NORTHERN ARIZONA UNIVERSITY
College of Engineering & Natural Sciences

Bachelor of Science
Engineering Physics
Semiconductor Emphasis

2008-2009 Undergraduate Catalog

Degree Progression Plan

Freshman Year							
1st term				2nd term			
PHY 161	University Physics I	3		PHY 262	University Physics II	3	
PHY 161L	University Physics I Lab	1		PHY 262L	University Physics II Lab	1	
MAT 136	Calculus I (SCI: SAS)	4		MAT 137	Calculus II (FNRQ)	4	
CHM 151	General Chemistry I (SCI: LAB)	4		ENG 105	Critical Reading & Writing (FNRQ)	4	
CHM 151L	General Chemistry I Lab (SCI: LAB)	1		CHM 152	General Chemistry II (SCI: SAS)	3	
EGR 186	Introduction to Engineering: Design	3					
PHY 103	First Year Seminar	1					
	Total units	17			Total units	15	

Sophomore Year							
3rd term				4th term			
PHY 263	University Physics III	3		EE 280	Introduction to Electronics	4	
MAT 238	Calculus III	4		PHY 265	Introduction to Computational Physics	3	
CENE 225	Engineering Analysis	3		MAT 239	Differential Equations	3	
EE 188	Electrical Engineering I	3		EGR 286	Engineering Design: Process	3	
EE 188L	Electrical Engineering I Lab	1		*DIV*	Diversity	3	
	Total units	14			Total units	16	

Junior Year							
5th term				6th term			
PHY 301	Methods of Analytical Physics **	3		PHY 476C	Senior Project I	1	
PHY 321	Mechanics I **	3		PHY 333W	Advanced Lab	3	
ME	Major Elective ***	3		PHY 331	Electricity and Magnetism I	3	
LS	Liberal Studies	3		PHY 361	Modern Physics	3	
LS/DIV	Liberal Studies/Diversity *	3		EE 370	Semi Theory and Fabrication	4	
	Total units	15			Total units	14	

Senior Year							
7th term				8th term			
PHY 486C	Senior Project II	3		PHY 332	Electricity and Magnetism II	3	
PHY 471	Quantum Mechanics	3		PHY 441	Thermal & Statistical Physics	3	
ME	Major Elective ***	3		ME	Major Elective ***	2	
LS	Liberal Studies	3		*LS*	Liberal Studies	3	
LS	Liberal Studies	3		*LS*	Liberal Studies	3	
	Total units	15			Total units	14	

Liberal Studies Distribution blocks

AHI (6 units)	SPW (6 units)	CU (6 units)	Science (7 units)	Additional 3 units to reach 35 total
			CHM 151 & L (5)	
			CHM 152 (3)	MAT 136 (4)

Revised 1/4/2008

PROGRAM INFORMATION

A minimum of 120 units are required for this degree.

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

** PHY 301 & PHY 321 are not required for this degree, but are pre-requisites for PHY 471 and will satisfy 6 of the 8 additional units of upper division courses required for the major.

*** Major electives include 14 units from the following:

- 6 units from: PHY 481, EE 471 or EE 472
- 8 additional units from 300-400 level technical courses chosen from BIO, CENE, CHM, EE, GLG, MAT, ME or PHY in consultation with your advisor. (6 of these units are satisfied with PHY 301 and PHY 321 as noted above.)

You may not count more than one grade below a C in a physics or astronomy course toward the major requirements for this degree.

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.math.nau.edu/placement.html

CONTACT INFORMATION

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