

## Enrolment Course Structure

Course Code – EN8.MEC

Course Name – Bachelor of Engineering (Mechanical Engineering) (Honours)

First Year	Unit Code	Unit Name	Unit Rules
<b>Semester 1</b>			
	ENGRG1001	Computational Skills for Engineers	
	ENGRG1002	Physics for Engineers 1	
	ENGRG1003	Engineering Design 1	
	MATHS1100	Applied Mathematics 1	<b>EX:</b> MATHS1001
<b>Semester 2</b>			
	COOPE1001	Professional Identity (Engineering)	
	ENGRG1004	Physics for Engineers 2	<b>EX:</b> ENGIN1002 & ENGIN1003
	ENGRG1005	Engineering Design 2	<b>EX:</b> ENGIN1004 & ENGIN3002
	MATHS2100	Applied Mathematics 2	<b>EX:</b> MATHS1005 & MATHS1102
Second Year	Unit Code	Unit Name	Unit Rules
<b>Semester 1</b>			
	ENGRG2301	Solid Mechanics	<b>PR:</b> ENGRG1003
	ENGRG2302	Fluid Mechanics	<b>PR:</b> ENGRG1002 & ENGRG1004 <b>EX:</b> ENGIN3301
	MATHS3100	Applied Mathematics 3	<b>PR:</b> MATHS1100 <b>EX:</b> MATHS3001
		Minor Unit 1	
<b>Semester 2</b>			
	ENGRG2303	Engineering Dynamics	<b>PR:</b> ENGRG1002 <b>EX:</b> ENGIN2302
	ENGRG2304	Thermodynamics	<b>PR:</b> ENGRG1002 & ENGRG1004 <b>EX:</b> ENGIN3304
	ENGRG2305	Mechanism and Machine Theory	<b>PR:</b> MATHS2100 <b>EX:</b> ENGIN2303
		Minor Unit 2	

Third Year	Unit Code	Unit Name	Unit Rules
<b>Semester 1</b>			
	COOPE2011	Cooperative Placement 1 (Engineering)	<b>PR:</b> COOPE1001 & At least 105 credit points from ENGRG subject-area at any level <b>EX:</b> BUGEN3751 & BUGEN3752 & SCCOR3003 & SCCOR3014
	ENGRG3301	Vibration Engineering	<b>PR:</b> ENGRG2302 <b>EX:</b> ENGIN3302
		Minor Unit 3	
<b>Semester 2</b>			
	COOPE2012	Cooperative Placement 2 (Engineering)	<b>PR:</b> COOPE1001 & At least 105 credit points from ENGRG subject-area at any level
	ENGRG3302	Machine Design	<b>PR:</b> ENGRG2301 & ENGRG2305 <b>EX:</b> ENGIN5301
		Minor Unit 4	
Fourth Year	Unit Code	Unit Name	Unit Rules
<b>Semester 1</b>			
	ENGRG4001	Engineering Design Project	<b>PR:</b> At least 300 credit points <b>EX:</b> ENGIN3002
	ENGRG4002	Engineering Capstone Project 1	<b>PR:</b> At least 300 credit points <b>EX:</b> ENGIN4001
	ENGRG4201	Control System Engineering	<b>PR:</b> ENGRG1004 <b>EX:</b> ENGIN3404
		Specialisation Elective Unit 1	
<b>Semester 2</b>			
	ENGRG4003	Engineering Capstone Project 2	<b>PR:</b> ENGRG4002 <b>EX:</b> ENGIN4002
	ENGRG9302	Advanced Robotics	<b>PR:</b> ENGRG2305 <b>EX:</b> ENGIN5304
		Specialisation Elective Unit 2	

**Specialisation Elective Unit 1**

ENGRG9301 Computer Aided Manufacturing  
 ENGRG9101 Modelling and Simulation in Engineering  
 ENGRG9303 Advanced Machine Design

**Specialisation Elective Unit 2**

ENGRG9203 Advanced Control System Engineering  
 ENGRG9304 Energy Conversion  
 ENGRG9305 Advanced Vibration Engineering

## Additional Information

This course structure applies to students commencing from 2025. Students who commenced prior to 2025 should refer to the continuing enrolments page.

*TEQSA have advised that, in accordance with B1.1.3 of [Higher Education Standards Framework \(Threshold Standards\) 2021](#) all Higher Education Providers are required to show their TEQSA Provider number and Provider Category on all relevant public material. ITS have ensured that our website and email signature templates have been amended to ensure compliance and have provided a knowledge article to assist you to update your signatures. Marketing are working to update the brand library and all social media accounts.*

## Glossary

**Semester:** designated teaching period.

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

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

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