Michigan Technological University

Minor in Tissue and Stem Cell Engineering

Program Code: ETSM, Academic Year 2018-19

Department of Biomedical Engineering

Total Credits Required: 18

Required Courses: 9 credits

Course	Credits
BE 2400 Cellular & Molecular Biology I (3)	
BE 2700 Biomedical Signals & Systems (3) *Prereq: CH1150, MA2160, ENG1102 and PH2100*	
BE 4230 Stem Cell and Tissue Engineering (3) *Prereq: BE2400, BE3350, BE3800*	

Elective Courses: 9 credits, minimum

Course	Credits
BE 3350 Human Biomechanics (3) *Prereq: BE3300 or MEEM2110*	
BE 3800 Biomaterials II (3) *Prereq: BE2800 or MSE2100*	
BE 3400 Laboratory Techniques for BME (2) *Prereq: BE2800 or MSE2100*	
BE 4200 Cellular & Molecular Biology II (3) *Prereq: BE2400*	
BE 4300 Polymeric Biomaterials (3) *Prereq: BE3800*	
BE 4330 Biomimetic Materials (3) *Prereq: BE3350 and BE3800*	
BE 4335 Smart Polymers (3) *Prereq: BE3350 and BE3800*	
BE 4350 Cell Biomechanics & Mechanical Transduction (3) *Prereq: BE2400 and BE3350 and BE3800*	
BE 4510 Cardiovascular Engineering (3) *Prereq: BE2400*	
BE 4800 Biomaterials Interfaces (3) *Prereq: BE3800*	
BE 4850 Tissue Mechanics (3) *Prereq: BE3350*	