SELF-GRADUATION CHECK

For students admitted from academic year 2017/2018 onwards (D-B7-XXXX-X students)
Bachelor of Science in Electromechanical Engineering

Students are strongly advised to check the enrolment records each semester in order to secure the graduation requirement has been fulfilled. You may print out this study plan and cross-check with your enrolment records. Should you have any doubts on the below study plan, please approach the Department of Electromechanical Engineering.

	Year 1		Credits
☐	EMEN1001	Engineering Drawing I	1
☐	EMEN1002	Engineering Drawing II	1
☐	EMEN1003	Engineering Materials	3
☐	EMEN1004	Statics	3
☐	MATH1003	Intermediate Calculus	3
☐	ECEN1008	Physics I	3
	Community and Peer Education Courses:		
☐	CPED1000	Residential College Experiential Learning	1
☐	CPED1001	Physical Education I	0.5
☐	CPED1002	Physical Education II	0.5
	General Education Courses:		
☐	GELH1000	Chinese Language and Culture	3
☐	GEST1004	Quantitative Reasoning for Science and Technology	3
☐	1 GE Course (Science and Technology)		3
	Languages and Skills Courses*:		
☐	EELC1001	Interactive English I	3
☐	EELC1002	Interactive English II	3
☐	CISC1000	Information Technology Fundamentals and Practices	3
	1 Languages and Skills Course*:		3
☐	CHLL1000	University Chinese or	
	PORT1000	Portuguese Language I – Introductory Portuguese	
	Total Credits		37

	Year 2		Credits
☐	EMEN2000	Strength of Materials	3
☐	EMEN2001	Thermodynamics	3
☐	EMEN2002	Manufacturing Technology	3
☐	EMEN2003	Electrical Engineering	3
☐	EMEN2004	Dynamics	3
☐	EMEN2005	Computer-Aided Design	3
☐	EMEN2006	Machine Elements	3
☐	EMEN2007	Mechatronics	3
☐	MATH2000	Engineering Mathematics I	3
☐	MATH2001	Engineering Mathematics II	3
	Community and Peer Education Courses:		
☐	CPED1003	Communication Skills and Leadership	1
	General Education Courses:		
☐	GEGA1000	Macao and Chinese Civilization	3

	Languages and Skills Courses*:		
☐	EELC1003	Academic English	3
	Total Credits		37

	Year 3		Credits
☐	EMEN3000	Production Management	3
☐	EMEN3001	Fluid Mechanics	3
☐	EMEN3002	Control Engineering	3
☐	EMEN3003	Heat Transfer	3
☐	EMEN3004	Computer Engineering	3
☐	EMEN3005	Society and the Engineer	3
	General Education Courses:		
☐	GESB1001	Applied Ethics	1
☐	GESB1002	Foundations of Moral Values	1
☐	GESB1003	Law and Society	1
☐	1 GE Course (Area of Global Awareness)		3
	4 Required Electives^		12
	Total Credits		34

	Year 4		Credits
☐	EMEN4000	Graduation Project	6
☐	STGC3000	Work-Integrated Education	3
	General Education Courses:		
☐	1 GE Course (Area of Literature and Humanities)		3
☐	1 GE Course (Area of Society and Behaviour)		3
	6 Required Electives^		18
	Total Credits		33

Required Elective Courses (3 credits for each course):

Stream A – Building Services

EMEN3008	Air Conditioning and Refrigeration
EMEN3012	Electrical Services - Wiring and Installations
EMEN3018	Intelligent Buildings
EMEN3025	Fire Protection Engineering
EMEN3030	Special Topics in Electromechanical Engineering I
EMEN3036	Extra-low-voltage Electrical Systems in Buildings
EMEN3037	Facility Management
EMEN3038	Lighting Technology

Stream B– Energy, Engineering Design & Control

EMEN3009	Applications of Vibration and Noise Control
EMEN3010	Computer Technology in Engineering
EMEN3013	Electromechanical Energy Conversion
EMEN3014	Electronics and Instrumentation
EMEN3015	Finite Element Techniques in Engineering
EMEN3016	Fundamentals of Automotive Engineering
EMEN3019	Internal Combustion Engines
EMEN3023	Computational Fluid Dynamics
EMEN3026	Robotics
EMEN3028	Optimization Techniques and Their Applications in Engineering
EMEN3031	Special Topics in Electromechanical Engineering II
EMEN3033	Theory of Mechanisms
EMEN3035	Electric Vehicles
EMEN3040	Nonlinear Dynamics and Chaos
EMEN3041	Selection of Materials for Engineering Design
EMEN3042	Sensors and Actuators
EMEN3045	Thermal Energy Transportation in Porous Media

Stream C– Materials, Manufacturing & Engineering Management

EMEN3006	Advanced Manufacturing
EMEN3007	Advanced Materials for Engineering
EMEN3011	Corrosion, Wear and Degradation of Materials
EMEN3017	Industrial Data Management
EMEN3024	Engineering Management
EMEN3027	Mechanical Behaviour of Engineering Materials and Basic Failure Analysis
EMEN3029	Production Systems, Planning & Control
EMEN3034	Creative Industry
EMEN3039	Mechanical Processing of Materials
EMEN3032	Special Topics in Electromechanical Engineering III
EMEN3043	Statistics and Probability for Engineering
EMEN3044	Surface Engineering and Coating Technology