

# FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES



## 2017 STUDY PLAN

FOR ADVANCED STANDING - OFFICE USE ONLY								
<input checked="" type="checkbox"/> Please mark the box to indicate advanced standing granted (use <b>CONDITIONAL</b> to denote conditional advanced standing)								
Unspecified Elective Credit:	Level 1:	units	Level 2:	units	Level 3:	units	Level 4:	units
Student ID Number:			Student Name:			Date: 6/12/16		
Assessor Name:			Advanced Standing Granted: units			Remaining Program Duration: 4 years		
Applicant's Previous Institution:			Applicant's Previous Qualification:					
Assessor's Comments:								

This study plan should be used to guide enrolment for the current academic year. Some students may need to modify their enrolment based on previous study (e.g. students granted advanced standing/credit, students repeating previously failed courses).

BACHELOR OF ENGINEERING (HONOURS) (MECHATRONIC) WITH A BACHELOR OF MATHEMATICAL AND COMPUTER SCIENCES (Maths Major)					
YEAR 1	S1	MECH ENG 1103 Introduction to Mechatronic Engineering (3 units) <input type="checkbox"/>	C&ENVENG 1010 Engineering Mechanics - Statics (3 units) <input type="checkbox"/>	ELEC ENG 1101 Electronic Systems (3 units) <input type="checkbox"/>	MATHS 1011 Mathematics IA (3 units) <input type="checkbox"/>
	S2	CHEM ENG 1009 Materials I (3 units) <input type="checkbox"/>	MECH ENG 1006 Design Graphics & Professional Practice (3 units) <input type="checkbox"/>	MECH ENG 1007 Engineering Mechanics - Dynamics (3 units) <input type="checkbox"/>	MATHS 1012 Mathematics IB (3 units) <input type="checkbox"/>
YEAR 2	S1	MECH ENG 2100 Design Practice (3 units) <input type="checkbox"/>	ELEC ENG 2105 Electronic Circuits M (3 units) <input type="checkbox"/>	MECH ENG 2021 Thermo-Fluids I (3 units) <input type="checkbox"/>	MATHS 2201 Engineering Mathematics IIA (3 units) <input type="checkbox"/>
	S2	MECH ENG 2019 Dynamics & Control I (3 units) <input type="checkbox"/>	MATHS 2202 Engineering Mathematics IIB (3 units) <input type="checkbox"/>	MECH ENG 2002 Stress Analysis & Design (3 units) <input type="checkbox"/>	MECH ENG 2101 Mechatronics IM (3 units) <input type="checkbox"/>
YEAR 3	S1	MECH ENG 3103 Manufacturing Engineering & Quality Systems (3 units) <input type="checkbox"/>	MECH ENG 3105 Sustainability & the Environment (3 units) <input type="checkbox"/>	MECH ENG 3106 Mechatronics II (3 units) <input type="checkbox"/>	MECH ENG 3102 Heat Transfer & Thermodynamics (3 units) <input type="checkbox"/>
	S2	MECH ENG 3027 Engineering Systems Design & Professional Practice (3 units) <input type="checkbox"/>	MECH ENG 3028 Dynamics & Control II (3 units) <input type="checkbox"/>	ELEC ENG 4059 Power Electronics & Drive Systems (3 units) <input type="checkbox"/>	MECH ENG 3032 Microcontroller Programming (3 units) <input type="checkbox"/>

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YEAR 4	S1	Level III Mathematics Elective (3 units) <input type="checkbox"/>	Level III Mathematics Elective (3 units) <input type="checkbox"/>	Level II or III Mathematics Elective (3 units) <input type="checkbox"/>	Level II or III Mathematics Elective (3 units) <input type="checkbox"/>
	S2	Level III Mathematics Elective (3 units) <input type="checkbox"/>	Level III Mathematics Elective (3 units) <input type="checkbox"/>	Level II or III Mathematics Elective (3 units) <input type="checkbox"/>	Level II or III Mathematics Elective (3 units) <input type="checkbox"/>
YEAR 5	S1	MECH ENG 4143A Honours Project Part A (3 units) <input type="checkbox"/>	MECH ENG 4102 Advanced PID Control (3 units) <input type="checkbox"/>	MECH ENG 4124 Robotics M (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>
	S2	MECH ENG 4143B Honours Project Part B (6 units) <input type="checkbox"/>		MECH ENG 4123 Advanced Digital Control (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>

CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES

SEMESTER 1	MECH ENG 4105 Advanced Vibrations (3 units) <input type="checkbox"/>	MECH ENG 4118 Finite Element Analysis of Structures (3 units) <input type="checkbox"/>	MECH ENG 4111 CFD for Engineering Applications (3 units) <input type="checkbox"/>	MECH ENG 4121 Materials Selection & Failure Analysis (3 units) <input type="checkbox"/>
SEMESTER 2	MECH ENG 4115 Engineering Acoustics (3 units) <input type="checkbox"/>	MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/>	CHEM ENG 4032 Composites & Multiphase Polymers (3 units) <input type="checkbox"/> <b>^NOT OFFERED 2017</b>	MECH ENG 4114 Corrosion: Principles & Prevention (3 units) <input type="checkbox"/>
	ENTREP 3900 Entrepreneurs Challenge (3 units) <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SUMMER	MECH ENG 4126 Topics in Welded Structures (3 units) <input type="checkbox"/>	MECH ENG 4115 Engineering Acoustics (3 units) <input type="checkbox"/>	MECH ENG 4120 Fracture Mechanics (3 units) <input type="checkbox"/>	<input type="checkbox"/>

Please refer to the program rules for the definition of an Applied Maths, Pure Maths, Statistics or Mathematical Sciences major. Refer to the degree finder for elective choices.

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<b>BACHELOR OF ENGINEERING (HONOURS) (MECHATRONIC) WITH BACHELOR OF MATHEMATICAL &amp; COMPUTER SCIENCES (Maths Major) - Semester 2 Start</b>					
YEAR 1	S2	CHEM ENG 1009 Materials I (3 units) <input type="checkbox"/>	MECH ENG 1006 Design Graphics & Professional Practice (3 units) <input type="checkbox"/>	MECH ENG 1007 Engineering Mechanics - Dynamics (3 units) <input type="checkbox"/>	MATHS 1011 Mathematics IA (3 units) <input type="checkbox"/>
		C&ENVENG 1010 Engineering Mechanics - Statics (3 units) <input type="checkbox"/>	ELEC ENG 1101 Electronic Systems (3 units) <input type="checkbox"/>	MECH ENG 1103 Introduction to Mechatronic Engineering (3 units) <input type="checkbox"/>	MATHS 1012 Mathematics IB (3 units) <input type="checkbox"/>
YEAR 2	S1	MECH ENG 2019 Dynamics & Control I (3 units) <input type="checkbox"/>	MECH ENG 2002 Stress Analysis & Design (3 units) <input type="checkbox"/>	MECH ENG 2101 Mechatronics IM (3 units) <input type="checkbox"/>	MATHS 2202 Engineering Mathematics IIB (3 units) <input type="checkbox"/>
	S2	ELEC ENG 2105 Electronic Circuits (3 units) <input type="checkbox"/>	MECH ENG 2021 Thermo-Fluids I (3 units) <input type="checkbox"/>	MECH ENG 2100 Design Practice (3 units) <input type="checkbox"/>	MATHS 2201 Engineering Mathematics IIA (3 units) <input type="checkbox"/>
YEAR 3	S1	MECH ENG 3027 Engineering Systems Design & Communication (3 units) <input type="checkbox"/>	MECH ENG 3028 Dynamics & Control II (3 units) <input type="checkbox"/>	MECH ENG 3032 Micro-Controller Programming (3 units) <input type="checkbox"/>	ELEC ENG 4059 Power Electronics & Drive Systems (3 units) <input type="checkbox"/>
	S2	Level III Mathematics Elective (3 units)* <input type="checkbox"/>	Level III Mathematics Elective (3 units)* <input type="checkbox"/>	Level II or III Mathematics Elective (3 units)* <input type="checkbox"/>	Level II or III Mathematics Elective (3 units)* <input type="checkbox"/>
YEAR 4	S1				

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	S2	Level III Mathematics Elective (3 units)* <input type="checkbox"/>	Level III Mathematics Elective (3 units)* <input type="checkbox"/>	Level II or III Mathematics Elective (3 units)* <input type="checkbox"/>	Level II or III Mathematics Elective (3 units)* <input type="checkbox"/>
YEAR 5	S1	MECH ENG 3102 Heat Transfer & Thermodynamics (3 units) <input type="checkbox"/>	MECH ENG 3103 Manufacturing Engineering & Quality Systems (3 units) <input type="checkbox"/>	MECH ENG 3106 Mechatronics II (3 units) <input type="checkbox"/>	MECH ENG 4143A Honours Project Part A (3 units) <input type="checkbox"/>
	S2	MECH ENG 4143B Honours Project Part B (6 units) <input type="checkbox"/>		MECH ENG 4123 Advanced Digital Control (3 units) <input type="checkbox"/>	Elective (3 units) <input type="checkbox"/>
YEAR 6	S1	MECH ENG 3105 Sustainability & the Environment (3 units) <input type="checkbox"/>	Elective (3 units) <input type="checkbox"/>	MECH ENG 4124 Robotics M (3 units) <input type="checkbox"/>	MECH ENG 4102 Advanced PID Control (3 units) <input type="checkbox"/>

CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES

SEMESTER 1	MECH ENG 4105 Advanced Vibrations (3 units) <input type="checkbox"/>	MECH ENG 4118 Finite Element Analysis of Structures (3 units) <input type="checkbox"/>	MECH ENG 4111 CFD for Engineering Applications (3 units) <input type="checkbox"/>	MECH ENG 4121 Materials Selection & Failure Analysis (3 units) <input type="checkbox"/>
SEMESTER 2	MECH ENG 4115 Engineering Acoustics (3 units) <input type="checkbox"/>	MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/>	CHEM ENG 4032 Composites & Multiphase Polymers (3 units) <input type="checkbox"/> <b>^NOT OFFERED 2017</b>	MECH ENG 4114 Corrosion: Principles & Prevention (3 units) <input type="checkbox"/>
	ENTREP 3900 Entrepreneurs Challenge (3 units) <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SUMMER	MECH ENG 4126 Topics in Welded Structures (3 units) <input type="checkbox"/>	MECH ENG 4115 Engineering Acoustics (3 units) <input type="checkbox"/>	MECH ENG 4120 Fracture Mechanics (3 units) <input type="checkbox"/>	<input type="checkbox"/>

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