

# MASTER OF PHILOSOPHY

## PROGRAMME SPECIFICATIONS

The Master of Philosophy (M.Phil.) offered at SKE is a research degree program for those holding a Bachelor's degree in Electrical Engineering of the equivalent field who would like to expand and upgrade their knowledge. This multidisciplinary program assists candidates to develop skills in high level analysis and presentation, as well as integrate academic and professional concerns. Successful completion of the program will indicate that candidates have completed a course of research training. The M.Phil. thesis is expected to make an invaluable contribution of new knowledge or to the existing body of knowledge in the field.

The degree is awarded based on a comprehensive oral examination (viva voce) of the thesis submitted by the candidate on the completion of the study. Prospective graduate students should prepare themselves adequately, both in the fundamental subject matter necessary for advanced work and other branches of learning, so they may conduct quality research and complete their programs excellently.

## GENERAL INFORMATION

1. Awarding Institution	Universiti Teknologi Malaysia
2. Teaching Institution	Universiti Teknologi Malaysia
3. Programme Name	Master of Philosophy
4. Final Award	M.Phil. in Electrical Engineering
5. Programme Code	MKEE
6. Professional or Statutory Body of Accreditation	Kementerian Pendidikan Malaysia
7. Language(s) of Instruction	English and Bahasa Melayu
8. Mode of Study (Conventional, distance learning, etc)	Conventional
9. Mode of operation (Franchise, self-govern, etc)	Self-governing
10. Study Scheme (Full Time/Part Time)	Full Time
11. Study Duration	Minimum : 2 yrs Maximum : 4 yrs

## PROGRAM EDUCATIONAL OBJECTIVE (PEO)

PEO1 Mastery of knowledge and competency in advanced areas of Electrical Power, Electronics, Instrumentation, Control, and Telecommunication engineering field.

PEO2 Professionalism and high standards of ethical conducts within

organization and society.

PEO3 Responsive to changing situations by continuously acquiring new knowledge and skills.

### **PROGRAM LEARNING OUTCOMES (PLO)**

PLO1 Attain advanced knowledge on theories, methods, and applications related to Electrical Power, Electronics, Instrumentation, Control, and Telecommunication engineering field.

PLO2 Demonstrate mastery in conducting research independently in solving problems related to Electrical Power, Electronics, Instrumentation, Control, and Telecommunication Engineering through relevant analytical methods, simulations and/or experiments.

PLO3 Synthesize engineering knowledge through design and development.

PLO4 Plan and perform research undertakings responsibly, professionally and ethically.

PLO5 Communicate and express knowledge and ideas effectively.

PLO6 Continue life-long learning and apply technology for the betterment of humanity.

### **PROGRAM DURATION**

The Master of Philosophy program takes typically two years (4 semesters) with a maximum duration of 4 years (8 semesters). M.Phil. students are supervised by graduate faculty members or a panel of supervisors. Co-supervisors may be appointed from the industry. The progress of a candidate is assessed through research progress reports submitted at the end of each semester.

### **COURSE LIST**

<b>No.</b>	<b>Course</b>	<b>Code</b>	<b>Credit Hours</b>
1.	Research Methodology	UKEP0010	0
2.	University Elective Course	U*** **3	3
3.	Research	MKEE **00	0

### **GRADUATION CHECKLIST**

M.Phil. students are required to register and pass the following courses:

#### **Research Methodology course (course code UKEP0010)**

To be taken once during the study. Students are advised to take this course in the first semester of study.

**University Elective Course (course code U\*\*\* \*\*3)**

One course is to be taken once during the study.

**Research (course code MKEE \*\*00)**

To be taken every semester until the submission of the thesis. The progress of a candidate in each semester is assessed through research progress reports submitted at the end of the semester. It is important for the students to know that the submission of the progress report needs to be done by the student themselves via GSMS website <http://spsapp3.utm.my:8080/gsmsv4/>.

**THESIS SUBMISSION AND EXAMINATION**

In the 2nd semester of the Masters' program, research students will undergo the first stage evaluation process. The objective of this evaluation process is to assist and ensure the research they are conducting is in the right direction and eventually meet the expectation of the research program. Students will receive a copy of the panel report containing suggestion and recommendation that will guide and improve the undertaken work.

At the end of the study, students will submit a thesis for oral examination.

Before submission of the thesis for the oral examination (viva), students must submit the Notice for Thesis Submission at least three months in advance. This is to ensure that approved internal and external examiners have been appointed by the university before the oral examination can take place.

Failure to do so may delay the viva process.