

Integrated Electrical & Biomedical Engineering (B.Eng.BME) ECE Technical Electives 2025/26

Revised: Sept 16, 2025

Course	Description	Term	Note
CompEng 3DQ5	Digital Systems Design	1	Permission may be required
CompEng 4DS4	Embedded Systems	2	
CompEng 4TN4	Image Processing	2	
ElecEng 3PI4	Energy Conversion	2	
ElecEng 4BF4	Advanced Medical Imaging	2	
ElecEng 4CL4	Control System Design	1	
ElecEng 4EK4	Microelectronics	1	
ElecEng 4EM4	Photonic Devices and Systems	2	
Engineering 4EX3	Experiential Engineering Design	1 & 2	
ElecEng 4OJ4	Research Project	1 & 2	
ElecEng 4OH4	Advanced Research Project	1 & 2	
ElecEng 4PK4	Power Electronics	1	
ElecEng 4PM4	Electrical Power Systems	2	
ElecEng 4PN4	Electric Motor Drives	2	
ElecEng 4PP4	Smart and Micro Grids	2	
ElecEng 4PR4	Net-Zero Emission Power Systems	2	
ElecEng 4QT3	Advanced Quantum Theory and Technology	2	
ElecEng 4TK4	Digital Communications	1	
SfwrEng 3K04	Software Development	Refer to Calendar	Permission may be required
MedPhys 4B03	Radioactivity and Radiation Interactions	Refer to Calendar	Permission may be required
MedPhys 4T03	Clinical Applications of Physics in Medicine	Refer to Calendar	Permission may be required
ChemEng 4T03	Applications of Chemical Engineering in Medicine	Refer to Calendar	Permission may be required
EngPhys 3O04	Introduction to Fluid Mechanics and Heat Transfer	Refer to Calendar	Permission may be required

MedPhys 4IO3	Introduction to Biophotonics	Refer to Calendar	Permission may be required

MechEng 3O04	Fluid Mechanics	Refer to Calendar	Permission may be required
MechEng 4CC3	Experimental and Computational Biomechanics	Refer to Calendar	Permission may be required
CompEng 4SL4	Fundamentals of Machine Learning	1	