



**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE

College of Professional and
Continuing Education

Graduate Certificate

in Power Engineering



GRADUATE CERTIFICATES

Graduate certificates enable working adults to update their knowledge and upgrade their skills required in key growth sectors to keep pace with the fast-changing economy. Each graduate certificate comprises of modules which are taken from the Postgraduate Full Degree Programme in key growth sectors including software engineering. These modular courses can also be taken individually and each course lasts for one semester of 13 weeks.

Each course is credit bearing and can be stackable to the relevant degree. There will be continuous assessments during course period and a final exam at the end of the course which contribute to a final grade. The maximum candidature period for earning a Graduate Certificate is 3 years from the first enrolled Graduate Certificate course under the specific certificate. A certificate will be awarded to the successful participants upon completion of courses.

Graduate Certificate in POWER ENGINEERING

LEARNING OBJECTIVES

- Understand power generation through synchronous generators, its transmission, distribution, conversion and utilization.
- Analyse power quality issues such as harmonics, transients, sags and swells and apply the learnt principles and concepts to solve power quality problems.
- Understand AC-DC, DC-DC and DC-AC power converter operating techniques and their applications in emerging renewable energy systems.

PROGRAMME STRUCTURE

This Graduate Certificate comprises of the following 4 modules (*Modules can be taken individually*):

1. [EE6501 Power Electronic Converters](#)
2. [EE6508 Power Quality](#)
3. [EE6510 Power System Operation and Planning](#)
4. [EE6511 Power System Modelling and Control](#)

ADMISSION CRITERIA

- At least 21 years of age
- Have 2 years of full-time work experience, or have fully discharged full-time NS liability, or are currently employed on a full-time basis
- At least a Bachelor's degree in Physics or in Electrical and/or Electronic Engineering
- Selective module(s) require relevant prerequisite modules or can be substituted with relevant work/industry experience

WHO SHOULD ATTEND

- Graduate participants or engineers already working in electric power distribution and/or related fields.
- Engineers who anticipate future involvement in this area.
- Prior knowledge of power, electronics, and control theory is preferred.

FEES AND SUBSIDIES

- Total course fee of around S\$11,000 before any applicable subsidy
- SkillsFuture (SSG) Training Grant available
- Enhanced funding from Enhanced Training Support for SME, SkillsFuture Mid-career Enhanced Subsidy and Workfare Training Support schemes
- Up to S\$250 course fee subsidy under NTUC UTAP
- Eligible for SkillsFuture Study Award

Log on to www.copace.ntu.edu.sg to apply

Applications for Graduate Certificates are open all year round

Academic Semester 1 : August to December
(Process in May)

Academic Semester 2: January to May
(Process in October)