

5-Year Health, Engineering Science and Entrepreneurship (HESE) Program Road Map 2022-23

This program layout applies to students registered in 2022-23.

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.

HESE - LEVEL II						
	TERM 1			TERM 2		
HESE CORE	Engineering Mathematics III	MATH 2Z03	3	3	MATH 2ZZ3	Engineering Mathematics IV
	Human Centred Design	IBEHS 2E03	3	3	IBEHS 2EE3	From Idea to Innovation
	Elective	ELECTIVE	3			
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
				3	CHEM 1AA3	Introductory Chemistry II
	<u>TOTAL TERM 1 UNITS</u>		15	15	<u>TOTAL TERM 2 UNITS</u>	
	<u>TOTAL UNITS:</u>		30			

HESE - LEVEL III						
	TERM 1			TERM 2		
HESE CORE	Fundamentals of Business Strategy	IBEHS 3E03	3	3	HTHSCI 2K03	Inquiry II: Cell Biology
	Elective	ELECTIVE	3	3	ELECTIVE	Elective
				3	ELECTIVE	Level III Health Sci, Engineering or Commerce course
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
	Introductory Organic Chemistry OR Organic Chemistry I	CHEM 2E03 OR CHEM 20A3	3			
	<u>TOTAL TERM 1 UNITS</u>		15	16	<u>TOTAL TERM 2 UNITS</u>	
	<u>TOTAL UNITS:</u>		31			

IBEHS 1HS0: Health Screening & Clinical Safety Training must be taken in the Spring/Summer, prior to enrolling in IBEHS 4EE6A/B

HESE - LEVEL IV

		TERM 1			TERM 2		
HESE CORE	Health, Engineering Science and Entrepreneurship III: Innovators in Scrubs	IBEHS 4EE6A	3	3	IBEHS 4EE6B	Health, Engineering Science and Entrepreneurship III: Innovators in Scrubs	
	Inquiry III: Advanced Inquiry in Health Sciences	HTHSCI 3E03	3	3	ELECTIVE	Elective	
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	
		<u>TOTAL TERM 1 UNITS</u>	17	15	<u>TOTAL TERM 2 UNITS</u>		
		<u>TOTAL UNITS:</u>	32				

HESE - LEVEL V

		TERM 1			TERM 2		
HESE CORE	Health, Engineering Science and Entrepreneurship Thesis	IBEHS 5E15A	7.5	7.5	IBEHS 5E15B	Health, Engineering Science and Entrepreneurship Thesis	
	Elective	ELECTIVE	3	3	ELECTIVE	Elective	
	Elective	ELECTIVE	3	3	ELECTIVE	Elective	
IBIOMED CORE	Modelling of Biological Systems	IBEHS 4QZ3	3				
		<u>TOTAL TERM 1 UNITS</u>	16.5	13.5	<u>TOTAL TERM 2 UNITS</u>		
		<u>TOTAL UNITS:</u>	30				