

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

Year	Semester	Unit of Study		Prerequisites
		Unit Code	Unit Title	
1	Sem 1 Mar 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 Sept 2021	MTH10012	Calculus and Applications	Nil
		ENG10001	Engineering, Design and Innovation	Nil
		ENG10002	Engineering Materials	Nil
	PHY10001	Energy and Motion	Nil	
2	Sem 3 Mar 2022	MTH20014	Mathematics 3B	(MTH10012 & MTH10013) / MTH10007
		EEE20006	Circuits and Electronics 1	PHY10004/EEE10001 & MTH10013/MTH10007
		EEE20001	Digital Electronics Design	Nil
		MEE20002@	Computer Aided Engineering Mechanical	ENG10001/RME10001
	Sem 4 Sept 2022	MEE20004	Structural Mechanics	ENG10003/CVE10004
		MEE20006	Machine Dynamics 1	MTH10013/MTH10007 & PHY10001
		RME20001	Electrical Actuators and Sensors	PHY10004/EEE10001
	SWE20004	Technical Software Development	ENG10004/COS10001/COS10009/RME10001	
3	Sem 5 Mar 2023	MEE30003@	Machine Design	MEE20004
		EEE20003@	Embedded Microcontrollers	EEE20001 & (SWE20004/COS10009/RME10001/RME10002)
		RME30002@	Control and Automation	(MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)
		COS10011	Creating Web Applications	COS10009 / SWE20004 (CR)
	Inter Semester	EAT20008	Professional Experience in Engineering#	<i>Introductory Seminar</i>
	Sem 6 Sept 2023	RME40002*@	Mechatronics Systems Design	EEE20003
		RME30003@	Robotic Control	RME30002
		EEE30004*@	Digital Signal Processing	(MTH20005/MTH20010/MTH20014) & (EEE20002/EEE20006)
		MME30001@	Engineering Management 1	100 credit points
	4	Sem 7 Mar 2024	ENG40001*@	Final Year Research Project 1
RME40003*@			Robot System Design	250 credit points
MEE40003*@			Machine Dynamics 2	MEE20006
SWE30011			IoT Programming	COS10011 & (COS20007 / SWE20004)
Sem 8 Sept 2024		ENG40002*@	Final Year Research Project 2	ENG40001
		MME40001	Engineering Management 2	100 credit points
		COS10022	Introduction to Data Science	Nil
		COS30018	Intelligent Systems	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.