



## DEGREE REQUIREMENTS: MECHANICAL ENGINEERING (335)-BACHELOR OF SCIENCE

College of Arts and Sciences

Department of Chemistry, Physics, and Engineering

Catalog Year: 2026-2027

| GENERAL EDUCATION REQUIREMENTS (43 HOURS)                                                                                                         |                                                      |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Communication (9 hours)</b>                                                                                                                    | <b>American History (3 hours)</b>                    | <b>Behavioral Science (3 hours)</b>                                                   |
| ENGL 1113 and 1213; COMM 1113                                                                                                                     | HIST 1483 or 1493                                    | FAMS 1123, PSY 1113, SOCI 1113                                                        |
| <b>Mathematics (5 hours)</b>                                                                                                                      | <b>Political Science (3 hours)</b>                   | <b>Economics (3 hours)</b>                                                            |
| MATH 2215                                                                                                                                         | PS 1113                                              | AGRC 2013, ECON 2003 or 2013, GEOG 3023                                               |
| <b>Science (8 hours)</b>                                                                                                                          | <b>Humanities (6 hours)</b>                          | <b>Health and Wellness** (3 hours)</b>                                                |
| Biological Science (3-4 hours)<br>Physical Science: PHYS 2015/L                                                                                   | <a href="#">Gen Ed Humanities List</a>               | SES 2003, 2013, 2023, MSL 1112,<br>PE 1--1, 2--1, 2--2<br>**Waived for some students. |
| UNIVERSITY REQUIREMENTS                                                                                                                           |                                                      |                                                                                       |
| <b>University Success (1 hour):</b> UNIV 1001<br><b>Computer Literacy (2 hours):</b> ENGR 1412<br><b>Capstone Experience (3 hours):</b> ENGR 4903 |                                                      |                                                                                       |
| MAJOR REQUIREMENTS (51 HOURS)                                                                                                                     |                                                      |                                                                                       |
| Required Core Courses (31 hours)                                                                                                                  |                                                      |                                                                                       |
| ENGR 1411 Introduction to Engineering (FA)                                                                                                        | ENGR 2723 Electrical Circuits (SP)                   |                                                                                       |
| ENGR 1412 Engineering Design and CAD (FA)                                                                                                         | ENGR 3013 Engineering Analysis & Methods (FA)        |                                                                                       |
| ENGR 2002 Professional Dev in Engineering (SP)                                                                                                    | ENGR 3112 Solids Lab (FA)                            |                                                                                       |
| ENGR 2113 Statics (SP)                                                                                                                            | ENGR 3153 Solid Mechanics (FA)                       |                                                                                       |
| ENGR 2213 Thermodynamics (FA)                                                                                                                     | ENGR 3223 Fluid Mechanics (FA)                       |                                                                                       |
| ENGR 2533 Dynamics (SP)                                                                                                                           | ENGR 3513 Engineering Applications (SP)              |                                                                                       |
| Additional Engineering Courses (17 hours)                                                                                                         |                                                      |                                                                                       |
| ENGR 3122 Heat Transfer Fluid Lab (SP)                                                                                                            | MENG 3523 Thermal Fluid Design (SP)                  |                                                                                       |
| ENGR 3173 Heat Transfer (SP)                                                                                                                      | MENG 4193 Computational Fluid Dynamics (FA)          |                                                                                       |
| MENG 3113/L Measurements & Instrument/Lab (FA)                                                                                                    | ENGR 4903 Capstone/Senior Design (SP)                |                                                                                       |
| <i>FA=Fall; SP=Spring; SU=Summer</i>                                                                                                              |                                                      |                                                                                       |
| Upper Division Electives (3 hours)                                                                                                                |                                                      |                                                                                       |
| 3000- or 4000-level PHYS Courses (PHYS 3183 preferred) or ENGR 4491-3 Special Problems: Engineering                                               |                                                      |                                                                                       |
| ADDITIONAL REQUIREMENTS (29 HOURS)                                                                                                                |                                                      |                                                                                       |
| MATH 2235 Calculus and Analytic Geometry II                                                                                                       | PHYS 2025/L Physics II for Sci & ENGR Majors/Lab     |                                                                                       |
| MATH 2244 Calculus and Analytic Geometry III                                                                                                      | PHYS 3003/3011 Modern Physics/Lab                    |                                                                                       |
| MATH 3253 Differential Equations                                                                                                                  | CHEM 1364/1361 General Chemistry I/Lab               |                                                                                       |
| MATH 3343 Numerical Analysis                                                                                                                      |                                                      |                                                                                       |
| GENERAL ELECTIVES (TO COMPLETE 124 HOURS)                                                                                                         |                                                      |                                                                                       |
| GRADUATION REQUIREMENTS                                                                                                                           |                                                      |                                                                                       |
| Department Requirements                                                                                                                           | Min. 60 Cr. Hrs. at a 4-Year Institution             |                                                                                       |
| Min. 124 Total Cr. Hrs.                                                                                                                           | Min. ½ of Major Upper Division Hrs Completed at CU   |                                                                                       |
| Min. 40 Upper Division Cr. Hrs.                                                                                                                   | 15 of last 30 Cr. Hrs. or ½ of Major Completed at CU |                                                                                       |
| Min. 55 Liberal Arts & Science Cr. Hrs.                                                                                                           | Retention GPA 2.0; Cameron GPA 2.0                   |                                                                                       |
| Min. 30 Cr. Hrs. in Residence at CU                                                                                                               | Complete Graduation Application Online               |                                                                                       |