

## 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:		
Assessor Name:			Advanced Standing Granted: units			Remaining Program Duration: 5 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) (MECHANICAL) WITH BACHELOR OF MATHEMATICAL & COMPUTER SCIENCES (Computer Science Major)					
YEAR 1	S1	C&ENVENG 1010 Engineering Mechanics - Statics (3 units) <input type="checkbox"/>	ELEC ENG 1101 Electronic Systems (3 units) <input type="checkbox"/>	MECH ENG 1100 Introduction to Mechanical Engineering (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	MATHS 2201 Engineering Mathematics IIA (3 units) <input type="checkbox"/>	MECH ENG 2020 Materials & Manufacturing (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"/>
	S2	COMP SCI 1102 Object Oriented Programming (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 2019 Dynamics & Control I (3 units) <input type="checkbox"/>
YEAR 3	S1	MECH ENG 3030 Structural Design & Solid Mechanics (3 units) <input type="checkbox"/>	MECH ENG 3103 Manufacturing Engineering & Quality Systems (3 units) <input type="checkbox"/>	COMP SCI 2000 Computer Systems (3 units) <input type="checkbox"/>	COMP SCI 2103 Algorithm Design & Data Structures for Engineers (3 units) <input type="checkbox"/>
	S2	MATHS 2104 Numerical Methods II (3 units) <input type="checkbox"/>	MECH ENG 2101 Mechatronics IM (3 units) <input type="checkbox"/>	MECH ENG 3027 Engineering Systems Design & Professional Practice (3 units) <input type="checkbox"/>	COMP SCI 2201 Algorithm & Data Structure Analysis (3 units) <input type="checkbox"/>
YEAR 4	S1	MECH ENG 3102 Heat Transfer & Thermodynamics (3 units) <input type="checkbox"/>	Level III Computer Science Elective (3 units) <input type="checkbox"/>	Level III Computer Science Elective (3 units) <input type="checkbox"/>	Level II or III Computer Science Elective (3 units) <input type="checkbox"/>

**2017 STUDY PLAN**

YEAR 5	S2	MECH ENG 3101 Applied Aerodynamics (3 units) <input type="checkbox"/>	MECH ENG 3028 Dynamics & Control II (3 units) <input type="checkbox"/>	COMP SCI 3006 Software Engineering & Project. (3 units) <input type="checkbox"/>	Level III Computer Science Elective (3 units) <input type="checkbox"/>
	S1	MECH ENG 4143A Honours Project Part A (3 units) <input type="checkbox"/>	MECH ENG 3105 Sustainability & the Environment (3 units) <input type="checkbox"/>	Engineering Elective (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"/>		Engineering Elective (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>

**CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES**

SEMESTER 1	MECH ENG 4102 Advanced PID Control (3 units) <input type="checkbox"/>	MECH ENG 4144 Renewable Fluid Power Technology (3 units) <input type="checkbox"/>	MECH ENG 4105 Advanced Vibrations (3 units) <input type="checkbox"/>	MECH ENG 4111 CFD for Engineering Applications (3 units) <input type="checkbox"/>
	MECH ENG 4112 Combustion Technology & Emission Control (3 units) <input type="checkbox"/>		MECH ENG 4118 Finite Element Analysis of Structures (3 units) <input type="checkbox"/>	MECH ENG 4124 Robotics M (3 units) <input type="checkbox"/>
	MECH ENG 4104 Advanced Topics in Fluid Mechanics (3 units) <input type="checkbox"/>	MECH ENG 4121 Materials Selection & Failure Analysis (3 units) <input type="checkbox"/>		
SEMESTER 2	MECH ENG 4114 Corrosion: Principles & Prevention (3 units) <input type="checkbox"/>	MECH ENG 4107 Airconditioning (3 units) <input type="checkbox"/>	MECH ENG 4115 Engineering Acoustics (3 units) <input type="checkbox"/>	MECH ENG 4101 Biomechanical Engineering (3 units) <input type="checkbox"/>
	MECH ENG 4120 Fracture Mechanics (3 units) <input type="checkbox"/>	MECH ENG 4125 Stresses in Plates & Shells (3 units) <input type="checkbox"/>	ENTREP 3900 Entrepreneurs Challenge (3 units) <input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SUMMER	MECH ENG 4126 Topic 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"/>

Computer Science Elective may be chosen from those listed in the Program Rules for the degree of Bachelor of Mathematical and Computer Sciences

#Students who have not passed SACE Stage 2 Specialist Maths are required to enrol in MATHS 1013 Mathematics IM as a prerequisite to enrolling in MATHS 1011 Mathematics IA. The satisfactory completion of MATHS 1013 Mathematics IM is in addition to the normal requirements of this program. Students may manage their enrolment by enrolling in MATHS 1013 Mathematics IM in semester I, followed by MATHS 1011 Mathematics IA in semester 2, and MATHS 1012 Mathematics IB in Summer.

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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:
Student ID Number:	Student Name:	units	Level 3:
Assessor Name:	Advanced Standing Granted:	units	Level 4:
Applicant's Previous Institution:	Applicant's Previous Qualification:	units	Date: 6/12/16
Assessor's Comments:	Remaining Program Duration: 4 years		

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) (MECHANICAL) WITH BACHELOR OF MATHEMATICAL & COMPUTER SCIENCES (Computer Science Major) – Semester 2 intake					
YEAR 1	S 2	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"/>
	S 1	ELEC ENG 1101 Electronic Systems (3 units) <input type="checkbox"/>	C&ENVENG 1010 Engineering Mechanics - Statics (3 units) <input type="checkbox"/>	MECH ENG 1100 Introduction to Mechanical Engineering (3 units) <input type="checkbox"/>	MATHS 1012 Mathematics IB (3 units) <input type="checkbox"/>
YEAR 2	S 2	COMP SCI 1102 Object Oriented Programming (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 2019 Dynamics & Control I (3 units) <input type="checkbox"/>
	S 1	COMP SCI 2103 Algorithm Design & Data Structures for Engineers (3 units) <input type="checkbox"/>	MATHS 2201 Engineering Mathematics IIA (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"/>
YEAR 3	S 2	MATHS 2104 Numerical Methods II (3 units) <input type="checkbox"/>	MECH ENG 2101 Mechatronics IM (3 units) <input type="checkbox"/>	MECH ENG 3027 Engineering Systems Design & Professional Practice (3 units) <input type="checkbox"/>	COMP SCI 2201 Algorithm & Data Structure Analysis (3 units) <input type="checkbox"/>
	S 1	MECH ENG 3030 Structural Design & Solid Mechanics (3 units) <input type="checkbox"/>	MECH ENG 3103 Manufacturing Engineering & Quality Systems (3 units) <input type="checkbox"/>	MECH ENG 2020 Materials & Manufacturing (3 units) <input type="checkbox"/>	MECH ENG 3102 Heat Transfer & Thermodynamics (3 units) <input type="checkbox"/>

2017 STUDY PLAN

YEAR 5	S 2	MECH ENG 3101 Applied Aerodynamics (3 units) <input type="checkbox"/>	MECH ENG 3028 Dynamics & Control II (3 units) <input type="checkbox"/>	COMP SCI 3006 Software Engineering & Project. (3 units) <input type="checkbox"/>	COMP SCI 2000 Computer Systems (3 units) <input type="checkbox"/>
	S 1	MECH ENG 4143A Honours Project Part A (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>	MECH ENG 3105 Sustainability & the Environment (3 units) <input type="checkbox"/>
	S 2	MECH ENG 4143B Honours Project Part B (6 units) <input type="checkbox"/>		Engineering Elective (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>
YEAR 6	S 1	Level III Computer Science Elective (3 units)* <input type="checkbox"/>	Level III Computer Science Elective (3 units)* <input type="checkbox"/>	Level II or III Computer Science Elective (3 units)* <input type="checkbox"/>	Level III Computer Science Elective (3 units)* <input type="checkbox"/>

CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES

SEMESTER 1	MECH ENG 4102 Advanced PID Control (3 units) <input type="checkbox"/>	MECH ENG 4144 Renewable Fluid Power Technology (3 units) <input type="checkbox"/>	MECH ENG 4105 Advanced Vibrations (3 units) <input type="checkbox"/>	MECH ENG 4111 CFD for Engineering Applications (3 units) <input type="checkbox"/>
	MECH ENG 4112 Combustion Technology & Emission Control (3 units) <input type="checkbox"/>		MECH ENG 4118 Finite Element Analysis of Structures (3 units) <input type="checkbox"/>	MECH ENG 4124 Robotics M (3 units) <input type="checkbox"/>
	MECH ENG 4104 Advanced Topics in Fluid Mechanics (3 units) <input type="checkbox"/>	MECH ENG 4121 Materials Selection & Failure Analysis (3 units) <input type="checkbox"/>		
SEMESTER 2	MECH ENG 4114 Corrosion: Principles & Prevention (3 units) <input type="checkbox"/>	MECH ENG 4107 Airconditioning (3 units) <input type="checkbox"/>	MECH ENG 4115 Engineering Acoustics (3 units) <input type="checkbox"/>	MECH ENG 4101 Biomechanical Engineering (3 units) <input type="checkbox"/>
	MECH ENG 4120 Fracture Mechanics (3 units) <input type="checkbox"/>	MECH ENG 4125 Stresses in Plates & Shells (3 units) <input type="checkbox"/>	ENTREP 3900 Entrepreneurs Challenge (3 units) <input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES



## 2017 STUDY PLAN

SUMMER	MECH ENG 4126 Topic 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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Computer Science Elective may be chosen from those listed in the Program Rules for the degree of Bachelor of Mathematical and Computer Sciences

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