

Arkansas State University - Jonesboro
Bachelor of Science
Major: Civil Engineering
2013-2014

Students requiring developmental course work based on low entrance exam scores (ACT, SAT, ASSET, COMPASS) may not be able to complete this program of study in eight (8) semesters. Developmental courses do not count toward total degree hours. **Students having completed college level courses prior to enrollment will be assisted by their advisor in making appropriate substitutions. In most cases, general education courses may be interchanged between semesters.** A minimum of 45 hours of upper division credit (3000-4000 level) is required for this degree. Mandatory state and institutional assessment exams will be required during your degree program. **Failure to participate in required assessments may delay graduation.**

Year 1				Year 1			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
BIOL 1063	People and the Environment	3		CHEM 1011	Lab for General Chemistry I	1	X
ENG 1003	Composition I	3	X	CHEM 1013	General Chemistry I	3	X
ENGR 1402	Concepts of Engineering	2		ENG 1013	Composition II	3	X
MATH 2204	Calculus I	4	X	ENGR 1412	Software Applications for Engineers	2	
COMS 1203	Oral Communications	3	X	MATH 2214	Calculus II	4	X
				PHYS 2034	University Physics I	4	X
Total Hours		15		Total Hours		17	
Year 2				Year 2			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
CE 2223	Plane Surveying	3		CE 2202	C.E. Presentations	2	
ENGR 2403	Statics	3		CE 3213	Structural Analysis I	3	
MATH 3254	Calculus III	4	X	ENGR 2401	Applied Engineering Statistics	1	
Social Science Elective	See below for listing of courses to fulfill General Education requirements	3	X	ENGR 2411	Lab for Mechanics of Materials	1	
Humanities Elective	See below for listing of courses to fulfill General Education requirements	3	X	ENGR 2413	Mechanics of Materials	3	
				ENGR 3471	Lab for Fluid Mechanics	1	
				ENGR 3473	Fluid Mechanics	3	
				MATH 4403	Differential Equations	3	
Total Hours		16		Total Hours		17	

Year 3				Year 3			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
CE 3223	C.E. Materials	3		CE 3273	Water and Waste Systems	3	
CE 3253	Engineering Hydrology	3		CE 3263	Intro to Environmental	3	
ENGR 3433	Engineering Economics	3		CE 4251	Lab for Soil Mechanics	1	
ENGR 3443	Engineering Thermo. I	3		CE 4253	Soil Mechanics	3	
ENGR 4453	Num. Methods for Engineers	3		ENGR 2421	Lab for Electric Circuits I	1	
				ENGR 2423	Electric Circuits I	3	
				ENGR 3423	Dynamics	3	
Total Hours		15		Total Hours		17	
Year 4				Year 4			
Fall Semester				Spring Semester			
Course No.	Course Name	Hrs	Gen Ed	Course No.	Course Name	Hrs	Gen Ed
CE 3233 OR CE 4263	Structural Analysis II OR Water and Waste Treatment	3		CE 4223	Transportation Engineering II	3	
CE 4203	Transportation Engineering I	3		CE 4283	Structural Steel Design	3	
CE 4233	Foundation Engineering	3		ENGR 4482	Senior Design II	2	
CE 4243	Reinforced Concrete	3		Fine Arts Elective	See below for listing of courses to fulfill General Education requirements	3	X
ENGR 4401	Senior Seminar	1		Science Elective	CHEM 1023 General Chemistry II AND CHEM 1021 Lab. for Gen. Chem. II OR GEOL 1004 OR PHYS 2044 University Physics II	4	
ENGR 4463	Senior Design I	3					
Total Hours		16		Total Hours		15	
Total Degree Hours						128	

General Education Curriculum for Engineering Baccalaureate Degrees

	Semester Hours
Communication	9
ENG 1003, Freshman English I ENG 1013, Freshman English II SCOM 1203, Oral Communications	
Mathematics	4
MATH 2204, Calculus I	
Arts and Humanities	6
Fine Arts. Select one of the following: Humanities. Select one of the following:	
MUS 2503, Fine Arts – Musical ENG 2003, Intro. to the Lit. of the Western World I	
THEA 2503, Fine Arts – Theater ENG 2013, Intro. to the Lit. of the Western World II	
ART 2503, Fine Arts – Visual PHIL 1103, Introduction to Philosophy	
Social Sciences	11
Select one of the following:	
HIST 2763, The United States to 1876	
HIST 2773, The United States since 1876	
POSC 2103, Introduction to United States Government	
Substitution of Higher Math (8hrs required): MATH 2214, Calculus II AND MATH 3254, Calculus III	
Science	8
CHEM 1013, General Chemistry I, and CHEM 1011, Laboratory for General Chemistry I	
PHYS 2034, University Physics I	

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Other rules:

A course may be counted in satisfaction of only one area requirement. With the exception of English courses (ENG), no more than two selections may have the same prefix.

Additional required support courses:

MATH 4403, Differential Equations	3
Science Elective	4

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Engineering Core Courses:

ENGR 1402, Concepts of Engineering	2
ENGR 1412, Software Applications for Engineers	2
ENGR 2401 Applied Engineering Statistics	1
ENGR 2403, Statics	3
ENGR 2413 and ENGR 2411, Mechanics of Materials and Lab. for Mechanics of Materials	4
ENGR 2423 and ENGR 2421, Electric Circuits I and Laboratory for Electric Circuits	4
ENGR 3423, Dynamics	3
ENGR 3433, Engineering Economics	3
ENGR 3443, Engineering Thermodynamics I	3
ENGR 4401 Senior Engineering Seminar	1
ENGR 4453, Numerical Methods for Engineers	3
ENGR 4463, Senior Design I	3
ENGR 4482, Senior Design II	2

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Civil Engineering Major Courses:

BIOL 1063, People and the Environment	3
ENGR 3473, Fluid Mechanics	3
ENGR 3471, Laboratory for Fluid Mechanics	1
CE 2202, Civil Engineering Presentations	2
CE 2223, Plane Surveying	3
CE 3213, Structural Analysis I	3
CE 3233, Structural Analysis II or CE 4263 Water and Waste Treatment	3
CE 3223, Civil Engineering Materials	3
CE 3263, Introduction to Environmental Engineering	3
CE 3253, Engineering Hydrology	3
CE 3273, Water and Waste Systems	3
CE 4203, Transportation Engineering I	3
CE 4223, Transportation Engineering II	3
CE 4243, Reinforced Concrete Design	3
CE 4253, Soil Mechanics	3
CE 4251, Laboratory for Soil Mechanics	1
CE 4283, Structural Steel Design	3
CE 4233, Foundation Engineering	3

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