

## **BE Fundamentals**

BE 502 From Biomedical Science to the Marketplace  
BE 512 Bioengineering III: Biomaterials  
BE 521 Brain-Computer Interfaces  
BE 537 Biomedical Image Analysis  
BE 540 Biomolecular and Cellular Engineering  
BE 546 Fundamental Techniques of Imaging I  
BE 547 Fundamental Techniques of Imaging 2  
BE 550 Hemodynamics  
BE 552 Cellular Bioengineering  
BE 553 Principles, Methods, and Applications of Tissue Engineering  
BE 554 Engineering Biotechnology  
BE 555 Nanoscale Systems Biology  
BE 557 From Cells to Tissue: Engineering Structure and Function  
BE 562 Drug Discovery and Development  
BE 567 Mathematical and Computational Modeling of Biological Systems  
BE 580 Medical Radiation Engineering  
BE 581 Techniques of Magnetic Resonance Imaging  
BE 583 Molecular Imaging  
BE 608 Translational Therapeutics  
BIOL 536 Computational Biology  
BIOL 537 Advanced Computational Biology  
BMB 554 Macromolecular Crystallography: Methods and Applications  
BMB 590 Biological Physics  
BMB 601 Fundamentals of Magnetic Resonance  
BMB 603 Advanced Topics in Magnetic Resonance  
BMB 618 Applications of High Resolution NMR Spectroscopy to Problems in Structural Biology  
BMB 625 Optical Methods in Cell Physiology  
BMB 626 Mass Spectrometry and Proteomics  
CAMB 526 Experimental Principles in Cell and Molecular Biology  
CAMB 550 Genetic Principles  
CBE 510 Polymer Engineering  
CBE 560 Biomolecular Engineering  
CBE 563 Development and Manufacturing of Biopharm  
CBE 640 Transport Processes I  
CBE 641 Transport Processes II  
ESE 530 Elements of Neural Computation, Complexity, and Learning  
ESE 574 The Principles of Microfabrication Technology  
ESE 580 Polymers and Biomaterials  
MEAM 505 Mechanical Properties of Macro/Nanoscale Materials  
MEAM 519 Mechanical Properties of Nano and Macro-Scale Materials  
NGG 594 Computational Neuroscience  
PHRM 531 Intro to Genome Science  
MEAM 521 Introduction to Parallel Computing  
MEAM 522 Fundamentals of Sensor Technology  
MEAM 527 Finite Element Analysis  
MEAM 530 Continuum Mechanics  
MEAM 544 Continuum Biomechanics  
MEAM 554 Mechanics of Materials  
MEAM 555 Nanoscale Systems Biology  
MEAM 570 Transport Processes I  
MEAM 625 Haptic Interfaces  
MEAM 644 BioTransport: Fluid Mechanics, Heat and Mass Transfer