Associate in Pre-Engineering - Civil and Mechanical Engineering Emphasis, A.P.E.

The pre-engineering program at UVU has been created for students who plan to complete the first two to three years of their engineering education at the ABET accredited UVU, then either continue at UVU or transfer to a baccalaureate university to complete their engineering degree. With adequate planning, pre-engineering coursework completed at UVU will be sufficient for students to remain at UVU or to transfer to all of the Utah universities with baccalaureate engineering degrees. All students who declare pre-engineering as their major are automatically accepted into pre-engineering status. After completion of the pre-engineering program at UVU, the student applies for professional status at UVU or at an institution of the student's choice.

Program Requirements

Code	Title	Credit Hours
Total Credit Hours		69
Associate in Pre-Enginee	ring Requirements	44
		Credits
Complete the requirements		44
Emphasis Requirements		25 Credits
ENGR 2010	Engineering Statics	3
ENGR 2030	Engineering Dynamics	3
ENGR 2140	Mechanics of Materials	3
or ENGR 2160	Introduction to Materials Science and Engineering	
or ENGR 2450	Computational Methods for Engineering Analysis	
Emphasis Elective Require	ments	
•	elect electives from the following list, based on the engineering discipline (Civil or Mechanical) they are interested in y they want to attend to finish their BS degree. See your advisor.	16
ECE 1000	Introduction to Electrical and Computer Engineering (undefined)	
ECE 2210	Fundamentals of Electric Circuit Analysis (3)	
EGDT 1040	Fundamentals of Technical Engineering Drawing (3)	
EGDT 1071	3 Dimensional ModelingSolidworks (3)	
EGDT 1400	Surveying Applications and Field Techniques I (3)	
ENGR 1000	Introduction to Engineering WE (3)	
ENGR 1020	Survey of Engineering (1)	
ENGR 2140	Mechanics of Materials (3)	
ENGR 2160	Introduction to Materials Science and Engineering (3)	
ENGR 2300	Engineering Thermodynamics (3)	
ENGR 2450	Computational Methods for Engineering Analysis (3)	
MATH 2210	Calculus III (4)	
MATH 2250	Differential Equations and Linear Algebra (4)	
or		
MATH 2270 & MATH 2280	Linear Algebra and Ordinary Differential Equations (6)	

Graduation Requirements

- 1. Completion of a minimum of 69 semester credits.
- 2. Overall grade point average of 2.0 (C) or above. 2.5 or above in Math, Science, and Engineering
- 3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.
- 4. Completion of GE and specified departmental requirements.

Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/ or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http://www.uvu.edu/wolverinetrack/).

Semester 1 Engineering Programming 6m KNRR 1003 Engineering Programming 3 American Institutions Course 3 Social Pothavioral Science Introduction to Academic Winting CC 3 of RNR 1010 in Introduction to Academic Winting CC 3 of Exhibit 1000 or Literaces and Composition Across Contexts CC 1 Semester Semester Se	First Year			
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	Elective		3	
Total Credit Hours 69		Credit Hours	13	
		Total Credit Hours	69	

Program Learning Outcomes

- 1. Ability to apply knowledge of mathematics, science, and engineering.
- 2. Know the basic knowledge and fundamental principles of engineering.
- 3. Be able to apply these principles to solving various engineering problems.
- 4. Value mathematics, science, and their application in engineering design.