

**BH-ERM - Bachelor of Engineering (Robotics & Mechatronics) (Honours)  
Recommended Study Sequence (August 2021 intake)**

Year	Semester	Unit of Study		Prerequisites
		Unit Code	Unit Title	
1	Sem 1 Aug 2021	ENG10003	Mechanics of Structures	Nil
		ENG10004	Digital and Data Systems	Nil
		PHY10004	Electronics and Electromagnetism	Nil
		MTH10013	Linear Algebra and Applications	Nil
	Sem 2 Mar 2022	MTH10012	Calculus and Applications	Nil
		ENG10001	Engineering, Design and Innovation	Nil
		ENG10002	Engineering Materials	Nil
	PHY10001	Energy and Motion	Nil	
2	Sem 3 Sept 2022	MEE20004	Structural Mechanics	ENG10003
		MEE20006	Machine Dynamics 1	MTH10013 & PHY10001
		EEE20001	Digital Electronics Design	Nil
		SWE20004	Technical Software Development	ENG10004/COS10001/COS10009
	Sem 4 Mar 2023	MTH20014	Mathematics 3B	MTH10012 & MTH10013
		EEE20006	Circuits and Electronics 1	PHY10004 & MTH10013
		MEE20002@	Computer Aided Engineering Mechanical	ENG10001
		EEE20003@	Embedded Microcontrollers	EEE20001 & (SWE20004/COS10009)
3	Sem 5 Sept 2023	RME40002* <sup>@</sup>	Mechatronics Systems Design	EEE20003
		EEE30004* <sup>@</sup>	Digital Signal Processing	MTH20014 & (EEE20002/EEE20006)
		RME20001	Electrical Actuators and Sensors	PHY10004
		MME30001 <sup>@</sup>	Engineering Management 1	100 credit points
	Inter Semester	EAT20008	Professional Experience in Engineering <sup>#</sup> (Industry Placement)	<i>Introductory Seminar</i>
	Sem 6 Mar 2024	MEE30003 <sup>@</sup>	Machine Design	MEE20004
		RME30002 <sup>@</sup>	Control and Automation	MTH20014 & (PHY10004/EEE20006)
		RME40003* <sup>@</sup>	Robot System Design	250 credit points
COS10011		Creating Web Applications	COS10009 / SWE20004 (CR)	
4	Sem 7 Sept 2024	ENG40001* <sup>@</sup>	Final Year Research Project 1	287.5 credit points
		RME30003 <sup>@</sup>	Robotic Control	RME30002
		COS10022	Introduction to Data Science	Nil
		COS30018	Intelligent Systems	COS20007 / SWE20004
	Sem 8 Mar 2025	ENG40002* <sup>@</sup>	Final Year Research Project 2	ENG40001
		MME40001	Engineering Management 2	100 credit points
		MEE40003* <sup>@</sup>	Machine Dynamics 2	MEE20006
		SWE30011	IoT Programming	COS10011 & (COS20007 / SWE20004)
12 Core units			Industrial Placement	
16 Robotics and Mechatronics Major units			* Outcome Units	
** 4 Prescribed Elective Units (Industry 4.0)			@ Honours Merit Units	

**Note:**

# **EAT20008 Professional Experience in Engineering** is compulsory for all students and must be taken before the last semester of study as part of EAC's requirement. Introductory Seminar will be conducted in week 4 of semester.

\*\* You may choose other elective units from the published elective list for R&M course.