

**OPTIONS FOR BIOMEDICAL ENGINEERING MAJOR PRESCRIBED ELECTIVES
(2022-2023)**

Students pursuing the general program must take 12 semester credit hours using any other BMEN 3000 level or higher class not listed in the major requirements.

COURSE	PRE-REQUISITE(S)
BMEN 3310 Fluid Mechanics and Transport Processes in Biomedical Engineering	BMEN 1208 and ENGR 3300
BMEN 3318 Introduction to Engineered Biomaterials	BMEN 1208, CHEM 1312 and CHEM 1112
BMEN 3325 Advanced Computational Tools for Biomedical Engineering	BMEN 1208
BIOL 3350 Biomedical Component and System Design	BMEN 3320 Pre-requisite/Co-requisite: BMEN 3402 or EE 3302 or BMEN 3302
BIOL 3150 Biomedical Engineering Laboratory	RHET 1302 Pre-requisite/Co-requisite: BMEN 3350
BMEN 3370 Digital Circuits	MATH 2420 and PHYS 2326/2126
BMEN 3380 Medical Imaging Systems and Methods	EE 3302 or BMEN 3402 or BMEN 3302
BMEN 4301 Introduction to Medical Device Development	RHET 1302 and junior standing
BMEN 4355 Finite Element Analysis in Biomedical Engineering	BMEN 3399 and ENGR 2300 or Senior standing with instructor consent
BMEN 4370 Biomedical Image Processing	BMEN 3402 or BMEN 3302 or EE 3302 and experience in MATLAB programming
BMEN 4375 Biomedical Engineering Data Analysis	None
BMEN 4V95 Undergraduate Topics in Biomedical Engineering	Varies as Topics Change

Students may also use BMEN 4V97 Independent Study in Biomedical Engineering or BMEN 4V98 Engineering Practicum with instructor and departmental approval. Students must consult an Academic Advisor before registering in these options.