FACULTY OF ELECTRICAL ENGINEERING (FKE)

Faculty of Electrical Engineering offers two taught course programmes:

- Master of Electrical Engineering – MEKG
- Master of Mechatronics Engineering – MEKH

Programme Structure

Programme : Master of Electrical Engineering

MQF Level : 7

NEC Field : 522 - Electricity and Energy

Mode of Study / Duration : Full-Time (1 – 2 years) / Part-Time (2 – 4 years)

Master of Electrical Engineering (Taught course) is developed to instil a strong engineering foundation, to produce graduates that are proficient in solving electrical engineering problems. The programme blends the fundamental elements of advanced electrical and mechatronics with industrial and manufacturing related studies, provide the opportunity for student to specialize in areas related with advanced industrial power, power electronics & drives and control engineering.

Section	Course	Field	Credit
Compulsory	Research Methodology		3
University Elective	Engineering & Technology Management		3
Program Core	Electrical Power System		3
	Modern Control Design		3
	Electrical Machines & Drives		3
	Insulation Coordination & Diagnostic Testing		3
	Energy Conversion		3
	Sustainable Energy & Distribution Generation		3
Elective (Choose only one (1) field, and Select Any Two (2) from the field list)	Advanced Drive Systems	Power Electronics & Drives	3
	Electrical Machine Design		3
	Power Electronics for Renewable Energy		3
	Nonlinear Control Systems	Control System Engineering	3
	Intelligent Control		3
	Control Technology & Applications		3
	Power Systems Operation & Control		3

	Power Systems Protection & Stability	Power System Engineering	3
	Power Quality & Energy Efficiency		3
	Lightning Protection & Grounding System		3
Master Project I & II			10
Total Credit hours			40

Programme **: Master of Mechatronics Engineering**
MQF Level **: 7**
NEC Field **: 523 – Electronics and Automation**
Mode of Study **: Full-Time (1 – 2 years) / Part-Time (2 – 4 years)**

Master of Mechatronics Engineering (Taught course) is developed to instil a strong engineering foundation, to produce graduates that are proficient in solving mechatronic engineering problems. The programme covers courses such as industrial robotics, Internet of Things-related controllers, mechatronics and control systems.

Section	Course	Field	Credit
Compulsory	Research Methodology		3
University Elective	Engineering & Technology Management		3
Program Core	Advanced Mechatronics System Design		3
	Modern Control Design		3
	Applied System Modelling & Simulation		3
	System Dynamics		3
	Industrial Machine Vision or Industrial Robotics		3
	Electrical Machines & Drives		3
Elective (Choose only (1) one Field, and Select Any Two (2) from the field list)	Industrial Robotics	Mechanical Engineering	3
	Engineering Standards		3
	System Identification	Control System Engineering	3
	Intelligent Control		3
	Advanced Industrial Automation	Mechatronic System	3
	Bilateral Motion Control		3

	Advanced Embedded Systems	Internet of Things (IOT)	3
	Industrial Machine Vision		3
Master Project I & II			10
Total Credit hours			40

List of Postgraduate Programmes

No.	Postgraduate Programme	Study Mode	Mode of Registration (Year)		Academic Fee	
			Full Time	Part Time	Malaysian (RM)	International (RM)
1.	Master of Electrical Engineering	TAUGHT COURSE	1 - 2	2 - 4	6,790	11,290
2.	Master of Mechatronics Engineering	TAUGHT COURSE	1 - 2	2 - 4	6,790	11,290

Further Information

Faculty of Electrical Engineering (FKE)
Universiti Teknikal Malaysia Melaka (UTeM)
Hang Tuah Jaya,
76100 Durian Tunggal,
Melaka,
Malaysia

Tel: +606 - 270 2112
Website: www.utem.edu.my/fke