

**BB-ERMSCS2 Bachelor of Engineering (Robotics and Mechatronics) (Honours) /  
Bachelor of Computer Science (IoT)  
Recommended Study Sequence (Sept 2019 Intake)**

Year	Semester	Unit of Study		Prerequisites / Co-requisites (CR)
		Unit Code	Unit Name	
1	Sem 1 Sept 2019	ENG10003	Mechanics of Structures	Nil
		PHY10004	Electronics and Electromagnetism	Nil
		MTH10013	Linear Algebra and Applications	Nil
		COS10009	Introduction to Programming	Nil
	Sem 2 Mar 2020	MTH10012	Calculus and Applications	Nil
		ENG10001	Engineering, Design and Innovation	Nil
		ENG10002	Engineering Materials	Nil
		PHY10001	Energy and Motion	Nil
2	Sem 3 Sept 2020	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 2021	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 2021	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
	Sem 6 Mar 2022	EAT20008	Professional Experience in Engineering <sup>#</sup>	Introductory Seminar
		MEE30003@	Machine Design	MEE20004
		RME30002@	Control and Automation	(MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)
		COS20015	Fundamentals of Data management	COS10009
		STA10003	Foundations of Statistics	Nil
4	Sem 7 Sept 2022	RME40002*@	Mechatronics Systems Design	EEE20003
		RME30003@	Robotic Control	RME30002
		COS30017	Software Development for Mobile Devices	COS20007/SWE20004
		COS20019	Cloud Computing Architecture	COS10011 & TNE10006/COS20016
	Sem 8 Mar 2023	MEE40003*@	Machine Dynamics 2	MEE20006
		RME40003*@	Robot System Design	250 credit points
		COS20007	Object-oriented Programming	COS10009 / SWE20004
		SWE30011	IoT Programming	COS30017 & COS20007/SWE20004
5	Sem 9 Sept 2023	ENG40001*@	Final Year Research Project 1	287.5 credit points
		EEE30004*@	Digital Signal Processing	(MTH20005/MTH20010/MTH20014) & (EEE20002/EEE20006)
		COS30015	IT Security	COS10009 & COS10011&TNE10006
		INF30029	Information Technology Project Management	100CP & SWE20004/COS20007/INF10003
	Sem 10 Mar 2024	ENG40002*@	Final Year Research Project 2	ENG40001
		MME40001	Engineering Management 2	100 credit points
		ICT30005	Professional Issues in IT	200 credit points
		SWE30012	IoT Launcher Project	SWE30011 & COS20007/SWE20004
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)
Elective unit			Industrial Placement	

**Note:**

**# 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.