

Biomedical Engineering Flow Chart

2022 – 2023 Catalog Year

				Required Courses			
Prerequisite Courses (if needed)				1 st Semester	2 nd Semester	3 rd Semester	4 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	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	MAT 276/277 (3-4) Modern Differential Equations
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		
BIOLOGY:			Eligibility for CRE 101 or RDG 100 with a grade of "C" or better		BIO 181 (4) General Biology (Majors)	BIO 201 (4) Human Anatomy and Physiology I ***May be taken at CGCC or at ASU.	BIO 202 (4) Human Anatomy and Physiology II ***May be taken at CGCC or at ASU.
ENGINEERING:				ECE 102 (2) Engineering Analysis Tools & Design ECE 105 (1) MATLAB Programming <u>AND</u> CSC 110 or 110 AA or 110 AB (3-4) Introduction to Computer Science (Java)	ECE 103 (2) Engineering Problem Solving & Design		EEE 202 (5) Circuits and Devices I
ENGLISH:			WAC 101 (3) Writing Across Curriculum	ENG 101 (3) First Year Composition I	ENG 102 (3) First Year Composition II		
GENERAL EDUCATION:				HU with H <u>AND</u> G (3) See Academic Advisor for more information.	Recommended Humanities course: ECE 150 (3) Exploring Engineering and its impact on Society.	SB chosen from COM 100 or COM 110 or COM 230 (3) Introduction to Human Communication or Interpersonal Communication or Small Group Communication	ECN 211 or 212 (3) Macroeconomic Principles (SB) or Microeconomic Principles (SB) <u>AND</u> HU with L and C (3) DAH 255, ENH 255, or MHL 204 recommended.

A 3.0 transfer GPA as calculated by ASU for admissions is required. All courses must be completed with a grade of "C" or better. **Be sure to check MAPP for requirements. Link to MAPP: [Pathway Agreement \(asu.edu\)](https://www.asu.edu/pathway-agreement) 3.0 transfer GPA as calculated by ASU for admissions.