



**Degree Requirements: Engineering (545)–Associate in Applied Science**

School of Arts and Sciences

Department of Chemistry, Physics, and Engineering

Catalog Year: 2019-2021

<b>General Education Requirements (27 hours)</b>	
<b>Required Courses (27 hours)</b>	
ENGL 1113 English Composition I ENGL 1213 English Composition II PS 1113 American Federal Government HIST 1483 U.S. History To 1865 <b>OR</b> 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	
<b>University Requirements</b>	
UNIV 1001 or 1113-1-3 hours	Computer Literacy-ENGR 1412
<b>Major Requirements (23–26 hours)</b>	
<b>Required Core Courses (12 hours)</b>	
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) <i>FA=Fall; SP=Spring; SU=Summer</i>	
<b>Option (11–14 hours)</b>	
<b>Mechanical Engineering Option (11 hours)</b> ENGR 2002 Professional Development in Engineering ENGR 2213 Thermodynamics ENGR 2533 Dynamics PHYS 2213 Selected Topics in General Physics or Higher* <b>Electrical Engineering Option (13 hours)</b> CS 1314/1314L Computer Science I and Lab ENGR 2002 Professional Development in Engineering ENGR 2314 Intro to Digital Design ENGR 2713 Digital Signals and Processing <b>Civil Engineering Option (14 hours)</b> CHEM 1471/1474 General Chemistry II and Lab ENGR 2002 Professional Development in Engineering ENGR 2153 Mechanics of Materials	<b>Environmental Engineering Option (14 hours)</b> CHEM 1471/1474 General Chemistry II and Lab CHEM XXX4 Above Freshman Chemistry** ENGR 2002 Professional Development in Engineering ENGR 2153 Mechanics of Materials <b>Industrial Engineering Option (12 hours)</b> CS 1314/1314L Computer Science I and Lab ENGR 2002 Professional Development in Engineering ENGR 2213 Thermodynamics ENGR 2533 Dynamics  *PHYS 3003 & 3011 strongly encouraged. **CHEM 3314 strongly encouraged.
<b>Additional Requirements (17 hours)</b>	
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.	
<b>General Electives (to Complete 68–71 hours)</b>	
<b>Graduation Requirements</b>	
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 Online	