

Prerequisite Chart for the B.S. BME Degree Program

Course	Title	Prerequisite
BMED 2210	Conservation Principles in BME	CHEM 1211K ² AND MATH 1552 ² (OR MATH 1501 ²)
BMED 2250	Problems in Biomedical Engineering	BMED 2210 ²
BMED 2310	Intro to BME Design	BMED 2210 ² AND BMED 2250 ² (OR BMED 1300 ²) AND PHYS 2211 ²
BMED 2400	Intro to Bioengineering Statistics	MATH 1552 ² (OR MATH 1501 ²) AND CS 1371
BMED 3100	Systems Physiology	CHEM 1315 OR CHEM 2311 OR JUNIOR STANDING
BMED 3110	Quantitative Engr Physiology Lab I	BMED 3400 AND BMED 3100 ¹ AND (BMED 2400 OR CEE/ISYE 3770) ¹ AND CS 1371
BMED 3310	Biotransport	BMED 2210 ² AND MATH 2551 (OR MATH 2401) AND MATH 2552 (OR MATH 2403) AND CS 1371 AND PHYS 2211 ²
BMED 3400	Intro to Biomechanics	MATH 2551 (OR MATH 2401) AND COE 2001 ²
BMED 3520	Biomedical Systems and Modeling	BMED 2210 ² AND BMED 3100 AND MATH 2552 (OR MATH 2403) AND CS 1371
BMED 3600	Physio of Cellular and Molecular Sys	BMED 3100
BMED 3610	Quantitative Engr Physiology Lab II	BMED 2310 (OR BMED 2300) AND BMED 3310 (OR BMED 3300) AND BMED 3110 AND BMED 3600 ¹
BMED 4400	Neuroengineering Fundamentals	BMED 3110 AND BMED 4752
BMED 4477	Biological Networks and Genomics	BMED 3520 AND (CEE/ISYE 3770 OR BMED 2400)
BMED 4500	Cell & Tissue Engineering Lab	BMED 3610 ¹
BMED 4602	Capstone Design	BMED 3610 ¹ AND BMED 2310 (OR BMED 2300)
BMED 4603	Advanced Biomedical Eng. Design	BMED 4602
BMED 4740	Bio-Inspired Design	BMED 3100
BMED 4750	Diagnostic Imaging Physics	BMED 3110
BMED 4751	Introduction to Biomaterials	MSE 2001
BMED 4752	Introductory Neuroscience	BMED 3600 OR BIOL 3340
BMED 4757	Biofluid Mechanics	BMED 3310 (OR BMED 3300)
BMED 4758	Biosolid Mechanics	BMED 3400
BMED 4765	Drug Design, Develop & Delivery	CHEM 3511 OR CHEM 4511
BMED 4781	Biomedical Instrumentation	ECE 3710 OR ECE 3040
BMED 4783	Intro to Medical Image Processing	ECE 2026 AND (CEE/ISYE 3770 OR BMED 2400)
BMED 4784	Engineering Electrophysiology	ECE 3040 OR BMED 3520
CHEM 1315	Survey of Organic Chemistry	CHEM 1211K OR CHEM 1310
CHEM 3511	Survey of Biochemistry	CHEM 1315 OR CHEM 2312
COE 2001	Statics	MATH 1552 AND 1553 (OR MATH 1502) AND PHYS 2211
ECE 2026	Intro to Signal Processing	MATH 1552 AND 1553 (OR MATH 1502) AND CS 1371 ²
ECE 3710	Circuits & Electronics	PHYS 2212
ECE 3741	Instrumentation & Electron Lab	ECE 3710
MATH 1551	Differential Calculus	SAT Math Score of 600 or MATH 1113
MATH 1552	Integral Calculus	MATH 1550 or MATH 1551 or MATH 1501 or MATH 15X1/MATH 1X5
MATH 1553	Introduction to Linear Algebra	SAT Math Score of 600 or MATH 1113
MATH 2551	Multivariable Calculus	MATH 1552 AND 1553 or MATH 1502 or [MATH 1X52 and MATH 1553] or [MATH 15X2 and MATH 1522]
MATH 2552	Differential Equations	MATH 1552 AND 1553 or MATH 1502 or [MATH 1X52 and MATH 1553] or [MATH 15X2 and MATH 1522]
ISYE 3770	Statistics & Applications	MATH 2551 (OR MATH 2401)
MSE 2001	Prin & Appl of Engineering Materials	CHEM 1211K OR CHEM 1310
PHYS 2211	Intro to Physics I	MATH 1501 (OR 1511, 1552, 1502, 15X2)
PHYS 2212	Intro to Physics II	PHYS 2211