



College of Eastern Utah

GENERIC ENGINEERING

Aeronautical, Aerospace, Agricultural, Architectural,
Biomedical, Clinical, Energy, Industrial, Irrigation,
Management, Manufacturing, Material Science, Nuclear,
Safety, Structural, Systems, and Transportation

Degree Options:

-Associate of Pre-Engineering

Program Description:

The Associate of Pre-Engineering (APE) degree is offered to students who plan to transfer to a university and pursue a baccalaureate degree in any of the traditional fields of engineering. This degree requires an emphasis of course work in engineering, mathematics, and science, with fewer general education requirements than the Associate of Science/Arts degree. It is anticipated that the balance of general education requirements necessary for a bachelor's degree will be taken during the summer semester or as a junior and/or senior at the 4-year transfer institution. This program is consistent with recent Accreditation Board for Engineering and Technology (ABET) standards. Course work for the APE degree must include the completion of at least 68 to 76 semester hours.

The recommended course of study is as follows:

TWO-YEAR PLAN

First Year:

<u>Fall Semester</u>	
ENGN 1000	Intro to Engineering 2*
ENGN 1005	Intro to Engineering Lab . 1*
MATH 1210	Calculus I** 4*
PHYS 2210	Physics for Scientists & Engineers 4*
PHYS 2215	Physics for Scientists & Engineers Lab 1*
Gen. Education or Technical Elective(s)**	6*
Semester Total	18

<u>Spring Semester</u>	
MATH 1220	Calculus II 4*
MATH 2280	Ord. Differential Equations 3*
CHEM 1210	General Chemistry I 4*
CHEM 1215	General Chemistry I Lab 1*

PHYS 2220	Physics for Scientists & Engineers II 4*
PHYS 2225	Physics for Scientists & Engineers II Lab 1*
-or-	
Gen. Education/Technical Elective(s)**	5*
Semester Total	17

Second Year:

<u>Fall Semester</u>	
MATH 2270	Linear Algebra 3*
ENGL 1010	Introduction to Writing . . . 3
ENGN 2010	Statics, Technical Elective(s)**
or General Education 3*
Computer Science Programming Language, Gen. Education, or Technical Electives**	3*
Technical Electives** 6*
Semester Total	18

<u>Spring Semester</u>	
ENGL 2010	Intermediate Writing 3*
ENGN 2030	Dynamics, ENGN 2140 Strength of Materials, ENGN 2300 Thermodynamics, &/or Technical Elective(s)**
Gen. Education or Technical Elective** 12*
Gen. Education or Technical Elective**	3*
Semester Total	18

Program Total 71

THREE-YEAR PLAN

First Year:

<u>Fall Semester</u>	
ENGN 1000	Intro to Engineering 2*
ENGN 1005	Intro to Engineering Lab . 1*
MATH 1060	Trigonometry 3*
ENGL 1010	Introduction to Writing . . . 3
Gen. Education or Technical Elective(s)**	6*
Semester Total	15

<u>Spring Semester</u>	
MATH 1210	Calculus I 4*
ENGL 2010	Intermediate Writing 3*
CHEM 1210	General Chemistry I 4*

CHEM 1215 General Chemistry I Lab . 1*
 Gen. Education or Technical Elective(s)*** 6*
 Semester Total 18

Second Year:

Fall Semester

MATH 2270 Linear Algebra 3*
 PHYS 2210 Physics for Scientists &
 Engineers I 4*
 PHYS 2215 Physics for Scientists &
 Engineers I Lab 1*
 Technical Elective(s)*** 7*
 Semester Total 15

Spring Semester

MATH 1220 Calculus II 4*
 PHYS 2220 Physics for Scientists &
 Engineers II 4*
 PHYS 2225 Physics for Scientists &
 Engineers II Lab 1*
 -or-
 Gen. Education or Technical Elective(s)*** 5*

EDDT 1400 CAD Level 1: Intro. to CAD 3*
 Computer Science Programming Lang,
 General Ed., or Technical Elective***. . . . 3*
 Technical Electives*** 4*
 Semester Total 19

Third Year:

Fall Semester

MATH 2210 Multivariable Calculus . . . 3*
 ENGN 2270 Circuits** 5*
 ENGN 2275 Circuits Lab** 1*
 ENGN 2010 Statics, General Education, or
 Technical Electives*** 3*
 Numerical Methods, General Education, or
 Technical Elective(s)*** 6*
 Semester Total 18

Spring Semester

MATH 2280 Ordinary Differential
 Equations 3*
 ENGN 2140 Strength of Materials** . . . 3*
 ENGN 2030 Dynamics** 3*
 ENGN 2300 Thermodynamics** 3*
 Technical Elective(s)*** or Gen. Education 6*
 Semester Total 18

Program Total 103

*course has pre-requisite(s) and/or corequisite(s)
 or technical elective*
 ***can be chosen from approved classes in Physics, Chemistry, Engineering,

Mathematics, Life Science, Electronics, Computer Science, and others

Note: MATH 2210 Multivariable Calculus is required at some four-year colleges/universities in the second year. It is strongly recommended that it be taken here to ensure better success at the transfer school.

For more information contact:

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