

Mechanical Engineering Flow Chart

2022 – 2023 Catalog Year

| | Prerequisite Courses (if needed) | | | | Required Courses | | | | |
|---|--|---------------------------------------|--|--|--|--|---|---------------------------------------|--------------------------|
| | | | | | 1 st Semester | 2 nd Semester | 3 rd Semester | 4 th Semester | 5 th Semester |
| MATHEMATICS: MAT 051, 052, 053, 055, 056, 057 (1 credit each) Diagnostic Math Modules | MAT 121/122 (3-4) Intermediate Algebra | MAT 151/152 (3-4) College Algebra and | MAT 182 (3) Trigonometry OR MAT 187 (5) Pre-Calculus | | MAT 220/221 (4-5) Calculus I | MAT 230/231 (4-5) Calculus II | MAT 240/241 (4-5) Calculus III OR MAT 276/277 (3-4) Modern Differential Equations | MAT 225 (3) Elementary Linear Algebra | |
| PHYSICS: | | PHY 111 (4) General Physics I | PHY 112 (4) General Physics II OR 1 year high school physics* | | | PHY 121 (4) University Physics I: Mechanics | PHY 131 (4) University Physics II: Electricity & Magnetism | | |
| CHEMISTRY: | | | CHM 130 (3) & CHM 130LL (1) Fundamental Chemistry OR 1 year high school chemistry* | | CHM 151 (3) & CHM 151LL (1) General Chemistry I and General Chemistry I Laboratory | CHM 152 (3) & CHM 152LL (1) General Chemistry II and General Chemistry II Laboratory | | | |
| ENGINEERING: | | | | ECE 102 (2) Engineering Analysis Tools & Design ECE 105 (1) MATLAB Programming OR CSC 110 (3) Introduction to Computer Science OR Both if pursuing Computational Mechanics.** | ECE 103 (2) Engineering Problem Solving & Design | ECE 211 (3) Engineering Mechanics-Statics ECE 216 (2) and ECE 216LL (1) Computer Aided Engineering and Computer Aided Engineering Lab | ECE 212 (3) Engineering Mechanics-Dynamics ECE 215 (3) Mechanics of Materials EEE 202 (5) Circuits and Devices I ***May be taken at CGCC or at ASU. It is highly recommended to complete EEE 202 before transfer to ASU. | | |
| ENGLISH: | | | WAC 101 (3) Writing Across the Curriculum | ENG 101 (3) First Year Composition I | ENG 102 (3) First Year Composition II | | | | |
| GENERAL EDUCATION: | | | | Recommended Humanities course: ECE 150 (3) Exploring Engineering and its impact on Society. | SB with H or G or both (3) if not taken with HU. See Academic Advisor for more information. AND HU with H or G or both (3). See Academic Advisor for more information. | HU with L and C (3) See Academic Advisor for more information. DAH 255, ENH 255, or MHL 204 recommended. | SB chosen from COM 100 or COM 110 or COM 230 (3) Introduction to Human Communication or Interpersonal Communication or Small Group Communication | | |

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2022 – 2023 Catalog Year



CHANDLER-GILBERT
COMMUNITY COLLEGE
A MARICOPA COMMUNITY COLLEGE



STEM

* The Fulton School of Engineering requires that students must complete the MAPP with a 3.0 cumulative transfer GPA. **Be sure to check MAPP for requirements. BSE Mechanical Engineering (Computational Mechanics) requires both ECE 105 and CSC 110.

Link to BSE Mechanical Engineering: [Pathway Agreement \(asu.edu\)](#)

Link to BSE Mechanical Engineering (Computational Mechanics): [Pathway Agreement \(asu.edu\)](#)

Link to BSE Mechanical Engineering (Energy and Environment): [Pathway Agreement \(asu.edu\)](#)

Mechanical Engineering

ECE 105: MATLAB Programming OR

1-3 hrs

CSC 110: Introduction to Computer Scie

Mechanical Engineering (Energy and Environment)

ECE 105: MATLAB Programming OR

1-4 hrs

CSC 110: Introduction to Computer Science (Java) or
CSC 110AA: Introduction to Computer Science (Java) or
CSC 110AB: Introduction to Computer Science (Java)