

**Approved depth electives from other majors:**

Highlighted courses or those that have the number 8 as their second digit are special topics courses that might change from semester to semester. If you are interested in one of the above special topics courses or an engineering course that builds on the core BME curriculum email a copy of the current course syllabus to the Director of Undergraduate study for evaluation. Seniors with a grade point average of at least 3.5 may schedule graduate level BMED courses as acceptable alternatives, subject to the approval of the course professor and the Director of Student Services.

School	Course
AE	AE 2010: Thermodynamics
	AE 2220: Dynamics
	AE 3030: Aerodynamics
	AE 3515: Systems Dynamics and Controls
CEE	CEE 2040: Dynamics
	CEE 4560: Origami Engineering
CHBE	CHBE 2120: Numerical Methods in Chemical Engineering
	CHBE 4210: Process Control
	CHBE 4505: Chemical Process Design
	CHBE 4525: Biochemical Process Design
	CHBE/ME/ECE 4782 : Biosystems Analysis
	CHBE/ME/MSE 4793 : Composite Materials & Processes
	CHBE/MSE/ME 4775 : Polymer Science and Engineering I
CHBE/MSE/ME 4776 : Polymer Science and Engineering II	
COE	COE 2701*: Start Up Lab (counts against 6 max credits of research)
	COE 3001: Mechanics of Deformable Bodies
	COE 3002: Introduction to the Microelectronics and Nanotechnology Revolution
	COE 3803: Data Analytics for Engineers
CS / CX	CS 3251: Computer Networks I
	CS 3600: Intro to AI
	CS 3630: Intro to Robotics and Perception
	CS 3651: Prototyping Intelligent Appliances
	CX 4010: Computational Problem Solving
	CS 4240: Computational Data Analysis
	CX4242: Data and Visual Analytics
	CS 4261: Mobile Applications and Services
	CS 4400: Intro to Database Management
	CS 4460: Introduction to Information Visualization
	CS 4476: Computer Vision
	CS 4605: Mobile and Ubiquitous Computing
	CS 4641: Machine Learning
	CX 4230: Computer Simulation
	ID
ID 4843/8900CZ: Evidence Based Design	
ID 6271: Healthcare Design of the Future	
ISYE	ISYE 3133 (QUP): Engineering Optimization

School	Course
ECE	ECE 2020: Fundamentals of Digital Design
	ECE 2026 : Intro to Signal processing
	ECE 2031: Digital Design Laboratory
	ECE 2036: Engineering Software Design
	ECE 2893: Computing Fundamentals: Combined Hardware/Software Approach
	ECE 3550: Feedback Control Systems
	ECE 4782 : Biosystems Analysis
ECE/MSE 4761 : Industrial Controls and Manufacturing	
ME	ME 2202: Dynamics of Rigid Bodies
	ME 3015: System Dynamics and Control
	ME 3017: System Dynamics
	ME 3180: Machine design
	ME 3210: Design, Materials, and Manufacture
	ME 3322: Thermodynamics
	ME 3743: Emerging Technologies
	ME 4214: Mechanical Behavior of Materials
	ME 4775 : Polymer Science and Engineering I
	ME 4776 : Polymer Science and Engineering II
	ME 4782 : Biosystems Analysis
	ME 4793 : Composite Materials & Processes
	ME 4803 : Probabilistic Risk Assessment
ME 4833: Collaborative Assistive Technology Design	
MSE	MSE 4010: Environ Degradation
	MSE 3300: Matsci & Eng of Sports
	MSE 4330 : Fund Nanomats & Nanostrucs
	MSE 4335: Soft Nano Bio Materials
	MSE 4761 : Industrial Controls and Manufacturing
	MSE 4775 : Polymer Science and Engineering I
	MSE 4776 : Polymer Science and Engineering II
	MSE 4793 : Composite Materials & Processes
	MSE 4803 : Advanced Nanomaterials
	MSE 4803: Energy and Materials Research
MSE 4330: Material Science & Engineering of Sports	
PHYS	PHYS 3520: Physics of Living Systems
	PHYS 3804: Neurophysics
	PHYS 4251 : Biophysics