Module Synopses

Semester One

1. Mobile Programming

   This module aims to teach students programming concepts suited for mobile devices. Students will be taught programming concepts such as data structures, control structures, methods and arrays. Students will learn multithreading and concurrent programming to take advantage of multicore mobile devices. By the end of the module, students will be competent in writing code for programming in mobile devices.

2. Mobile User Interaction

   This module aims to provide students with the skills in designing usable applications for web on mobile platforms, such as smart phones and tablets. Students will be equipped with skills to create interactive mobile web applications using tools such as HTML5 and Mobile jQuery which could be viewable on mobile phone browsers. Students will be taught theories of user-centric design, usability engineering and human-computer interaction principles to provide in-depth understanding of implementing good mobile-web application experience.

Semester Two

3. Mobile Applications

   This module imparts general domain knowledge in the area of mobile applications development. The architecture of the mobile network, the operating systems used in different mobile devices as well as the software tools used for mobile applications development will be taught. Students will also understand how deployment and bringing the application to market are done. On completion of the module, students will also be able to program, among others; user interfaces, persistence storage, 2D graphics and location-aware applications using Android as an example platform.

4. Web Services

   The module provides students with knowledge and skills required to develop web services consumed by mobile applications, based on industry standards such as RESTful. At the end of the module, students will be competent in designing, implementing, testing and integrating web services.