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

V	C		Unit of Study	Prerequisites /
Year	Semester	Unit Code	Unit Name	Co-requisites (CR)
1	Sem 1	ENG10003	Mechanics of Structures	Nil
		PHY10004	Electronics and Electromagnetism	Nil
	Sept 2019	MTH10013	Linear Algebra and Applications	Nil
		COS10009	Introduction to Programming	Nil
	Sem 2	MTH10012	Calculus and Applications	Nil
		ENG10001	Engineering, Design and Innovation	Nil
	Mar 2020	ENG10002	Engineering Materials	Nil
		PHY10001	Energy and Motion	Nil
		MEE20004	Structural Mechanics	ENG10003/CVE10004
	Sem 3	MEE20006	Machine Dynamics 1	MTH10013/MTH10007 & PHY10001
	Sept 2020	SWE20004	Technical Software Development	ENG10004/COS10001/COS10009/RME10001
		EEE20001	Digital Electronics Design	Nil
2	<b>Sem 4</b> Mar 2021	MTH20014	Mathematics 3B	(MTH10012 & MTH10013) / MTH10007
		EEE20006	Circuits and Electronics 1	PHY10004/EEE10001 & MTH10013/MTH10007
		EEE20003@	Embedded Microcontrollers	EEE20001 & (SWE20004/COS10009/RME10001/RME10002)
		MEE20002 <sup>@</sup>	Computer Aided Engineering Mechanical	ENG10001/RME10001
3		RME20001	Electrical Actuators and Sensors	PHY10004/EEE10001
	<b>Sem 5</b> Sept 2021	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
		MEE30003@	Machine Design	MEE20004
	<b>Sem 6</b> Mar 2022	RME30002@	Control and Automation	(MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)
		COS20015	Fundamentals of Data management	COS10009
		TNE20002	Network Routing Principles	TNE10006
	Sem 7	RME40002*@	Mechatronics Systems Design	EEE20003
		RME30003@	Robotic Control	RME30002
4	Sept 2022	COS30015	IT Security	COS10009 & COS10011 & TNE10006
		INF30020	Information Systems Risk and Security	100CP & SWE20004 / COS20007 / INF10003
	<b>Sem 8</b> Mar 2023	MEE40003*@	Machine Dynamics 2	MEE20006
		RME40003*@	Robot System Design	250 credit points
		ICT30010	eForensic Fundamentals	TNE10006
		TNE30009	Network Security & Resilience	TNE10006
5	<b>Sem 9</b> Sept 2023	ENG40001*@	Final Year Research Project 1	287.5 credit points
		EEE30004*@	Digital Signal Processing	(MTH20005/MTH20010/MTH20014) & (EEE20002/EEE20006)
		INF30029	Information Technology Project Management	100CP & SWE20004 / COS20007 / INF10003
		TNE30012	Secure Remote Access Networks	TNE20002
	Sem 10	ENG40002*@	Final Year Research Project 2	ENG40001
		MME40001	Engineering Management 2	100 credit points
	Mar 2024	ICT30005	Professional Issues in IT	200 credit points
		Elective	Elective Unit	-

11 Core units (Engineering)	16 Robotics and Mechatronics Major units	* Outcome Units (R&M)
<b>5</b> Core units (Computer Science)	7 Cybersecurity 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.