IT1101Computing Mathematics 1 [60 hours] This module equips students with the fundamentals of computing mathematics and calculus, and forms the foundation for more advanced mathematics topics. Topics covered include number system, set theory and logic, matrices, relations, functions, differentiation and integration.IT1110Communication Skills 1 [30 hours] This module teaches students to communicate effectively and skilfully in an academic and professional environment. It explores effective communication, reading, listening, technical writing, proposal writing and oral presentation. It helps students develop good communication strategies to improve interpersonal and teamwork skills.IT1111Programming Essentials [60 hours] This module covers the application of Java programming to problems that require structured thinking. Students learn to think through different kinds of problems and formalise the process of problem-solving strategy by defining the problem, looking for alternatives as solutions and presenting the solutions using Java. It teaches programming as a rigorous discipline to be applied independent of computer type, language or application, and deals mainly with the fundamental programming constructs, its grouping towards comprising a program, the program structure as a whole and the communication between various segments of the program. It also covers program testing, debugging, and a number of program design tools and techniques used to express the solutions needed to solve the impending problem.IT1201Computing Mathematics 2 [60 hours] This subject covers basic statistical concepts and spplications. The topics cover basic concepts on descriptive statistics, linear regression and correlation, permutation and combination, probability theory and probability distributions, which serve as foundation for subsequent topics such as estimation and hypothesis testing.IT1204Data Structures and Algorithms [60 hours] This module teaches the concepts of data structures and algorithms for effective problem-solving skills and the implementation of solutions using Java. It focuses on dynamic data structures such as stacks, queues, linked lists, trees and graphs. Algorithms for searching and sorting, including common algorithm design techniques, will also be introduced.IT1205Operating Systems [60 hours] This module introduces the fundamental concepts of operating systems to students. It provides an overview of the different types of operating systems such as Windows and Linux, as well as their general functions. It discusses in detail essential operating system components and concepts in the area of process management, memory management, storage management and file management.IT1210Communication Skills 2 [30 hours] This module develops critical communication and interactive skills needed by students to prepare them for entry into the job market as working professionals. It focuses on interpersonal skills and various types of business communication needed in the workplace. Topics include business correspondence, writing resumes, interviewing skills, conflict management and negotiation skills.IT1213Data Communications & Networking [60 hours] This module focuses on network terminologies and protocols, local area networks (LAN), wide area networks (WAN), Open System Interconnection (OSI) models, cabling, routers, router configuration, Ethernet, Internet Protocol (IPv4) addressing and network standards.IT1324 Law & Ethics of IT [30 hours] This module aims to provide students with an awareness of the ethics and law of IT. It covers issues like intellectual property rights protection and infringement, copyrights and plagiarism, software piracy, computer crimes, Internet fraud, objectionable materials and confidentiality in the Information Age. Singapore's law on copyright, computer misuse and electronic transactions will also be covered at an awareness level.IT1325 Computing Mathematics [60 hours] This module equips students with the fundamentals of computing mathematics and calculus, and forms the foundation for more advanced mathematics

topics. Topics covered include number system, set theory and logic, matrices, relations, functions, differentiation and integration.IT1331Object-Oriented Programming [60 hours] This module introduces students to the fundamentals of object orientation and equips them with object-oriented (OO) programming skills. Students will learn various OO programming topics such as classes, objects, abstraction, encapsulation, inheritance and polymorphism. Students will also learn how to implement these concepts using programming languages.IT1333Business Statistics [60 hours] This module covers basic statistical concepts and applications, and includes topics such as permutation and combination, probability theory, probability distribution, estimation, hypothesis testing, least squares method, simple linear regression and correlation. IT1214Digital Media Interaction Design [60 hours] This module introduces the importance of user interface design for digital media. It covers design methodology from the human computer interaction approach, guidelines and standards for using different types of digital media, and techniques used to perform usability testing. Issues on accessibility, personalisation and globalisation are also discussed.IT1218 Law & Ethics of IT [30 hours] This module aims to provide students with an awareness of the ethics and law of IT. It covers issues like intellectual property rights protection and infringement, copyright and plagiarism, software piracy, computer crimes, Internet fraud, objectionable materials, and confidentiality in the information age. Singapore's laws on copyright, computer misuse and electronic transactions will also be covered at an awareness level.IT1321Programming Essentials [60 hours] This module covers the application of programming to problems that require structured thinking. Students learn to think through different kinds of problems and formalise the process of problem-solving strategy. It teaches programming as a rigorous discipline to be applied independent of computer type, language or application, and deals mainly with the fundamental programming constructs, its grouping towards comprising a program, the program structure as a whole and the communication between various segments of the program. It also covers program testing, debugging, and a number of program design tools and techniques used to express the solutions needed to solve the impending problem.IT1323Psychology & Sociology [60 hours] This module introduces students to basic concepts of psychology and sociology for online media applications. Students will learn psychology theories such as personality profiles, online social behaviour, online interpersonal relationships, cognition, perception, emotion, and motivation, as well as sociology theories such as online media and socialisation, group dynamics, social identity and social action.