

PROGRAMME HIGHLIGHTS

- Integrate conceptual and technological knowledge with practices for data analytics, software engineering, cloud computing and cybersecurity
- Cover cutting-edge and prevalent technologies including Machine Learning, Data Science, Cloud Computing, Cybersecurity, Internet of Things, Mobile App Development, Full Stack Development and Game Development
- Enhance students' abilities and competence to meet the needs of the latest-growing information and communications technology industry in Hong Kong

Programme Overview

This programme aims to provide students with the conceptual and technological knowledge for data analytics and software engineering as well as network and system configuration. Emphasis is on integration of theoretical knowledge with practical skills on implementing applications. Graduates will be able to apply proven principles and techniques to the development and support of computer systems. A distinguished feature of the programme is that it will enhance students' abilities and competence to meet the needs of the fast-growing information and communications technology industry in Hong Kong.

Career Prospects

Graduates will be employed as Software Developers, Network Engineers, Data Analysts, Al Engineers, Security Engineers, Game Software Developers, Mobile and Web Application Programmers, rising to challenging prospects such as ICT Project Managers, Data Scientists, Security Consultants/Managers, Game Software Technical Officers, Internetworking Administrators and other managerial positions.









Graduate Endorsement

"Studying ICT at THEi was great. I had the theory and practice (a mix of software, AI, and cybersecurity). Projects and internships also enable me to apply what I have learned in real life, which increases my confidence and job opportunities. Overall, it provided me a strong start in tech related field."

James CHAN
2025 Graduate (First Honours)

Programme Structure

	MODULE TITLE	CORE / ELECTIVE
1	English for Academic Studies 1	GE Core
	Chinese 1	
	Creativity & Innovation in Society	
	Discrete Mathematics, Probability & Statistics	
	Information Technology Essentials	
	Introduction to Programming	
	Network Fundamentals	Programme Core
	Database Principles	- Trogrammo Gore
	Object-Oriented Programming	
	Multimedia Websites Design & Practices	
	Applied Mathematics for Science & Technology	
2	Entrepreneurial Mindset	GE Core
	A.I. and Blockchain in Society & Work	
	GE Elective 1	GE Elective
	GE Elective 2	GE Elective
	Operating Systems & Architecture	Programme Core
	Web Applications Development	
	Software Engineering & Project Management	
	IT Professionalism	
	Object-Oriented System Analysis & Design	
	Data Structures & Algorithms	
	Software Development Project	
3	English for Academic Studies 2	GE Core
	English for Professional Purposes	
	Chinese 2	
	GE Elective 3	GE Elective
	Advanced Database Systems	Programme Core
	Mobile Applications Development	
	Game Engines & Game Development	
	Cloud Computing	
	Network Switching & Routing	
	Enterprise Architecture & System Development	
	Programme Elective 1	Programme Elective
	(Year 3 Summer) Work-integrated Learning	Programme Core
4	GE Elective 4	GE Elective
	Cybersecurity Operations	Programme Core
	Machine Learning	
	Data Science	
	Modern Web Technology & Development	
	Enterprise Network Technologies	
	Advanced Topics in Information & Communications Technology	
	Final Year Project 1	
	Final Year Project 2	
	Programme Elective 2	
	Programme Elective 3	Programme Elective

PROGRAMME ELECTIVE MODULE*

- Distributed Systems & Computing
- Embedded Systems & Hardware Interface
- Object-Oriented Framework & Design Patterns
- Game Software Technology & Development
- Data Visualisation & Interactive Design
- 2D/3D Graphic Programming
- Big Data & Enterprise Search Engines
- Artificial Intelligence & Expert Systems in Games

^{*} More elective modules may be offered. Modules offered are subject to change.