COMP 4095 Information Systems Management and Professional Practices (3,2,1)

Prerequisite: Year IV standing in Computing and Information Systems

The course deals with the management of information systems and technology as it is being practised in organizations today to produce value for businesses. It also examines important professional issues in contemporary practice to help students become effective participants in a team of professional information systems practitioners.

COMP 4096 Business Intelligence and Decision Support (3,2,1) (E)

Prerequisite: COMP 2016 Database Management

Students will learn the methodologies and concepts of business intelligence, including the characteristics, architectures, and development of data warehouses and data marts. After completing the course, the students will understand the features and applications of Online Analytic Processing (OLAP), and identify the different types of OLAP. Emphasis will be placed on the understanding of enabling technologies and their applications to improve business operations and decision making.

COMP 4097 Mobile Computing (3,2,2)

Prerequisite: COMP 3015 Data Communications and Networking

This course introduces the basic concepts and principles in mobile computing. This includes the major techniques involved, and networks and systems issues for the design and implementation of mobile computing systems and applications. This course also provides an opportunity for students to understand the key components and technologies involved and to gain hands-on experiences in building mobile applications.

COMP 4105 Web Search Principles and Technology (3,2,1)

Prerequisite: COMP 2007 Object Oriented Programming

This course provides a comprehensive examination of different popular search systems for diverse types of data such as text, image, video and audio information. Students will be introduced to the powerful features in these systems, as well as the technology underpinning them. Students will learn how large information repositories are efficiently organized, managed and searched, and the principles of Web search engines and information retrieval.

COMP 4106 E-Business Technology (3,3,0) (E)

Prerequisite: Year III standing in Computer Science or Computing and Information Systems

This course introduces the use of technology in many aspects of a business, with particular emphasis on concepts and practices for modeling, specifying and integrating within-enterprise and B2B business processes. Business processes related to customer relationship management, enterprise resource planning, supply chain management, etc. will be covered. Students gain a heightened awareness of emerging technologies and trends in e-business.

COMP 4888-9 Final Year Project (3,0,9)

Prerequisite: Year IV standing in Computing and Information Systems

Students will carry out a piece of highly independent work, which could be a system development project or an academic research project, under the supervision of a faculty member. A project report and an oral presentation/demonstration are required upon successful completion of the project. Other deliverables for research projects may be a research paper or research prototype.

COMP 4898-9 Final Year Project (3,0,9)

Prerequisite: Year IV standing in Computer Science

Students will engage in a highly independent problem solving activity under the supervision of a faculty member. Students are expected to gain practical experiences of applying software systems principles and techniques acquired from the Programme to the solution of a real-life problem. The project demands careful planning and creative applications of underlying theories and enabling technologies. A final report and an oral presentation are required upon successful completion of the project.

COMP 7010 Advanced Topics in Computer Science and Information Systems (3,3,0)

Prerequisite: BSc in Computer Science or equivalent

This course studies in-depth the theories and issues in some specialized areas of computer science and information systems that are of current interest.

COMP 7030 Advanced Theory and Methodology for Information Systems Development (3,2,1)

Prerequisite: Research postgraduate student standing

To extend students' knowledge of informaton systems and development methodology through the study of advanced theories and methodologies, and to examine the critical issues of current IS research, so as to provide a student an integrative perspective of information systems and development.

At the end of the study of this course, students should be able to develop new solutions and models for an information system. They should also have an appreciation of methodological pluralism (that there is not one but many methods and that the 'correct' method is contingent on the problem being studied).

COMP 7040 Advanced Pattern Recognition (3,2,1)

Prerequisite: BSc in Computer Science or equivalent

This course gives students some advanced topics in the areas of pattern recognition, computer vision and image processing.

COMP 7050 Advanced Topics in Distributed Computing (3,2,1) (E)

Prerequisite: Postgraduate standing

This course offers a study of the design and implementation issues of distributed computing systems. It revisits the designs and approaches used by traditional centralized systems and proposes relevant solutions based on the distributed computing environment. The topics for discussion include distributed computing in communications, process management, synchronization, consistency and replication, fault tolerance, file systems and case studies.

COMP 7060 Advanced Topics in Intelligent Systems (3,3,0)

Prerequisite: Research postgraduate student standing

This course deals with the advanced topics in intelligent systems. Through a systematic training, students will be able to conduct independent intelligent systems research and develop theoretical or practical solutions in some selected domains, such as learning, planning, self-organization, soft-computing, adaptive computation, evolutionary computation, and intelligent agents.

COMP 7070 Advanced Topics in Machine Learning (3,2,1)

Prerequisite: Postgraduate standing

This is an advanced course that will not only focus on the recent literature on the applications of machine learning to problems from a range of different areas, including image/signal processing, robotics, information retrieval and data mining, but also let students learn the state-of-the-art learning theories and techniques based on statistics, neural networks and information theory.

COMP 7080 Postgraduate Seminar (1,0,0)

Students are exposed to the current IT research, development and practice via seminars, IT forum and presentations given by academic scholars, IT professionals and research students. After completing this course, students will: (1) learn the frontier knowledge of IT research and development; (2) broaden their mind; (3) understand the current IT practice; and (4) share their experience with academic scholars and IT professionals.

COMP 7090 Ubiquitous Computing (3,2,2)

Prerequisite: Postgraduate standing

This course discusses the concepts of ubiquitous/pervasive computing. This includes location-based services provided