



Degree Plan: Engineering – Associate in Applied Science

[AR–AAS–ENGI-1]

School of Arts and Sciences

Department of Chemistry, Physics, and Engineering

Catalog Year: 2018-2019

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

Required Core Courses – 12 hours

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

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