

Courses that Fulfill the BME Master's Degree Focus in Nanomedicine Electives Requirement

Students must pass four of the following courses (or three courses if completing a thesis), including at least two courses (8 credits) from Biomedical Engineering. Grades of C- or lower are not acceptable. Students may petition for a different course (500-level or higher) to count towards the Nanomedicine Electives Requirement, subject to approval by the BME Graduate Committee.

BE 504 Polymers and Soft Materials, 4 cr
BE 511, Biomedical Instrumentation, 4 cr
BE 515 Introduction to Medical Imaging, 4 cr
BE 517 Optical Microscopy of Bio. Materials, 4 cr
BE 526/726 Fundamentals of Biomaterials, 4 cr
BE 527/727 Principles and Applications of Tissue Engineering, 4 cr
BE 535 Cell Mechanics, 4 cr
BE 549 Structure and Function of the Extracellular Matrix, 4 cr
BE 560 Biomolecular Architecture, 4 cr
BE 565 Molecular Biotechnology, 4 cr
BE 566 DNA Structure and Function, 4 cr
BE 569 Next Generation Sequencing, 4 cr
BE 765 Biomedical Optics and Biophotonics, 4 cr
BI 551 Biology of Stem Cells, 4 cr
BI 576 Carcinogenesis, 4 cr
CH 629 DNA Nanotechnology, 4 cr
MS/EC 577 Electrical, Optical and Magnetic Properties of Materials, 4 cr
EC 777 Nano-optics, 4 cr
ME 528 Biological Physics, 4 cr
ME 546 Introduction to Micro/Nanofluidics, 4 cr
ME 555 MEMS: Fabrication and Materials, 4 cr
ME 579 Nano/Microelectronic Device Technology, 4 cr
GMS BT 520 Biology of Cancer, 4 cr
PY 895 Biomolecular Nanotechnology