



**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE

College of Professional and
Continuing Education

Specialist Certificate

in Communication Networks



SPECIALIST CERTIFICATES

Specialist 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 specialist certificate comprises of modules which are taken from the Undergraduate Full Degree Programme in key growth sectors including network communications. 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 Specialist Certificate is 3 years from the first enrolled Specialist Certificate course under the specific certificate. A certificate will be awarded to the successful participants upon completion of courses.

Specialist Certificate in COMMUNICATION NETWORKS

LEARNING OBJECTIVES

- Analyse and evaluate communication networks and network performances.
- Understand network architectures, protocols and operation principles.
- Understand basic concepts and operations of cellular mobile networks, network routing algorithms, congestion and flow control mechanisms.
- Gain a better appreciation and understanding of communication networks, network design and performance evaluation.

PROGRAMME STRUCTURE

This Specialist Certificate comprises of the following 6 modules (*Modules can be taken individually*):

1. [EE2010 Signals and Systems](#)
2. [EE3012 Communication Principles](#)
3. [EE3017 Computer Communications](#)
4. [EE4188 Wireless Communications](#)
5. [EE4718 Enterprise Network Design](#)
6. [EE4761 Computer Networking](#)

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
- Degree in Engineering/Science or Polytechnic Diploma with relevant working experience
- Selective module(s) require relevant prerequisite modules or can be substituted with relevant work/industry experience

WHO SHOULD ATTEND

- Enterprise/Network Architect(s) and Engineer(s), System Infrastructure Specialist(s), System Support Manager(s), Administrator(s), and Engineer(s)

FEES AND SUBSIDIES

- Total course fee of around S\$8,500 before any applicable subsidy
- MOE Skills-based Modular fee subsidy
- Additional 60% fee subsidy under SkillsFuture Mid-Career Enhanced Subsidy (MCES)
- Up to S\$250 course fee subsidy under NTUC UTAP

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

Applications for Specialist Certificates are open all year round

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

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