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2024 Commencement Mechatronic Engineering Specialisation with a Major in Mining Engineering Bachelor of Engineering (Honours)



Recommended Study Plan

This study plan is a **guide only** for students commencing the Bachelor of Engineering (Hons) in a Mechatronic Engineering Specialisation with a major in Mining Engineering in 2024. Please note that all course selections must adhere to the course list outlined at [UQ Courses and Programs](#). If you have any questions or concerns regarding your course selections, please speak with an [Academic Advisor](#).

#8 Compulsory Core #8	Compulsory Specialisation	Preparatory courses or general elective #0-#4
#4 Mining Engineering Courses for Mechatronic Engineers	#12 Mining Engineering Compulsory Courses	

February Commencement

SEMESTER YEAR 1					
Sem 1 Feb	ENGG1100 Professional Engineering	MATH1051 Calculus & Linear Algebra I (or) MATH1071 Advanced Calculus & Linear Algebra I	ENGG1300 Introduction to Electrical Systems	Preparatory courses or general elective	
Sem 2 July	ENGG1001 Programming for Engineers (or) CSSE1001 Introduction to Software Engineering	MATH1052 Multivariate Calculus & ODEs (or) MATH1072 Advanced Multivariate Calculus & Ordinary	ENGG1700 Statics and Materials	Preparatory courses or general elective	
SEMESTER YEAR 2					
Sem 1 Feb	MECH2300 Structures & Materials	METR2800 Mechatronic System Design Project I	CSSE2010 Intro to Computer Systems	MATH2001 Calculus & Linear Algebra	
Sem 2 July	MECH2100 Machine Element Design	MECH2210 Intermediate Mechanical & Space Dynamics	ELEC2004 Circuits, Signals & Systems	MATH2010 Analysis of ODEs	STAT2201 Analysis of Eng. & Scientific Data
SEMESTER YEAR 3					
Sem 1 Feb	METR3100 Control Systems Implementation	METR4201 Control Engineering 1	ELEC2300 Fundamentals of Electromagnetism & Electromechanics	ELEC3004 Signals, Systems & Control	
Sem 2 July	METR4810 Mechatronic System Design Project II	MECH2100 Machine Element Design	MINE3110 Integrated Orebody Knowledge	MINE3122 Mine Systems & Automation	
SEMESTER YEAR 4					
Sem 1 Feb	METR4911 Thesis/Design Project	ENGG4901 Professional Practice & the Business Environment	MINE3123 Mine Planning & Sustainability	MINE3129 Applied Mining Geomechanics	
Sem 2 July		MECH3200 Advanced Dynamics & Vibrations	MINE4124 Mine Design & Feasibility	MINE4129 Mine Process Optimisation	

Recommended Study Plan .

July Commencement

SEMESTER YEAR 1					
Sem 2 July	ENGG1100 Professional Engineering	MATH1051 Calculus & Linear Algebra I (or) MATH1071 Advanced Calculus & Linear Algebra I	ENGG1300 Introduction to Electrical Systems		Preparatory courses or general elective*
Sem1 Feb	ENGG1001 Programming for Engineers (or) CSSE1001 Introduction to Software Engineering	MATH1052 Multivariate Calculus & ODEs (or) MATH1072 Advanced Multivariate Calculus & Ordinary Differential Equations	ENGG1700 Statics and Materials		Preparatory courses or general elective*
SEMESTER YEAR 2					
Sem 2 July	MECH2100 Machine Element Design	MECH2210 Intermediate Mechanical & Space Dynamics	MATH2001 Calculus & Linear Algebra		MINE3110 Integrated Orebody Knowledge
Sem 1 Feb	METR2800 Mechatronic System Design Project I	MECH2300 Structures & Materials	MATH2010 Analysis of ODEs	STAT2201 Analysis of Eng.& Scientific Data	CSSE2010 Intro to Computer Systems
SEMESTER YEAR 3					
Sem 2 July	METR4810 Mechatronic System Design Project II	ELEC2004 Circuits, Signals & Systems	MECH3200 Advanced Dynamics & Vibrations		MINE3122 Mine Systems & Automation
Sem 1 Feb	METR3100 Control Systems Implementation	METR4201 Control Engineering I	MINE3123 Mine Planning & Sustainability		MINE3129 Applied Mining Geomechanics
SEMESTER YEAR 4					
Sem 2 July	METR4912 Thesis/Design Project	METR4202 Robotics & Automation	MINE4124 Mine Design & Feasibility		MINE4129 Mine Process Optimisation
Sem 1 Feb		ENGG4901 Professional Practice & the Business Environment	ELEC2300 Fundamentals of Electromagnetism & Electromechanics		ELEC3004 Signals, Systems & Control

Refer to the course list for electives:

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