

Michigan Technological University**Minor in Tissue and Stem Cell Engineering**

Program Code ETSM, Academic Year 2021-22

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 <i>Prereq: CH1150, MA2160, ENG1102 and PH2100</i>	3
BE 4230 Stem Cell and Tissue Engineering <i>Prereq: BE2400, BE3350, BE3800</i>	3

Elective Courses: 9 credits minimum

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