

# Master of Engineering Technology in Electrical Power Engineering

## Overview

This Masters coursework programme is formulated to equip graduates and professionals with broad and robust training on modern electrical engineering technologies, with a strong focus on power and energy applications in an urban environment. It is suitable for recent graduates who wish to develop the specialist knowledge and skills relevant to this industry. It is also suitable for mid-career professionals who wish to take advantage of current economic restructuring and industrial transformation to switch to electrical engineering careers in sectors including but not limited to – power and energy, transportation and connectivity, built environment and advanced manufacturing.

**The 60-ECTS<sup>1</sup>-credit postgraduate degree programme consists of a dissertation project and eight elective modules in:**

- Analysis and Design of Electrical Machine Systems
- Condition Monitoring in Power Engineering
- Electrification for Transportation and Built Environment
- Energy Resources, Market and Economics
- Power Electronic Conversion
- Power Quality and Reliability
- Power Systems Analysis and Control
- Power Systems Fault Analysis and Protection
- Professional Practices in Power Engineering
- Smart Grids and Cyber-Security

The MEngTech in Electrical Power Engineering (EPE) programme will be seeking professional accreditation from the Engineering Accreditation Board. The first provisional accreditation exercise of the MEngTech (EPE) with BEng (EPE) is expected in early 2019.

<sup>1</sup>ECTS – European Credit Transfer and Accumulation System

**Professor Tseng King Jet, Programme Director  
for Electrical Power Engineering Programmes in SIT**



This programme shall provide the further learning educational qualification to add to your Bachelor's degree, which is a critical component in a portfolio to attain Chartered or Professional Engineering status needed for career advancement. Its student-centric and outcome-based education approach is also redefining the modern graduate education for Singapore Engineering.



**Flexible Study Programme**

Full-time students will be able to complete the programme in a year or less, while part-time students can take up to two years at a pace suited to them.

		Trimester 1	Trimester 2	Trimester 3
Full-time candidates	Year 1	4 modules (24 credits)	4 modules (24 credits)	
		Dissertation Project (12 credits)		
Part-time candidates	Year 1	2 modules (12 credits)	2 modules (12 credits)	
		Dissertation Project (12 credits)		
	Year 2	2 modules (12 credits)	2 modules (12 credits)	

**Eligibility**

- Having the SIT-Newcastle University BEng in Electrical Power Engineering degree or equivalent qualifications; and
- At least one year of relevant working experience.

**Tuition Fees**

Tuition fee subsidy by the Ministry of Education may be available to students who meet the criteria. The AY2017/18 subsidised tuition fees for the current 60-credit MEngTech programme for Singapore Citizens is \$8,550. As the AY2018/19 fees are not available at time of print, please visit **SingaporeTech.edu.sg** for updates.

**Facilities and Support**

The programme is conducted at SIT@NYP Building with state-of-the-art power engineering design and project facilities including:

- Real-time data acquisition and condition monitoring system for 400kW Pulau Ubin 'live' microgrid;
- Electrical installation power quality monitoring system for entire SIT@NYP building;
- Hardware-in-loop real-time digital simulator;
- Multi-energy microgrid lab (at industrial partner);
- Electrical power system analysis software.



**MEMORANDUM OF UNDERSTANDING**  
Between SP Group and SIT on Singapore's First Experimental Urban Micro-Grid, 23 October 2017

*Photo courtesy of Energy Market Authority*

**Contact Information**

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