

# Bachelor of Science in Engineering CIVIL ENGINEERING

2008-2009 Undergraduate Catalog

# **Degree Progression Plan**

		Fres	hman Year			
	1 <sup>st</sup> term			2 <sup>nd</sup> 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)	3	
MAT 136	Calculus I (SCI: SAS)	4	PHY 161L	University Physics I Lab	1	
FYE 101	First Year Experience	1	PHI 105 or PHI 331	Introduction To Ethics or Environmental Ethics (AHI)	3	
	Total un	its 17		Total ı	units 16	
		Soph	omore Year			
	3 <sup>rd</sup> term			4 <sup>th</sup> 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 un	its 16		Total ı	ınits 16	
		•			•	
		Ju	nior Year			
	5 <sup>th</sup> term			6 <sup>th</sup> 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 ı	units 17	
		Sei	nior Year			
	7 <sup>th</sup> term			8 <sup>th</sup> 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 un	its 16		Total	units 15	

## Liberal Studies Distribution blocks

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

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#### 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 7<sup>th</sup> 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 7<sup>th</sup> 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: <a href="http://www4.nau.edu/aio/Articulation/LScourselist.htm">http://www4.nau.edu/aio/Articulation/LScourselist.htm</a>
  - 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.math.nau.edu/placement.html

## **CONTACT INFORMATION**

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