



**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE

College of Professional and
Continuing Education

Specialist Certificate

in Software Basics II



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 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 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 SOFTWARE BASICS II

LEARNING OBJECTIVES

- Design and analyse a greedy algorithm to solve an appropriate problem.
- Design and implement a C++/Java software solution to a problem.
- Assess the functions and services provided by each component in an operating system.
- Participate in all stages of the software Development Life Cycle for a medium-size software project.

PROGRAMME STRUCTURE

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

1. [CE/CZ2001 Algorithms](#)
2. [CE/CZ2002 Object Oriented Design and Programming](#)
3. [CE/CZ2005 Operating Systems](#)
4. [CE/CZ2006 Software Engineering](#)

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

- Security Administrator(s) and Security Engineer(s) from the security operations sector

FEES AND SUBSIDIES

- Total course fee of around S\$5,500 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)