## BH-ERM - Bachelor of Engineering (Robotics & Mechatronics) (Honours) Recommended Study Sequence (Sept 2020 intake)

Year	Semester	Unit of Study		
		Unit Code	Unit Title	Prerequisites
1	<b>Sem 1</b> Sept 2020	ENG10003	Mechanics of Structures	Nil
		ENG10004	Digital and Data Systems	Nil
		PHY10004	Electronics and Electromagnetism	Nil
		MTH10013	Linear Algebra and Applications	Nil
	<b>Sem 2</b> Mar 2021	MTH10012	Calculus and Applications	Nil
		ENG10001	Engineering, Design and Innovation	Nil
		ENG10002	Engineering Materials	Nil
		PHY10001	Energy and Motion	Nil
	<b>Sem 3</b> Sept 2021	MEE20004	Structural Mechanics	ENG10003/CVE10004
		MEE20006	Machine Dynamics 1	MTH10013/MTH10007 & PHY10001
		EEE20001	Digital Electronics Design	Nil
2		SWE20004	Technical Software Development	ENG10004/COS10001/COS10009/RME10001
	<b>Sem 4</b> 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)
		RME40002*@	Mechatronics Systems Design	EEE20003
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	Sem 5	EEE30004*@	Digital Signal Processing	(MTH20005/MTH20010/MTH20014) & (EEE20002/EEE20006)
	<b>Sem 5</b> Sept 2022			
		EEE30004*@	Digital Signal Processing	(EEE20002/EEE20006)
3		EEE30004*@ MME30001@	Digital Signal Processing Engineering Management 1	(EEE20002/EEE20006) 100 credit points
3	Sept 2022	EEE30004*@ MME30001@ RME20001	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004
3	Sept 2022  Inter Semester  Sem 6	EEE30004*@ MME30001@ RME20001 EAT20008	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar
3	Sept 2022  Inter Semester	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) &
3	Sept 2022  Inter Semester  Sem 6	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)
3	Sept 2022  Inter Semester  Sem 6	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation  Machine Dynamics 2	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)  MEE20006
3	Sept 2022  Inter Semester  Sem 6	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@  RME40003*@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation  Machine Dynamics 2  Robot System Design	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)  MEE20006  250 credit points
3	Inter Semester  Sem 6 Mar 2023	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@  RME40003*@  ENG40001*@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation  Machine Dynamics 2  Robot System Design  Final Year Research Project 1	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)  MEE20006  250 credit points  287.5 credit points
	Inter Semester  Sem 6 Mar 2023	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@  RME40003*@  ENG40001*@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation  Machine Dynamics 2  Robot System Design  Final Year Research Project 1  Robotic Control	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)  MEE20006  250 credit points  287.5 credit points
4	Inter Semester  Sem 6 Mar 2023	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@  RME40003*@  ENG40001*@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation  Machine Dynamics 2  Robot System Design  Final Year Research Project 1  Robotic Control  Approved Elective	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)  MEE20006  250 credit points  287.5 credit points
	Inter Semester  Sem 6 Mar 2023	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@  RME40003*@  ENG40001*@  RME30003@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation  Machine Dynamics 2  Robot System Design  Final Year Research Project 1  Robotic Control  Approved Elective  Approved Elective	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)  MEE20006  250 credit points  287.5 credit points  RME30002
	Sept 2022  Inter Semester  Sem 6 Mar 2023  Sem 7 Sept 2023	EEE30004*@  MME30001@  RME20001  EAT20008  MEE30003@  RME30002@  MEE40003*@  RME40003*@  RME40003*@  ENG40001*@  RME30003@	Digital Signal Processing  Engineering Management 1  Electrical Actuators and Sensors  Professional Experience in Engineering#  Machine Design  Control and Automation  Machine Dynamics 2  Robot System Design  Final Year Research Project 1  Robotic Control  Approved Elective  Approved Elective  Final Year Research Project 2	(EEE20002/EEE20006)  100 credit points  PHY10004/EEE10001  Introductory Seminar  MEE20004  (MTH20014/MTH20007/MTH20005) & (PHY10004/EEE20006/EEE10001)  MEE20006  250 credit points  287.5 credit points  RME30002  ENG40001

12 Core units	4 Elective/Minor Units	* Outcome Units
16 Robotics and Mechatronics Major units	Industrial Placement	<sup>@</sup> Honours Merit Units

## Note:

# EAT20008 Professional Experience in Engineering is compulsory for all students who commenced first year from 2004, and 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.