## NCSU BIOMEDICAL ENGINEERING UNDERGRADUATE PROGRAM **Sophomores First Years and Sophomores Juniors Seniors** FIS FIS CODA **BME 298 3 GATEWAY** Non-CODA **4 SPECIALTY** Change of Degree Application BME Design I **ELECTIVES ELECTIVES** 315 Biotransport FS From one or two of the 325 Biochemistry FS SF following areas: PY 205/206 PY 208/209 **BME 207** Pre-Med: CHEM 430 **BME Electronics Physics Mechanics** Physics E&M 335 Biomaterials FS Pharmacoengineering 345 Solid Mech. Regenerative Medicine Need 355 Biocontrols FS Rehabilitation Eng 365 Signals & Syst. FS Biosignals and Imaging total MA 141 MA 242 S F/S 375 Microcontroller FS **CSC 113** Medical Microdevices Calculus I Calculus III 385 Bioinstrument. Intro to Computing FS **MATLAB** OR FS1 **BME 201 BME 398 MATH 241** MA 341 or MA 441 **BME 451** Comp Methods in BME Calculus II **Differential Equations BME Design II** Senior Design BME 205 F/S F/S2 FS SS CH 201/202 **BME 301** CH 101/102 **BME 452\*** OR Human Phys: Electrical General Chemistry I General Chemistry II **BME Mechanics** Senior Design SF F/S S **BME 209 ENG 101** CH 221/222 **BME 302** Acad Writing & Research Organic Chemistry I Human Phys: Mech Materials Science **STEM Elective BIO 183** E 101 Extra Gateway or Specialty Elective or >300 STEM Course Introductory Biology Intro Engineering Must be Engineering Elective if taking CHEM 430 as Gateway E 102 **Engr 21st Century** Offered at NCSU or UNC Pre-Requisite F = fallE 115

Co-Requisite

S = spring

S1 = Summer Session I

**Computing Environments** 

**\*BMME 452** has the same prerequisite courses as BMME 451 with a corequisite of 3 additional Gateway or Specialty Electives.