NORTHERN ARIZONA UNIVERSITY
College of Engineering, Forestry & Natural Sciences

Bachelor of Science in Engineering
CIVIL ENGINEERING
2009-2010 Undergraduate Catalog

Degree Progression Plan

Freshman Year							
1st term				**2nd term**			
EGR 186	Introduction to Engineering Design/Lab	3		CENE 150	Introduction to Environmental Engineering	3	
CHM 151	General Chemistry I (SCI: LAB)	4		CENE 180	Computer Aided Drafting/Lab	2	
CHM 151L	General Chemistry I Lab (SCI: LAB)	1		MAT 137	Calculus II (FNRQ)	4	
ENG 105	Critical Reading and Writing (FNRQ)	4		PHY 161	University Physics I (SCI: SAS)	4	
MAT 136	Calculus I (SCI: SAS)	4		PHI 105 or PHI 331	Introduction To Ethics or Environmental Ethics (AHI)	3	
NAU 100	Transition to College	1					
	Total units	17			Total units	16	

Sophomore Year							
3rd term				**4th term**			
CENE 225	Engineering Analysis	3		CENE 253	Mechanics of Materials	3	
CENE 251	Applied Mechanics: Statics	3		CENE 253L	Mechanics Materials Lab	1	
CENE 270	Surveying/Lab	3		EGR 286	Engineering Design: The Process	3	
MAT 238	Calculus III	4		ME 291	Thermodynamics I	3	
PHY 262	University PHY II (SCI: SAS)	3		MAT 239	Differential Equations	3	
				LS/DIV	Liberal Studies/ Diversity *	3	
	Total units	16			Total units	16	

Junior Year							
5th term				**6th term**			
CENE 376	Structural Analysis I	3		CENE 333	Applied Hydraulics	3	
ME 252	Applied Mechanics: Dynamics	3		CENE 333L	Applied Hydraulics Lab	1	
ME 395	Fluid Mechanics	3		CENE 383	Geotechnical Engineering I	3	
CENE 420	Traffic Study/Lab	3		CENE 383L	Geotechnical Engineering I Lab	1	
SE	*Science Elective* **	3		CENE 386W	Engineering Design: The Methods	3	
LS	Liberal Studies	3		CENE 433	Hydrology & Flood Control	3	
				LS/DIV	Liberal Studies/ Diversity *	3	
	Total units	18			Total units	17	

Senior Year							
7th term				**8th term**			
CENE 331	Sanitary Engineering	3		EE 188	Electrical Engineering I	3	
CENE 418	Highway Engineering/Lab	3		CENE 486C	Engineering Design Capstone/Lab	3	
CENE 438	Reinforced Concrete Design	3		*TE*	*Technical Elective* ***	3	
CENE 476	Engineering Design: Capstone Preparation	1		*LS*	Liberal Studies	3	
CENE 450	Geotechnical Engineering II	3		*LS*	Liberal Studies	3	
TE	*Technical Elective* ***	3					
	Total units	16			Total units	15	

Liberal Studies Distribution blocks

AHI (6 units)	SPW (6 units)	CU (6 units)	Science (7 units)	Additional 3 units to reach 35 total
PHI 105 or PHI 331 (3)			PHY 161 (4)	
			PHY 262 (3)	MAT 136 (4)

Revised 1/21/2009

PROGRAM INFORMATION

A minimum of 130 units are required for this degree.

You can not have more than one grade of D in your engineering, mathematics, and science courses.

*Take a Liberal Studies course that also satisfies a Diversity requirement.

** Science electives include 3-4 units of: BIO 181/181L, CHM 152, CHM 230, GLG 101/103, PHY 263 or other courses approved by department.

*** Technical electives include 6 units from the following list. At least 3 units must be from the CENE technical electives list.

- CENE technical electives: CENE 377, 436, 437, 440, 457, 460, 462, 468, 499, 545, and 599
- Other non-CENE approved electives include: CS 122, CM 329, CM491, CM 460; EE 425; EGR 389; GGR 239; GLG 451; MAT 316, MAT 362; ME 340, ME 441, ME 442, ME 451, ME 454, ME 455, ME 484; PL 201; STA 371, STA 471, STA 472

GENERAL INFORMATION

- This degree progression plan is to be used in conjunction with the academic catalog and degree progress report.
- Students should see an academic advisor regularly to confirm their academic progress.
- Students must see an academic advisor before enrollment for the 7th term in preparation for graduation.
- Many courses have pre-requisites. Please check the academic catalog for pre-requisite and placement information.
- Submit graduation application during 7th term.
- Honors students complete different requirements to meet NAU's liberal studies program. Students should consult an Honors Program advisor for complete information on fulfilling Honors Liberal Studies requirements.
- All students are required to complete at least 120 total units which includes:
  - 35 units of liberal studies courses: http://www4.nau.edu/aio/Articulation/LScourselist.htm
  - 6 units of diversity courses (3 units in Global & 3 units in Ethnic). The diversity requirement may be fulfilled in any part of the program of study: http://www4.nau.edu/aio/Articulation/DiversityCourseList.htm
  - 30 units of upper division courses (300-400 level), 18 of these units must be taken at NAU
- English placement: http://www.nau.edu/comp/placement.html
- Math placement: http://www.cefns.nau.edu/Academic/Math/studentInformation/Placement/Placement.shtml

CONTACT INFORMATION

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