

**BB-ERMCS2 Bachelor of Engineering (Robotics and Mechatronics) (Honours) /  
Bachelor of Computer Science (Software Development)  
Recommended Study Sequence (Sept 2020 Intake)**

Year	Semester	Unit of Study		Prerequisites / Co-requisites (CR)	
		Unit Code	Unit Name		
1	Sem 1 Sept 2020	ENG10003	Mechanics of Structures	Nil	
		PHY10004	Electronics and Electromagnetism	Nil	
		MTH10013	Linear Algebra and Applications	Nil	
		COS10009	Introduction to Programming	Nil	
	Sem 2 Mar 2021	MTH10012	Calculus and Applications	Nil	
		ENG10001	Engineering, Design and Innovation	Nil	
		ENG10002	Engineering Materials	Nil	
		PHY10001	Energy and Motion	Nil	
2	Sem 3 Sept 2021	MEE20004	Structural Mechanics	ENG10003/CVE10004	
		MEE20006	Machine Dynamics 1	MTH10013/MTH10007 & PHY10001	
		EEE20001	Digital Electronics Design	Nil	
		SWE20004	Technical Software Development	ENG10004/COS10001/COS10009/RME10001	
	Sem 4 Mar 2022	MTH20014	Mathematics 3B	(MTH10012 & MTH10013) / MTH10007	
		EEE20006	Circuits and Electronics 1	PHY10004/EEE10001 & MTH10013/MTH10007	
		MEE20002@	Computer Aided Engineering Mechanical	ENG10001/RME10001	
		EEE20003@	Embedded Microcontrollers (SWE20004/COS10009/RME10001/RME10002)		
3	Sem 5 Sept 2022	MME30001@	Engineering Management 1	100 credit points	
		RME20001	Electrical Actuators and Sensors	PHY10004/EEE10001	
		COS10011	Creating Web Applications	COS10009 (CR)	
		TNE10006	Network and Switching	Nil	
			EAT20008	Professional Experience in Engineering#	<i>Introductory Seminar</i>
	Sem 6 Mar 2023	MEE30003@	Machine Design	MEE20004	
		RME30002@	Control and Automation	(MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)	
		COS20015	Fundamentals of Data management	COS10009	
COS20001		User Centred Design	Nil		
4	Sem 7 Sept 2023	RME40002*@	Mechatronics Systems Design	EEE20003	
		RME30003@	Robotic Control	RME30002	
		COS20007	Object-oriented Programming	COS10009 / SWE20004	
		SWE20001	Development Project 1 - Tools and Practices	CR COS20007/CR SWE20004	
	Sem 8 Mar 2024	MEE40003*@	Machine Dynamics 2	MEE20006	
		RME40003*@	Robot System Design	250 credit points	
		SWE30009	Software Testing and Reliability	COS20007 / COS20004 / COS20011	
		COS30008	Data Structure and Patterns	COS20007/SWE20004	
5	Sem 9 Sept 2024	ENG40001*@	Final Year Research Project 1	287.5 credit points	
		EEE30004*@	Digital Signal Processing	(MTH20005/MTH20010/MTH20014) & (EEE20002/EEE20006)	
		COS30017	Software Development for Mobile Devices	COS20007 / SWE20004	
		COS30041	Creating Secure and Scalable Software	COS10011/COS20001 & COS20007/SWE20004	
	Sem 10 Mar 2025	ENG40002*@	Final Year Research Project 2	ENG40001	
		MME40001	Engineering Management 2	100 credit points	
		SWE30011	IoT Programming	(COS10011 / COS10005) & (COS20007 / SWE20004)	
		ICT30005	Professional Issues in IT	200 credit points	

<b>11</b> Core units (Engineering)	<b>16</b> Robotics and Mechatronics Major units	* Outcome Units (R&M)
<b>5</b> Core units (Computer Science)	<b>8</b> Software Development Major units	@ Honours Merit Units (R&M)
	Industrial Placement	

# EAT20008 Professional Experience in Engineering is compulsory for all students. It 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.