Electrical Engineering and Biomedical Engineering
September 2023 (for students entering Year 1 in September 2020 or later)

Year 2
Term A
NMM 2270A	Applied Mathematics for Engineering II
BME 3201A	Fundamentals of Biomedical Engineering Design
CS 1027A	Computer Science Fundamentals II
ECE 2205A	Electric Circuits I
ECE 2240A	Electrical Laboratory
ECE 2277A	Digital Logic Systems

Term B
NMM 2276B	Applied Mathematics for Electrical & Mechanical Eng. III
ECE 2231B	Introduction to Electronics
ECE 2233B	Circuits and Systems
ECE 2236B	Magnetic Circuits and Transmission Lines
ECE 2242B	Principles of Design in Electrical Engineering

One 0.5-credit non-technical elective *

Year 3
Term A
NMM 3415A	Advanced Applied Mathematics for Electrical Engineering
Biol 1001A	Biology for Sciences I
ECE 3330A	Control Systems
ECE 3332A	Electric Machines
ECE 3337A	Electronic Circuits
SS 2141A	Applied Probability and Statistics for Engineers

Term B
Biol 1002B	Biology for Sciences II
ECE 3331B	Introduction to Signal Processing
ECE 3336B	Electromagnetic Theory
ECE 3370B	Communication Electronics I
ECE 3375B	Microprocessors and Microcomputers
ECE 3399B	Principles and Practices of Design of Electronic Systems

Year 4
Term A
Biochem 2280A	Biochemistry and Molecular Biology
BME 3301A	Neural Systems Engineering
ECE 4455A	Biomedical Systems Analysis
Physiol 2130	Human Physiology

0.5 credit Biomedical Science elective
0.5 credit Healthcare non-technical elective

Term B
BME 3303B	Cellular Systems Engineering
MME 4469B	Biomechanics of the Musculoskeletal System
Physiol 2130	Human Physiology

Two 0.5-credit Biomedical Science electives
One 0.5-credit Healthcare non-technical elective
One 0.5-credit Open elective (taken in either term)**

NOTES:

Important:
Students are responsible for ensuring they have the correct courses required for their degree. If you are unsure which courses you still need or if you see courses listed on the progression sheet that are no longer offered or are not offered in the term you see listed here, please contact your Academic Counsellor.

Non-technical electives:
https://www.eng.uwo.ca/undergraduate/upper-year/electives.html

Biochemistry 3385A/B	Human Biochemistry
Biochemistry 3386A/B	Clinical Biochemistry
Biology 2382A/B	Cell Biology
Biology 2581A/B	Genetics
Chemistry 2213A/B	Organic Chemistry
Chemistry 2223F/G	Organic Chemistry of Biological Molecules
Communication Sciences and Disorders 4417A/B	Hearing Science
Health Science 2300A/B	Systemic Approach to Functional Anatomy
Health Science 3300A/B	Anatomy of the Human Body
Medical Science 4931F/G	Selected Topics in Medical Science
Physiology 3140A/B	Cellular Physiology
Psychology 2220A/B	Intro. to Behavioural & Cognitive Neuroscience
CBE 4421A/B	Intro. to Biomaterials Engineering
CBE 4422A/B	Nanobiotechnology
ECE 4438A/B	Advanced Image Processing & Analysis
Medical Biophysics 3507F/G	Analysis of Oxygen Transport
Medical Biophysics 3645A/B	Intro. to Biomedical Optics
Medical Biophysics 4475A/B	Medical Imaging
Physics 4662A/B	Magnetic Resonance Imaging
Physics 4672A/B	Radiological Physics

**Open Electives
For the course credit designated as an "open elective", students may select any course from the lists of: Biomedical Science electives; BME technical electives; ECE technical electives; Healthcare non-technical electives; or Faculty of Engineering approved non-technical electives.

Year 5

Term A

BME 4400	Biomedical Engineering Research Thesis (1.5-credit course)
ECE 4416	Electrical/Computer Engineering Project
ECE 4429A	Advanced Digital Signal Processing
ECE 4437A	Communications Theory
ECE 4445A	Introduction to Digital Image Processing
ELI 4410F	Engineering Ethics, Sustainable Development and the Law

Term B

BME 4400	Biomedical Engineering Research Thesis (1.5-credit course)
ECE 4416	Electrical/Computer Engineering Project
ELI 3200B	Engineering Innovation I: New Venture Creation

Two 0.5-credit BME technical electives
One 0.5-credit ECE technical elective
(https://www.eng.uwo.ca/undergraduate/upper-year/next.html)