PROGRAM	MKEH	MKET	MEEM	MEEP
Compulsory courses	 Advanced Digital System Design Advanced Microprocessor System Analogue CMOS Design Nanoelectronic Devices 	 Sustainable Design, Engineering & Management Internet of Things Technologies Wireless Communication Systems Communication and Computer Networks RF/Microwave and Antenna Design 	 Control Systems Engineering Embedded Control Systems Artificial Intelligence and Applications Advanced Instrumentatio n and Measurement 	 Power System Apparatuses and Devices Power Electronics Systems Power System Analysis and Computational Methods High Voltage and Electrical Insulation Intelligent Engineering Solution Engineering Project Management
Elective courses	 Advanced Computer Architecture Advanced Digital Signal Processing Hardware and Software Co- Design Image Processing Integrated Circuit Testing Random Process Software Engineering Special Topic in Electronic Engineering Speech Processing VLSI Circuits & Design VLSI Design Automation 	 Broadband Multimedia Networks Satellite Communication Network Modeling & Performance Advanced Digital Communications Computer and Network Forensics Advanced Antenna Design Microwave and Millimeter Wave System Design Advanced Optical Fiber Communication Optical Communication Networks Entrepreneur- ship for Telecommunica- tion Industry 	 Nonlinear and Robust Control Systems System Identification and Adaptive Control Advanced Process Control Model Predictive Control Linear Control System Design Autonomous Mobile Robotics Advanced Robotics Advanced Robotics Mechatronic Design Sensors and Actuators Smart Manufacturing Embedded Systems for Innovative Product Design Rapid Prototyping and Simulation Cyber Physical System Deep Learning Intelligent Vision System 	 Power Electronics Applications Electrical Drives Advanced Power System Control Power Systems Security & Deregulated Market Lightning Protection & Grounding System Integrated Resource Planning in Energy Sector Special Topic in Power Engineering Power System Protection Alternative Energy Systems and Technologies Advanced High Voltage Technology Power Quality

Table 4: Program Structure

*All above are subject to change without notice



Accelerate Your Career through FKE Weekend Programs at Faculty of Electrical Engineering

- ✓ **NEW**-Blended Learning Mode (2 online and 1 face-to-face classes)
- ✓ Flexible solution for working engineers / professionals
- ✓ Classes taught by Universiti Teknologi Malaysia faculty members
- ✓ Accredited by Malaysian Qualification Agency (MQA)
- ✓ Industry-driven, up-to-date curricula
- ✓ Affordable

Introduction

Faculty of Electrical Engineering (FKE), Universiti Teknologi Malaysia offers four master's programs as weekend programs (PESISIR) at selected study centers. Classes are on weekends and are fully taught by our graduate faculties. These programs are accredited by the Malaysian Qualification Agency (MQA). The duration of study is between two to four years. The program fee is affordable and competitive.

Programs Offered

We offer the following four programs at our selected centers.

• **Master of Engineering (Computer and Microelectronic Systems)-MKEH** This program is an advanced degree program that exposes students to cutting-edge technologies and techniques in computer engineering, integrated circuit (IC) design, microelectronics system and advanced electronics for next generation applications. This program covers both the theoretical and practical aspects of computer engineering and microelectronics system. It is designed especially for engineers and researchers to complement their industrial expertise and to enhance their knowledge in this field.

• **Master of Engineering in Wireless Communication and Network -MKET** This program aims to produce professionals with advanced knowledge and skills in the

This program aims to produce professionals with advanced knowledge and skills in the field of Wireless Communication and Network in line with the development of today's communications technology. The program will also provide exposure in entrepreneurship and sustainability in technology and engineering to further contribute to the generation of talent and transformation leaders according to the current needs of the country.

• Master of Engineering (Electrical Power)- MEEP

The program is an advanced degree program to cater for graduates and professionals who are seeking and updating greater knowledge of current technology and techniques in electrical power, energy conversion, and high voltage engineering. This program offers high-level graduate program with strong foundations in theory, to equip student with the skills necessary to grasp and develop new technologies and trends in the electrical engineering field. It is designed to develop competent electrical power system professionals and the potentials of tomorrow's leaders in the power industry.

• Master of Engineering (Mechatronics and Automatic Control)- MEEM

The program is designed to provide advanced academic study and is also structured to meet the demands of industries. The program provides the graduate student with stateof-the-art knowledge and technology necessary for the quality research work. The program also provides the student with relevant advanced know-how for today's mechatronics and control engineering profession. This program aims to equip graduates, with both the theoretical and the practical skills necessary to apply modern control techniques to a wide range of industrial problems and/or embark on further research.

Study Centers

Weekends Masters by taught course programs (PESISIR) are available at the University's off-campus centers:

- Johor Bahru: Universiti Teknologi Malaysia main campus
- Kuala Lumpur: Universiti Teknologi Malaysia Kuala Lumpur
- Pulau Pinang: Penang Skills Development Center
- Kota Kinabalu: TBA

DROCRAM	STUDY CENTER for PESISIR				
PROGRAM	Kuala Lumpur	Pulau Pinang	Kota Kinabalu		
MKEH	_	MKEHA1HPA	—		
MKET	MKETA1HKA	-	_		
MEEM	MEEMA1HKA	-	-		
MEEP	MEEPA1HKA	_	MEEPA1HSA		

 Table 1: Programs offered at selected centers

Program Structure

Students must complete 43 credits and achieve a final CGPA of at least 3.0 in order to be awarded Master of Electrical Engineering.

	Number of courses Credit Total cred			credit h	lit hours		
Courses	MKEH MEEM	MKET	MEEP	hours per course	MKEH and MEEM	MKET	MEEP
Compulsory	4	5	6	3	12	15	18
Elective	4	3	2	3	12	9	6
Free Elective*	1	1	1	3	3	3	3
University Elective	1	1	1	3	3	3	3
Research Methodology	1	1	1	3	3	3	3
Master's Project		Project 1	1	4	10	10	10
	Project 2		6				
Total credits to graduate				43			

Table 2: Credit hours for each course

Note: Students may register one free elective from any program offered by the faculty

Attractive Class Schedule

Our fulltime program can be completed within 2 years (four normal semesters and one short semester). Admission is in February and September every academic year. Each normal semester has 15 weeks lecture, and 3 weeks final examination weeks. Short semester is for 8 weeks starting July.

Classes are conducted on Saturday and Sunday at all study centers. Each course will typically occupy 3 weekends for Kuala Lumpur and Penang study centers, i.e., taking 3 courses will occupy 9 weekends per semester. For Johor Bahru center, each course will be on 4 weekends. **Classes will be held as blended learning mode:** 2 online classes and 1 face-to-face (starting 20232024 sem1).

Due to different weekend depending on states, our classes for a 3-credit course are scheduled as follows:

- Johor Bahru: 4 classes on Saturday and 1 class on Sunday. Classes are from 8.30 a.m. until 6.30 p.m. including lunch break.
- Kuala Lumpur: 3 classes on Saturday from 2.00 p.m. to 10.00 p.m. including dinner break; and 3 classes on Sunday from 9.00 a.m. to 6.00 p.m. including lunch break.
- Penang: 3 classes on Saturday and 3 classes on Sunday from 9.00 a.m. to 6.00 p.m. including lunch break.

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Sem. 1	Sem. 2	Short sem.	Sem. 3	Sem. 4
Compulsory 1	Compulsory 3	University elective	Elective 3	Elective 5
Compulsory 2	Compulsory 4	Research Methodology	Elective 4	Project 2
Elective 1	Elective 2		Project 1	
(9 credits)	(9 credits)	(6 credits)	(10 credits)	(9 credits)

Table 3: Suggested study plan e.g., for MKEH (October Intake)

Admission Requirement

Entry to the program requires a bachelor's degree in electrical engineering or equivalent from a tertiary institution recognized by UTM and Board of Engineers. Minimum requirement is 3.0/4.0 for fresh graduate or 2.7/4.0 for applicant with 2 years' experience, or 2.5/4.0 for candidate with 4 years related experience. Expatriates may also apply admission to our program.

<u>Fees</u>

Our fee structure is very competitive. The estimated fee for JB is RM19.5k, KL for RM23k, and Penang for RM28k. The fee covers fee to complete 43 credits in 2-year study period. Payment for additional fees is required for repeat courses or semester extension. The university has the right to increase the fee (term & condition apply).

Information and Application

For further information, please contact:

PESISIR Programme Coordinator (MKEH, MKET, MEEM or MEEP) Email: penyelarasmeeh@fke.utm.my, penyelarasmeet@fke.utm.my penyelarasmeem@fke.utm.my, penyelarasmeep@fke.utm.my

> Or Email us : Joinus@fke.utm.my Tel: +6019-6886235 More Info: <u>https://www.admission.utm.my</u>



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