

2015-2016 Catalogue

ENGINEERING B.A.E.

All students must meet the University Requirements .

The Bachelor of Arts in Engineering degree is intended to provide an engineering background for students who desire more educational breadth in the liberal arts than is possible with the various engineering B.S. degrees. Students graduating with this degree might pursue more advanced studies in engineering, or they might go on to advanced studies in fields such as business, law, environmental science, medicine, etc. The degree is not ABET-accredited and is not intended to produce students prepared to work as practicing engineers immediately upon graduation. The degree requires 123-126 credits.

Engineering B.A. students declare a primary concentration of study in engineering and a minor in liberal arts. The primary concentration can be within one of the following four areas of engineering: civil, electrical, environmental, or mechanical systems. Alternatively, students may request to develop their own tailored primary concentration in engineering. The required course work for each primary concentration area will be determined by a committee of SoE faculty with research and teaching interests in areas relevant to the concentration topic. The minor must be selected from the liberal arts minors offered by the College of Arts and Sciences (natural science and mathematical science minors may not be selected). Engineering B.A. students complete a specified set of course work in the mathematics and basic sciences and in engineering, as well as complete the B.A. distribution requirements of the College of Arts and Sciences.

PLAN OF STUDY

THE CURRICULUM FOR THE B.A. IN ENGINEERING

First Year	Credits	
	Fall	Spring
CHEM 031 General Chemistry 1 ¹	4	
ENGR 002 Graphical Communication	2	
ENGS 001 Written Expression	3	
MATH 021 Calculus I ¹	4	
Distribution (Social Science) ²	3	3
CS 020 Programming for Engineers ¹		3
MATH 022 Calculus II ¹		4
ME 001 First-Year Design Experience or EE 001 First-year Design Experience or CE 003 Intro to Civil & Envir Engr		2
PHYS 030 Physics Problem Solving I (Optional)		0-1

PHYS 031 Physics for Engineers I ¹		4
Year Total:	16	16-17
Sophomore		
	Fall	Spring
EE 003 Linear Circuit Analysis I or EE 100 Electrical Engr Concepts	3-4	
MATH 121 Calculus III	4	
PHYS 123 Physics Problem Solving II (Optional)	0-1	
PHYS 125 Physics for Engineers II	3	
Choose two Distribution (Humanities) courses ²	6	
CE 001 Statics		3
MATH 271 Adv Engineering Mathematics		3
ME 040 Thermodynamics		3
Engineering Science		3
Distribution (Fine Arts) ²		3
Year Total:	16-18	15
Junior		
	Fall	Spring
Choose two Engineering Science Electives ³	6	6
Minor ⁴	3	3
Free Elective	3	3
Distribution (Foreign Language) ²	3	3
Year Total:	15	15
Senior		
	Fall	Spring
ME 185 Capstone Design I or EE 187 Capstone Design I or CE 185 Capstone Design I	3	
Engineering Science ³	3	
Distribution (Literature) ²	3	
Choose two Minor courses ⁴	6	6
ME 186 Capstone Design II or EE 188 Capstone Design II or CE 186 Capstone Design II		3
Choose two Engineering Science Electives ³		6

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Year Total:	15	15
Total Credits in Sequence:		
	123-126	

- ¹ Pre-Engineering Technical (PET) requirement: PET courses must be completed with C- or better by the third semester of enrollment in order to continue in engineering coursework.
- ² Distribution requirements: Consult the College of Arts & Sciences portion of this catalog for courses approved to meet the Bachelor of Arts distribution requirements. BAE students should use distribution or minor requirements to satisfy the University diversity requirement (three credits of D1 and three credits of D1 or D2).
- ³ Engineering Science Electives: All CE, EE, ME and ENGR courses (except ENGR 010). Must have a minimum of 9 credits at the 200-level.
- ⁴ Minor: BAE students must complete a minor in a liberal arts field. BAE students should use distribution or minor requirements to satisfy diversity requirement (three credits of D1 and three credits of D1 or D2).