BB-ERMSCS2 Bachelor of Engineering (Robotics and Mechatronics) (Honours) /
Bachelor of Computer Science (Software Development)
Recommended Study Sequence (Mar 2021 Intake)

Year	Semester	Unit of Study		Prerequisites / Co-requisites (CR)
		Unit Code	Unit Name	
1	Sem 1 Mar 2021	ENG10003	Mechanics of Structures	Nil
		PHY10004	Electronics and Electromagnetism	Nil
		MTH10013	Linear Algebra and Applications	Nil
		COS10009	Introduction to Programming	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)
		COS20015	Fundamentals of Data management	COS10009
		TNE10006	Network and Switching	Nil
		EAT20008	Professional Experience in Engineering#	*Introductory Seminar*
	Sem 6 Sept 2023	MME30001@	Engineering Management 1	100 credit points
		EEE30004*@	Digital Signal Processing	(MTH20005/MTH20010/MTH20014) & (EEE20002/EEE20006)
		COS10011	Creating Web Applications	COS10009 (CR)
		COS20007	Object-oriented Programming	COS10009 / SWE20004
4	Sem 7 Mar 2024	RME30002@	Control and Automation	(MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)
		MEE40003*@	Machine Dynamics 2	MEE20006
		COS20001	User Centred Design	Nil
		SWE20001	Development Project 1 - Tools and Practices	CR COS20007/CR SWE20004
	Sem 8 Sept 2024	RME40002*@	Mechatronics Systems Design	EEE20003
		RME30003@	Robotic Control	RME30002
		SWE30009	Software Testing and Reliability	COS20007 / COS20004 / COS20011
		COS30008	Data Structure and Patterns	COS20007/SWE20004
5	Sem 9 Mar 2025	ENG40001*@	Final Year Research Project 1	287.5 credit points
		RME40003*@	Robot System Design	250 credit points
		SWE30011	IoT Programming	(COS10011 / COS10005) & (COS20007 / SWE20004)
		ICT30005	Professional Issues in IT	200 credit points
	Sem 10 Sept 2025	ENG40002*@	Final Year Research Project 2	ENG40001
		MME40001	Engineering Management 2	100 credit points
		COS30017	Software Development for Mobile Devices	COS20007 / SWE20004
		COS30041	Creating Secure and Scalable Software	COS10011/COS20001 & COS20007/SWE20004

11 Core units (Engineering)	**16** Robotics and Mechatronics Major units	* Outcome Units (R&M)
5 Core units (Computer Science)	**8** 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.