Computer Science and Engineering

COMP 1001 Exploring Multimedia and Internet Computing [3 Credit(s)]
This course is an introduction to computers and computing tools. It introduces the organization and basic working mechanism of a computer system, including the development of the trend of modern computer system. It covers the fundamentals of computer hardware design and software application development. The course emphasizes the application of the state-of-the-art software tools to solve problems and present solutions via a range of skills related to multimedia and internet computing tools such as internet, e-mail, WWW, webpage design, computer animation, spread sheet charts/figures, presentations with graphics and animations, etc. The course also covers business, accessibility, and relevant security issues in the use of computers and Internet. *Exclusion(s):* ISOM 2010, any COMP courses of 2000-level or above

COMP 1002 Computer and Programming Fundamentals I [3 Credit(s)]
Introduction to computers and programming. Computer hardware and software. Problem solving. Program design. Procedural abstraction. Debugging and testing. Simple and structured data types. Recursive programming. Introduction to searching and sorting. *Exclusion(s):* COMP 1004 (prior to 2013-14), COMP 1021, COMP 1022P, COMP 1022Q

COMP 1021 Introduction to Computer Science [3 Credit(s)]
This course introduces students to the world of Computer Science. Students will experience a range of fun and interesting areas from the world of computing, such as game programming, web programming, user interface design and computer graphics. These will be explored largely by programming in the Python language. *Exclusion(s):* COMP 1002, COMP 1004 (prior to 2013-14), COMP 1022P, COMP 1022Q, COMP 2011

COMP 1022P Introduction to Computing with Java [3 Credit(s)]
This course is designed to equip students with the fundamental concepts of programming elements and data abstraction using Java. Students will learn how to write procedural programs using variables, arrays, control statements, loops, recursion, data abstraction and objects using an integrated development environment. *Exclusion(s):* COMP 1002, COMP 1004 (prior to 2013-14), COMP 1021, COMP 1022Q, COMP 2011, ISOM 3320

COMP 1022Q Introduction to Computing with Excel VBA [3 Credit(s)]
This course is designed to equip students with the fundamental concepts of programming using the VBA programming language, within the context of the Microsoft Excel program. Students will first learn how to use Excel to analyze and present data, and will then learn how to use VBA code to build powerful programs. *Exclusion(s):* COMP 1002, COMP 1004 (prior to 2013-14), COMP 1021, COMP 1022P, COMP 2011, ISOM 3230

COMP 1029A Introduction to Mobile Application Development Using Android [1 Credit(s)]
[Previous Course Code(s): COMP 4901C*]* This course provides a basic introduction to mobile application development using the Android platform. It is intended for students who have some prior programming experience, but wish to learn the basics of mobile application development. The course will introduce them to the Android SDK and development environment, Android application components: Activities and their lifecycle, UI design, Multimedia, and 2D graphics support in Android. Students explore these concepts through self-learning course materials and guided laboratory exercises. Graded P or F. *Prerequisite(s):* COMP 1002 OR COMP 1004 (prior to 2013-14) OR COMP 1021 OR COMP 1022P OR COMP1022Q

COMP 1029C C Programming Bridging Course [1 Credit(s)]
This course introduces the C programming language. It is intended for students who already have some experience in computer programming but wish to learn how to apply those programming skills to the C language. The course covers basic programming topics, such as variables, control, loops, and functions, to more advanced topics. Students explore these by self-learning of course materials together with guided programming exercises. Students without the prerequisites but possess relevant programming knowledge may seek instructor's approval for enrolling in the course. Graded P or F. *Exclusion(s):* COMP 1002, COMP 1004 (prior to 2013-14), COMP 2011 *Prerequisite(s):* COMP 1021 OR COMP 1022P OR COMP 1022Q OR ISOM 3230 OR ISOM 3320

COMP 1029J Java Programming Bridging Course [1 Credit(s)]
This course introduces the Java programming language. It is intended for students who already have some experience in computer programming but wish to learn how to apply those programming skills to the Java language. The course covers basic programming topics such as variables, control statements, loops, functions, and object-oriented programming concepts. Students explore these by self-learning of course materials together with guided programming exercises. Students without the prerequisites but possess relevant programming knowledge may seek instructor's approval for enrolling in the course. Graded P or F. *Exclusion(s):* COMP 1022P, COMP 3021, ISOM 3320 *Prerequisite(s):* COMP 1002 OR COMP 1004 (prior to 2013-14) OR COMP 1021 OR COMP 1022Q OR ISOM 3230