



Degree Plan: Engineering – Associate in Applied Science

[AR–AAS–ENGI-1]

School of Arts and Sciences

Department of Chemistry, Physics, and Engineering Catalog

Year: 2017-2018

General Education Requirements –27 hours

Required Courses - 27 hours

ENGL 1113 English Composition I
 ENGL 1213 English Composition II
 PS 1113 American Federal Government
 HIST 1483 U.S. History To 1865 **OR** HIST 1493 U.S. History Since 1865
 MATH 2215 Calculus and Analytic Geometry
 CHEM 1361/1364 General Chemistry I and Lab
 PHYS 2015/L Physics I for Science and Engineering Majors

University Requirements

UNIV 1001 or 1113 – 1-3 hours

Computer Literacy – ENGR 1412

Major Requirements – 23-26 hours

ENGR 1411 Introduction to Engineering
 ENGR 1412 Engineering Design and CAD
 ENGR 2113 Statics
 ENGR 2223 Fluid Mechanics
 ENGR 2723 Electrical Circuits

Area of Concentration – 11-14 hours

Mechanical Engineering Option (11 hours)

ENGR 2002 Professional Development in Engineering
 ENGR 2213 Thermodynamics
 ENGR 2533 Dynamics
 PHYS 2213 Selected Topics in General Physics or Higher*

Electrical Engineering Option (13 hours)

CS 1314 Computer Science I
 ENGR 2002 Professional Development in Engineering
 ENGR 2314 Intro to Digital Design
 ENGR 2713 Digital Signals and Processing

Civil Engineering Option (14 hours)

GEOL 1014/L Physical Geology and Lab
 CHEM 1471/1474 General Chemistry II and Lab
 ENGR 2002 Professional Development in Engineering
 ENGR 2153 Mechanics of Materials

Environmental Engineering Option (14 hours)

CHEM 1471/1474 General Chemistry II and Lab
 CHEM XXX4 Above Freshman Chemistry**
 ENGR 2002 Professional Development in Engineering
 ENGR 2153 Mechanics of Materials

Industrial Engineering Option (12 hours)

CS 1314 Computer Science I
 ENGR 2002 Professional Development in Engineering
 ENGR 2213 Thermodynamics
 ENGR 2533 Dynamics

*PHYS 3003 & 3011 strongly encouraged.

**CHEM 3314 strongly encouraged.

Additional Requirements – 17 hours

MATH 2235 Calculus and Analytic Geometry II
 MATH 2244 Calculus and Analytic Geometry III
 MATH 2613 Foundations of Mathematics or Higher***
 PHYS 2025/L Physics II for Science and Engineering Majors
 ***MATH 3253 strongly encouraged.

General Electives – to Complete 68-71 hours

Graduation Requirements

Department Requirements
 Minimum 68 Total Credit Hours
 Minimum 15 Credit Hours in Residence at Cameron
 Retention GPA 2.0
 Cameron GPA 2.0
 Complete Graduation Application at Registrar’s Office