

Health, Engineering Science and Entrepreneurship (HESE) Program Road Map 2021-22

This program layout applies to students registered in 2021-2022.

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 Student Summary in Mosaic.

HESE - LEVEL II						
	TERM 1			TERM 2		
HESE CORE	Engineering Mathematics III	MATH 2Z03	3	3	MATH 2ZZ3	Engineering Mathematics IV
	Health, Engineering Science and Entrepreneurship I: Human-Centred Design	IBEHS 2E06A	3	3	IBEHS 2E06B	Health, Engineering Science and Entrepreneurship I: Human-Centred Design
	Current Research Initiatives I	IBEHS 2R00A	0	0	IBEHS 2R00B	Current Research Initiatives I
	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
	TOTAL TERM 1 UNITS		15	15	TOTAL TERM 2 UNITS	
	TOTAL UNITS:		30			

HESE - LEVEL III						
	TERM 1			TERM 2		
HESE CORE	Health, Engineering Science and Entrepreneurship II: From Idea to Enterprise	IBEHS 3EE6A	3	3	IBEHS 3EE6B	Health, Engineering Science and Entrepreneurship II: From Idea to Enterprise
	Current Research Initiatives II	IBEHS 3R00A	0	0	IBEHS 3R00B	Current Research Initiatives II
	Elective	ELECTIVE	3	3	HTHSCI 2K03	Inquiry II: Cell Biology
				3	ELECTIVE	Elective
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			
	TOTAL TERM 1 UNITS		15	16	TOTAL TERM 2 UNITS	
	TOTAL UNITS:		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	
	Current Research Initiatives III	IBEHS 4R00A	0	0	IBEHS 4R00B	Current Research Initiatives III	
	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	
	Current Research Initiatives IV	IBEHS 5R06	3	3	IBEHS 5R06B	Current Research Initiatives IV	
	Elective	ELECTIVE	3	3	ELECTIVE	Elective	
				3	ELECTIVE	Elective	
IBIOMED CORE	Elective	ELECTIVE	3	3	ELECTIVE	Elective	
		<u>TOTAL TERM 1 UNITS</u>	16.5	19.5	<u>TOTAL TERM 2 UNITS</u>		
		<u>TOTAL UNITS:</u>	36				