DEGREE REQUIREMENTS: ENGINEERING (545)–ASSOCIATE IN APPLIED SCIENCE
College of Arts and Sciences
Department of Chemistry, Physics, and Engineering
Catalog Year: 2026-2027

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

University Success (1 hour): UNIV 1001
Computer Literacy (2 hours): ENGR 1412

MAJOR REQUIREMENTS (22–26 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 Gen 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 ELECTIVES (TO COMPLETE 68–71 HOURS)

GRADUATION REQUIREMENTS

Department Requirements
Min. 68 Total Cr. Hrs.
Min. 15 Cr. Hrs. in Residence at CU
Retention GPA 2.0
Cameron GPA 2.0
Complete Graduation Application Online