BB-ERMSCS2 Bachelor of Engineering (Robotics and Mechatronics) (Honours) / Bachelor of Computer Science (IoT)
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	EEE20001 & (SWE20004/COS10009/RME10001/RME10002)
3	**Sem 5** Sept 2022	RME20001	Electrical Actuators and Sensors	PHY10004/EEE10001
		MME30001@	Engineering Management 1	100 credit points
		COS10011	Creating Web Applications	COS10009 (CR)
		TNE10006	Network and Switching	Nil
		EAT20008	Professional Experience in Engineering#	*Introductory Seminar*
	Sem 6 Mar 2023	MEE30003@	Machine Design	MEE20004
		RME30002@	Control and Automation	(MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)
		COS20015	Fundamentals of Data management	COS10009
		COS20007	Object-oriented Programming	COS10009 / SWE20004
4	**Sem 7** Sept 2023	RME40002*@	Mechatronics Systems Design	EEE20003
		RME30003@	Robotic Control	RME30002
		STA10003	Foundations of Statistics	Nil
		COS30017	Software Development for Mobile Devices	COS20007/SWE20004
	Sem 8 Mar 2024	MEE40003*@	Machine Dynamics 2	MEE20006
		RME40003*@	Robot System Design	250 credit points
		COS20019	Cloud Computing Architecture	COS10011 & TNE10006/COS20016
		SWE30011	IoT Programming	COS30017 & 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)
		SWE30012	IoT Launcher Project	SWE30011 & COS20007/SWE20004
		SWE20001	Development Project 1 - Tools and Practices	SWE20004 / COS10009
	Sem 10 Mar 2025	ENG40002*@	Final Year Research Project 2	ENG40001
		MME40001	Engineering Management 2	100 credit points
		ICT30005	Professional Issues in IT	200 credit points
		COS30015	IT Security	(COS10009 / SWE20004) & COS10011 & TNE10006

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