completing this course, students will understand the principles of the Internet and the World Wide Web and be able to develop and manage Internet systems.

## **COMP 7700** E-Technology Architectures, Tools (3,2,1)and Applications

This course will develop students' understanding of recent developments in e-technologies, including XML, Web services, service-oriented architecture, Web-enabled business processes, as well as related architectures, tools, and applications. It will also enable students to acquire the capability to design and develop software systems based on e-technologies and to apply them to some domain applications.

## COMP 7730 **MSc Project**

Pre/co-requisite: Either COMP 7920 Project Skills in IT Management or COMP 7950 IT Project Skills

Students work on the projects proposed by themselves. Each project is supervised by an academic staff, and it may be cosupervised by practicing professionals. After completing the projects, students will submit written reports and present their results (e.g. new methodologies, IT systems, or critical surveys). Each project will be assessed by the supervisor(s) and one additional academic staff on four aspects: (1) project management and progress, (2) methodologies and results, (3) report writing, and (4) oral presentation. Through these projects, students will develop (1) mastery of integrating concepts with practice in IT Management, (2) creative and systematic problem solving skills for designing, analysing, managing or developing IT systems, (3) self-learning capability for sustainable self-development in the rapidly changing IT field, and (4) report writing and presentation skills for effective communication in IT enterprises.

## COMP 7740 Supplementary Programming (0,\*,\*) (E)

This course provides students with basic knowledge of computeroriented problem solving methodologies, algorithm development, structured programming concepts and design techniques, and implementation tools that facilitate debugging and testing. In particular, structured programming skills will be illustrated with a contemporary programming language. This course is open to MSc in Information Technology Management students with inadequate programming background.

## COMP 7750 Information and Knowledge (3,3,0) (E) Management

This course introduces the basic principles and technologies of information and knowledge management. Information storage and retrieval systems, knowledge management solutions, and knowledge management systems will be covered. Students will be able to understand the impacts of information and knowledge management in business and organization. They will be able to utilize information and knowledge management to maximize productivity.

## COMP 7760 Special Topics in Business Analytics (3,3,0) (E)

Prerequisite: The pre-requisite depends on the specific topics

covered. The pre-requisite and the chosen topics will be announced before the semester starts.

Students will learn state-of-the-art topics in business analytics. Emphasis will be placed on the current issues, methodologies and/ or practice. After completing this course, students will understand some current topics in and methodologies of business analytics.

#### COMP 7770 **Special Topics in IT Management**

Prerequisite: The pre-requisite depends on the specific topics covered. The pre-requisite and the chosen topics

will be announced before the semester starts. Students will learn state-of-the-art topics in IT management.

Emphasis will be placed on the current issues, methodologies and/ or practice. After completing this course, students will understand some current topics in and methodologies of IT management.

## COMP 7780 Special Topics in Knowledge and (3,3,0) (E) Information Management

Prerequisite: The pre-requisite depends on the specific topics covered. The pre-requisite and the chosen topics will be announced before the semester starts.

Students will learn state-of-the-art topics in knowledge and information management. Emphasis will be placed on the current issues, methodologies and/or practice. After completing this course, students will understand some current topics in and methodologies of knowledge and information management.

## COMP 7790 Special Topics in Internet and Web (3,3,0) (E) **Technologies**

Prerequisite: The pre-requisite depends on the specific topics

covered. The pre-requisite and the chosen topics will be announced before the semester starts.

Students will learn state-of-the-art topics in Internet and Web technologies. Emphasis will be placed on the current issues, methodologies and/or practice. After completing this course, students will understand some current topics in and methodologies of Internet and Web systems.

## **COMP 7800 Analytic Models in Information** (3,2,1) (E) **Technology Management**

This course aims to introduce different analytic models used in the management of information technology. These include practical applications of quantitative analysis techniques in business decision making, process modeling, planning and evaluation. The course focuses on the ability to recognize the appropriate models applicable to diverse information technology management situation, and to identify solutions to them. Emphasis will be placed on problem formulation and solution application rather than mathematical derivations.

## COMP 7810 Business Intelligence

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 operations and decision making in business and healthcare contexts.

# COMP 7820 Decision Analysis and Support To provide a study of decision analysis and support processes and relevant tools that provide support to such processes. Students

will learn the challenges and techniques of decision making in an environment of imperfect and changing information. Both the qualitative and the quantitative aspects of decision analysis and support will be covered.

## COMP 7830 Health Informatics (3,3,0)

In this course, students will learn the following: (1) structures, operations and workflow in healthcare organizations, (2) data and data standards in the healthcare industry, (3) information technology in healthcare, and (4) health information systems.

## Management of Medical Visual Data (3,2,1) In this course, students will learn (1) some fundamental image processing techniques, (2) the characteristics of different types of medical images, (3) the structure and components of visual information management systems, and (4) the architecture and application of picture archiving and communication systems.

## COMP 7850 Information Security Management (3,2,1) (E)

This course studies the principles of information security management. The course content is compatible with current industrial standard in information security (e.g. CISSP certification). The students will also learn the current topics and issues in information security management. On completion of the course, students should be able to (1) understand the principles