

# Civil Engineering Program 2009/2011 (132 Hours)

Offered:  
F=Fall  
S=Spring  
M=Summer

Semester, Transfer or AP	Grade	Course Number	Cr Hrs	Course Title	Prerequisites, Corequisites and/or with Concurrency	Prerequisites	Offered:	
<b>English - 6 hours</b>								
		EH 101	3	Freshman Composition I	Placement		FSM	
		EH 102	3	Freshman Composition II	EH 101		FSM	
<b>Mathematics - 18 hours</b>								
		MA 171	4	Calculus A	MA 113 or MA 115 or Level III Placement		FSM	
		MA 172	4	Calculus B	MA 171		FSM	
		MA 201	4	Calculus C	MA 172		FSM	
		MA 238	3	Applied Differential Equations	Prereq w/Con: MA 201		FSM	
		MA 244	3	Introduction to Linear Algebra	MA 172		FSM	
<b>Biology - 4 hours</b>								
		BYS 119	4	Principles of Biology	None		FSM	
<b>Chemistry - 8 hours</b>								
		CH 121	3	General Chemistry I	CH 101 or Plcmt, MA 112, Prereq w/Con: MA 113 or 115, Co-req: CH 125		FSM	
		CH 125	1	General Chemistry Lab I	Prereq w/Con: CH 121		FSM	
		CH 123	3	General Chemistry II	CH 121, Co-req: CH 126		FSM	
		CH 126	1	General Chemistry Lab II	Prereq w/Con: CH 123		FSM	
<b>Physics - 8 hours</b>								
		PH 111	3	General Physics w/Calculus I	MA 171, Coreq: PH 114		FSM	
		PH 114	1	General Physics Lab I	Coreq: PH 111		FSM	
		PH 112	3	General Physics w/Calculus II	MA 172, PH 111, Coreq: PH 115		FSM	
		PH 115	1	General Physics Lab II	Coreq: PH 112		FSM	
<b>History, Social &amp; Behavioral Sciences - 9 hours</b>								
		HY	3	History	Must take a six hour sequence in a discipline.		FSM	
			3		See Humanities & Fine Arts List at		FSM	
			3		<a href="http://www.uah.edu/engineering/StudentAffairs/forms.php">http://www.uah.edu/engineering/StudentAffairs/forms.php</a> .		FSM	
<b>Humanities &amp; Fine Arts - 9 hours</b>								
		EH	3	Literature	See History, Social & Behavioral Sciences list at <a href="http://www.uah.edu/engineering/StudentAffairs/forms.php">http://www.uah.edu/engineering/StudentAffairs/forms.php</a> .		FSM	
			3	Fine Arts			FSM	
		PHL 202	3	Intro to Ethics			FSM	
<b>Engineering Core - 12 hours</b>								
		CE 271	3	Statics	PH 111, Prereq w/Con: MA 201		FSM	
		MAE 341	3	Thermodynamics I	MA 201, CH 121, CH 125, PH 112		FSM	
		MAE 310	3	Fluid Mechanics I	MA 238, MAE/CE 271 & MAE 285 or CPE 112 or CHE 197		FSM	
		ISE 321	3	Engineering Economy	MA 172, Sophomore Standing		FSM	
<b>** Class has required lab section</b>								
<b>Civil Engineering Option - 58 hours</b>								
		CE 101	1	Prelude to Civil Engineering	None		F	
**		CPE 112	3	Intro to Computer Programming in Engineering	MA 113, MA 115 or Level III Placement, Coreq: CPE 112L		FSM	
		CE 111	2	Civil Engineering Graphics	MA 112 or Level II Placement, Freshman CE Standing		FSM	
		CE 284	2	Surveying	Prereq w/Con: CE 101, CE 111, or Instr/Advsr Approval		F	
		CE 321	3	Transportation Engineering & Design	CE 284, MA 171		S	
		CE 272	3	Dynamics	CPE 112, CE/MAE 271		FSM	
**		CE 370	4	Mechanics of Materials	CPE 112, CE/MAE 271, Coreq: CE 370L		FSM	
		CE 381	3	Structural Analysis I	CE/MAE 272, CE/MAE 370		F	
		CE 372	3	Soil Mechanics	CE/MAE 370, Prereq w/Con: MAE 310		S	
		CE 373	1	Soil Mechanics Lab	Prereq w/Con: CE 372		S	
		CE 380	3	Civil Engineering Materials	CE/MAE 370		F	
		ISE 390	3	Probability & Engineering Statistics I	Prereq w/Con: MA 201		FSM	
		CE 422	3	Traffic Engineering Design	CE 321		S	
		CE 449	3	Intro to Environmental Engineering	CH 123, CH 126, MAE 341, Prereq w/Con: MAE 310		F	
		CE 441	3	Hydraulic Engineering Design	MAE 310		S	
		CE 483	3	Reinforced Concrete Design	CE 381		F	
		CE 485	3	Foundation Engineering	CE 372, CE 483		S	
		CE 498	1	Civil Engineering Design I	CE 321, CE 372, ISE 321		F	
**		CE 499	2	Civil Engineering Design II	CE 498 Coreq: CE 499L (FE Review)		S	
Select One Concentration	Structural		CE 481	3	Structural Analysis II	CE 381		S
			CE 484	3	Steel Design	CE 381		F
			CE 487	3	Bridge Design	CE 483		S
	Environmental		CE 473	3	Earth Structures Engineering	CE 372, CE 373		F
			CE 456	3	Water Quality Control Processes	CE 449		S
			CE 457	3	Hydrology	MAE 310		F
	Transportation		CE 458	3	Environmental Engineering Design	Prereq w/Con: CE 449		S
			CE 384	3	Advanced Surveying	CE 284		S
			CE 411	3	Intro to Geographical Information Systems	Senior Standing or Instructor Approval		F
			CE 420	3	Urban Transportation Planning	CE 321		F
General		CE	3	CE 481 or CE 456 or CE 384			S	
		CE	3	CE 473 or CE 457 or CE 411			F	
		CE	3	CE 484 or CE 458 or CE 420	CE 484 & CE 420 offered in F; CE 458 offered in S			

All prerequisite classes must be completed with a "C" or higher grade.

The Catalog is the final authority for all degree requirements.

**ENGINEERING**  
**APPROVALS:**

Advisor	Date	Department Chair	Date	Dean of Engineering	Date
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