

FSU Biomedical Engineering - Cell & Bioprocess

* Course Pre-requisites
+ Course Co-requisites

* Semester(s)
course is offered

Please note that major courses are not offered every semester

FRESHMAN	<p>_ CHM 1045/1045L General Chemistry I w/ Lab (3/1) *C- or better in MAC 1105</p> <p>Fall, Spring, Summer</p>	<p>_ MAC 2311 Calculus I (4) *C- or better in MAC 1140 and MAC 1114</p> <p>Fall, Spring, Summer</p>	<p>_ ENC 1101 English I (3)</p> <p>Fall, Spring, Summer</p>	<p>_ EGN 1004L First Year Engineering Lab (1)</p> <p>Fall, Spring, Summer</p>	<p>LIBERAL STUDIES *Requirements in gray not required for students with AA</p> <p>Statewide Social Science or History: ANT2000, ECO2013, POS1041, PSY2012, SYG1000, AMH 2020 (3)</p> <p>Statewide Humanities or Ethics: ARH2000, HUM2020, LIT2000, MUL2010, THE2000, PHI 2010 (3)</p> <p>_ Scholarship in Practice/ Formative Exp.: BME 4801/4802 (6)</p> <p>_ Upper-Division Writing: BME 4801 (3)</p> <p>Computer Competency: BME 3702 (4)</p> <p>Oral Comm. Competency: BME 4801 (3)</p> <p>General Education Electives 1 _____ (3) 2 _____ (3)</p> <p>_ History State W _ Social Science Humanities Ethics 1st Diversity Civic Lit Course 2nd Diversity Civic Lit Exam</p> <p>BME 3009 Intro to Biomedical Engineering (3) *BSC 2010, MAC 2312, PHY 2048C +ECH 3024, ECH 3301, MAC 2313, PHY 2049C</p>
	<p>_ CHM 1046/1046L General Chemistry II with Lab (3/1) *C- or better in CHM 1045</p> <p>Fall, Spring, Summer</p>	<p>_ MAC 2312 Calculus II (4) *C- or better in MAC 2311</p> <p>Fall, Spring, Summer</p>	<p>_ ENC 2135 English II (3)</p> <p>Fall, Spring, Summer</p>	<p>BSC 2010 Biological Science I (3)</p> <p>Fall, Spring, Summer</p>	
SOPHOMORE	<p>CHM 2210 or CHM 3217 Organic Chemistry I or One- Semester Organic (3) *C- or better in CHM 1046</p> <p>Fall, Spring, Summer</p>	<p>MAC 2313 Calculus III (5) *C- or better in MAC 2312</p> <p>Fall, Spring, Summer</p>	<p>ECH 3023 Mass & Energy Balances I (3) *MAC 2312, CHM 1046 +CHM 2210, MAC 2313, PHY 2048C</p> <p>Fall, Spring</p>	<p>PHY 2048C Gen. Physics A with Lab (5) *C- or better in MAC 2311</p> <p>Fall, Spring, Summer</p>	
	<p>CHM 2211 Organic Chemistry II or BCH 3023 if student takes CHM 3217 (3) *C- or better in CHM 2210</p> <p>Fall, Spring, Summer</p>	<p>ECH 3301 Process Analysis & Design (4) *C- or better in MAC 2312 +ECH 3023, MAC 2313</p> <p>Fall, Spring, Summer</p>	<p>ECH 3024 Mass & Energy II (4) *CHM 2210, MAC 2313, PHY 2048C, ECH 3023 +ECH 3301, PHY 2049C, BSC 2010</p> <p>Spring, Summer</p>	<p>PHY 2049C Gen. Physics B with Lab (5) *PHY 2048C, MAC 2312</p> <p>Fall, Spring, Summer</p>	
JUNIOR	<p>BME 3622 Biothermodynamics (3) *ECH 3024, ECH 3301, PHY 2049C, BME 3009 +BME 3702, BME 3361, BME 4403C</p> <p>Fall</p>	<p>BME 3702 Biocomputations (4) *ECH 3024, ECH 3301, PHY 2049C, BME 3009, CHM 2210 +BME 3622, BME 3361, BME 4403C</p> <p>Fall</p>	<p>BME 3361 Biotransport Phenomena (3) *ECH 3024, ECH 3301, PHY 2049C, BME 3009 +BME 3702, BME 3622, BME 4403C</p> <p>Fall</p>	<p>BME 4403C Quantitative Anatomy and Sys. Phys. I (QASP) (3) *BME 3009, ECH 3024, ECH3301, PHY 2049C + BME 3702, BME 3361, BME 3622</p> <p>Fall</p>	
	<p>_ BME 3100 Biomaterials (3) *BME 3622, BME 3361, BME 3702, BME 4403C +BME 4211, BME 4503, BME 4503L, BME 4404C</p> <p>Spring</p>	<p>_ BME 4211 Biomechanics (3) *BME 3702, BME 3622, BME 3361 +BME 3100, BME 4503, BME 4503L, BME 4404C</p> <p>Spring</p>	<p>_ BME 4404C QASP II (3) *ECH3 301, BME 3361, BME 3702, BME 4403C +BME 4503, BME 4503L</p> <p>Spring</p>	<p>_ BME 4503 Bioinstrumentation (3) *BME 3702, BME 4403C +BME 4404C</p> <p>Spring</p>	
SENIOR	<p>_ BME 4332 Cell and Tissue Eng. (3) *BME 3702, BME 3100, BME 4404C +BME 4801, BME 4332L</p> <p>Fall</p>	<p>_ BME 4332L Cell and Tissue Eng. Lab (1) *BME 3702, BME 3100, BME 4404C +BME 4332</p> <p>Fall</p>	<p>_ BME 4801 BME Design I (3) *BME 3100, BME 4211, BME 4503, BME 4503L, BME 4404C</p> <p>Fall</p>	<p>BME XXXX BME Senior Elective (3) *Senior standing</p> <p>Fall, Spring</p>	<p>ECH 4504 Kinetics & Reactor Design (3) *Senior standing</p> <p>Fall</p>
	<p>_ BME 4744C Biodynamics and Sys. Cont. (4) *BME 3702, BME 4211, BME 4503</p> <p>Spring</p>	<p>BME 4802 BME Design II (3) *BME4801; BME 4332 or BME 4508 depending on major pathway</p> <p>Spring</p>	<p>BME XXXX BME Senior Elective (3) *Senior standing</p> <p>Fall, Spring</p>	<p>_ BME XXXX BME Senior Elective (3) *Senior standing</p> <p>Fall, Spring</p>	

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 FSU