



NORTHERN ARIZONA UNIVERSITY

College of Engineering, Forestry, and Natural Sciences
Mechanical Engineering Bachelor of Science in Engineering

~~2014-2015~~
2015-2016

2013-2014 Undergraduate Catalog

Four Year Progression Plan

Sample Progression Plans are for planning purposes only, see the catalog for official details

Year 1 - Fall		
I.GR 186	Intro To Engineering Design	3
ME 180	Computer-aided Design	2
MAT 136	Calculus I	4
CHM 151	General Chemistry I	4
CHM 151L	General Chemistry I Lab	1
LIBST COURSE	Liberal Studies Course	3
NAU 100	Transition To College	1

Year 1 - Spring		
MAT 137	Calculus II	4
ENG 105	Critical Read/Writing In Univ	4
PHY 161	University Physics I	4
CS 122	Programming For Eng & Sci	2
CS 122L	Prog For Egr & Sci Lab	1

Year 2 - Fall		
I.GR 286	Engineering Design: Process	3
EE 188	Electrical Engineering I	3
EE 188L	Electrical Engineering I Lab	1
CENE 251	Applied Mechanics Statics	3
MAT 238	Calculus III	4
PHY 262	University Physics II	3

Year 2 - Spring		
ME 252	Applied Mechanics Dynamics	3
CENE 253	Mechanics Of Materials	3
CENE 253L	Mechanics Of Materials Lab	1
ML 291	Thermodynamics I	3
MAT 239	Differential Equations	3
LIBST COURSE	Liberal Studies Course	3

Year 3 - Fall		
ME 340	Materials Science	3
ME 395	Fluid Mechanics	3
CENE 225	Engineering Analysis	3
LS/DIV COURSE	Liberal Studies/Diversity Course	3
LIBST COURSE	Liberal Studies Course	3
Engineering program fee assessed		

Year 3 - Spring		
ME 365	Machine Design	3
ME 392	Thermodynamics II	3
MAT 362	Intro To Numerical Analysis	3
EGR 386W	Eng Design: The Method	3
DEPTH ELECTIVE	Depth Elective	3
Engineering program fee assessed		

Year 4 - Fall		
ME 450	Heat Transfer	3
ME 476C	Mechanical Egr Design I	1
ME 495	Exptl Mthds Thermal Sciences	3
DEPTH ELECTIVE	Depth Elective	3
BREADTH ELECTIVE	Breadth Elective	3
LS/DIV COURSE	Liberal Studies/Diversity Course	3
Submit graduation application this term		
Engineering program fee assessed		

Year 4 - Spring		
ME 486C	Mechanical Egr Design II	3
DEPTH ELECTIVE	Depth Elective	3
BREADTH ELECTIVE	Breadth Elective	3
BREADTH ELECTIVE	Breadth Elective	3
LIBST COURSE	Liberal Studies Course	3
Engineering program fee assessed		

University Requirements Specified by Major	
Foundation Requirements: English (ENRQ:ENG1)	ENG 105 (4)
Foundation Requirements: Math (ENRQ:MAT1)	MAT 137 (4)
Science: Applied Science (SAS:LAB)	PHY 161 (4), PHY 262 (3)
Liberal Studies Elective	CHM 151 (4)

214
(1)

(1) ME 476C & ME 486C ME Design I & II (1) = (3)
 (2) EGR 476C & EGR 486C Engineering Design I & II (2) = (3)

PROGRAM INFORMATION

A minimum of 126 units are required for this degree. You can not have more than two grades of D in your engineering and computer science courses. Furthermore, all prerequisite courses for your engineering classes must be completed with grades of C or better. The two grades of D that are allowed cannot be in the prerequisite courses.

*Depth electives include 9 units from the following lists or 300-400 level engineering courses with approval from your advisor. It is encouraged that you select courses from only one of the two areas.

- Mechanical design: CENE 376 or 477; EE 325 or 458; ME 454, 455, 467, 482 or 484
- Fluid & thermal sciences: CENE 430 or 480; EE 325 or 458; ME 441, 442, 451 or 454
- You can also use 500-level courses as depth electives, if you meet the pre-requisites and have advisor approval

** Breadth electives include 9 additional units of upper-division courses in engineering, natural sciences, business or mathematics as approved by the department.

CONTACT INFORMATION

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Four Year Honors Plan

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Year 1 - Fall		
EGR 186	Intro To Engineering Design	3
ME 180	Computer-aided Design	2
MAT 136	Calculus I	4
LS/DIV COURSE	Liberal Studies/Diversity Course	3
HON 190	Sem Critical Reading & Writing I	3
HON 100	Introduction To Honors	1

Year 1 - Spring		
MAT 137	Calculus II	4
HON 29X	Honors Topic Seminar 29X	4
PHY 161	University Physics I	4
CHM 151	General Chemistry I	4
CHM 151L	General Chemistry I Lab	1

Year 2 - Fall		
EGR 286	Engineering Design Process	3
EE 188	Electrical Engineering I	3
EE 188L	Electrical Engineering I Lab	1
CFME 251	Applied Mechanics Statics	3
MAT 238	Calculus III	4
PHY 262	University Physics II	3

Year 2 - Spring		
ME 252	Applied Mechanics Dynamics	3
CENE 253	Mechanics Of Materials	3
CENE 253L	Mechanics Of Materials Lab	1
ME 291	Thermodynamics I	3
MAT 239	Differential Equations	3
HON 39X	Honors Advanced Seminar 39X	3

Year 3 - Fall		
ME 340	Materials Science	1
ME 395	Fluid Mechanics	3
CENF 225	Engineering Analysis	3
CS 122	Programming For Eng & Sci	2
CS 122L	Prog For Eng & Sci Lab	1
LIBST COURSE	Liberal Studies Course	3
Engineering program fee assessed.		

Year 3 - Spring		
ME 365	Mechanic Design	3
ME 392	Thermodynamics II	3
MAT 362	Intro To Numerical Analysis	3
EGR 386W	Eng Design: The Methods	3
DEPTH ELECTIVE	Depth Elective	3
Engineering program fee assessed.		

Year 4 - Fall		
ME 450	Heat Transfer	3
ME 476C	Mechanical Eng Design I	1
ME 495	Exptl Mthds Thermal Sciences	3
DEPTH ELECTIVE	Depth Elective	3
BREADTH ELECTIVE	Breadth Elective	3
LS/DIV COURSE	Liberal Studies/Diversity Course	3
Submit graduation application this term.		
Engineering program fee assessed.		

Year 4 - Spring		
ME 486C	Mechanical Eng Design II	3
DEPTH ELECTIVE	Depth Elective	3
BREADTH ELECTIVE	Breadth Elective	3
BREADTH ELECTIVE	Breadth Elective	3
LIBST COURSE	Liberal Studies Course	3
Engineering program fee assessed.		

University Requirements Specified by Major	
Foundation Requirements: Math (ENR):MATH	MAT 137 (4)
Science/Applied Science (SAS):LAD	PHY 161 (4), PHY 262 (3)
Liberal Studies Elective	CHM 151 (4)

① { ME 476C & ME 486C ME Design I & II

(1) & (3)

{ EGR 476C & EGR 486C Engineering Design I & II

(2) & (3)

University Honors Program

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