

## Prerequisite Chart for the B.S. BME Degree Program

Course	Title	Prerequisite
BIOL 1510	Biological Principles	None
BMED 1300	Problems in BME I	MATH 1501 <sup>2</sup> AND BIOL 1510 <sup>1</sup>
BMED 2210	Conservation Principles in BME	BMED 1300 <sup>2</sup> AND MATH 2403 <sup>1</sup> AND PHYS 2211 <sup>2</sup>
BMED 2300	Problems in BME II	BMED 1300 <sup>2</sup> AND 2210 <sup>1</sup> AND COE 2001 <sup>1</sup>
BMED 3160	Systems Physiology I	(CHEM 3511 <sup>1</sup> OR 4511 <sup>1</sup> ) AND BIOL 1510 <sup>2</sup>
BMED 3161	Systems Physiology II	BMED 2300 AND 3160 AND CEE/ISYE/MATH 3770 <sup>1</sup>
BMED 3300	Biotransport	BMED 2210 <sup>2</sup>
BMED 3400	Intro to Biomechanics	(MATH 2403 <sup>1</sup> OR MATH 2413 <sup>1</sup> ) AND COE 2001 <sup>2</sup>
BMED 3500	Sensors and Instrumentation	BMED 2300 AND ECE 2025 AND ECE 3741 <sup>1</sup> AND CEE/ISYE/MATH 3770 <sup>1</sup>
BMED 4400	Neuroengineering Fundamentals	BMED 3500 AND 4752
BMED 4500	Cell & Tissue Engineering Lab	BMED 3160 AND 3300 AND 3400
BMED 4600	Senior Design Project I	BMED 3161 <sup>1</sup> AND 3500 <sup>1</sup>
BMED 4601	Senior Design Project II	BMED 4600
BMED 4750	Diagnostic Imaging Physics	BMED 3500
BMED 4751	Introduction to Biomaterials	MSE 2001
BMED 4752	Introductory Neuroscience	BMED 3160
BMED 4757	Biofluid Mechanics	BMED 3300
BMED 4758	Biosolid Mechanics	BMED 3400
BMED 4765	Drug Design, Development & Delivery	CHEM 3511 or 4511
BMED 4783	Intro Medical Image Processing	ECE 2025 AND CEE/ISYE/MATH 3770
BMED 4784	Engineering Electrophysiology	ECE 3040 or BMED 3500
CHEM 1315	Survey of Organic Chemistry	CHEM 1310
CHEM 3511	Survey of Biochemistry	CHEM 1315 OR CHEM 2312
COE 2001	Statics	MATH 1502 AND PHYS 2211
CS 1371	Computing for Engineers	None
ECE 2025	Into to Signal Processing	MATH 1502 AND CS 1371
ECE 3710	Circuits & Electronics	PHYS 2212
ECE 3741	Instrumentation & Electron Lab	ECE 3710
MATH 1501	Calculus I	None
MATH 1502	Calculus II	MATH 1501
MATH 2401	Calculus III	MATH 1502
MATH 2403	Differential Equations	MATH 1502
MATH 3770	Statistics & Applications	MATH 2401
MSE 2001	Prin/Appl Engineering Materials	CHEM 1310
PHYS 2211	Intro Physics I	MATH 1502 <sup>1</sup>
PHYS 2212	Intro Physics II	PHYS 2211

<sup>1</sup>Prerequisite w/concurrency

<sup>2</sup>Minimum grade of C required