

Technical Elective Modules – Cohort 2016/2017 Onwards

1. TE modules offered by BME. Students are encouraged to take TEs from this list.

Module code and title	Modular credits
BN2001 Independent Study	4
BN2105 Medical Device Life Cycle Management	4
BN3202 Musculo-Skeletal Biomechanics	4
BN3402 Bio-Analytical Methods in Bioengineering	4
BN3301 Introduction to Biomaterials	4
BN4102 Gerontechnology in Ageing	4
BN4103 Assistive Technology for Persons with Disability	4
BN4109 Special Topics in Bioengineering	4
BN4202 Biofluids Dynamics	4
BN4203 Robotics in Rehabilitation	4
BN4301 Principles of Tissue Engineering	4
BN4302 Organs in a Dish: Organoid Bioengineering	4
BN4303 Tissue Engineering for Designing Food	4
BN4304 Engineering Strategies for Gene and Cell Manufacturing	4
BN4402 Electrophysiology	4
BN4403 Cellular Bioengineering	4
BN4404 Biomicroelectromechanical Systems-BioMEMs	4
BN4406 Biophotonics and Bioimaging	4
BN4501 Engineering Biology	4
BN4601 Intelligent Medical Robotics	4
BN4701 Serious Games for Health	4
BN5104 Quantitative Physiology Principles in Bioengineering	4
BN5201 Advanced Biomaterials	4
BN5202 Advanced Tissue Biomechanics	4
BN5203 Advanced Tissue Engineering	4
BN5205 Computational Biomechanics	4
BN5207 Medical Imaging Systems	4
BN5208 Biomedical Quality and Regulatory Systems	4
BN5209 Neurosensors and Signal Processing	4
BN5210 Biosensors & Biochips	4

2. TE modules offered by other Departments/Faculties. Subject to approval, students can also take TEs offered by other Departments/Faculties listed below.

Module code and title	Modular credits
EE4603 Biomedical Imaging Systems	4
LSM2233 Cell Biology	4
MB5105 Microfabrication for Biologists	2

ME4242 Soft Robotics	4
ME4253 Biomaterials Engineering	4
PC2267 Biophysics I	4
PC3267 Biophysics II	4
PC4267 Biophysics III	4

Professional Development Modules – Cohort 2016/2017 Onwards

Students can take modules from this list or from the list of Technical Elective Modules for PPP Pathway Requirements (8 MCs).

Module code and title	Modular credits
BN5208 Biomedical Quality and Regulatory Systems	4
IE4240 Project Management	4
ME2162 Manufacturing Processes	4
MT2001 Experiencing Engineering Leadership	4
MT3001 Systems Thinking and Engineering	4
MT5001 IP Management	4
MT5003 Creativity and Innovation	4
MT5006 Strategic and New Product Development	4
MT5007 Management of Technological Innovation	4