Module synopsis

Introduction to Information Technology 1

This module aims to introduce the fundamentals of computing to students, covering basic computer concepts in hardware, software, operating systems and software. Students will also learn about the basics of networking, the internet and the World Wide Web, how to work with databases as well as an introduction to computer security. They will also be exposed to the fundamentals of programming, covering algorithms, programming languages and software engineering principles.

Introduction to Information Technology 2

This module aims to introduce students to a broad range of the applications of computing, ranging from information systems, Internet of Things (IoT), smartphones and social media, digital marketing, Human-Computer Interaction (HCI) to ubiquitous computing and artificial intelligence. Students will then be made to consider the impact of computing on our society by looking at the legal and ethical issues as well as the positive and negative implications to our lives and jobs.

Mathematics and Statistics

This module aims to offer an overview of key mathematical methods and statistical concepts. Topics included are number and algebra, geometry and measurement, function and graph, and probability and statistics.

Study Skills for Effective Learning

This module aims, at the basic level, to improve two complementary clusters of study skills, namely receptive skills in listening and reading, and productive skills in speaking and writing. Topics covered include: time management and study goals, listening and reading techniques in relation to receiving information from various situations and text types; and, visual and critical thinking skills. At the next scaffold of learning, other supplementary study methods are introduced: case management and problem-solving; report writing and research techniques; effective presentation techniques; analyzing and outlining various essay genres; and, fundamental essay and summary writing practice.

Web Programming Fundamentals

This module aims to introduce students to the basic concepts of Internet and hypertext, and how these concepts are integrated to provide World Wide Web applications over the Internet. Students will learn the theory behind current web-based development tools and technologies including HTML (HyperText Markup Language), CSS (Cascading Style Sheets) and JavaScript. Students will then advance to learning how to create web pages according to the standards set by the World Wide Web Consortium (W3C) and major steps involved in building a Web site, such as planning, design, development and implementation.