



**Degree Plan: Engineering – Associate in Applied Science**

[ST–AAS–ENGI]

School of Arts and Sciences

Department of Chemistry, Physics, and Engineering

Catalog Year: 2016-2017

**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