This elective course further develops students' knowledge in software engineering, and discusses state-of-art techniques and research topics in the field.

COMP 3240 Advanced Topics in Networking and Digital Media (3,2,1)

Prerequisite: The prerequisite depends on the specific topics covered. The prerequisite and the selected topics will be announced before the semester starts.

Students will learn some state-of-the-art topics in networking and digital media.

COMP 3250 Advanced Topics in Theoretical Computer Science (3,3,0)

Prerequisite: Year III standing in Computer Science

This course provides an in-depth study on a selected topic of theoretical computer science. The topic to be covered may vary from semester to semester, and is to be determined by the instructor. The topic could be a specific area of algorithmic problems (e.g. graph algorithms, combinatorial optimization), or a particular algorithm design paradigm (e.g. randomized algorithms, parallel algorithms).

COMP 3430 Information Technology Professional Practices (3,2,1)

Prerequisite: Year III standing in Computer Science

This course examines important professional issues in contemporary practice to help students become an effective participant in a team of IT professionals.

COMP 3450 Information Systems Theory and Methodology (3,2,1)

Prerequisite: Year III standing in Computer Science or Computing Studies

To extend students' knowledge of information 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 students with an integrative perspective of information systems and development.

COMP 3460 Information Systems Management (3,2,1)

Prerequisite: Year III standing in Computer Science or Computing Studies

The course deals with the management of information systems and technology as it is being practiced in organizations today to produce value for businesses and consumers.

COMP 3490 Information Systems Professional Practices (3,2,1)

Prerequisite: Year III standing in Computing Studies

This course examines important professional issues in contemporary practice to help students become an effective participant in a team of professional information systems developers.

COMP 3521-2 Final Year Project (3,0,9)

Prerequisite: Year III standing in Computer Science

Students will engage in a highly independent problem solving activity under the supervision of a faculty member and gain the practical experience of applying software systems principles and techniques acquired from the Programme to the solution of real-life problems. The project demands careful planning and creative application of underlying theories and enabling technologies. A thesis and an oral presentation are required upon successful completion of the project. This course is open to Computer Science majors only.

COMP 3551-2 Final Year Project (3,0,0)

Prerequisite: Year III standing in Computing Studies

The objective of the course is to enable students to carry out a piece of highly independent work. At the end, they will be able to demonstrate their mastery of course materials and their ability to apply what they have learned in solving practical problems. Students may propose a topic of their own choice (subject to a suitable supervisor being available) or select one from a list of topics provided by the Department.

COMP 3620 Human–Computer Interaction (3,2,1)

Prerequisite: COMP 1150 Object Oriented Programming

This course provides an introduction to and overview of the field of human-computer interaction (HCI). HCI is an interdisciplinary field that integrates theories and methodologies from computer science, cognitive psychology, design and many other areas. Issues include command languages, menus, forms, and direct manipulation, graphical user interfaces, computer supported co-operative work, information search and visualization, World Wide Web design, input/output devices, and display design.

COMP 3670 Mobile Computing (3,2,2)

Prerequisite: COMP 2330 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 3710 Electronic Transformation in Business (3,3,0)

Prerequisite: Year III standing in Computer Science or Computing Studies

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 3720 Business Intelligence and Decision Support (3,2,1)

Prerequisite: Year III standing in Computer Science or Computing Studies

This course provides a study of business intelligence, the enabling technologies, and the applications of these technologies for business intelligence, including the analysis and design for data warehousing, various data mining and knowledge discovery and sharing techniques, and the applications of the results for decision making and improved operations.

COMP 3740 Information Systems Evaluation and Policy (3,2,1)

Prerequisite: COMP 2010 Structured Systems Analysis and Design, COMP 2020 Object-Oriented Systems Analysis and Design, and Year III standing in Computer Science or Computing Studies

This course develops students' knowledge in two areas: (1) Evaluation of information systems, and (2) Information technology policy. The first area focuses on the measure of the quality of the information systems acquisition (by purchase or by engineering) process and of the deployed system. The second area addresses the enterprise-wide IT policy and standards related to IS acquisition.

COMP 3820 Information Systems Security and Auditing (3,3,0)

Prerequisite: Year III standing in Computer Science or Computing Studies

This elective course is to give students a thorough grounding in the theory, techniques and practical issues involved in computer-based information systems security and auditing. It draws on the students' knowledge gained in courses studied earlier, particularly information systems and accounting courses.