

Enrolment Program Structure

Program Code – GM8

Program Name – Bachelor of Mechatronic Systems Engineering (Honours)

(It is strongly recommended by the Faculty that students commencing online study enrol in a reduced load of two courses per semester with a maximum of three).

Course Code	Course Name	Course Rules
First Year Semester 1		
ENGIN1001	Professional Engineering	PR: Nil EX: ENCOR1005
ENGIN1002	Engineering Physics	PR: Nil EX: ENCOR1021 and ENCOR2100
ENGIN1003	Materials in Engineering	PR: Nil EX: ENCOR1110
MATHS1001	Modelling and Change (Introductory Level)	PR: Nil
First Year Semester 2		
ENGIN1004	Engineering Design & Drafting	PR: Nil EX: ENCOR1010
ENGIN1005	Engineering Mechanics	PR: Nil EX: ENCOR1110 and ENCOR1021
ENGIN1006	Engineering Computer Modelling	PR: Nil EX: ENCOR1021
MATHS1005	Secrets of the Matrix	PR: Nil
Second Year Semester 1		
ENGIN2001	Professional Practice	PR: ENGIN1001 or ENCOR1005 EX: ENCOR3035
ENGIN2401	Analog and Digital Electronics	PR: ENCOR1000 or ENCOR1021 or ENGIN1002 EX: ENMTX2010
ENGIN2402	Measurement and Computer Instrumentation	PR: ENCOR1000 or ENCOR1021 or ENGIN1002 EX: ENMTX2020 and ETMEC3260
ENGIN2403	Fluid and Pneumatic Control	PR: ENGIN1006 and ENCOR1000 or ENCOR1021 or ENGIN1002 EX: ENMTX2030
MATHS2016	Modelling Continuous Change	PR: MATHS1001

Second Year		Semester 2
ENGIN2002	Engineering Project Management and Sustainable Design	PR: ENCOR1005 or ENGIN1001 EX: ENMEC2121 and ENMTX2050
ENGIN2303	Mechanism and Machine Theory	PR: ENCOR1000 or ENCOR1021 or ENGIN1005 EX: ENMEC2111
ENGIN2404	Electrical and Electronic Drives and Actuators	PR: ENCOR1000 or ENCOR1021 or ENGIN1002 EX: ENMTX2040
MATHS3001	Modelling and Change (Advanced Level)	PR: MATHS2001 EX: MATHS2006
Third Year		Semester 1
ENGIN3401	Engineering Computer Applications and Interactive Modelling	PR: ENCOR1021 or ENGIN1006 EX: ENMTX3010 and ITECH1000
ENGIN3402	Mechatronics Components Design	PR: ENCOR1010 or ENGIN1004 and ENGIN23003 or ENMEC2111 EX: ENMTX3020
MREGC5001	Terotechnology and Life Cycle Costs	PR: Nil EX: ENMTX4050
ENGIN3404	System Dynamics and Control	PR: MATHS3001 or MATHS3040 EX: ENMEC3500 and ENMTX3040
Third Year		Semester 2
ENGIN3001	Engineering Research Methodology and Management	PR: ENCOR1005 or ENGIN1001 EX: ENCOR4010 and ENMTX4060
ENGIN3002	Engineering Design Project	PR: ENGIN2002 or ENMEC2121 or ENMTX2050 EX: ENCIV3360 and ENMEC2120 and ENMEC2121 and ENMEC3250 and ENMTX3800
ENGIN3405	Digital Imaging and Artificial Intelligence	PR: MATHS3001 or MATHS3040 EX: ENMTX3030
ENGIN3406	Intelligent Mechanisms Design	PR: ENGIN2303 or ENMEC2111 EX: ENMTX4010
Fourth Year		Semester 1
ENGIN4001	Engineering Project 1	PR: ENGIN3001 EX: ENCOR4100
ENGIN4401	Industrial Robotic Systems	PR: ENGIN3406 or ENMTX4010 EX: ENMTX3070
MREGC5001	Terotechnology and Life Cycle Costs	PR: Nil EX: ENMTX4050

Fourth Year	Semester 2	
ENGIN4002	Engineering Project 2	PR: ENCOR4110 or ENGIN4001 EX: ENCOR4200
ENGIN4402	Digital and Embedded Systems	PR: ENGIN2401 or ENMTX2010 and ENGIN3401 or ENMTX3010 EX: ENMTX3050
ENGIN5405	Advanced Control Systems Engineering	PR: ENGIN3404 or ENMTX3040 EX: ENMTX4020

Please note:

Students in year 3 and year 4 are to enrol in MREGC5001 in semester 1, 2019.

Additional Information

This structure applies to all students.

Glossary

Semester: designated teaching period.

PR: Pre-requisite, a course/s that must be completed prior to undertaking another course.

CO: Co-requisite, a course/s that must be completed simultaneously, or prior to, undertaking another course.

EX: Exclusion, a course/s that may not be taken.