

FAMU Biomedical Engineering - Biomaterials

* Course Pre-requisites
+ Course Co-requisites

* Semester(s)
course is offered

Please note that major courses are not offered every semester

FRESHMAN	_ CHM 1045/1045L General Chemistry I w/ Lab _____ (3/1) *C- or better in MAC 1105 Fall, Spring, Summer	_ MAC 2311 Calculus I _____ (4) *C- or better in MAC 1140 and MAC 1114 Fall, Spring, Summer	_ ENC 1101 English I _____ (3) Fall, Spring, Summer	_ EGN 1004L First Year Engineering Lab _____ (1) Fall, Spring, Summer	LIBERAL STUDIES *Requirements in gray not required for students with AA Statewide Social Science: ANT2000, ECO2013, POS2041, PSY2012, SYG 2000, _____ (3) Statewide Humanities: ARH2000, HUM2210, LIT2110, MUL2010, THE2000, PHI 2010 _____ (3) 2nd Humanities (from FAMU list): _____ (3) 2nd Social Science (from FAMU list): _____ (3) AFA 2000, AFA 3104, or AMH 2091: _____ (3) Civic Literacy Course (AMH2020 or POS1041) _____ (3) Civic Literacy Exam
	_ CHM 1046/1046L General Chemistry II with Lab _____ (3/1) *C- or better in CHM 1045 Fall, Spring, Summer	_ MAC 2312 Calculus II _____ (4) *C- or better in MAC 2311 Fall, Spring, Summer	_ ENC 1102 English II _____ (3) Fall, Spring, Summer	BSC 1010 General Biology I _____ (3) Fall, Spring, Summer	
SOPHOMORE	CHM 2210 or CHM 3217 Organic Chemistry I or One-Semester Organic _____ (3) *C- or better in CHM 1046 Fall, Spring, Summer	MAC 2313 Calculus III _____ (5) *C- or better in MAC 2312 Fall, Spring, Summer	ECH 3023 Mass & Energy Balances I _____ (3) *MAC 2312, CHM 1046 +CHM 2210, MAC 2313, PHY 2048C Fall, Spring	PHY 2048/2048L Gen. Physics A with Lab _____ (5) *C- or better in MAC 2311 Fall, Spring, Summer	BME 3009 Intro to Biomedical Engineering _____ (3) *BSC 2010, MAC 2312, PHY 2048C +ECH 3024, ECH 3301, MAC 2313, PHY 2049C
	CHM 2211 Organic Chemistry II or BCH 3023 if student takes CHM 3217 _____ (3) *C- or better in CHM 2210 Fall, Spring, Summer	ECH 3301 Process Analysis & Design _____ (4) *C- or better in MAC 2312 +ECH 3023, MAC 2313 Fall, Spring, Summer	ECH 3024 MEB2 _____ (4) *CHM 2210, MAC 2313, PHY 2048C, ECH 3023 +ECH 3301, PHY 2049C, BSC 2010 Spring, Summer	PHY 2049/2049L Gen. Physics B with Lab _____ (5) *PHY 2048C, MAC 2312 Fall, Spring, Summer	
JUNIOR	BME 3622 Biothermodynamics _____ (3) *ECH 3024, ECH 3301, PHY 2049C, BME 3009 +BME 3702, BME 3361, BME 4403C Fall	BME 3702 Biocomputations _____ (4) *ECH 3024, ECH 3301, BME 3009 +BME 3622, BME 3361, BME 4403C Fall	BME 3361 Biotransport Phenomena _____ (3) *ECH 3024, ECH 3301, PHY 2049C, BME 3009 +BME 3702, BME 3622, BME 4403C Fall	BME 4403C Quantitative Anatomy and Sys. Phys. I (QASP) _____ (3) *ECH 3024, ECH 3301, PHY 2049C, BME 3009 +BME 3702, BME 3361, BME 3622 Fall	_ BME 4503L Bioinstrumentation Lab _____ (1) *BME 3702, BME 4403C +BME 3100, BME 4211, BME 4404C Spring
	_ BME 3100 Biomaterials _____ (3) *BME 3622, BME 3361, BME 3702, BME 4403C +BME 4211, BME 4503, BME 4503L, BME 4404C Spring	_ BME 4211 Biomechanics _____ (3) *BME 3702, BME 3622, BME 3361 +BME 3100, BME 4503, BME 4503L, BME 4404C Spring	_ BME 4404C QASP II _____ (3) *ECH 3301, BME 4403C, BME 3702, BME 3361 +BME 3100, BME 4211, BME 4503, BME 4503L Spring	_ BME 4503 Bioinstrumentation _____ (3) *BME 3702, BME 4403C +BME 3100, BME 4211, BME 4404C Spring	
SENIOR	_ BME 4332 Cell and Tissue Eng. _____ (3) *BME 3702, BME 3100, BME 4404C +BME 4332L, BME 4801 Fall	_ BME 4332L Cell and Tissue Eng. Lab _____ (1) *BME 3702, BME 3100, BME 4404C +BME 4332 Fall	_ BME 4801 BME Design I _____ (3) *BME 4211, BME 4503, BME 4404C, BME 3100 Fall	BME XXXX BME Senior Elective _____ (3) *Senior standing Fall, Spring	BME XXXX BME Senior Elective _____ (3) *Senior standing Fall, Spring
	_ BME 4744C Biodynamics and Sys. Cont. _____ (4) *BME 3702, BME 4211, BME 4503 Spring	BME 4802 BME Design II _____ (3) *Pre-requisite dependent on major / instructor permission Spring	BME XXXX BME Senior Elective _____ (3) *Senior standing Fall, Spring	_ ECH 4822/4823 Polymer Physical Science / Science _____ (3) *Senior standing Spring	

Name _____
 Student ID _____
 E-mail _____
 Current GPA _____ Date _____
 Major _____

Graduation Requirements

- _ C grade or above in all ECH and BME major courses
- _ 2.0 Major GPA
- _ 2.0 Overall GPA
- _ 128 total credit hours
- _ AA or General Education Requirements
- _ Summer Residency Requirement or waiver
- _ Completion final 30 degree hours at FAMU