

Electrical & Biomedical Engineering Program Road Map 2022-23

This program layout applies to students registered in 2022-2023.

Where there are discrepancies in this document, the published [Academic Calendar](#) will always take precedence.

For a detailed breakdown of your course requirements, please refer to your Advisement Report in Mosaic.

ELECTRICAL & BIOMEDICAL - LEVEL II						
	TERM 1			TERM 2		
ELEC CORE	Engineering Mathematics III	MATH 2Z03	3	4	COMPENG 2SI3	Data Structures, Algorithms and Discrete Mathematics
	Principles of Programming	COMPENG 2SH4	4	4	ELECENG 2CJ4	Circuits and Systems
	Introduction to Electrical Engineering	ELECENG 2CI4	5	4	ELECENG 2FH4	Electromagnetics I
IBIOMED CORE	Inquiry II: Biochemistry	HTHSCI 2E03	3	3	IBEHS 2P03	Health Solutions Design Projects II: Introduction to Genetic Engineering
	Human Physiology & Anatomy I	HTHSCI 2F03	3	3	HTHSCI 2FF3	Human Physiology & Anatomy II
	TOTAL TERM 1 UNITS		17	17	TOTAL TERM 2 UNITS	
	TOTAL UNITS:		34			

ELECTRICAL & BIOMEDICAL - LEVEL III						
	TERM 1			TERM 2		
ELEC CORE	Logic Design	COMP ENG 2DI4	4	3	COMPENG 2DX3	Microprocessor Systems Project
	Electromagnetics II	ELECENG 3FK4	4	4	ELECENG 2EI4	Electronic Devices and Circuits I
	Advanced Probability and Random Processes	ELECENG 3TQ3	3			
IBIOMED CORE	Statistics & Epidemiology 1	HTHSCI 2G03	3	3	HTHSCI 3G03	Critical Appraisal of Medical Literature
	Biomedical Signals and Systems	IBEHS 3A03	3	4	IBEHS 3P04	Health Solutions Design Projects III: Analysis and Decision Making
				3	CHEM 1AA3	Introductory Chemistry II
	TOTAL TERM 1 UNITS		17	17	TOTAL TERM 2 UNITS	
	TOTAL UNITS:		34			

ELECTRICAL & BIOMEDICAL - LEVEL IV

	TERM 1			TERM 2		
ELEC CORE	Electronic Devices & Circuits II	ELECENG 3EJ4	4	3	COMPENG 3SK3	Computer-Aided Engineering
				4	ELECENG 3TR4	Communication Systems
IBIOMED CORE	Biomechanics	IBEHS 4B03	3	3	IBEHS 4A03	Biomedical Control Systems
	Biomedical Instrumentation and Measurement	IBEHS 4F04	4	3	IBEHS 4C03	Statistical Methods in Biomedical Engineering
	Health Solutions Design Projects IV: Economics and Project Management	IBEHS 4P04	4	3	IBEHS 4D03	Introduction to Medical Imaging
	Introductory Organic Chemistry OR Organic Chemistry I	CHEM 2E03 OR CHEM 20A3	3	4	ELECTIVE	IBEHS Technical Elective
	<u>TOTAL TERM 1 UNITS</u>		18	20	<u>TOTAL TERM 2 UNITS</u>	
	<u>TOTAL UNITS:</u>		38			

ELECTRICAL & BIOMEDICAL - LEVEL V

	TERM 1			TERM 2		
ELEC CORE	Level III/IV Electrical Engineering Elective from Approved List	ELECTIVE	4	3	ENGINEER 4A03	Ethics, Equity and Law in Engineering
	Level III/IV Electrical Engineering Elective from Approved List	ELECTIVE	4	4	ELECTIVE	Electrical Engineering Elective (from list)
	Complementary Studies	ELECTIVE	3	4	ELECTIVE	Electrical Engineering Elective (from list)
				3	ELECTIVE	Complementary Studies
IBIOMED CORE	Biomedical Capstone Design Project	ELECBME 5P06A	3	3	ELECBME 5P06B	Biomedical Capstone Design Project
	Modelling of Biological Systems	IBEHS 4QZ3	3	4	ELECTIVE	IBEHS Technical Elective
	<u>TOTAL TERM 1 UNITS</u>		17	21	<u>TOTAL TERM 2 UNITS</u>	
	<u>TOTAL UNITS:</u>		38			