

MODULE SYNOPSIS

IT8051 Fundamentals of Programming 1

This module equips students with the fundamentals of programming using a beginner friendly language such as Python. Students will learn how to solve problems through coding a computer program. Fundamentals on program structure, variables, selection and iteration constructs will be covered. Students will be able to create programs to solve simple programming problems.

IT8052 Visual Interface Design

This module equips students with graphic design skills, techniques and use of image processing tools like Photoshop to produce digital content in areas of web applications. Basic design principles like colour models, typography layout and design elements will also be covered. Students will be able to apply the use of design principles to create compelling online digital content.

IT8053 Fundamentals of Programming 2

Continuing from Fundamentals of Programming 1, students will learn additional topics on Python programming such as functions, lists, dictionaries, exceptions, file input/output and consuming data from the web. Students will be able to create an application that interacts with dynamic data residing in a file or on the web.

ST4011 Fundamentals of Web Development Technology

This module provides the students with the knowledge and skills to understand different evaluation strategies for a user interface prototype and design as well as develop interactive web application. Topics covered include Internet and HTTP protocol, basic web design principles, web interface and navigation, HTML, hypertext links, images, tables, frames, forms and different evaluation methods. Students will also be taught how to apply Cascading Style Sheets to maintain consistencies across web pages. It also provides an overview of other web technologies such as Web Client programming with Javascript, Web Development Methodology and Web Development Platforms In addition, students will appreciate various hardware and software platforms, and learn basic web administration.

ST4012 Web Programming

This module teaches techniques and skills required for client-side web programming. Students will learn to use JavaScript and JQuery for client-side programming to manipulate the DHTML object model to achieve dynamism in web pages. Students will also be taught how to adapt their web pages for mobile devices using HTML5 and JQuery Mobile for viewing on mobile web browsers. Usage of Cordova to convert the mobile JQuery webpage to a native mobile app will also be covered.