GEOL 11103 Physical Geology (ACTS Equivalency = GEOL 1114 Lecture) & GEOL 11101 Physical Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)	4	
GEOL 11101 Physical Geology Laboratory (ACTS Equivalency = GEOL 1114 Lab)	1	
CHEM 14103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture)	3	
ENGL 10103 Composition I (ACTS Equivalency = ENGL 1013) (Satisfies General Education Outcome 1.1)	3	
MATH 25004 Calculus II		4
GNEG 11201 Introduction to Engineering II		1
ENGL 10303 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 20003 American National Government (ACTS Equivalency = PLSC 2003)		
HIST 20003 History of the American People to 1877 (ACTS Equivalency = HIST 2113)		
HIST 20103 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123)		
Satisfies General Education Outcome 3.4:		
PHYS 20304 University Physics I (ACTS Equivalency = PHYS 2034)		4

Year Total: 16 15

Second Year	Units	
	Fall	Spring
MATH 26004 Calculus III	4	
CVEG 20103 Civil Engineering Mechanics I	3	
CVEG 20002 Introduction to Civil Engineering Plans and CADD	2	
CVEG 20503 Surveying Systems & CVEG 20501 Surveying Systems Laboratory	4	
Fine Arts Elective (Select a course to satisfy General Education Outcome 3.1) <sup>2</sup>	3	
MATH 25804 Elementary Differential Equations		4
CVEG 20203 Civil Engineering Mechanics II		3
CVEG 21103 Structural Materials		3
INEG 33103 Engineering Probability and Statistics Science Elective <sup>7</sup>		3
		4
Year Total:	16	17

Third Year	Units	
	Fall	Spring
INEG 24103 Engineering Economic Analysis	3	
CVEG 33003 Structural Analysis	3	
CVEG 32103 Hydraulics	3	
STEM Elective	3	
CVEG 34103 Transportation Systems Engineering	3	
CVEG 28501 Engineering Professional Practice Issues	1	
CVEG 43003 Reinforced Concrete Design I		3
CVEG 32403 Environmental Engineering		3
CVEG 31302 Soil Mechanics & CVEG 31301 Soil Mechanics Laboratory		3
CVEG 32203 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 41403 Foundation Engineering	3	
CVEG 44203 Transportation Infrastructure	3	
CVEG 48900	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 45103 Construction Management		3
Civil Engineering Design Elective (Satisfies General Education Outcome 6.1)		2
CVEG 42403 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: 129**

<sup>1</sup> Students have demonstrated successful completion of the learning indicators identified for learning outcome 2.1, by meeting the prerequisites for MATH 24004.

<sup>2</sup> The Fine Arts Elective courses which satisfy General Education Outcome 3.1 include: ARCH 10003, ARHS 10003, COMM 10003, DANC 10003, LARC 10003, MUSC 10003, MUSC 100H3, MUSC 10103, MUSC 101H3, MUSC 13303, THTR 10003, THTR 10103, or THTR 101H3.

<sup>3</sup> The Social Sciences Elective courses which satisfy General Education Outcomes 3.3 and 4.1 include: ANTH 10203, COMM 10203, HDFS 14003, HDFS 24103, HIST 11193, HIST 11293, HIST 20903, HUMN 111H4, HUMN 211H4, INST 28103, INST 281H3, PLSC 20103, PLSC 28103, PLSC 281H3, RESM 28503, SOCI 10103, SOCI 201H3, or SOCI 20103.

<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 10003, CLST 100H3, CLST 10103, HUMN 112H4, PHIL 20003, PHIL 200H3, PHIL 21003.

<sup>6</sup> The Social Sciences Elective courses which satisfy General Education Outcome 3.3 include: AGECE 11003, AGECE 21003, ANTH 10203, COMM 10203, ECON 21003, ECON 22003, ECON 21403, EDST 20003, HDFS 14003, HDFS 24103, HDFS 26003, HIST 11193, HIST 111H3, HIST 11293, HIST 112H3, HIST 20003, HIST 20103, HIST 20903, HUMN 111H4, HUMN 211H4, INST 28103, INST 281H3, PLSC 20003, PLSC 20103, PLSC 21003, PLSC 28103, PLSC 281H3, PSYC 20003, RESM 28503, SOCI 10103, SOCI 201H3, SOCI 20103. Note, courses cannot be counted twice in degree requirements.

<sup>7</sup> Chose one from the list below:

PHYS 20404, GEOS 35104, BIOL 10103 and BIOL 10101, BIOL 20003 and BIOL 20001, or  
CHEM 14203 and CHEM 14201.