

	Code	Units of Study	Pre-requisite(s)	Convener	Tel
<b>First and Second Academic Semesters</b>					
Sem 1	HET1000	Professional Engineering	Nil	Adam Krezel	8237
	HET102	Introductory Physiology	Nil	Per Line	5214
	HET124	Energy & Motion	Nil	Tom Edwards	8372
	HMS111	Engineering Mathematics 1	VCE Mathematical Methods or equivalent	Chris Barling	8289
Sem 2	HET133	Human Physiology	Nil	Joe Ciorciari	8363
	HET182	Electronic Systems	Nil	Alex Mazzolini	8866
	HIT2080	Introduction to Programming	Nil	F Wang	5065
	HMS112	Engineering Mathematics 2	HMS111	Patrick Tobio	8013
<b>Third and Fourth Academic Semesters</b>					
Sem 1	HET202	Digital Electronics Design	Nil	George Banky	8318
	HET240	Cellular Biophysics	HET133 and either HET124 or HET182	Per Line	5214
	HIT3181	Technical Software Development	HIT2080	B Todd	8740
	HMS213	Engineering Mathematics 3B	HMS112	Nian Li	8265
Sem 2	HET230	Cardiovascular Biophysics	HET240	Andrew Wood	8867
	HET235	Biomedical Electronics	HET210 or HET202	D Simpson	5212
	HET260	Renal and Respiratory Biophysics	HET133 & either HET124 or HET182	Mark Schier	8713
	HMS214	Engineering Mathematics 4B	HMS112	Nian Li	8265
	HAC0001*	Careers in the Curriculum	Nil		
<b>Optional Biomedical IBL Year</b>					
Sem 1	HSW050	Industry Based Learning	Completion of first 4 academic Semesters	Annette Pelgrim	8753
Sem 2	HSW055	Industry Based Learning	HSW050	Annette Pelgrim	8753
<b>Fifth and Sixth Academic Semesters</b>					
Sem 1	HET128	Physics 2	HET182 & HET124	Don Ward-Smith	8865
	HET314	Communications Principles	HMS112	Tony Cricenti	5506
		Choose one of:			
	HET219	Neurological Monitoring	HET102 & (HET148 or HET202 or HET210)	Joe Ciorciari	8363
	HET227	Neurophysiology	HET133 and HET182 or HET148	John Patterson	8862
	HET425	Nucleonics and Spectroscopy	HET182 and HET124	Anthony Bartel	5271
		<i>Management &amp; Business Studies (choose one)</i>			
Sem 2	HET214	Circuits & Electronics 1	HMS112 and HET182	Ismat Hijazin	8007
	HET226	Sensory Systems	HET102 or HET133	Joe Ciorciari	8563
	HET232	Embedded Microcontrollers	HET210 or HET202 (from 2005) and HIT2080 or HIT1051 and HIT1052	Peter O'Donoghue	8317
	HET419	Physiological Modelling	HET128 or HMS213	David Liley	8812
<b>Seventh Academic Semesters and Optional Engineering IBL Semesters</b>					
Sem 1	HET312	Control and Automation	HET182 and HMS213 or HMS211	Zhenwei Cao	8809
	HET408	Biomedical Imaging and Emerging Technologies	HMS213 or HMS211	David Liley	8812
	HET550	Design and Development Project 1	287.5 credit points excluding IBL	George Banky	8318
		<i>Management &amp; Business Studies (choose one)</i>			
Sem 2	HSW050	Industry Based Learning	Completion of first 7 academic Semesters	Annette Pelgrim	8753
<b>Optional Engineering IBL Semesters and Eighth Academic Semesters</b>					
Sem 1	HSW055	Industry Based Learning	HSW050	Annette Pelgrim	8753
Sem 2	HET329	Digital Signal and Image Processing	HMS213 or HMS211	Peter Cadusch	8864
	HET556	Design and Development Project 2	HET550	George Banky	8313
		<i>Management &amp; Business Studies (choose one)</i>			
		<i>Specialist Technical (BMS) Studies (choose one)</i>			
<b>Ninth and Tenth Academic Semesters</b>					
Sem 1	HET378	Integrated Circuit Design	HET431 or HET202 (from 2005)	Ismat Hijazin	8007
	HET417	Photonics and Fibre Optics	Nil	Alex Mazzolini	8866
	HET515	Advanced Embedded Systems	HET232 & HET378	Peter O'Donoghue	8317
		<i>Specialist Technical (BMS) Studies (choose one)</i>			
Sem 2	HET416	Computer Systems Engineering	HET232 & HET378	Peter O'Donoghue	8317
		<i>Specialist Technical (BMS) Studies (choose two)</i>			
		<i>Specialist Technical (BMS) Studies (choose two)</i>			
		<i>Choose one of:</i>			
	HET315	Communications Information Theory	HET314 & HMS214	Tony Cricenti	5506
	HIT3138	Intelligent Systems	Nil	Tim Hendtlass	8863
	HET489	Robotic Control	HET312	Zhenwei Cao	8809

Not all subjects will be offered in each Semesters. Some units of study may be offered subject to sufficient enrolments.

Note: In addition to the above sequence, the successful completion of HED400 and HAC0001 is required for the award of the degree.

\* HAC0001 Careers in the Curriculum is a compulsory subject for students commencing from 2007. 100% fee exempt and no credit points.

Group	Code	Units of Study	Prerequisite(s)	Semester Offered
Compulsory Units	HED400	Professional Experience in Engineering	HED400 Introductory Seminar	S1 & S2
	HAC0001	Careers in the Curriculum	NIL	S1 & S2
Engineering & Science (BMS) Core Studies (all 12.5 CP)	HET1000	Professional Engineering	NIL	S1
	HET1102	Introductory Physiology	NIL	S1
	HET124	Energy & Motion	NIL	S1 & S2
	HET128	Physics 2	HET182 and HET124	S1
	HET133	Human Physiology	NIL	S2
	HET182	Electronic Systems	NIL	S1 & S2
	HET202	Digital Electronics Design	NIL	S1
	HET214	Circuits & Electronics 1	HMS112 and HET182	S2
	HET226	Sensory Systems	HET102 or HET133	S2
	HET230	Cardiovascular Biophysics	HET240	S2
	HET232	Embedded Microcontrollers	HET210 (or HET202 from 2005), and HIT2080 or HIT1051 & HIT1052	S2
	HET235	Biomedical Electronics	HET210 or HET202	S1
	HET240	Cellular Biophysics	HET133 and either HET124 or HET182	S1
	HET260	Renal & Respiratory Biophysics	HET133 & either HET124 or HET182	S2
	HET312	Control and Automation	HET182 and HMS213 or HMS211	S1
	HET314	Communications Principles	HMS112	S1
	HET329	Digital Signal & Imaging Processing	HMS213 or HMS211	S2
	HET378	Integrated Circuit Design	HET431 or HET202 (from 2005)	S1
	HET408	Biomedical Imaging & Emerging Technologies	HMS213 or HMS211	S1
	HET416	Computer System Engineering	HET232 & HET378	S2
	HET417	Photonics & Fibre Optics	NIL	S1
	HET419	Physiological Modelling	HET128 or HMS213	S2
	HET550	Design & Development Project 1	Completion of 287.5 credit points of the Degree excluding IBL	S1 & S2
	HET556	Design & Development Project 2	HET550	S1 & S2
	HMS111	Engineering Mathematics 1	VCE Mathematical Methods or equivalent	S1 & S2
	HMS112	Engineering Mathematics 2	HMS111	S1 & S2
HMS213	Engineering Mathematics 3B	HMS112	S1	
HMS214	Engineering Mathematics 4B	HMS112	S2	
Technical (BMS) Studies (all 12.5 CP)	HET308	Circuits & Electronics 2	HET214	S1
	HET315	Communications Information Theory	HET314 and HMS214	S2
	HET316	Electromagnetic Waves	HMS213	S1
	HET489	Robotic Control	HET312	S2
	HET513	Design of DSP Architectures	HET329	S2
	HET515	Advanced Embedded Systems	HET232 & HET378	S1
	HIT3138	Intelligent Systems	NIL	S2
Software Engineering Studies: (all 12.5 CP)	HIT2080	Introduction to Programming (replaces HIT1051)	NIL	S1 & S2
	HIT3181	Technical Software Development (replaces HIT1052)	HIT2080	S1 & S2
	HIT3172	Object-Oriented Programming in C++ (replaces HIT3072)	HIT3181 or HIT3081 or HIT1052 or HIT2302	S1 & S2
Specialist Technical (BMS) Studies (all 12.5 CP)	HES1510	Chemistry 1	NIL, knowledge of Year 12 chemistry is required.	S1 & S2
	HES1525	Chemistry 2	HES1510, or a credit in HES1490, or equivalent.	S2
	HET103	Photonics 1	NIL	TBA
	HET219	Neurological Monitoring	HET102 and (HET148 or HET202 or HET210)	S1
	HET227	Neurophysiology	HET133 and HET182 or HET148	S1
	HET425	Nucleonics and Spectroscopy	HET182 and HET124	S1
	HET527	Sleep and Attention	HET226 or HET219	S1
	HET528	Higher Cortical Function	HET226 or HET231	S1
	HMA103	Statistics and Research Methods A	NIL	S1 & S2
HMA278	Design and Measurement 2	HMA103	S1 & S2	
Management and Business Studies (all 12.5 CP)	HBSG200	New Venture Development & Management	NIL	S1 & S2
	HES3380	Engineering Management 1	100 credit points	S1 & S2
	HES5380	Engineering Management 2	100 credit points	S1 & S2

Students must complete a minimum of 500 credit points according to the following rules:

Engineering & Science (BMS) Core Studies (350 credit points),

25 credit points chosen from Software Engineering Studies,

25 credit points chosen from Technical (BMS) Studies,

50 credit points chosen from Specialist Technical (BMS) Studies,

37.5 credit points chosen from Management and Business Studies, and a further

12.5 credit points chosen from Software Engineering or Specialist Technical (BMS) Studies.

\* HAC0001 Careers in the Curriculum is a compulsory subject for students commencing from 2007. 100% fee exempt and no credit points.

Note: The successful completion of HED400 is required for the award of the degree.