Degree Requirements: Engineering (545)–Associate in Applied Science
School of Arts and Sciences
Department of Chemistry, Physics, and Engineering
Catalog Year: 2024-2025

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/Lab PHYS 2015/L Physics I for Science and Engineering Majors/Lab	
University Requirements	
UNIV 1001 (1 hour)	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) *FA=Fall; SP=Spring; SU=Summer*	
Option (10-14 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/L Computer Science I/Lab ENGR 2002 Professional Development in Engineering ENGR 2314 Intro to Digital Design ENGR 2713 Digital Signals and Processing **Civil Engineering Option (10 hours)** CHEM 1471/1474 General Chemistry II/Lab ENGR 2002 Professional Development in Engineering ENGR 2153 Mech/Dsgn Materials Manufact	**Environmental Engineering Option (14 hours)** CHEM 1471/1474 General Chemistry II/Lab CHEM XXX4 Above Freshman Chemistry** ENGR 2002 Professional Development in Engineering ENGR 2153 Mech/Dsgn Materials Manufact **Industrial Engineering Option (12 hours)** CS 1314/L Computer Science I/Lab 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/Lab ***MATH 3253 strongly encouraged.
General Elective (To Complete 68-71 hours)
Graduation Requirements
Department Requirements Minimum 68 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Retention GPA 2.0 Cameron GPA 2.0 Complete Graduation Application Online