

Materials Science Engineering Flow Chart

2022 – 2023 Catalog Year

	<i>Prerequisite Courses (if needed)</i>			Required Courses				
				1st Semester	2nd Semester	3rd Semester	4th Semester	5th 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	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			
ENGINEERING:				ECE 102 (2) Engineering Analysis Tools & Design	ECE 103 (2) Engineering Problem Solving & Design	ECE 215 (3) Mechanics of Materials	EEE 202 (5) Circuits and Devices I (One of the technical electives choice)	
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	

* The Fulton School of Engineering requires that students must complete the MAPP with a 3.0 cumulative transfer GPA.

Link to BSE Materials Science and Engineering Pathway Agreement:

<https://webapp4.asu.edu/transferepathwaybuilder/public?year=2021&extOrgId=MARICOPA&acadPlan=ESMSEBSE>