# TAYLOR'S UNIVERSITY MODULES GUIDE

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#### AMERICAN DEGREE TRANSFER PROGRAM

## Programme Structure - American Degree Transfer Program (Study Intake May 2016)

| No.             | Module Title                                       | Code    | Credit Hours |  |  |
|-----------------|--|---------|--------------|--|--|
| English Modules |  |         |              |  |  |
| 1.              | Basic Writing II                                   | ENGL093 | 3            |  |  |
| 2.              | English Composition I                              | ENGL101 | 3            |  |  |
| 3.              | Introduction to Creative Writing                   | ENGL210 | 3            |  |  |
| 4.              | Reading and Writing Foundations                    | ENGL090 | 5            |  |  |
|                 | Mathematics N                                      | Iodules |              |  |  |
| 1.              | Calculus for Business I                            | MATH161 | 3            |  |  |
| 2.              | Calculus for Business II                           | MATH162 | 3            |  |  |
| 3.              | Calculus I   | MATH171 | 5            |  |  |
| 4.              | Calculus II  | MATH172 | 5            |  |  |
| 5.              | Calculus III                                       | MATH271 | 5            |  |  |
| 6.              | College Algebra                                    | MATH110 | 3            |  |  |
| 7.              | Differential Equations                             | MATH353 |              |  |  |
| 8.              | Discrete Mathematics                               | MATH208 | 3            |  |  |
| 9.              | Linear Algebra                                     | MATH319 | 3            |  |  |
| 10.             | Pre-Calculus                                       | MATH150 | 3            |  |  |
| 11.             | Statistics I                                       | MATH230 | 3            |  |  |
|                 | Sciences Moo                                       | dules   |              |  |  |
| 1.              | Biological Science (with lab)                      | BIOL160 | 4            |  |  |
| 2.              | Fundamentals of Chemistry (with lab) CHEM101       |         | 4            |  |  |
| 3.              | Fundamentals of Human Nutrition                    | NUTR201 | 3            |  |  |
| 4.              | General Chemistry I (with lab)                     | CHEM105 | 4            |  |  |
| 5.              | General Chemistry II (with lab)                    | CHEM106 | 4            |  |  |
| 6.              | Nutrition for Health & Disease                     | NUTR202 | 3            |  |  |
| 7.              | Organic Chemistry                                  | CHEM221 | 4            |  |  |
| 8.              | Physics for Science & Engineering I<br>(with lab)  | PHYS211 | 4            |  |  |
| 9.              | Physics for Science & Engineering II<br>(with lab) | PHYS212 | 4            |  |  |
|                 | Computer Mo  | dules   |              |  |  |
| 1.              | C Programming for Science &<br>Engineering         | CSCI251 | 3            |  |  |
| 2.              | Computer Programming - Java                        | CSCI117 | 3            |  |  |
| 3.              | Introduction to Computers                          | CSCI101 | 3            |  |  |
| 4.              | Programming in C++                                 | CSCI102 | 3            |  |  |

|    | Communication Modules             |                |   |  |  |
|----|-----------------------------------|----------------|---|--|--|
| 1. | Effective Public Communication    | SPCH105        | 3 |  |  |
| 2. | Interpersonal Communication       | COMM105        | 3 |  |  |
| 3. | Introduction to Communication     | COMM101        | 3 |  |  |
|    | Fine and Performin                | g Arts Modules |   |  |  |
| 1. | Foundations of Acting I           | THTR101        | 3 |  |  |
| 2. | Introduction to Film Studies      | FILM101        | 3 |  |  |
| 3. | Introduction to Music             | MUSC103        | 3 |  |  |
|    | Humanities I                      | Modules        |   |  |  |
| 1. | U.S History Since 1877            | HISt106        | 3 |  |  |
| 2. | U.S. History to 1877              | HIST105        | 3 |  |  |
| 3. | World Civilization I (to 1500)    | HIST101        | 3 |  |  |
| 4. | World Civilization II (from 1500) | HIST102        | 3 |  |  |
| 5. | World Religion                    | WREL105        | 3 |  |  |
|    | Social Sciences                   | s Modules      |   |  |  |
| 1. | American Government               | POLS101        | 3 |  |  |
| 2. | General Psychology                | PSYC201        | 3 |  |  |
| 3. | International Relations           | POLS207        | 3 |  |  |
| 4. | Sociology I                       | SOCS101        | 3 |  |  |
| 5. | Sociology II                      | SOCS102        | 3 |  |  |
|    | Business M                        | odules         |   |  |  |
| 1. | Accounting I                      | ACCT201        | 3 |  |  |
| 2. | Accounting II                     | ACCT202        | 3 |  |  |
| 3. | Introduction to Business          | GBUS102        | 3 |  |  |
| 4. | Macroeconomics                    | ECON203        | 3 |  |  |
| 5. | Microeconomics                    | ECON202        | 3 |  |  |
| 6. | Pre Business                      | GBUS101        | 3 |  |  |
|    | Engineering                       | Modules        |   |  |  |
| 1. | Basic Mechanics I                 | MECH270        | 3 |  |  |
| 2. | Engineering Problem Solving       | ENGR196        | 3 |  |  |

| No. | Module Title                                       | Module Title Code |   |
|-----|--|-------------------|---|
|     | English Moo  | dules             |   |
| 1.  | Basic Writing II                                   | ENGL093           | 3 |
| 2.  | English Composition I                              | ENGL101           | 3 |
| 3.  | English Composition II                             | ENGL102           | 3 |
| 4.  | Introduction to American Literature                | ENGL200           | 3 |
| 5.  | Introduction to Creative Writing                   | ENGL210           | 3 |
| 6.  | Reading and Writing Foundations                    | ENGL090           | 5 |
|     | Mathematics N                                      | Лodules           |   |
| 1.  | Calculus for Business I                            | MATH161           | 3 |
| 2.  | Calculus for Business II                           | MATH162           | 3 |
| 3.  | Calculus I   | MATH171           | 5 |
| 4.  | Calculus II  | MATH172           | 5 |
| 5.  | Calculus III                                       | MATH271           | 5 |
| 6.  | College Algebra                                    | MATH110           | 3 |
| 7.  | Differential Equations                             | MATH353           |   |
| 8.  | Discrete Mathematics                               | MATH208           | 3 |
| 9.  | Linear Algebra                                     | MATH319           | 3 |
| 10. | Pre-Calculus                                       | MATH150           | 3 |
| 11. | Statistics for Engineering & Sciences              | MATH261           | 3 |
| 12. | Statistics I                                       | MATH230           | 3 |
|     | Sciences Mo  | dules             |   |
| 1.  | Biological Science (with lab)                      | BIOL160           | 4 |
| 2.  | Fundamentals of Chemistry (with lab)               | CHEM101           | 4 |
| 3.  | Fundamentals of Human Nutrition                    | NUTR201           | 3 |
| 4.  | General Chemistry I (with lab)                     | CHEM105           | 4 |
| 5.  | General Chemistry II (with lab)                    | CHEM106           | 4 |
| 6.  | Nutrition for Health & Disease                     | NUTR202           | 3 |
| 7.  | Organic Chemistry                                  | CHEM221           | 4 |
| 8.  | Physics for Science & Engineering I<br>(with lab)  | PHYS211           | 4 |
| 9.  | Physics for Science & Engineering II<br>(with lab) | PHYS212           | 4 |
|     | Computer Mo  | odules            |   |
| 1.  | C Programming for Science &<br>Engineering         | CSCI251           | 3 |
| 2.  | Computer Programming - Java                        | CSCI117           | 3 |
| 3.  | Introduction to Computers                          | CSCI101           | 3 |
| 4.  | Object-Oriented Programming (C++)                  | CSCI221           | 3 |
| 5.  | Programming in C++                                 | CSCI102           | 3 |

# Programme Structure - American Degree Transfer Program (Study Intake August 2016)

|    | Communication Modules             |              |   |  |  |  |  |
|----|-----------------------------------|--------------|---|--|--|--|--|
| 1. | Advertising                       | ADVS210      | 3 |  |  |  |  |
| 2. | Business Communication            | GBUS271      | 3 |  |  |  |  |
| 3. | Effective Public Communication    | SPCH105      | 3 |  |  |  |  |
| 4. | Interpersonal Communication       | COMM105      | 3 |  |  |  |  |
| 5. | Introduction to Communication     | COMM101      | 3 |  |  |  |  |
|    | Fine and Performing               | Arts Modules |   |  |  |  |  |
| 1. | Foundations of Acting I           | THTR101      | 3 |  |  |  |  |
| 2. | Introduction to Film Studies      | FILM101      | 3 |  |  |  |  |
| 3. | Introduction to Music             | MUSC103      | 3 |  |  |  |  |
|    | Humanities N                      | 1odules      |   |  |  |  |  |
| 1. | U.S. History Since 1877           | HIST106      | 3 |  |  |  |  |
| 2. | U.S. History to 1877              | HIST105      | 3 |  |  |  |  |
| 3. | World Civilization I (to 1500)    | HIST101      | 3 |  |  |  |  |
| 4. | World Civilization II (from 1500) | HIST102      | 3 |  |  |  |  |
| 5. | World Religion                    | WREL105      | 3 |  |  |  |  |
|    | Social Sciences Modules           |              |   |  |  |  |  |
| 1. | American Government               | POLS101      | 3 |  |  |  |  |
| 2. | General Psychology                | PSYC201      | 3 |  |  |  |  |
| 3. | International Relations           | POLS207      | 3 |  |  |  |  |
| 4. | Social Psychology                 | PYSC226      | 3 |  |  |  |  |
| 5. | Sociology I                       | SOCS101      | 3 |  |  |  |  |
|    | Business Modules                  |              |   |  |  |  |  |
| 1. | Accounting I                      | ACCT201      | 3 |  |  |  |  |
| 2. | Accounting II                     | ACCT202      | 3 |  |  |  |  |
| 3. | Introduction to Business          | GBUS102      | 3 |  |  |  |  |
| 4. | Macroeconomics                    | ECON203      | 3 |  |  |  |  |
| 5. | Microeconomics                    | ECON202      | 3 |  |  |  |  |
| 6. | Pre Business                      | GBUS101      | 3 |  |  |  |  |
| 7. | The Legal Environment of Business | BLAW331      | 3 |  |  |  |  |
|    | Engineering Modules               |              |   |  |  |  |  |
| 1. | Basic Mechanics I                 | MECH270      | 3 |  |  |  |  |
| 2. | Basic Mechanics II                | MECH274      | 3 |  |  |  |  |
| 3. | Engineering Graphics              | ENGR121      | 3 |  |  |  |  |
| 4. | Engineering Problem Solving       | ENGR196      | 3 |  |  |  |  |
| 5. | Linear Circuit Lab                | ELEC207      | 1 |  |  |  |  |
| 6. | Linear Circuit Theory I           | ELEC201      | 3 |  |  |  |  |

\*\*Note: Module Offered is subject to availability of lecturer. ADP reserved the right not to offer a course if there is less than 10 students enrolled for the module

## Module Synopsis – American Degree Transfer Program

| Module                           | Code    | Synopsis  |
|----------------------------------|---------|---|
| Advertising                      | ADVS210 | This is an introductory course that will focus on the foundation<br>and basic principles of advertising, which emphasizes the<br>theories, concepts and practice of this dynamic discipline.<br>Students will learn what effective advertising is and how to<br>measure it and will participate in hands-on activities designed<br>to further reinforce the principles and theories of the subject.<br>You will be exposed to various topics and contexts related to<br>advertising and will study this material through readings,<br>discussions, and activities.  |
| American<br>Government           | POLS101 | This course is an introductory survey of the United States<br>national government. Topics covered include the American<br>Federal system, national and state governments, the US<br>constitutional principles, political participation, electoral<br>process and functions of political institutions. This will include<br>the theory and practice of politics, the organization and use of<br>power at various levels, individual interest groups,<br>organizations, the state and international relations. Emphasis<br>will also be on the role of political parties, political ideologies,<br>the relationship between the three main branches of<br>government and the impact on public policy.                           |
| Basic Writing II                 | ENGL093 | An English preparatory course which focuses on the development of both, academic writing and reading skills, as they are essential to succeed in any undergraduate setting. Grammar is incorporated and will be taught in context. To practice these skills, authentic course materials will be used as much as possible and a wide range of themes will be explored. A textbook is required for this module. Students will be exposed to a variety of academic texts over the period of fourteen (14) weeks.   |
| Biological Science<br>(with lab) | BIOL160 | A one-semester course that incorporates both lectures and<br>laboratory experiments. It is an introduction to the basic<br>concepts of life at the molecular and cellular level. Students<br>will learn about the important biomolecules, structures and<br>functions of the cell, transport mechanisms across the cell, the<br>genetics of life and the role of DNA, and the link between the<br>transmission of genetic information to protein synthesis,<br>applications in biotechnology, natural selection and population<br>genetics. Open to all students interested in biology whether<br>intending to major in the biological sciences, or to fulfil a<br>Natural World / Life Science general education requirement |

| Module  | Code    | Synopsis  |
|---|---------|---|
|   |         | for non-science majors requiring a 4 credit laboratory course.  |
| Business<br>Communication                     | GBUS271 | This course meets three lecture hours per week. It prepares<br>students to understand business communication in its ever<br>changing environment in order to achieve individual and<br>organizational success. The course involves exploring the basic<br>foundation and principles of effective communication in<br>business writing namely writing business memos, business<br>reports, resume writing and presentations. The course also<br>incorporates workplace etiquette for business communication<br>and discusses the opportunities and challenges of intercultural<br>business.  |
| C Programming for<br>Science &<br>Engineering | CSCI251 | This course provides the student with the opportunity to learn<br>the basics of programming and algorithm development using<br>top-down design with syntax and semantics of the C language.<br>The course teaches the essentials of programming with a<br>concentration on Science and Engineering Applications. This<br>course will introduce the essential ideas of C programming and<br>the breadth of discipline of computing. We will study<br>fundamentals of language in details. This course will cover few<br>advanced features which include Structs, Classes, Pointers,<br>Data structures and file processing. No prior knowledge of C is<br>required but students are expected to have a good<br>understanding of computing environment and concepts.  |
| Calculus for Business                         | MATH161 | Introduction to calculus with applications to business along<br>with basic skills, algebra review, functions, graphs, limits,<br>continuity, and derivatives. This course will develop skills in<br>critical thinking, problem solving and discipline-specified<br>knowledge. It will further refine the student's ability to apply<br>mathematics to solve problems in business, finance,<br>economics and life science. Math 161 is designed to help<br>students develop a sound, intuitive understanding of the basic<br>concepts of the techniques of differential calculus. The course<br>emphasizes the importance of the derivatives of functions, and<br>introduces students to differentiation with applications to<br>business. During the course, students will master and apply<br>new techniques to practical situations in business context. This<br>is to help you gather information from a problem given,<br>analyze it, form ideas about it, and effectively solve the<br>problem with appropriate techniques and correct concepts. |
| Calculus for Business<br>II                   | MATH162 | An extension of MATH 161, this course will develop skills in critical thinking, and problem solving, and discipline-specified   |

| Module          | Code    | Synopsis  |
|-----------------|---------|---|
|                 |         | knowledge. It will further refine the student's ability to apply<br>mathematics to solve problems in business, finance,<br>economics and life science. Math 162 is designed to help<br>students develop a sound, intuitive understanding of the basic<br>concepts of the techniques of differential and integral calculus.<br>The course emphasizes the importance of the derivatives of<br>logarithmic and exponential functions, and introduces<br>students to integration with applications to business. During<br>the course, you will master and apply new techniques to<br>practical situations in business context. This is to help you<br>gather information from a problem given, analyze it, form<br>ideas about it, and effectively solve the problem with<br>appropriate techniques and correct concepts.                                 |
| Calculus I      | MATH171 | The course concentrates on: Analytic Geometry, Functions,<br>Limits, Continuity, Derivatives of Algebraic and Trigonometric<br>Functions, Applications of Derivatives, and Integration.   |
| Calculus II     | MATH172 | An extension of MATH 171, this course will develop skills in critical thinking, and problem solving, and discipline-specified knowledge. It will further refine the student's ability to apply mathematics to solve problems in sciences and engineering. Math 172 is designed to help students develop a sound, intuitive understanding of the basic concepts of the techniques of differential and integral calculus. The course emphasizes the importance of the functions, graphs, limits, continuity and derivatives. The course aims (a) to help students to understand thoroughly the concepts of differential calculus theoretically and computationally and how these concepts can be used in real-life situations, (b) to develop students' skills in creative problem solving, and (c) prepare them towards a higher level of mathematics. |
| Calculus III    | MATH271 | Analytic Geometry in Three-Dimensional Space. Partial Derivatives and Multiple Integrals of Functions of Two or more Variables. Vector Calculus. Applications.  |
| College Algebra | MATH110 | The course is meant for students who have little or no knowledge of the basic algebraic concept. The course gives added emphasis to the connections among graphical, numerical and algebraic concepts. It also emphasizes the connections between algebra and other branches of mathematics such as natural logarithms, Cartesian planes and more.  |

| Module                            | Code     | Synopsis   |
|-----------------------------------|----------|--|
| Computer<br>Programming-Java      | CSCI 117 | This course will first lay a sound foundation on object-oriented<br>programming concepts such as classes, methods,<br>encapsulation, inheritance, polymorphism and then introduces<br>to graphical user interface (GUI) using AWT, Swing class<br>hierarchy, event driven programming, graphical components<br>and introduction to Applet programming design.  |
| Differential<br>Equations         | MATH353  | The course is designed to serve the needs of a one-semester course in basic theory as well as applications of differential equations (D.E). Materials that will be introduced are : first and second order linear D.E. and their applications ; Laplace transform ; special functions and series solution of D.E. This course will develop skills in critical thinking and problem solving. It will further refine the student's ability to apply mathematics to solve problems in engineering, economics and science. Math 353 is designed to help students developing a sound, intuitive understanding of the basic concepts of the techniques of differential equations. During the course, students will master and apply new acquired techniques to solve practical problems in engineering and physics. This will also help the students to gather information from problems (projects) given and analyze it, and effectively solve the problems with appropriate techniques and correct concepts. |
| Discrete<br>Mathematics           | MATH208  | Basic Set Theory and Symbolic logic. Methods of proof,<br>including Mathematical Induction. Relations, Partitions, Partial<br>Orders, Functions, and Graphs. Modular arithmetic.   |
| Effective Public<br>Communication | SPCH105  | This course is designed to provide students with the basic skills<br>of public speaking and to familiarize them with the principles<br>of speech communication. The main thrust of the course is to<br>provide them with the theory of public speaking and practical<br>experience in preparing and delivering a speech whether<br>impromptu, informative or persuasive. Students will learn the<br>ability to adapt material to particular audiences, reason from<br>evidence to conclusions, and organize ideas according to the<br>demands of informative and persuasive public speaking<br>situations. By the end of the course, students should be able<br>to deliver ideas in public settings using an extemporaneous<br>method of presentation with effective channelling of speech<br>anxiety and will have developed critical listening skills and the<br>ability to assess and evaluate messages.  |

| Module                       | Code    | Synopsis  |
|------------------------------|---------|---|
| English Composition I        | ENGL101 | English Composition 1 is a writing workshop. This course<br>involves planning, writing, editing, revising and critical reading.<br>Students will demonstrate their competence through a variety<br>of writing assignments. Students will be introduced to the<br>principles of essay writing as well as some (classification,<br>cause-effect, narrative and argumentative) rhetorical modes.<br>At the end of the course, students should be able to write<br>academic essays on various contemporary/social issues.   |
| English Composition<br>II    | ENGL102 | An extension of ENGL 101, this course will develop skills in<br>critical reading, and writing, and research strategies. It will<br>further refine the student's ability to synthesize material from<br>independent reading. English 102 is designed to help students<br>develop sophisticated, situation-sensitive reading and writing<br>strategies. The course emphasizes the importance of all stages<br>of students' writing processes, including invention, drafting,<br>revising, editing and proofreading. During the course, you will<br>critically examine readings, discuss them intelligently, and<br>generate your own ideas from these readings. This is to help<br>you gather information, analyze it, form ideas about it, and<br>effectively communicate these ideas to others. |
| Foundations to<br>Acting I   | THTR101 | Students will explore basic techniques in freeing the actor's voice, imagination and physicality, as well as enhancing skills in working supportively and collaboratively with others in the creation of character, situation and role through devised work. This practical course work will focus on nurturing confidence, concentration, creativity, ensemble collaboration, physicality, rehearsal skills, sensory, script writing, speech and language, vocal ability and public performance.   |
| Fundamentals of<br>Chemistry | CHEM101 | CHEM 101 is a one semester course for those who have not<br>studied Chemistry as a subject in high school. It provides the<br>physical science requirement in the major area of your study,<br>or prepares you for subsequent General Chemistry classes.<br>This course introduces the language and basic principles of<br>chemistry along with problem solving. Emphasis will be placed<br>on developing an understanding of chemical concepts and<br>practices in the process of science through lectures and in the<br>laboratory.   |

| Module                             | Code     | Synopsis   |
|------------------------------------|----------|--|
| Fundamentals of<br>Human Nutrition | NUTR201  | NUTR 201 is an introductory nutritional science course that<br>integrates basic concepts of science with the study of food and<br>nutrition. Students will have a sound understanding of<br>foundational concepts and theories relating to the six classes<br>of nutrients, nutrient digestion and their absorption. Students<br>will get to use dietary guidelines for evaluating and planning of<br>healthful meals based on energy balance. This course is<br>intended for all students who want an introduction to food<br>and nutrition and, for those who may later choose a major in<br>it. No college-level science background is required; rather the<br>course will provide elementary aspects of the several<br>biological sciences that are needed.    |
| General Chemistry I<br>(with lab)  | CHEM 105 | This course involves the study of basic chemistry<br>phenomenological laws as well as their applications, matter,<br>atomic structure, stoichiometry and chemical bonds. The<br>objectives of this course are for student to understand the<br>concept of matter, the different states and classification of<br>matter. During the course you will learn the concept of atom,<br>molecules, ions, the mole and molar mass, different types of<br>chemical reactions and calculations in chemical reactions, the<br>concept of ionic and covalent bonding, and the electronic<br>structures of atoms and the arrangement of elements in the<br>periodic table. You will also learn how to conduct experiments<br>in the laboratory according to scientific methods. |
| General Chemistry II<br>(with lab) | CHEM106  | This course involves the study of phenomenological laws as<br>well as atomic theories of chemistry in chemical equilibrium,<br>directed valence, inorganic, organic, polymer and physical<br>chemistry.  |
| General Psychology                 | PYSC201  | This course is designed to introduce Psychology as a scientific<br>research based approach to understanding the fundamentals<br>of mental and behavioral process. It includes theories and<br>concepts ranging from a biological perspective to a socio-<br>cultural one. This course will introduce the numerous but<br>integrated subfields of psychology.   |
| International<br>Relations         | POLS207  | This course introduces students to international relations, one<br>of the four sub-fields in political science. As a field of study,<br>international relations focuses on the political, military,<br>economic, and cultural interaction of state and non-state<br>actors at the global level. The field, therefore, encompasses a<br>diverse array of topics, from economic development to<br>military conflict, from the environment to international   |

| Module                                 | Code    | Synopsis   |
|--|---------|--|
|  |         | institutions. In this course, we begin by exploring the key<br>concepts, issues, and processes of international relations in<br>order to provide the general knowledge and analytic tools<br>necessary to understand, evaluate, and respond to a complex<br>array of problems in the contemporary world.   |
| Interpersonal<br>Communication         | COMM105 | This course will focus on the communication that occurs in our<br>interpersonal interactions. We will look at the concepts and<br>principles of interpersonal communication, cover both verbal<br>and non-verbal communication, and will include elements of<br>intercultural communication throughout. We will seek to<br>understand interpersonal communication from a variety of<br>perspectives. You will be exposed to various topics and<br>contexts related to interpersonal communication and will<br>study this material through readings, discussions, and<br>activities.  |
| Introduction to<br>American Literature | ENGL200 | This is an introductory course for which no previous literary<br>training is assumed. Focus is on the different genres-the short<br>story, novel, poetry and drama. Students will learn how to<br>interpret and appreciate selected works from American<br>Literature. In so doing, it is hoped that students will develop an<br>awareness of some formal aspects of literary works as well as<br>an appreciation of some typical writers from various periods in<br>American literary history. Typically in a semester, students will<br>read at least one playwright and a minimum of two novelists in<br>addition to the short stories and poems. |
| Introduction to<br>Communication       | COMM101 | This course considers how the modern mass media developed<br>and what they are developing into. We will examine why and<br>how traditional mass mediums are converging with the new<br>digital media and the social, political and personal impact of<br>these changes. We will also be studying in-depth the<br>traditional mass media that uses print, broadcast, sound and<br>filmic ways of producing and conveying messages to<br>audiences; and the evolution of these mediums in conjunction<br>with broader historical and cultural changes.   |
| Introduction to<br>Computers           | CSCI101 | The aim of this course is to provide students with no or<br>minimal background in computers with basic knowledge and<br>skills in the computing environment, and to provide a<br>foundation from which to advance to higher level courses in<br>computer-related fields. The course introduces computer<br>hardware and software, input and output devices, storage,<br>Internet concepts and technologies, computer security and  |

| Module                              | Code    | Synopsis  |
|-------------------------------------|---------|---|
|                                     |         | ethics, basic web-authoring skills, the functions of an operating<br>system, data communications and networks, databases,<br>computer programming concept and languages, and involves<br>the practical use of Microsoft Word, Excel, PowerPoint, Access,<br>Publisher, Visual Basic VDE, Internet browsers, utility software<br>and web applications that includes social networking sites.   |
| Introduction to<br>Creative Writing | ENGL210 | ENGL210 is an introduction to the art and craft of Creative<br>Writing with a specific focus on personal monologue, poetry<br>and short fiction. This is a writing-intensive course, which will<br>be conducted as a workshop or studio, where students will be<br>expected to write, read and critique each other's work on a<br>weekly basis. This course will look at a range of classical and<br>contemporary work in poets, prose/short fiction to help<br>students create their own distinct voices and way of writing.<br>Students will be expected to engage in critical discourse, and<br>develop a way of using writing as a way of looking at the<br>world, a way of seeing and expressing the human condition<br>through words. Students will produce a Writing Portfolio by<br>the end of the semester.  |
| Introduction to Film<br>Studies     | FILM101 | This course will acquaint students with the basics of film<br>history, genre, and technique. It will examine the elements of<br>the construction of narrative, documentary, experimental and<br>animated film; aspects of production including<br>cinematography, editing, and performance, It will address the<br>role of the director and the definitions of film genre and style.<br>These topics will be covered in a roughly historical framework<br>with particular emphasis into its application in a modern<br>cinematic worldview context, based upon the derivatives from<br>filmic structures and paradigms. It will acquaint students with<br>various critical theories to provide a framework for analysis.<br>The overall thematic focus of the course will be on the<br>relationship between film, modernism and the transition into<br>the digital era of filmmaking. |
| Introduction to Music               | MUSC103 | MUSC 103 is an introductory music course, which is designed<br>for students who are interested in music. This course will<br>develop music listening and analyzing skills, basic music<br>reading and composing skills, and music performing skills. The<br>emphasis of the course is the different major music styles of<br>the Western civilization, encompassing the characteristics of<br>music from each era, different major types of compositions,<br>and composers. During the course, you will learn elementary<br>musical terminology and apply them effectively. You will  |

| Module   | Code     | Synopsis   |
|--|----------|--|
|  |          | further identify music from different major styles by critically listening and analyzing.  |
| Linear Algebra                                       | MATH319  | An introduction to the basic concepts, computational techniques, and applications of linear algebra. Topics include system of linear equations, matrices, determinants, eigenvalues and eigenvectors, vector space and linear transformations. This module also aims to form a cohesive learning environment where mathematical research of linear algebra, matrix theory and others which are strongly related are brought together and viewed in terms of the real-world applications in which they emerge, such as computational engineering and sciences, and increasingly in social sciences and economics. It also prepares the students toward a higher level of mathematics. |
| Nutrition for Health<br>& Disease                    | NUTR202  | This course gives an introduction to organic chemistry, a<br>branch of chemistry which involves carbon and hydrogen. It<br>builds upon the concepts the student learnt from Chem 106. It<br>involves the study of organic reactions and synthesis of<br>compounds, and the exploration of various chemical reactions<br>in building higher organic.  |
| Object-Oriented<br>Programming (C++)                 | CSCI221  | This course discusses conceptual models for object-oriented<br>programming and illustrates these with C++ programming<br>language and application problems. This is an intermediate<br>programming course and the topics include operator<br>overloading, inheritance, polymorphism, templates, exception<br>handling, fundamental data structures (including stacks,<br>queues, and linked lists), the basics of algorithmic analysis, and<br>an introduction to the principles of language translation.  |
| Organic Chemistry                                    | CHEM 221 | This course gives an introduction to organic chemistry, a<br>branch of chemistry which involves carbon and hydrogen. It<br>builds upon the concepts the student learnt from Chem 106. It<br>involves the study of organic reactions and synthesis of<br>compounds, and the exploration of various chemical reactions<br>in building higher organ.  |
| Physics for Science &<br>Engineering I (with<br>lab) | PHYS211  | First physics course of a two-semester sequence in<br>introductory physics with laboratory for science and<br>engineering students. This <b>calculus</b> -based study includes<br>Newtonian mechanics, oscillation and waves, fluids, heat and<br>thermodynamics. Science and Engineering students will<br>understand the basic concepts, theories and principle of  |

| Module  | Code    | Synopsis   |
|---|---------|--|
|   |         | Newtonian Mechanics which include the description<br>(kinematics) and cause (dynamics) of motion, the conservation<br>ideas of energy, momentum, and angular momentum, the<br>simple harmonic motion, circular motion and the concept of<br>gravity. They will also study Heat and Thermodynamics, as well<br>as Oscillation, Waves and Sound in the problem-based or<br>project-based learning conducted in this course.  |
| Physics for Science &<br>Engineering II (with<br>lab) | PHYS212 | This course is the continuation of two-semester sequence in<br>introductory physics with laboratory for science and<br>engineering students. This <b>calculus</b> -based study includes<br>electricity, magnetism, optics, and modern physics. Science<br>and Engineering students will understand the basic concepts,<br>theories and principle of Electricity, magnetism and optics.<br>They will also study Nuclear Physics and modern physics in the<br>problem-based or project-based learning conducted in this<br>course.   |
| Pre-Calculus  | MATH150 | The course concentrates on: Polynomial, Rational, Exponential,<br>Logarithmic and Trigonometric Functions, with applications to<br>problems in mathematics and the sciences.   |
| Programming in C++                                    | CSCI102 | This course will provide students with no or minimal programming experiences the basics of C++ programming language. This course discusses fundamental conceptual models for object-oriented programming and illustrates these through C++ programming language and application problems.  |
| Reading and Writing<br>Foundations                    | ENGL090 | First level basic writing course which introduces students to<br>academic writing. Students will be taken step by step through<br>the writing process, from formulating ideas through the<br>revision stage. Students will be required to write effective<br>paragraphs on contemporary subjects from health, cultures,<br>social sciences, sciences and humanities that are relevant to<br>their current or future academic coursework. Reading skills<br>such as skimming, scanning making inferences etc would be<br>emphasized. Much focus will also be devoted to the<br>development of fluency and accuracy in applying grammatical<br>structures. Students will be exposed to a range of themes<br>throughout the course. |

| Module  | Code    | Synopsis  |
|---|---------|---|
| Statistics for<br>Engineering and<br>Sciences | STAT261 | The course focuses on basic probability and statistics with<br>applications and examples in engineering and the sciences.<br>Quantitative and qualitative analysis of statistical data,<br>descriptive statistics, elementary probability, random variables<br>and their distributions, random processes and statistical<br>inferences.   |
| Statistics I                                  | STAT230 | An introduction to statistics for students from various disciplines (business, health, social sciences, science). This course is designed to help students learn basic concepts in descriptive and inferential statistics, and introductory probability. Key topics covered in this course include graphical representation of data, descriptive statistics, random variables, probability concepts and counting rules, discrete and continuous probability distribution, sampling, confidence intervals and sample size, hypothesis testing, test of difference between two means, proportions and variances, correlation and regression, other Chi-square tests and Analysis of Variance (ANOVA). |
| U.S. History Since<br>1877                    | HIST106 | This course is a survey of the American history from the<br>Reconstruction to the present. The class will examine the<br>historical events, personalities, and factors that contributed to<br>the development of the United States of America in the 19th<br>and 20th centuries. The survey includes U.S. territorial and<br>economic expansion, industrialization and urbanization,<br>Manifest Destiny, reforms in the Progressive and New Deal<br>eras, World Wars, world power status and post-war<br>transformations.  |
| U.S. History to 1877                          | HIST105 | This course is a survey of the historical events, personalities<br>and factors, which had contributed to the development of the<br>United States of America from pre-Colonial era to the<br>Reconstruction in 1865. The survey includes pre-Columbian<br>times; the arrival of the Europeans, the American Revolution<br>and independence from the British, the birth of a new nation<br>and constitution, Western expansion, the attempt to break up<br>the nation, Civil War and Reconstruction.  |
| World Civilizations I<br>(to 1500)            | HIST101 | This course is an introductory survey of the salient features in<br>the development of world civilizations from Prehistoric times<br>until 1500s. Emphasis is laid on the basic formative factors of<br>historical development of societies and massive civilizations in<br>the world to 1500s – economic, social, ideological, cultural,<br>religious as well as political.  |

| Module                                | Code    | Synopsis  |
|---------------------------------------|---------|---|
| World Civilizations II<br>(from 1500) | HIST102 | This course is an introductory survey of the salient features in<br>the development of world civilizations from 1500s to the<br>present. Emphasis is laid on the basic formative factors of<br>historical development in the world since 1600s – economic,<br>social, ideological, cultural, religious as well as political. The<br>course covers European overseas voyages, imperial expansion,<br>revolutions against excessive government power and<br>authority, and the development of new science and<br>technologies. The course concludes with the formation of new<br>international, national, religious identities in the last few<br>decades.  |
| World Religion                        | WREL105 | A study of Eastern and Western religions beginning with<br>prehistoric and primal religious sources and including the<br>origins, teachings, practices and primary characteristics of<br>contemporary major world religions. This course is designed to<br>provide students with an overview of the major elements<br>which give rise to the great religions of the world and to give<br>them an international outlook. It will examine the religious and<br>spiritual experience of different communities across time and<br>space. The main emphasis will be to study the historical and<br>doctrinal aspects of world religions, particularly Hinduism,<br>Buddhism, Judaism, Christianity, Islam, Confucianism and<br>Taoism. Primal religion will also be examined. The course will<br>touch on the methodological issues arising in the study of<br>religions and the current approaches to inter-faith dialogue. |

#### SCHOOL OF COMMUNICATION

## Programme Structure - Bachelor of Mass Communication (Broadcasting)

| No.        | Module Title                           | Code     | Credit Hours |  |  |  |
|------------|--|----------|--------------|--|--|--|
|            | Year 1                                 |          |              |  |  |  |
|            | Semeste                                | r 1      |              |  |  |  |
| 1.         | Communication Theory                   | COM60404 | 4            |  |  |  |
| 2.         | Critical And Creative Thinking         | COM60304 | 4            |  |  |  |
| 3.         | Introduction to Mass Communication     | COM60504 | 4            |  |  |  |
| 4.         | Visual Communication                   | COM61004 | 4            |  |  |  |
|            | Total Credit                           |          | 16           |  |  |  |
|            | Semeste                                | r 2      |              |  |  |  |
| 1.         | Communication Research<br>Fundamentals | RES60304 | 4            |  |  |  |
| 2.         | Innovative Media                       | COM60904 | 4            |  |  |  |
| 3.         | Intercultural Communication            | COM60604 | 4            |  |  |  |
| 4.         | Media Writing                          | COM60704 | 4            |  |  |  |
|            | Total Credit 16                        |          |              |  |  |  |
|            | Year 2                                 |          |              |  |  |  |
|            | Semeste                                | r 3      |              |  |  |  |
| 1.         | Audience Studies                       | BCA60304 | 4            |  |  |  |
| 2.         | Broadcasting Principles                | BCA60104 | 4            |  |  |  |
| 3.         | Writing For Broadcast                  | BCA60204 | 4            |  |  |  |
|            | Total Credit                           |          | 16           |  |  |  |
| Semester 4 |  |          |              |  |  |  |
| 1.         | Interactive Media                      | COM61104 | 4            |  |  |  |
| 2.         | Radio and TV Production                | BCA60404 | 4            |  |  |  |
|            | Total Credit                           |          | 8            |  |  |  |
|            | Year 3                                 |          |              |  |  |  |
|            | Semeste                                | r 5      |              |  |  |  |
| 1.         | Advanced TV Production                 | BCA60105 | 5            |  |  |  |
| 2.         | Digital Storytelling and Production    | BCA60604 | 4            |  |  |  |
| 3.         | Media Law And Ethics                   | LAW64004 | 4            |  |  |  |
| 4.         | Professional Media Workshop            | COM60104 | 4            |  |  |  |
|            | Total Credit 17                        |          |              |  |  |  |

## Module Synopsis - Bachelor of Mass Communication (Broadcasting)

| Module                                 | Code     | Synopsis   |
|--|----------|--|
| Advanced Television<br>Production      | BCA60105 | This course outlines the TV production processes students<br>undergo from conceptualization of ideas to the production of<br>programmes. Students are evaluated from their ability to<br>perform the various tasks involved in TV production.  |
| Audience Studies                       | BCA60304 | This course outlines the history, development, scope,<br>structure and nature of audience studies strategies in various<br>media industries as well as the trend and convergence in<br>media studies. It also introduces the basic theories of<br>audience studies.  |
| Broadcasting Principles                | BCA60104 | To provide students with the basic understanding of the<br>history, nature, operations, practice and scope of radio,<br>television and web broadcasting. It is designed to help<br>students comprehend the trend and convergence in<br>broadcasting and the electronic media industry and what<br>effects operations and development might have on<br>individuals and the collective society.  |
| Communication<br>Research Fundamentals | RES60304 | This course outlines the basic approach to research in the field of communication and mass media. It will provide students with a fundamental understanding of the various types of research approaches, namely quantitative and qualitative, and their respective methodologies that are appropriate to communication research. An introduction to a variety of descriptive and inferential statistical techniques that are normally used in communication research will also be provided. Students will also be thought how to read and review research journals as well as produce a research report. |
| Communication Theory                   | COM60404 | This course outlines the concepts, roles, goals and changes in<br>mass communication theories. It introduces the connections<br>between communication theories and research. It also<br>introduces the basic theories of mass media effects and<br>media issues.   |
| Critical and Creative<br>Thinking      | COM60304 | This course outlines a comprehensive introduction to the cognitive process and helps students develop their higher-<br>order thinking abilities needed for academic study and career success as critical and creative thinking skills are the cornerstones of higher education. It integrates various perspectives on the thinking process by fostering  |

| Module                                 | Code     | Synopsis  |
|--|----------|---|
|  |          | sophisticated intellectual and language abilities. It also shows<br>that learning to think is a synthesizing process, knitting<br>critical thinking and creative thinking abilities together with<br>academic content and the fabric of students' experiences.  |
| Digital Storytelling and<br>Production | BCA60604 | To provide students with the fundamental knowledge and<br>understanding of multi-modal techniques to broaden<br>horizons of the writer's craft, of their standing within the<br>language and expression of creativity and representation,<br>and of how they may be created using some basic digital<br>software applications. To provide an opportunity for multi-<br>modal narratives to advance and develop from conceptual to<br>production stages.   |
| Innovative Media                       | COM60904 | This course is an introductory of new media studies and skill-<br>based digital media course which enable students to explore,<br>develop and apply in the areas of Mass Communication. It<br>also ventures into creativity of digital media application by<br>creating and manipulating various multimedia elements.   |
| Interactive Media                      | COM61104 | This course outlines the types of authoring platforms, interactive design principles, interactive scripting in authoring in the current industry practices. It also focuses on practical application of the current industry used application for both CD-ROM and online interactive applications.  |
| Intercultural<br>Communication         | COM60604 | This course outlines the personal and theoretical<br>understanding of the cultural origin of people's values,<br>ideologies, habits and how they affect communication across<br>cultural, racial and ethnic lines. It also seeks to develop<br>awareness and increased understanding among peoples of<br>different cultures, an appreciation of this rich diversity, and<br>to offer tools for a lifeline of continued growth in<br>intercultural competence.   |
| Introduction To Mass<br>Communication  | COM60504 | This course outlines a basic understanding of the various<br>types and roles of different traditional and new media<br>industries as well as the related institutions of journalism,<br>advertising and public relations and their respective<br>structure, support and influence. Particular attention will be<br>paid to mass communication issues relating to the rise of<br>digital media such as trends, convergence, globalization and<br>challenges. Mass media and communication in the Malaysian<br>context will also be explored. |

| Module                         | Code     | Synopsis   |  |
|--------------------------------|----------|--|--|
| Media Law and Ethics           | LAW64004 | This course introduces the Malaysian legal system and judicial process. It discusses the laws and legal issues pertaining to the media, as well as ethical issues confronting professional communicators. It also discusses the important cases in media laws and ethics.  |  |
| Media Writing                  | COM60704 | <sup>4</sup> This course prepares students to be able to write for the various media, each of which requires distinct styles and approaches. It takes the student through a survey of the different styles, understanding the nuances, and appreciating the underpinning theories that influence the crafting of written communication. Ample practice is given to developing the writing skills for efficient and effective writing for the media.  |  |
| Professional Media<br>Workshop | COM60104 | This course will enable students to understand and visualize<br>all the theories and concepts learned into application in the<br>industry. It will also expose students to first hand of the latest<br>happening and news of the industry and market place. They<br>will also be informed of the expectation of fresh graduates<br>like themselves upon graduation. The workshops will covers<br>important areas in advertising, public relations, broadcasting,<br>leadership as well as project management. It will be<br>conducted by experts from communication field. |  |
| Radio and TV Production        | BCA60404 | This course outlines the nature of the radio and TV industries<br>and audio visual production work. Students will learn to<br>handle the whole process of producing radio and TV<br>programmes which will range from news, entertainment,<br>drama, sports and documentaries.  |  |
| Visual Communication           | COM61004 | This course outlines the basic understanding of visual literacy<br>and communication within the current media industries<br>through the comprehension of design elements and<br>principles. It also focuses on the practical application and<br>ethical considerations of the visual aspect in screen and print<br>based visual communication design.  |  |
| Writing for Broadcast          | BCA60204 | To provide students with the basic understanding of the<br>history, nature, operations, practice and scope of radio,<br>television and web broadcasting. It is designed to help<br>students comprehend the trend and convergence in<br>broadcasting and the electronic media industry and what<br>effects operations and development might have on<br>individuals and the collective society.  |  |

## Programme Structure - Bachelor of Mass Communication (Public Relations)

| No. | Module Title                           | Code          | <b>Credit Hours</b> |  |  |  |
|-----|--|---------------|---------------------|--|--|--|
|     | Year 1                                 |               |                     |  |  |  |
|     | Semeste                                | r1            |                     |  |  |  |
| 1.  | Communication Theory                   | COM60404      | 4                   |  |  |  |
| 2.  | Critical And Creative Thinking         | COM60304      | 4                   |  |  |  |
| 3.  | Introduction to Mass<br>Communication  | COM60504      | 4                   |  |  |  |
| 4.  | Visual Communication                   | COM61004      | 4                   |  |  |  |
|     |  | Total Credits | 16                  |  |  |  |
|     | Semeste                                | r 2           |                     |  |  |  |
| 1.  | Communication Research<br>Fundamentals | RES60304      | 4                   |  |  |  |
| 2.  | Innovative Media                       | COM60904      | 4                   |  |  |  |
| 3.  | Intercultural Communication            | COM60604      | 4                   |  |  |  |
| 4.  | Media Writing                          | COM60704      | 4                   |  |  |  |
|     |  | Total Credits | 16                  |  |  |  |
|     | Year 2                                 |               |                     |  |  |  |
|     | Semeste                                | r 3           |                     |  |  |  |
| 1.  | Promotional Writing                    | PRL60204      | 4                   |  |  |  |
| 2.  | Public Relations Principles            | PRL60104      | 4                   |  |  |  |
| 3.  | Publicity And Media Relations          | PRL60304      | 4                   |  |  |  |
|     |  | Total Credits | 12                  |  |  |  |
|     | Semeste                                | r 4           |                     |  |  |  |
| 1.  | Crisis Management                      | PRL60404      | 4                   |  |  |  |
| 2.  | Interactive Media                      | COM61104      | 4                   |  |  |  |
|     |  | Total Credits | 8                   |  |  |  |
|     | Year 3                                 |               |                     |  |  |  |
|     | Semeste                                | r 5           |                     |  |  |  |
| 1.  | Financial Public Relations             | PRL60504      | 4                   |  |  |  |
| 2.  | Media Law And Ethics                   | LAW64004      | 4                   |  |  |  |
| 3.  | Professional Media Workshop            | COM61404      | 4                   |  |  |  |
| 4.  | Public Relations Consultancy           | PRL60105      | 5                   |  |  |  |
|     |  | Total Credits | 17                  |  |  |  |

## Module Synopsis - Bachelor of Mass Communication (Public Relations)

| Module                                    | Code     | Synopsis  |
|---|----------|---|
| Communication<br>Research<br>Fundamentals | RES60304 | This course outlines the basic approach to research in the field<br>of communication and mass media. It will provide students with<br>a fundamental understanding of the various types of research<br>approaches, namely quantitative and qualitative, and their<br>respective methodologies that are appropriate to<br>communication research. An introduction to a variety of<br>descriptive and inferential statistical techniques that are<br>normally used in communication research will also be provided.<br>Students will also be thought how to read and review research<br>journals as well as produce a research report. |
| Communication<br>Theory                   | COM60404 | This course outlines the concepts, roles, goals and changes in<br>mass communication theories. It introduces the connections<br>between communication theories and research. It also<br>introduces the basic theories of mass media effects and media<br>issues.  |
| Crisis Management                         | PRL60404 | This course outlines the key responsibilities of public relations<br>in the contemporary world by understanding the importance of<br>managing crisis locally and internationally. The course will<br>introduce the students to different types of crisis and offers a<br>wide range of frameworks and methods to managing crisis.   |
| Critical and<br>Creative Thinking         | COM60304 | This course outlines a comprehensive introduction to the cognitive process and helps students develop their higher-order thinking abilities needed for academic study and career success as critical and creative thinking skills are the cornerstones of higher education. It integrates various perspectives on the thinking process by fostering sophisticated intellectual and language abilities. It also shows that learning to think is a synthesizing process, knitting critical thinking and creative thinking abilities together with academic content and the fabric of students' experiences.                           |
| Financial Public<br>Relations             | PRL60504 | This course outlines the basics of financial communication, with<br>a focus on investor relations. It introduces the basic principles<br>of how to interpret company reports, financial statements, and<br>also what to communicate to key publics. Students are<br>expected to keep up to date with current affairs, especially<br>business news.  |

| Module                                   | Code     | Synopsis  |
|--|----------|---|
| Innovative Media                         | COM60904 | This course is an introductory of new media studies and skill-<br>based digital media course which enable students to explore,<br>develop and apply in the areas of Mass Communication. It also<br>ventures into creativity of digital media application by creating<br>and manipulating various multimedia elements.   |
| Interactive Media                        | COM61104 | This course outlines the types of authoring platforms, interactive design principles, interactive scripting in authoring in the current industry practices. It also focuses on practical application of the current industry used application for both CD-ROM and online interactive applications.  |
| Intercultural<br>Communication           | COM60604 | This course outlines the personal and theoretical understanding<br>of the cultural origin of people's values, ideologies, habits and<br>how they affect communication across cultural, racial and<br>ethnic lines. It also seeks to develop awareness and increased<br>understanding among peoples of different cultures, an<br>appreciation of this rich diversity, and to offer tools for a lifeline<br>of continued growth in intercultural competence.  |
| Introduction To<br>Mass<br>Communication | COM60504 | This course outlines a basic understanding of the various types<br>and roles of different traditional and new media industries as<br>well as the related institutions of journalism, advertising and<br>public relations and their respective structure, support and<br>influence. Particular attention will be paid to mass<br>communication issues relating to the rise of digital media such<br>as trends, convergence, globalization and challenges. Mass<br>media and communication in the Malaysian context will also be<br>explored. |
| Media Law and<br>Ethics                  | LAW64004 | This course introduces the Malaysian legal system and judicial process. It discusses the laws and legal issues pertaining to the media, as well as ethical issues confronting professional communicators. It also discusses the important cases in media laws and ethics.   |
| Media Writing                            | COM60704 | This course prepares students to be able to write for the various<br>media, each of which requires distinct styles and approaches. It<br>takes the student through a survey of the different styles,<br>understanding the nuances, and appreciating the underpinning<br>theories that influence the crafting of written communication.<br>Ample practice is given to developing the writing skills for<br>efficient and effective writing for the media.  |

| Module                           | Code     | Synopsis   |
|----------------------------------|----------|--|
| Professional Media<br>Workshop   | COM61404 | This course will enable students to understand and visualize all<br>the theories and concepts learned into application in the<br>industry. It will also expose students to first hand of the latest<br>happening and news of the industry and market place. They will<br>also be informed of the expectation of fresh graduates like<br>themselves upon graduation. The workshops will covers<br>important areas in advertising, public relations, broadcasting,<br>leadership as well as project management. It will be conducted<br>by experts from communication field. |
| Promotional<br>Writing           | PRL60204 | This course introduces the concept of designing and writing<br>promotional materials for a wide spectrum of communication<br>media. It covers the scope and structure of the different forms<br>of writing used in public relations, advertising and marketing.  |
| Public Relations<br>Consultancy  | PRL60105 | This course is designed to provide students with the essential<br>knowledge and skills they need to excel in a professional<br>working environment. It trains students to be critical, creative<br>and professional when planning, managing and executing a<br>public relations campaign.  |
| Public Relations<br>Principles   | PRL60104 | This course outlines the history and development of public<br>relations, with an emphasis on providing the student with an<br>awareness of various publics that an organisation interacts<br>with. It also provides grounding for students to understand the<br>need for a corporate strategic communication plan with a<br>professional perspective. Students would be expected to keep<br>up with current affairs.   |
| Publicity and Media<br>Relations | PRL60304 | This course outlines the role of a public relations practitioner as<br>a publicist in an organization. It also introduces to the various<br>techniques of media relations, testing and evaluating publicity,<br>and understanding the various types of publicity collaterals for<br>the press.   |
| Visual<br>Communication          | COM61004 | This course outlines the basic understanding of visual literacy<br>and communication within the current media industries<br>through the comprehension of design elements and principles.<br>It also focuses on the practical application and ethical<br>considerations of the visual aspect in screen and print based<br>visual communication design.  |

## Programme Structure - Bachelor of Mass Communication (Advertising)

| No. | Module Title                           | Code          | <b>Credit Hours</b> |  |  |  |
|-----|--|---------------|---------------------|--|--|--|
|     | Year 1                                 |               |                     |  |  |  |
|     | Semester 1                             |               |                     |  |  |  |
| 1.  | Communication Theory                   | COM60404      | 4                   |  |  |  |
| 2.  | Critical And Creative Thinking         | COM60304      | 4                   |  |  |  |
| 3.  | Introduction to Mass Communication     | COM60504      | 4                   |  |  |  |
| 4.  | Visual Communication                   | COM61004      | 4                   |  |  |  |
|     |  | Total Credits | 16                  |  |  |  |
|     | Semester 2                             |               |                     |  |  |  |
| 1.  | Communication Research<br>Fundamentals | RES60304      | 4                   |  |  |  |
| 2.  | Innovative Media                       | COM60904      | 4                   |  |  |  |
| 3.  | Intercultural Communication            | COM60604      | 4                   |  |  |  |
| 4.  | Media Writing                          | COM60704      | 4                   |  |  |  |
|     |  | Total Credits | 16                  |  |  |  |
|     | Year 2                                 |               |                     |  |  |  |
|     | Semester 3                             |               |                     |  |  |  |
| 1.  | Advertising Principles                 | ADV60104      | 4                   |  |  |  |
| 2.  | Creative Copywriting                   | ADV60304      | 4                   |  |  |  |
| 3.  | Principles of Marketing                | MKT60104      | 4                   |  |  |  |
|     |  | Total Credits | 12                  |  |  |  |
|     | Semester 4                             |               |                     |  |  |  |
| 1.  | Advertising Design And Execution       | ADV60404      | 4                   |  |  |  |
| 2.  | Interactive Media                      | COM61104      | 4                   |  |  |  |
|     |  | Total Credits | 8                   |  |  |  |
|     | Year 3                                 |               |                     |  |  |  |
|     | Semester 5                             |               |                     |  |  |  |
| 1.  | Advertising Campaign                   | ADV60105      | 5                   |  |  |  |
| 2.  | Media Law And Ethics                   | LAW64004      | 4                   |  |  |  |
| 3.  | Media Strategy                         | ADV60504      | 4                   |  |  |  |
| 4.  | Professional Media Workshop            | COM61404      | 4                   |  |  |  |
|     |  | Total Credits | 17                  |  |  |  |

## Module Synopsis - Bachelor of Mass Communication (Advertising)

| Module                                    | Code     | Synopsis  |
|---|----------|---|
| Advertising<br>Campaign                   | ADV60105 | Students will have hands-on, real-world advertising experience.<br>They will work independently and in team settings to develop a<br>comprehensive advertising campaign for a real client. As a truly<br>hands-on experience, the teams will function as an advertising<br>agency in which each student will play an important role.  |
| Advertising<br>Principles                 | ADV60104 | This course outlines the history, development, scope, structure<br>and nature of advertising, various media industries as well as<br>the trend and convergence in Advertising. It also introduces the<br>application of advertising in marketing campaign and account<br>management.  |
| Brand Management                          | ADV60604 | This course outlines the theory and practice of brand<br>management. It delves into the theories, concepts, issues, and<br>principles, processes of Branding by considering it from the<br>perspective of Marketing, Management, and Communication. It<br>provides a viewpoint of the organization taking into<br>consideration its competitive environment and the forces that<br>affects its banding exercise. Students will have the opportunity<br>to develop their portfolio in this Module through the<br>development of branding through strategic processes.  |
| Communication<br>Research<br>Fundamentals | RES60304 | This course outlines the basic approach to research in the field<br>of communication and mass media. It will provide students with<br>a fundamental understanding of the various types of research<br>approaches, namely quantitative and qualitative, and their<br>respective methodologies that are appropriate to<br>communication research. An introduction to a variety of<br>descriptive and inferential statistical techniques that are<br>normally used in communication research will also be provided.<br>Students will also be thought how to read and review research<br>journals as well as produce a research report. |
| Communication<br>Theory                   | COM60404 | This course outlines the concepts, roles, goals and changes in<br>mass communication theories. It introduces the connections<br>between communication theories and research. It also<br>introduces the basic theories of mass media effects and media<br>issues.  |

| Module                            | Code     | Synopsis  |
|-----------------------------------|----------|---|
| Creative<br>Copywriting           | ADV60304 | This course is designed as a skills course focusing on the creative aspects of advertising specifically copywriting. The emphasis will be on how to research for information on both product and consumer and apply this information to develop creative ad copy for various media.   |
| Critical and Creative<br>Thinking | COM60304 | This course outlines a comprehensive introduction to the cognitive process and helps students develop their higher-order thinking abilities needed for academic study and career success as critical and creative thinking skills are the cornerstones of higher education. It integrates various perspectives on the thinking process by fostering sophisticated intellectual and language abilities. It also shows that learning to think is a synthesizing process, knitting critical thinking and creative thinking abilities together with academic content and the fabric of students' experiences. |
| Innovative Media                  | COM60904 | This course is an introductory of new media studies and skill-<br>based digital media course which enable students to explore,<br>develop and apply in the areas of Mass Communication. It also<br>ventures into creativity of digital media application by creating<br>and manipulating various multimedia elements.   |
| Interactive Media                 | COM61104 | This course outlines the types of authoring platforms, interactive design principles, interactive scripting in authoring in the current industry practices. It also focuses on practical application of the current industry used application for both CD-ROM and online interactive applications.  |
| Intercultural<br>Communication    | COM60604 | This course outlines the personal and theoretical understanding<br>of the cultural origin of people's values, ideologies, habits and<br>how they affect communication across cultural, racial and<br>ethnic lines. It also seeks to develop awareness and increased<br>understanding among peoples of different cultures, an<br>appreciation of this rich diversity, and to offer tools for a lifeline<br>of continued growth in intercultural competence.  |

| Module                                   | Code     | Synopsis   |
|--|----------|--|
| Introduction to<br>Mass<br>Communication | COM60504 | This course outlines a basic understanding of the various types<br>and roles of different traditional and new media industries as<br>well as the related institutions of journalism, advertising and<br>public relations and their respective structure, support and<br>influence. Particular attention will be paid to mass<br>communication issues relating to the rise of digital media such<br>as trends, convergence, globalization and challenges. Mass<br>media and communication in the Malaysian context will also be<br>explored.  |
| Media Law and<br>Ethics                  | LAW64004 | This course introduces the Malaysian legal system and judicial process. It discusses the laws and legal issues pertaining to the media, as well as ethical issues confronting professional communicators. It also discusses the important cases in media laws and ethics.  |
| Media Strategy                           | ADV60504 | This course provides the in-depth learning of creative practices<br>in the advertising media industry. It solely focuses on the<br>creative process and execution of an advertising strategy/plan<br>through the understanding of design and production<br>fundamentals.   |
| Media Writing                            | COM60704 | This course prepares students to be able to write for the various<br>media, each of which requires distinct styles and approaches. It<br>takes the student through a survey of the different styles,<br>understanding the nuances, and appreciating the underpinning<br>theories that influence the crafting of written communication.<br>Ample practice is given to developing the writing skills for<br>efficient and effective writing for the media.   |
| Principles of<br>Marketing               | MKT60104 | This course introduces students to the key marketing concepts<br>and strategies employed by marketers in facing the challenges<br>in a dynamic business environment. It develops an<br>understanding of the overall process of planning,<br>implementation and control in the contemporary business<br>environment. This course provides students with the needed<br>conceptual skills to identify analyse and solve marketing<br>problems. This course also provides a foundation for those who<br>intend to further study in the marketing field or other business<br>related courses. |

| Module                         | Code     | Synopsis   |
|--------------------------------|----------|--|
| Professional Media<br>Workshop | COM61404 | This course will enable students to understand and visualize all<br>the theories and concepts learned into application in the<br>industry. It will also expose students to first hand of the latest<br>happening and news of the industry and market place. They will<br>also be informed of the expectation of fresh graduates like<br>themselves upon graduation. The workshops will covers<br>important areas in advertising, public relations, broadcasting,<br>leadership as well as project management. It will be conducted<br>by experts from communication field. |
| Visual<br>Communication        | COM61004 | This course outlines the basic understanding of visual literacy<br>and communication within the current media industries<br>through the comprehension of design elements and principles.<br>It also focuses on the practical application and ethical<br>considerations of the visual aspect in screen and print based<br>visual communication design.  |

# Programme Structure - Bachelor of Mass Communication (Public Relations and Marketing)

| No. | Module Title                            | Code          | Credit Hours |
|-----|---|---------------|--------------|
|     | Year 1                                  |               |              |
|     | Semester                                | 1             |              |
| 1.  | Communication Theory                    | COM60404      | 4            |
| 2.  | Critical And Creative Thinking          | COM60304      | 4            |
| 3.  | Introduction to Mass Communication      | COM60504      | 4            |
| 4.  | Visual Communication                    | COM61004      | 4            |
|     |   | Total Credits | 16           |
|     | Semester                                | 2             |              |
| 1.  | Communication Research<br>Fundamentals  | RES60304      | 4            |
| 2.  | Innovative Media                        | COM60904      | 4            |
| 3.  | Intercultural Communication             | COM60604      | 4            |
| 4.  | Media Writing                           | COM60704      | 4            |
|     | · · ·                                   | Total Credits | 16           |
|     | Year 2                                  |               |              |
|     | Semester                                | 3             |              |
| 1.  | Introduction to Management              | MGT60104      | 4            |
| 2.  | Principles of Marketing                 | MKT60104      | 4            |
| 3.  | Promotional Writing                     | PRL60204      | 4            |
| 4.  | Public Relations Principles             | PRL60104      | 4            |
| 5.  | Publicity And Media Relations           | PRL60304      | 4            |
|     |   | Total Credits | 20           |
|     | Semester                                | 4             |              |
| 1.  | Consumer Behavior                       | MKT60204      | 4            |
| 2.  | Crisis Management                       | PRL60404      | 4            |
| 3.  | E-Marketing                             | MCM60105      | 5            |
| 4.  | Interactive Media                       | COM61104      | 4            |
| 5.  | Promotional Management                  | PRL60804      | 4            |
|     |   | Total Credits | 21           |
|     | Year 3                                  |               |              |
|     | Semester                                | 5             |              |
| 1.  | Issues in Marketing (Marketing Seminar) | MCM60104      | 4            |
| 2.  | Media Law And Ethics                    | LAW64004      | 4            |
| 3.  | Professional Media Workshop             | COM61404      | 4            |
| 4.  | Public Relations Consultancy            | PRL60105      | 5            |
| 5.  | Relationship Marketing                  | MCM60204      | 4            |
|     | · · · · · ·                             | Total Credits | 21           |

## Module Synopsis - Bachelor of Mass Communication (Public Relations and Marketing)

| Module                                    | Code     | Synopsis   |
|---|----------|--|
| Brand Management                          | ADV60604 | This course outlines the theory and practice of brand<br>management. It delves into the theories, concepts, issues,<br>and principles, processes of Branding by considering it<br>from the perspective of Marketing, Management, and<br>Communication. It provides a viewpoint of the<br>organization taking into consideration its competitive<br>environment and the forces that affects its banding<br>exercise. Students will have the opportunity to develop<br>their portfolio in this Module through the development of<br>branding through strategic processes.  |
| Communication<br>Research<br>Fundamentals | RES60304 | This course outlines the basic approach to research in the<br>field of communication and mass media. It will provide<br>students with a fundamental understanding of the<br>various types of research approaches, namely<br>quantitative and qualitative, and their respective<br>methodologies that are appropriate to communication<br>research. An introduction to a variety of descriptive and<br>inferential statistical techniques that are normally used in<br>communication research will also be provided. Students<br>will also be thought how to read and review research<br>journals as well as produce a research report. |
| Communication<br>Theory                   | COM60404 | This course outlines the concepts, roles, goals and<br>changes in mass communication theories. It introduces<br>the connections between communication theories and<br>research. It also introduces the basic theories of mass<br>media effects and media issues.   |
| Consumer Behavior                         | МКТ60204 | To understand consumer behavior, it is important to<br>understand concepts and theories borrowed from fields<br>such as psychology, sociology, economics, etc. In addition<br>during this course students will explore, many social,<br>cultural and marketing factors that influence the<br>selection, purchase and usage of products and services.   |
| Crisis Management                         | PRL60404 | This course outlines the key responsibilities of public<br>relations in the contemporary world by understanding the<br>importance of managing crisis locally and internationally.<br>The course will introduce the students to different types<br>of crisis and offers a wide range of frameworks and<br>methods to managing crisis.   |

| Module                            | Code     | Synopsis   |
|-----------------------------------|----------|--|
| Critical and Creative<br>Thinking | COM60304 | This course outlines a comprehensive introduction to the cognitive process and helps students develop their higher-order thinking abilities needed for academic study and career success as critical and creative thinking skills are the cornerstones of higher education. It integrates various perspectives on the thinking process by fostering sophisticated intellectual and language abilities. It also shows that learning to think is a synthesizing process, knitting critical thinking and creative thinking abilities together with academic content and the fabric of students' experiences.  |
| E-Marketing                       | BUS60104 | This course will focus on the marketing management<br>framework and will address the unique features of digital<br>marketing. In summary, the course will look at how the 7<br>P's apply to the 'e' by providing an understanding of the<br>principles and practices of E-Marketing to market goods<br>and services. It describes the internet and the various<br>business models employed in online marketing, and<br>explore methods for conducting online market research<br>and developing competitive intelligence for an<br>organization. In addition, the course details processes for<br>planning and implementing comprehensive e-marketing<br>strategies using alternative online pricing strategies, Web-<br>based advertising and promotion, and internet<br>distribution channels. The course also considers other<br>critical issues such as customer acquisition and retention,<br>customer relationship management (CRM), and the<br>challenges faced by firms in the application of E-<br>Marketing strategies in global markets. |
| Innovative Media                  | COM60904 | This course is an introductory of new media studies and<br>skill-based digital media course which enable students to<br>explore, develop and apply in the areas of Mass<br>Communication. It also ventures into creativity of digital<br>media application by creating and manipulating various<br>multimedia elements.  |
| Interactive Media                 | COM61104 | This course outlines the types of authoring platforms, interactive design principles, interactive scripting in authoring in the current industry practices. It also focuses on practical application of the current industry used application for both CD-ROM and online interactive applications.   |

| Module                                     | Code     | Synopsis   |
|--|----------|--|
| Intercultural<br>Communication             | COM60604 | This course outlines the personal and theoretical<br>understanding of the cultural origin of people's values,<br>ideologies, habits and how they affect communication<br>across cultural, racial and ethnic lines. It also seeks to<br>develop awareness and increased understanding among<br>peoples of different cultures, an appreciation of this rich<br>diversity, and to offer tools for a lifeline of continued<br>growth in intercultural competence.  |
| Introduction to<br>Management              | MGT60104 | This module is designed to provide the candidate with the basic concepts and principles of management in organisations. It focuses on the context of managerial activity and covers the four major functions of management i.e. planning, organising, leading and controlling and places them in a historical, political and economic context.   |
| Introduction to Mass<br>Communication      | COM60504 | This course outlines a basic understanding of the various<br>types and roles of different traditional and new media<br>industries as well as the related institutions of journalism,<br>advertising and public relations and their respective<br>structure, support and influence. Particular attention will<br>be paid to mass communication issues relating to the rise<br>of digital media such as trends, convergence,<br>globalization and challenges. Mass media and<br>communication in the Malaysian context will also be<br>explored.   |
| Issues in Marketing<br>(Marketing Seminar) | MCM60104 | This course is designed to provide students with the<br>essential knowledge and skills they need to excel in<br>handling relevant marketing-related workplace issues and<br>problems. It trains students to be critical, creative and<br>professional when planning, managing and executing a<br>marketing campaign taking into account their immediate<br>microenvironment such as issues with suppliers,<br>customers, internal organization, publics, intermediaries,<br>and competitors; and the macroenvironment such as<br>public, political and economic policies, technological<br>advancements, gender, social trends and social media,<br>diverse and global consumer markets, green and<br>sustainable marketing. |
| Media Law and Ethics                       | LAW64004 | This course introduces the Malaysian legal system and judicial process. It discusses the laws and legal issues pertaining to the media, as well as ethical issues  |

| Module                         | Code     | Synopsis  |
|--------------------------------|----------|---|
|                                |          | confronting professional communicators. It also discusses the important cases in media laws and ethics.   |
| Media Writing                  | COM60704 | This course prepares students to be able to write for the various media, each of which requires distinct styles and approaches. It takes the student through a survey of the different styles, understanding the nuances, and appreciating the underpinning theories that influence the crafting of written communication. Ample practice is given to developing the writing skills for efficient and effective writing for the media.  |
| Principles of<br>Marketing     | MKT60104 | This course introduces students to the key marketing<br>concepts and strategies employed by marketers in facing<br>the challenges in a dynamic business environment. It<br>develops an understanding of the overall process of<br>planning, implementation and control in the<br>contemporary business environment. This course<br>provides students with the needed conceptual skills to<br>identify analyse and solve marketing problems. This<br>course also provides a foundation for those who intend to<br>further study in the marketing field or other business<br>related courses. |
| Professional Media<br>Workshop | COM61404 | This course will enable students to understand and visualize all the theories and concepts learned into application in the industry. It will also expose students to first hand of the latest happening and news of the industry and market place. They will also be informed of the expectation of fresh graduates like themselves upon graduation. The workshops will covers important areas in advertising, public relations, broadcasting, leadership as well as project management. It will be conducted by experts from communication field.  |
| Promotional<br>Management      | PRL60104 | This course outlines to students the importance of promotional management. It introduces students to the various concepts, methods, and effects of different promotional techniques in an organisation.   |
| Promotional Writing            | PRL60204 | This course introduces the concept of designing and<br>writing promotional materials for a wide spectrum of<br>communication media. It covers the scope and structure<br>of the different forms of writing used in public relations,<br>advertising and marketing.  |

| Module                           | Code     | Synopsis   |
|----------------------------------|----------|--|
| Public Relations<br>Consultancy  | PRL60105 | This course is designed to provide students with the essential knowldege and skills they need to excel in a professional working environment. It trains students to be critical, creative and professional when planning, managing and executing a public relations campaign.  |
| Public Relations<br>Principles   | PRL60104 | This course outlines the history and development of<br>public relations, with an emphasis on providing the<br>student with an awareness of various publics that an<br>organisation interacts with. It also provides a grounding<br>for students to understand the need for a strategic<br>perspective instead of the mindset of a public relations<br>technician. Students would be expected to keep up with<br>current affairs.   |
| Publicity and Media<br>Relations | PRL60304 | This course outlines the role of a public relations<br>practitioner as a publicist in an organization. It also<br>introduces to the various techniques of media relations,<br>testing and evaluating publicity, and understanding the<br>various types of publicity collaterals for the press.   |
| Relationship<br>Marketing        | MCM60204 | This course acquaints students with the various<br>approaches and applications of relationship marketing,<br>building and developing customer value and customer<br>retention. This course also focuses on the strategic side of<br>customer relationship management where consideration<br>is taken into the analysis of the change in the marketing<br>rationale from a crude concern for increased market<br>share to a strategy aimed at creating long-term profitable<br>relationships with targeted customers. The course<br>provides students with an understanding of customer<br>relationship management and its application in providing<br>competitive advantage in the fields of marketing, public<br>relations and sales. |
| Visual<br>Communication          | COM61004 | This course outlines the basic understanding of visual<br>literacy and communication within the current media<br>industries through the comprehension of design elements<br>and principles. It also focuses on the practical application<br>and ethical considerations of the visual aspect in screen<br>and print based visual communication design.  |
# Programme Structure - Bachelor Of Mass Communication (Public Relations And Event Management)

| No. | Module Title                           | Code          | Credit Hours |
|-----|--|---------------|--------------|
|     | Year 1                                 |               |              |
|     | Semester                               | 1             |              |
| 1.  | Communication Theory                   | COM60404      | 4            |
| 2.  | Critical And Creative Thinking         | COM60304      | 4            |
| 3.  | Introduction to Mass Communication     | COM60504      | 4            |
| 4.  | Visual Communication                   | COM61004      | 4            |
|     |  | Total Credits | 16           |
|     | Semester                               | 2             |              |
| 1.  | Communication Research<br>Fundamentals | RES60304      | 4            |
| 2.  | Innovative Media                       | COM60904      | 4            |
| 3.  | Intercultural Communication            | COM60604      | 4            |
| 4.  | Media Writing                          | COM60704      | 4            |
|     |  | Total Credits | 16           |
|     | Year 2                                 |               |              |
|     | Semester                               | 3             |              |
| 1.  | Exhibition Management                  | EVT60104      | 4            |
| 2.  | Introduction To Events and Meetings    | EVT60103      | 3            |
| 3.  | Promotional Writing                    | PRL60204      | 4            |
| 4.  | Public Relations Principles            | PRL60104      | 4            |
| 5.  | Publicity And Media Relations          | PRL60304      | 4            |
|     |  | Total Credits | 19           |
|     | Semester                               | · 4           |              |
| 1.  | Crisis Management                      | PRL60404      | 4            |
| 2.  | Design For Events                      | EVT60203      | 3            |
| 3.  | Entertainment Management               | EVT60303      | 3            |
| 4.  | Events Operation                       | EVT60403      | 3            |
| 5.  | Interactive Media                      | COM61104      | 4            |
| 6.  | Special Events And Festivals           | EVT60603      | 3            |
|     |  | Total Credits | 20           |
|     | Year 3                                 |               |              |
|     | Semester                               | 5             |              |
| 1.  | Event Risk Management And Safety       | EVM60204      | 4            |
| 2.  | Financial Public Relations             | PRL60504      | 4            |
| 3.  | Media Law And Ethics                   | LAW64004      | 4            |
| 4.  | Professional Media Workshop            | COM61404      | 4            |
| 5.  | Public Relations Events Consultancy    | PRL60205      | 5            |
|     |  | Total Credits | 21           |

## Module Synopsis - Bachelor of Mass Communication (Public Relations and Event Management)

| Module                                    | Code     | Synopsis   |
|---|----------|--|
| Communication<br>Research<br>Fundamentals | RES60304 | This course outlines the basic approach to research in the<br>field of communication and mass media. It will provide<br>students with a fundamental understanding of the<br>various types of research approaches, namely<br>quantitative and qualitative, and their respective<br>methodologies that are appropriate to communication<br>research. An introduction to a variety of descriptive and<br>inferential statistical techniques that are normally used in<br>communication research will also be provided. Students<br>will also be thought how to read and review research<br>journals as well as produce a research report. |
| Communication<br>Theory                   | COM60404 | This course outlines the concepts, roles, goals and<br>changes in mass communication theories. It introduces<br>the connections between communication theories and<br>research. It also introduces the basic theories of mass<br>media effects and media issues.   |
| Crisis Management                         | PRL60404 | This course outlines the key responsibilities of public<br>relations in the contemporary world by understanding the<br>importance of managing crisis locally and internationally.<br>The course will introduce the students to different types<br>of crisis and offers a wide range of frameworks and<br>methods to managing crisis.   |
| Critical and Creative<br>Thinking         | COM60304 | This course outlines a comprehensive introduction to the cognitive process and helps students develop their higher-order thinking abilities needed for academic study and career success as critical and creative thinking skills are the cornerstones of higher education. It integrates various perspectives on the thinking process by fostering sophisticated intellectual and language abilities. It also shows that learning to think is a synthesizing process, knitting critical thinking and creative thinking abilities together with academic content and the fabric of students' experiences.                              |
| Design for Events                         | EVT60203 | This course aims to develop students in their creative<br>thinking and train them to use principles of designs in<br>their event design creations.   |

| Module                                 | Code     | Synopsis  |
|--|----------|---|
| Entertainment<br>Management            | EVT60303 | This course is designed to give an understanding into the<br>entertainment industry in relation to events<br>management. Students are provided with a technical<br>knowledge and the knowhow of programme<br>arrangement.   |
| Event Risk<br>Management and<br>Safety | EVM60204 | An event usually comes with risk – from rowdy guests at a festival to a life-threatening issue at a sport event. Event Risk Management and Safety provides a comprehensive resource for managing event risk and controlling the damage due to problem. The course will cover theoritical perspectives as well as practical application. Topics covers in this course include measuring risk, crowd control, fire safety and emergency medical services. |
| Events Operation                       | EVT60403 | This course encompasses a comprehensive conceptual<br>and technical essential to create and execute an event<br>successfully.   |
| Exhibition<br>Management               | EVT60104 | This course prepares students towards professional<br>analysis in exhibition management from a local and<br>international perspective. Students are able to create<br>suitable designs in line with the clients requirement and<br>needs.   |
| Financial Public<br>Relations          | PRL60504 | This course outlines the basics of financial communication, with a focus on investor relations. It introduces the basic principles of how to interpret company reports, financial statements, and also what to communicate to key publics. Students are expected to keep up to date with current affairs, especially business news.   |
| Innovative Media                       | COM60904 | This course is an introductory of new media studies and<br>skill-based digital media course which enable students to<br>explore, develop and apply in the areas of Mass<br>Communication. It also ventures into creativity of digital<br>media application by creating and manipulating various<br>multimedia elements.   |

| Module                                 | Code     | Synopsis   |
|--|----------|--|
| Interactive Media                      | COM61104 | This course outlines the types of authoring platforms,<br>interactive design principles, interactive scripting in<br>authoring in the current industry practices. It also focuses<br>on practical application of the current industry used<br>application for both CD-ROM and online interactive<br>applications.  |
| Intercultural<br>Communication         | COM60604 | This course outlines the personal and theoretical<br>understanding of the cultural origin of people's values,<br>ideologies, habits and how they affect communication<br>across cultural, racial and ethnic lines. It also seeks to<br>develop awareness and increased understanding among<br>peoples of different cultures, an appreciation of this rich<br>diversity, and to offer tools for a lifeline of continued<br>growth in intercultural competence.  |
| Introduction to<br>Events and Meetings | EVT60103 | This course provides an introduction to the concepts,<br>methods and practices in the event and meeting industry.<br>It includes a review of the components involved in an<br>event regardless of its size, duration and type. This course<br>prepares students towards professional understanding of<br>meetings in local and international perspective. Students<br>are able to describe accurately the components found in<br>various event or meeting environments.  |
| Introduction to Mass<br>Communication  | COM60504 | This course outlines a basic understanding of the various<br>types and roles of different traditional and new media<br>industries as well as the related institutions of journalism,<br>advertising and public relations and their respective<br>structure, support and influence. Particular attention will<br>be paid to mass communication issues relating to the rise<br>of digital media such as trends, convergence,<br>globalization and challenges. Mass media and<br>communication in the Malaysian context will also be<br>explored. |
| Media Law and Ethics                   | LAW64004 | This course introduces the Malaysian legal system and<br>judicial process. It discusses the laws and legal issues<br>pertaining to the media, as well as ethical issues<br>confronting professional communicators. It also discusses<br>the important cases in media laws and ethics.  |

| Module                           | Code     | Synopsis   |
|----------------------------------|----------|--|
| Media Writing                    | COM60704 | This course outlines the basic understanding of visual literacy and communication within the current media industries through the comprehension of design elements and principles. It also focuses on the practical application and ethical considerations of the visual aspect in screen and print based visual communication design.   |
| PR Events<br>Consultancy         | PRL60205 | This course is designed to provide students with the essential knowledge and skills they need to excel in a professional working environment. It trains students to be critical, creative and professional when planning, managing and executing an event as a PR campaign.  |
| Professional Media<br>Workshop   | COM61404 | This course will enable students to understand and visualize all the theories and concepts learned into application in the industry. It will also expose students to first hand of the latest happening and news of the industry and market place. They will also be informed of the expectation of fresh graduates like themselves upon graduation. The workshops will covers important areas in advertising, public relations, broadcasting, leadership as well as project management. It will be conducted by experts from communication field. |
| Promotional Writing              | PRL60204 | This course introduces the concept of designing and<br>writing promotional materials for a wide spectrum of<br>communication media. It covers the scope and structure<br>of the different forms of writing used in public relations,<br>advertising and marketing.   |
| Public Relations<br>Principles   | PRL60104 | This course outlines the history and development of<br>public relations, with an emphasis on providing the<br>student with an awareness of various publics that an<br>organisation interacts with. It also provides grounding for<br>students to understand the need for a strategic<br>perspective instead of the mindset of a public relations<br>technician. Students would be expected to keep up with<br>current affairs.   |
| Publicity and Media<br>Relations | PRL60304 | This course outlines the role of a public relations<br>practitioner as a publicist in an organization. It also<br>introduces to the various techniques of media relations,<br>testing and evaluating publicity, and understanding the<br>various types of publicity collaterals for the press.   |

| Module                          | Code     | Synopsis  |
|---------------------------------|----------|---|
| Special Events and<br>Festivals | EVT60603 | This course will provide students with various integrated<br>strategies of marketing and operation needed to<br>successfully run public events ranging from small to large<br>scale, branding a venue such as hallmark festivals.   |
| Visual<br>Communication         | COM61004 | This course outlines the basic understanding of visual<br>literacy and communication within the current media<br>industries through the comprehension of design elements<br>and principles. It also focuses on the practical application<br>and ethical considerations of the visual aspect in screen<br>and print based visual communication design. |

#### SCHOOL OF COMPUTING & IT

## Programme Structure – Bachelor Of Computer Science (Hons) (Computer Security And Forensics)

| Year 1     Semester 1     1.   C Programming   ITS60304   None   Common<br>Core   4     2.   Computer Systems   ITS60404   None   Common<br>Core   4     3.   Mathematics for Computing 1   MTH60104   None   Common<br>Core   4     4.   Systems Analysis and Design   ITS60103   None   Common<br>Core   3     7   Communication Practice for IT   Semester 2   Common<br>Core   3     2.   Elective 1   Common<br>Core   Common<br>Core   3     3.   Computer Crime and Digital   COM60303   None   Core   3     2.   Elective 1   Semester 3   Common<br>Core   4   6     Computer Crime and Digital   ITS60904   None   Core   4     1.   Evidence   ITS60704   None   Core   4     2.   Data Structures and Algorithms   ITS60704   None   Core   4     3.   Engineering   ITS60704   None   Core   4     4.   Programming   ITS60704   N   | No. | Module Title                   | Code       | Prerequisite | Status        | Credit<br>Hours |
|---|-----|--------------------------------|------------|--------------|---------------|-----------------|
| 1.   C Programming   ITS60304   None   Common<br>Core   4     2.   Computer Systems   ITS60404   None   Common<br>Core   4     3.   Mathematics for Computing 1   MTH60104   None   Common<br>Core   4     4.   Systems Analysis and Design   ITS60103   None   Common<br>Core   3     4.   Systems Analysis and Design   ITS60103   None   Common<br>Core   3     7   Communication Practice for IT   Semester 2   Common<br>Core   3     2.   Elective 1   COM60303   None   Core   3     3.   Computer Crime and Digital   ITS60904   None   Core   4     1.   Evidence   ITS60504   ITS60304   Core   4     2.   Data Structures and Algorithms   ITS60504   ITS60304   Core   4     3.   Fundamentals of Software   ITS60704   None   Core   4     4.   Programming   ITS60803   None   Core   4     1.   Computer and Network Security   ITS60803   None   Core   4   |     |                                | Year 1     |              |               |                 |
| 1. C Programming ITS60304 None Core 4   2. Computer Systems ITS60404 None Cormon<br>Core 4   3. Mathematics for Computing 1 MTH60104 None Common<br>Core 4   4. Systems Analysis and Design ITS60103 None Common<br>Core 3   7 Total Credits 15 Total Credits 15   7 Communication Practice for IT COM60303 None Core 3   2. Elective 1 COM60303 None Core 4   3. Computer Crime and Digital COM60303 None Core 4   1. Professionals COM60304 None Core 4   2. Elective 1 Semester 3 Total Credits 6   7 Computer Crime and Digital ITS60904 None Core 4   1. Evidence ITS60704 None Core 4   2. Data Structures and Algorithms ITS60704 None Core 4   3. Fundamentals of Software ITS60704 None Core 4   4. Programming ITS60803 None Core 4   |     | Semester 1                     |            |              |               |                 |
| 2. Computer Systems ITS60404 None Core 4   3. Mathematics for Computing 1 MTH60104 None Cormon<br>Core 3   4. Systems Analysis and Design ITS60103 None Common<br>Core 3   5. Systems Analysis and Design ITS60103 None Common<br>Core 3   6. Semester 2 Total Credits 15   7. Professionals COM60303 None Core 3   7. Elective 1 Common Core 3   7. Elective 1 Elective 3   7. Computer Crime and Digital TS60904 None Core 4   7. Computer Crime and Algorithms ITS60504 ITS60304 Core 4   7. Data Structures and Algorithms ITS60704 None Core 4   8. Engineering ITS60704 None Core 4   9. Engineering ITS60704 None Core 4   1. Computer on object-Oriented ITS60704 None Core 4   1. Computer and Network Security ITS60803 None Core 4   1. Co   | 1.  | C Programming                  | ITS60304   | None         |               | 4               |
| 3. Mathematics for Computing 1 MTH60104 None Core 4   4. Systems Analysis and Design ITS60103 None Common<br>Core 3   Image: Core of the systems analysis and Design ITS60103 None Common<br>Core 3   Image: Core of the systems analysis and Design ITS60103 None Common<br>Core 3   Image: Communication Practice for IT<br>Professionals COM60303 None Core 3   2. Elective 1 Elective 3   3. Elective 1 Elective 3   1. Professionals COM60303 None Core 3   2. Elective 1 Elective 3 6   1. Evidence ITS60904 None Discipline<br>Core 4   2. Data Structures and Algorithms ITS60504 ITS60304 Core 4   4. Fundamentals of Software ITS60704 None Core 4   4. Programming ITS60804 None Core 4   5. Computer and Network Security ITS60803 None Core 3   7. Fundamentals of Data<br>Communications ITS60203 ITS60404 Core 3   | 2.  | Computer Systems               | ITS60404   | None         |               | 4               |
| 4.   Systems Analysis and Design   ITS60103   None   Core   3     Total Credits   15     Total Credits   15     Communication Practice for IT   COM60303   None   Common   3     2.   Elective 1   Elective   3   3   Total Credits   6     Semester 3     Computer Crime and Digital   Discipline   Common   2     1.   Evidence   ITS60904   None   Core   4     Computer Crime and Digital     1.   Evidence   ITS60904   None   Core   4     2.   Data Structures and Algorithms   ITS60504   ITS60304   Core   4     Fundamentals of Software     3.   Engineering   ITS60704   None   Core   4     1.   Programming   ITS60704   None   Core   4     Semester 4     Total Credits   16     Computer and Network Security   ITS60803   None   Core   3 <td< td=""><td>3.</td><td>Mathematics for Computing 1</td><td>MTH60104</td><td>None</td><td></td><td>4</td></td<>   | 3.  | Mathematics for Computing 1    | MTH60104   | None         |               | 4               |
| Semester 21.Communication Practice for IT<br>ProfessionalsCOM60303NoneCommon<br>Core32.Elective 1COM60303NoneElective33.Elective 1Semester 3Total Credits6Semester 31.EvidenceITS60904NoneCore42.Data Structures and AlgorithmsITS60504ITS60304Core42.Data Structures and AlgorithmsITS60504ITS60304Core43.EngineeringITS60704NoneCompulsory44.ProgrammingITS60804NoneCore4Vear 2Semester 41.Computer and Network SecurityITS60803NoneCore33.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60704Core45.Software DesignITS60603ITS60704Core4  | 4.  | Systems Analysis and Design    | ITS60103   | None         |               | 3               |
| Communication Practice for IT<br>ProfessionalsCOM60303NoneCommon<br>Core32.Elective 1COM60303NoneElective32.Elective 1Total Credits6Semester 3Discipline<br>Computer Crime and Digital<br>EvidenceDiscipline<br>Core41.EvidenceITS60904NoneCore42.Data Structures and AlgorithmsITS60504ITS60304Core43.EngineeringITS60704NoneCore44.ProgrammingITS60704NoneCore44.ProgrammingITS60804NoneCore4Year 2Semester 41.Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core4  |     |                                |            |              | Total Credits | 15              |
| 1.ProfessionalsCOM60303NoneCore32.Elective 1IElective32.Elective 1IItelective33.Computer Crime and DigitalITS60904NoneCore44.EvidenceITS60904NoneCore42.Data Structures and AlgorithmsITS60504ITS60304Core44.Fundamentals of SoftwareCompulsoryCompulsory43.EngineeringITS60704NoneCore44.ProgrammingITS60804NoneCore44.ProgrammingITS60804NoneCore45.Software and Network SecurityITS60203ITS60404Core33.Fundamentals of Data<br>Computer and Network SecurityITS60203ITS60404Core34.Object-Oriented ProgrammingITS60203ITS60404Core35.Software DesignITS60604NoneCore45.Software DesignITS60603ITS60704Core4  |     |                                | Semester 2 |              |               |                 |
| Total Credits6Semester 3Computer Crime and Digital<br>EvidenceITS60904NoneDiscipline<br>Core41.EvidenceITS60904NoneCormon42.Data Structures and AlgorithmsITS60504ITS60304Core4Fundamentals of Software<br>Introduction to Object-Oriented<br>ProgrammingITS60704NoneCore41.Introduction to Object-Oriented<br>ProgrammingITS60804NoneCore41.Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3  | 1.  |                                | COM60303   | None         |               | 3               |
| Semester 3Computer Crime and DigitalITS60904NoneDiscipline<br>Core41.EvidenceITS60904NoneCommon42.Data Structures and AlgorithmsITS60504ITS60304Core4Fundamentals of SoftwareITS60704NoneCompulsory33.EngineeringITS60704NoneCore44.ProgrammingITS60804NoneCore44.ProgrammingITS60804NoneCore4Year 2Semester 41.Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCommon44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   | 2.  | Elective 1                     |            |              | Elective      | 3               |
| Computer Crime and DigitalITS60904NoneDiscipline1.EvidenceITS60904NoneCore42.Data Structures and AlgorithmsITS60504ITS60304Core4Fundamentals of SoftwareCompulsoryCompulsory3.EngineeringITS60704NoneCore41.Introduction to Object-OrientedITS60804NoneCore444.ProgrammingITS60804NoneCore45.Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CompunciationsITS60203ITS60404Core33.Fundamentals of Data<br>CommunicationsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS60004ITS60804Core45.Software DesignITS60603ITS60704Core3   |     |                                |            |              | Total Credits | 6               |
| 1.EvidenceITS60904NoneCore42.Data Structures and AlgorithmsITS60504ITS60304Core42.Data Structures and AlgorithmsITS60504ITS60304Core4Fundamentals of SoftwareITS60704NoneCompulsory3.3.EngineeringITS60704NoneCore4Introduction to Object-OrientedITS60804NoneCore44.ProgrammingITS60804NoneCore4Year 2Year 2Vear 2Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3  |     |                                | Semester 3 |              |               |                 |
| 2.Data Structures and AlgorithmsITS60504ITS60304Common<br>Core4Fundamentals of Software<br>EngineeringITS60704NoneCompulsory<br>Core4Introduction to Object-Oriented<br>ProgrammingITS60804NoneCommon<br>Core44.ProgrammingITS60804NoneCore4Total Credits16Year 2Vear 2Computer and Network Security1.Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   |     |                                |            |              |               |                 |
| 2.Data Structures and AlgorithmsITS60504ITS60304Core4Fundamentals of SoftwareITS60704NoneCompulsory3.EngineeringITS60704NoneCore4Introduction to Object-OrientedITS60804NoneCore44.ProgrammingITS60804NoneCore4Total Credits16Vear 2Vear 2EngineeringITS60803NoneDisciplineComputer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3  | 1.  | Evidence                       | ITS60904   | None         | -             | 4               |
| SubscriptionFundamentals of Software<br>EngineeringITS60704NoneCompulsory<br>Core4Introduction to Object-Oriented<br>ProgrammingITS60704NoneCommon44.ProgrammingITS60804NoneCore44.ProgrammingITS60804NoneCore45.Software DesignITS60803ITS60704Core36.Software DesignITS60603ITS60704Core4   | 2   | Data Structures and Algorithms | 17560504   | 17560304     |               | Л               |
| 3.EngineeringITS60704NoneCore4Introduction to Object-OrientedITS60804NoneCommon44.ProgrammingITS60804NoneCore44.ProgrammingITS60804NoneCore45.Software DesignITS60803ITS60804NoneCore41.Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   | ۷.  | -                              | 11300304   | 11300304     |               | 4               |
| 4.ProgrammingITS60804NoneCore4Image: state stat | 3.  |                                | ITS60704   | None         |               | 4               |
| Year 2Semester 41.Computer and Network SecurityITS60803NoneDiscipline<br>Core32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCommon<br>Core44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   | 4.  | -                              | ITS60804   | None         |               | 4               |
| Semester 41.Computer and Network SecurityITS60803NoneDiscipline<br>Core32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCommon<br>Core44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   |     |                                |            |              | Total Credits | 16              |
| 1.Computer and Network SecurityITS60803NoneDiscipline<br>Core32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCommon<br>Core44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   |     |                                | Year 2     |              |               |                 |
| 1.Computer and Network SecurityITS60803NoneCore32.Fundamentals of Data<br>CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCommon<br>Core44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   |     |                                | Semester 4 |              |               |                 |
| 2.CommunicationsITS60203ITS60404Core33.Fundamentals of Database<br>SystemsITS60604NoneCormon44.Object-Oriented Programming<br>using JavaITS61004ITS60804Core45.Software DesignITS60603ITS60704Core3   | 1.  | Computer and Network Security  | ITS60803   | None         |               | 3               |
| 3.SystemsITS60604NoneCore44.Object-Oriented Programming<br>using JavaITS61004ITS60804Discipline<br>Core45.Software DesignITS60603ITS60704Core3  | 2.  |                                | ITS60203   | ITS60404     |               | 3               |
| 4.Object-Oriented Programming<br>using JavaITS61004ITS60804Discipline<br>Core45.Software DesignITS60603ITS60704Core3  | 3.  |                                | ITS60604   | None         |               | 4               |
| 5.Software DesignITS60603ITS60704Common3  | 4.  | Object-Oriented Programming    | ITS61004   | ITS60804     | •             | 4               |
|   | 5.  |                                |            |              | Common        | 3               |
|   |     | ~ ~                            | 1          |              | Total Credits | 17              |

| No. | Module Title                     | Code       | Prerequisite | Status             | Credit<br>Hours |
|-----|----------------------------------|------------|--------------|--------------------|-----------------|
|     | -                                | Semester 5 |              |                    |                 |
| 1.  | Computer Security and Forensics  |            |              | Discipline         |                 |
|     | Tools                            | ITS61204   | None         | Core               | 4               |
| 2.  |                                  |            |              | Common             | 2               |
|     | Computing Theory                 | ITS60403   | MTH60104     | Core               | 3               |
| 3.  | Distributed Application          | ITS61604   | ITS60804     | Discipline<br>Core | л               |
|     | Development                      | 11301004   | 11360804     | Common             | 4               |
| 4.  | Operating Systems                | ITS60503   | None         | Core               | 3               |
|     | User Interface Programming and   | 11300303   | None         | Common             | ,               |
| 5.  | Graphics                         | ITS60303   | ITS60804     | Core               | 3               |
|     |                                  |            |              | Total Credits      | 17              |
|     |                                  | Year 3     |              |                    |                 |
|     |                                  | Semester 6 |              |                    |                 |
|     |                                  |            |              | Discipline         |                 |
| 1.  | Computer Intrusion Detection     | ITS61103   | None         | Core               | 3               |
|     |                                  |            |              | Discipline         |                 |
| 2.  | Cryptography                     | ITS61203   | MTH60104     | Core               | 3               |
| 3.  | Elective 2                       |            |              | Elective           | 3               |
|     |                                  |            |              | Discipline         |                 |
| 4.  | Professional Computing Practice  | CSC60303   | None         | Core               | 3               |
|     |                                  |            |              | Discipline         |                 |
| 5.  | Security Management in Practice  | ITS61303   | ITS60803     | Core               | 3               |
|     |                                  |            |              | Total Credits      | 15              |
|     |                                  | Semester 8 |              |                    |                 |
|     |                                  |            |              | Discipline         |                 |
| 1.  | Artificial Intelligence          | ITS61403   | ITS60504     | Core               | 3               |
| 2.  | Elective 3                       |            |              | Elective           | 4               |
| 3.  | 3. Elective 4                    |            |              | Elective           | 4               |
|     |                                  |            |              | Discipline         |                 |
| 4.  | Final Year Project (Semester II) | PRJ60207   | -            | Core               | 4               |
|     |                                  |            |              | Discipline         |                 |
| 5.  | Forensic Computing Practice      | ITS61503   | ITS61303     | Core               | 3               |
|     |                                  |            |              | Total Credits      | 18              |

#### **Elective Modules**

| No. | Code     | Module Title                    | Prerequisite | Status   | Credit<br>Hours |
|-----|----------|---------------------------------|--------------|----------|-----------------|
| 1.  | ITS62004 | Advanced Database Systems       | ITS60604     | Elective | 4               |
|     |          | Advanced Systems                |              |          |                 |
| 2.  | ITS61603 | Administration                  | ITS60503     | Elective | 3               |
| 3.  | ITS61504 | Data Mining                     | ITS61004     | Elective | 4               |
| 4.  | ITS61703 | Enterprise Computing*           | None         | Elective | 3               |
| 5.  | CSC60103 | Online Presence Management**    | None         | Elective | 3               |
| 6.  | ITS61804 | OOP using C++                   | ITS60804     | Elective | 4               |
| 7.  | CSC60403 | Technopreneurship               | None         | Elective | 3               |
| 8.  | ITS61304 | UNIX Programming                | ITS60503     | Elective | 4               |
|     |          | Web Applications using .NET     |              |          |                 |
| 9.  | ITS61404 | Technologies                    | ITS60804     | Elective | 4               |
| 10. | ITS61104 | Web Systems and Technologies    | None         | Elective | 4               |
|     |          | Windows Applications using .Net |              |          |                 |
| 11. | ITS61704 | Technologies                    | ITS60804     | Elective | 4               |

\*Introduction to SAP ERP professional training embedded \*\*leads to Google Online Professional Certification

# Module Synopsis - Bachelor Of Computer Science (Hons) (Computer Security And Forensics)

| Module  | Code     | Synopsis  |
|---|----------|---|
| Advanced<br>Database Systems                      | ITS62004 | The subject aims to broaden knowledge of the implementation<br>of database systems and to introduce emerging database<br>technologies, including information retrieval, and spatial<br>databases. File structures and indexing are discussed, and<br>analytical details presented, that enable students to<br>understand efficiency in query evaluation. The idea of the<br>transaction is introduced along with the necessity of<br>concurrency control and serialisability. Issues of backup and<br>recovery for databases are discussed.   |
| Advanced Systems<br>Administration                | ITS61603 | This course introduces students to the key marketing concepts<br>and strategies employed by marketers in facing the challenges<br>in a dynamic business environment. It develops an<br>understanding of the overall process of planning,<br>implementation and control in the contemporary business<br>environment. This course provides students with the needed<br>conceptual skills to identify, analyse and solve marketing<br>problems. This course also provides a foundation for those who<br>intend to further study in the marketing field or other business<br>related courses.   |
| Artificial<br>Intelligence                        | ITS61403 | This course is designed to introduce to the students the techniques and algorithms used in Artificial Intelligence.   |
| C Programming                                     | ITS60304 | This course introduces the basics of structured programming,<br>functions, arrays, pointers, data structures and dynamic<br>memory allocation. Topics covered include Introduction to<br>Program Development Environment, Control Structures,<br>Functions, Arrays, Pointers, File Processing, Data Structures<br>and Dynamic Memory Management.  |
| Communication<br>Practice for IT<br>Professionals | COM60303 | This practice-based course is designed to provide students with<br>knowledge and a practical understanding of the concepts and<br>theories of information and communication. The course aims<br>to equip students working with information systems with<br>information literacy and communication skills essential for<br>their academic work and for their future professional roles in<br>the IT industry. Lectures will provide the theoretical basis and<br>instruction while tutorials, practical sessions and group project<br>work will provide training in written and oral communication as<br>well as a realistic experience of working in teams. The<br>knowledge and training gained in this course will help develop<br>key skills necessary for life-long learning. |

| Module                                    | Code     | Synopsis  |
|---|----------|---|
| Computer and<br>Network Security          | ITS60803 | The subject reviews the following areas: computer crime, scale<br>of problem, financial costs, and case studies. This subject<br>focuses on security, trust, policy including security life cycle;<br>layering & distribution of security mechanisms. Students also<br>investigate threats to networks in detail (interception;<br>interruption; modification; fabrication; types of attack;<br>eavesdropping; masquerading; message tampering; replaying;<br>denial of service), protection mechanisms focusing on<br>encryption, authentication protocols, digital signatures for<br>message integrity, the various secure Internet Protocols,<br>security and mobility issues and security application<br>programming interfaces (Java Secure socket extension (JSSE);<br>Java Cryptography Architecture (JCA & JCAE)). Additional<br>material will be covered through the practical group<br>coursework. The aim here is to apply the technical knowledge<br>and put into practice the skills developed earlier in the<br>programme.  |
| Computer Crime<br>and Digital<br>Evidence | ITS60904 | The subject looks into legal matters, and categories of computer crime: offences against confidentiality and integrity; computer-related offences (e.g. fraud, forgery, copyright etc.); content-related offences (e.g. child pornography). Students will explore the laws pertaining to computer crime: Malaysian Cyberlaws, the UK Computer Misuse Act 1990; the EU CyberCrime Convention 2003; and applicable international law may also be presented. Students will learn to apply law relating to evidence in Malaysia specifically, and selected countries of the world generally; and the challenges in applying existing legislation to forensic computing. Students will understand the responsibilities of a Forensic Computing practitioner: securing evidence; ensuring continuity of evidence; use of auditable procedures when investigating evidence; admissibility of evidence; the need for impartiality; regulation and licensing. This subject also explores computer crime investigation and incident response, and forms of digital evidence: emails, documents, images, residual information. This subject also introduces students to the investigative strategies for digital evidence and computer crime scenes. |

| Module                                      | Code     | Synopsis   |
|---|----------|--|
| Computer<br>Intrusion Detection             | ITS61103 | The subject looks into computer intrusion detection areas such<br>as: identifying and exposing security weaknesses in an<br>organization and selecting the proper countermeasures,<br>understand how hacking tools can be sued to test and improve<br>security, protect against and prevent intrusions. This module<br>in a nutshell aims to provide a graduate with knowledge of how<br>illegal computer attacks can be performed and how they can<br>be detected and stopped.  |
| Computer Security<br>and Forensics<br>Tools | ITS61204 | This subject aims to extend and expand the knowledge gained<br>in Computer Crime and Digital Evidence Part to cover a wide<br>range of computer security and forensic computing tools and<br>techniques. Major areas covered are Advanced EnCase and<br>basic EnScripting, Encryption, e-Discovery, ethical hacking,<br>incident response, digital evidence acquisition methods and<br>procedures, Windows and Linux OS artifacts, and intrusion<br>detection systems. Though the module will be regularly<br>updated to cover new tools and techniques an indicative list of<br>content follows: review of Boot Process, Partitions and File<br>Systems; FAT internals; NTFS internals; EnCase: concepts and<br>internals; Review of data formats; Searching (including GREP),<br>bookmarking; Indexing and searching; Virus checkers; Network-<br>based tools; Network packet sniffers; Intrusion detections<br>systems, activity monitor, linklogger, tcpdump, netsniffer,<br>syslog, spybuddy, Snort, Honeypots et cetera. |
| Computer Systems                            | ITS60404 | This course introduces the fundamentals of computer systems.<br>Topics covered include data representation, data conversion,<br>logic circuits and digital arithmetic.   |
| Computing Theory                            | ITS60403 | This subject aims to introduce students to foundational issues<br>in computer science. This includes the study of measuring how<br>long computations may take, probabilistic approaches to<br>difficult problems, the principles of cryptography, the use of<br>grammars to specify syntax rules, formal models of<br>computation, and computability properties. The emphasis is on<br>understanding and application of techniques, rather than<br>formal mathematical proofs.   |
| Cryptography                                | ITS61203 | This course covers the following areas: the mathematical<br>background behind cryptography, historical ciphers, security<br>politics in modern key ciphers, popular ciphers used today,<br>cryptographic hash functions and cryptographic Hash Functions<br>and digital signatures (SHA1, MD5) Key Management<br>Implementation and performance within computing systems   |

| Module                                    | Code     | Synopsis   |
|---|----------|--|
|   |          | and error correcting codes principles.<br>This subject also introduces coding, information theory and the<br>systems in which codes are used. The emphasis is on the<br>underlying concepts governing information theory and the<br>mathematical basis for modern coding systems, but practical<br>details of important codes like Reed-Solomon, BCH, and Turbo<br>codes will be analysed.<br>Data Compression Review of basic compression techniques,<br>implementation of compression techniques within Multimedia<br>(audio, video) and communication systems and the<br>understanding of application requirements in terms of<br>bandwidth, latency, cost, data loss and tolerance of errors are<br>also explored. |
| Data Mining                               | ITS61504 | This course is designed to introduce to the students the<br>algorithms and data structures used in information retrieval<br>including the inverted index, natural language processing,<br>query processing, Measuring quality of search engine and<br>documents classification.  |
| Data Structures<br>and Algorithms         | ITS60504 | This course introduces students to algorithm analysis and<br>discusses the working of various data structures in details.<br>Topics covered include Principles of Algorithms Analysis, Linked<br>Lists, Stacks and Queues, Trees and Recursion, Hashing, Sorting<br>Methods, Binary Search Trees and Graph Theory.   |
| Distributed<br>Application<br>Development | ITS61604 | This course introduces the concepts of distributed application<br>development. Topics covered include client-server model and<br>programming in socket level and using Remote Method<br>Invocation (RMI). Laboratory instruction will include program<br>development and walk-through.   |
| Enterprise<br>Computing                   | ITS61703 | The purpose of this course is to provide students with a comprehensive understanding of enterprise resource planning (ERP) concepts, business processes, software configuration and system implementation. This is very much a hands-on course (with heavy lab sessions) and requires the active participation of enrolled students.   |
| Final Year Project<br>(Semester II)       | PRJ60207 | This module is a two semester project comprising of Part1 (3credits) and Part2 (4 credits). Part1 culminates with Systems Analysis and Design while, Part2 culminates with the Software System relevant to the programme.—. Hence the learning outcomes listed of this module can only be met at the end of semester 2. Employers want to see that graduates who are   |

| Module                                     | Code     | Synopsis   |
|--|----------|--|
|  |          | capable of taking on a significant project and carrying it<br>through to a successful completion. This module provides the<br>opportunity to show that one can develop an idea for a piece<br>of software, through the stages of research, analysis and design<br>into an implemented product. Working over a period of two<br>semesters, you will have an individual supervisor who will<br>provide assistance and guidance. You will typically produce a<br>significant piece of software and substantial written report and<br>attend a viva to demonstrate and articulate your findings and<br>progress.   |
| Forensic<br>Computing<br>Practice          | ITS61503 | This subject allows students to look in-depth into an individual<br>computer crime scenario simulating a source of evidence of<br>one or more computer-related crimes. They are to investigate<br>the contents of the scenario using appropriate tools.<br>Throughout the duration of the module advice can be sought<br>from the subject tutor with whom the suitability of different<br>approaches and the significance of particular pieces of<br>evidence can be discussed.<br>As a result of their investigation students are to write a report<br>detailing their findings for submission as evidence. Finally, they<br>will give evidence as an expert witness in a mock courtroom<br>and be cross examined by their peers or by staff. |
| Fundamentals of<br>Data<br>Communications  | ITS60203 | This subject will provide a broad introduction to the fundamentals of data communications and network technology. Emphasis is on higher aspects of data communications from perspective of the computer scientist and information technologist in the communication of data, and the interaction of remote systems.  |
| Fundamentals of<br>Database Systems        | ITS60604 | This course is an introduction to the principles, use, and<br>applications of database systems. Students who complete the<br>course will be able to design and create databases, be able to<br>extract information from databases, understand in broad terms<br>how database systems work, and understand the purposes for<br>which databases are used.  |
| Fundamentals of<br>Software<br>Engineering | ITS60704 | This course is about understanding what we need to know<br>before software is built, how to obtain that information, how<br>to analyse and understand and subsequently design it. It also<br>looks at the process and management you should incorporate<br>to discover and create this information.  |

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| Module  | Code     | Synopsis  |
| Introduction to<br>Object-Oriented<br>Programming | ITS60804 | This course introduces the fundamentals of Object-Oriented<br>Programming using Java. Topics covered include Object-<br>Oriented programming concepts, classes, inheritance,<br>polymorphism, abstract classes, interfaces, and exception<br>handling.  |
| Mathematics for<br>Computing 1                    | MTH60104 | This module will introduce the students to the discrete mathematical skills required in the field of computing and information technology.  |
| Object-Oriented<br>Programming using<br>Java      | ITS61004 | This course introduces the fundamentals of Object-Oriented<br>Programming using Java. Topics covered include Object-<br>Oriented programming concepts, classes, inheritance,<br>polymorphism, abstract classes, interfaces, and exception<br>handling.  |
| Online Presence<br>Management                     | CSC60103 | The module provides students with the state of the art training<br>in using cloud computing technologies and applications.<br>Provides hands-on project opportunities for students to build<br>online applications that can enhance business productivity,<br>create online presence, understanding and engaging customers<br>with social media and analyzing online presence using different<br>web tool technologies. |
| OOP using C++                                     | ITS61804 | This course strengthens students' understanding of object-<br>oriented programming concept and introduces them to OO<br>concepts supported in C++. Topics covered include inheritance,<br>polymorphism, and generic programming, Standard Template<br>Library, and design patterns.   |
| Operating Systems                                 | ITS60503 | This subject aims to introduce fundamental principles, strategies and algorithms used in operating systems.   |

| Module                                | Code     | Synopsis  |
|---------------------------------------|----------|---|
| Professional<br>Computing<br>Practice | CSC60303 | This subject is an introduction to professional computing<br>practices. It is intended for computer science and IT students<br>who have not studied business principles, or who have little<br>work experience in the industry. The subject provides a survival<br>kit for computer science and IT graduates entering the work<br>force. The subject considers computer ethical issues, such as<br>information privacy, computer crime, computer misuse.<br>The subject considers the international legal framework<br>available to protect software system development. This<br>includes non-disclosure agreements, employment contracts,<br>intellectual property law (copyright, patent, licensing, and<br>royalties), trademarks and warranty disclaimers. The subject<br>also considers the how ethics and law affect software system<br>development.  |
| Security<br>Management in<br>Practice | ITS61303 | This subject takes a deeper look into software security in the real world: analysing systems and security aware applications from various domains such as mobile communications, electronic commerce, banking and finance. This subject also looks into the application of trusted computing and trust in electronic commerce and the existence of a trusted computing base. Policies for managing security, policy languages and models are also looked into. This subject also looks at trust and reputation and the basis for authorization decisions; the notion of trust and how to express it (subjective logic, trust and uncertainty, rating systems and reputations servers); the eBay reputation server as an example; and communities of trust. In security analysis; assumptions are made; on social basis and threat assumptions. The trade-off between threats and countermeasures and the return on security investment (RoSI) is also investigated. Information Security Management Standards and Codes of Practice, and legislation are also covered. The interrelation and interdependency of security management and other system management activities and considerations such as:- Business Continuity Management, Organizational Security, Asset Classification and Control, Personnel Security, Physical and Environmental Security, Communications and Operations Management, Systems Development and Compliance are a major part of the subject. |
| Software Design                       | ITS60603 | The subject advances the student's knowledge and<br>understanding of the fundamentals of software engineering;<br>focusing on the software design phase/stage. Students learn<br>and gain practical skills in software design architectures like the  |

| Module   | Code     | Synopsis   |
|--|----------|--|
|  |          | role of decomposition, components / subsystems, interfaces, separation of concerns, layers, architectural styles and patterns. Students also are taught advanced software design principle of design patterns; patterns definition, history of patterns, pattern languages, pattern communities, designing patterns both from general usage (i.e. model view controller, iterator and wrapper). Students in the end are expected to implement their knowledge using CASE tools and Java programming. |
| Systems Analysis<br>and Design                     | ITS60103 | The course provides basic understanding and practical skills of system analysis and design. It will help students to work in information systems related field in the future.  |
| Technopreneurship                                  | CSC60403 | This course introduces students to the technopreneurship IT<br>Professionals, its process, the kind of mind-set is required,<br>starting a new business with a proper plan, financing the<br>venture and finally managing & growing the venture.   |
| UNIX Programming                                   | ITS61304 | This subject is designed to introduce the Unix System<br>Administration, Shell scripting and networking technology in<br>Unix system.  |
| User Interface<br>Programming and<br>Graphics      | ITS60303 | This subject will provide a broad introduction to the fundamentals of data communications and network technology. Emphasis is on higher aspects of data communications from perspective of the computer scientist and information technologist in the communication of data, and the interaction of remote systems.  |
| Web Applications<br>using .NET<br>Technologies     | ITS61404 | This course introduces the ASP.NET, ADO.NET, security and web services. Topics covered include the .NET framework in relation to Web applications, ASP.NET server controls, ADO.NET, SQL Server, .NET security, and web services.  |
| Windows<br>Applications using<br>.Net Technologies | ITS61704 | This subject is designed to provide the candidate with an<br>introduction to psychological and behavioural approaches to<br>the study of work and organisations. The course introduces<br>some of the basic analytical tools and concepts from the fields<br>of organisational behaviour and work psychology that<br>encourage an understanding of the behaviour of individuals<br>and groups in the workplace.  |

## Programme Structure - Bachelor Of Software Engineering (Hons)

| No. | Module Title                                   | Code       | Prerequisite | Status         | Credit<br>Hours |
|-----|--|------------|--------------|----------------|-----------------|
|     |  | Year 1     |              |                |                 |
|     |  | Semester 1 |              |                |                 |
| 1.  | C Programming                                  | ITS60304   | None         | Common<br>Core | 4               |
| 2.  | Computer Systems                               | ITS60404   | None         | Common<br>Core | 4               |
| 3.  | Mathematics for Computing 1                    | MTH60104   | None         | Common<br>Core | 4               |
| 4.  | Systems Analysis and Design                    | ITS60103   | None         | Common<br>Core | 3               |
|     | •  | ·          | T            | otal Credits   | 15              |
|     |  | Semester 2 |              |                |                 |
| 1.  | Communication Practice for IT<br>Professionals | COM60303   | None         | Common<br>Core | 3               |
| 2.  | Elective 1                                     |            |              | Elective       | 3               |
|     |  |            | Т            | otal Credits   | 6               |
|     |  | Semester 3 | -            |                |                 |
| 1.  | Data Structures and Algorithms                 | ITS60504   | ITS60304     | Common<br>Core | 4               |
| 2.  | Fundamentals of Software<br>Engineering        | ITS60704   | None         | Common<br>Core | 4               |
| 3.  | Introduction to Object-Oriented<br>Programming | ITS60804   | None         | Common<br>Core | 4               |
| 4.  | Mathematics for Computing 2                    | MTH60503   | MTH60104     | Common<br>Core | 3               |
|     | <u> </u>                                       |            |              | otal Credits   | 15              |
|     |  |            |              |                |                 |

| No. | Module Title                              | Code       | Prerequisite                          | Status             | Credit<br>Hours |
|-----|---|------------|---------------------------------------|--------------------|-----------------|
|     |   | Year 2     |                                       |                    |                 |
|     |   | Semester 4 |                                       |                    |                 |
| 1.  | Fundamentals of Data<br>Communications    | ITS60203   | None                                  | Common<br>Core     | 3               |
| 2.  | Fundamentals of Database<br>Systems       | ITS60604   | None                                  | Common<br>Core     | 4               |
| 3.  | Object-Oriented Programming<br>using Java | ITS61004   | ITS60804                              | Discipline<br>Core | 4               |
| 4.  | Software Design                           | ITS60603   | ITS60704                              | Common<br>Core     | 3               |
| 5.  | Software Process                          | ITS60703   | ITS60704                              | Discipline<br>Core | 3               |
|     |   |            | Т                                     | otal Credits       | 17              |
|     |   | Semester 5 |                                       |                    |                 |
| 1.  | Distributed Application<br>Development    | ITS61604   | ITS60804                              | Discipline<br>Core | 4               |
| 2.  | Operating Systems                         | ITS60503   | None                                  | Common<br>Core     | 3               |
| 3.  | Project Management                        | CSC60703   | ITS60704                              | Discipline<br>Core | 3               |
| 4.  | Software Maintenance                      | ITS61003   | ITS60603,<br>ITS60703                 | Discipline<br>Core | 3               |
| 5.  | Software Quality                          | ITS60903   | ITS60703                              | Discipline<br>Core | 3               |
|     |   |            | Т                                     | otal Credits       | 16              |
|     |   | Year 3     |                                       |                    |                 |
|     |   | Semester 6 | l l l l l l l l l l l l l l l l l l l |                    |                 |
| 1.  | Computing Theory                          | ITS60403   | MTH60104                              | Common<br>Core     | 3               |
| 2.  | Elective 2                                |            |                                       | Elective           | 3               |
| 3.  | Enterprise Computing*                     | ITS61703   | None                                  | Common<br>Core     | 3               |
| 4.  | Professional Computing Practice           | CSC60303   | None                                  | Discipline<br>Core | 3               |
|     |   |            | Т                                     | otal Credits       | 12              |
|     |   |            |                                       |                    |                 |
| L   |   | 1          | 1                                     |                    |                 |

| No. | Module Title                 | Code       | Prerequisite | Status       | Credit<br>Hours |
|-----|------------------------------|------------|--------------|--------------|-----------------|
|     |                              |            |              |              |                 |
|     | :                            | Semester 8 |              |              |                 |
|     |                              |            |              | Discipline   |                 |
| 1.  | Artificial Intelligence      | ITS61403   | ITS60504     | Core         | 3               |
|     |                              |            |              | Discipline   |                 |
| 2.  | Data Mining                  | ITS61504   | ITS61004     | Core         | 4               |
| 3.  | Elective 3                   |            |              | Elective     | 4               |
| 4.  | Elective 4                   |            |              | Elective     | 4               |
|     | Software Engineering Project |            |              | Discipline   |                 |
| 5.  | (Semester II)                | PRJ60107   | -            | Core         | 4               |
|     |                              |            | Т            | otal Credits | 19              |

#### **Elective Modules**

| No. | Code     | Module Title             | Prerequisite | Status   | Credit<br>Hours |
|-----|----------|--------------------------|--------------|----------|-----------------|
|     |          | Advanced Database        |              |          | nours           |
| 1.  | ITS62004 | Systems                  | ITS60604     | Elective | 4               |
| 2.  | CSC60104 | E-Commerce               | None         | Elective | 4               |
| 3.  | CSC60204 | Internet Fundamentals    | None         | Elective | 4               |
|     |          | Introduction to          |              |          |                 |
| 4.  | ACC60104 | Accounting               | None         | Elective | 4               |
|     |          | Introduction to          |              |          |                 |
| 5.  | MGT60104 | Management               | None         | Elective | 4               |
|     |          | Online Presence          |              |          |                 |
| 6.  | CSC60103 | Management**             | None         | Elective | 3               |
|     |          | OO Programming using     |              |          |                 |
| 7.  | ITS61804 | C++                      | ITS60804     | Elective | 4               |
| 8.  | OBM60104 | Organizational Behaviour | None         | Elective | 4               |
| 9.  | MKT60104 | Principles of Marketing  | None         | Elective | 4               |
| 10. | CSC60403 | Technopreneurship        | None         | Elective | 3               |
| 11. | ITS61304 | UNIX Programming         | ITS60503     | Elective | 4               |
|     |          | Web Applications using   |              |          |                 |
| 12. | ITS61404 | .NET Technologies        | ITS60804     | Elective | 4               |
|     |          | Windows Applications     |              |          |                 |
| 13. | ITS61704 | using .NET Technologies  | ITS60804     | Elective | 4               |

\*Introduction to SAP ERP professional training embedded

\*\*leads to Google Online Professional Certification

#### Module Synopsis - Bachelor of Software Engineering (Hons)

| Module  | Code     | Synopsis  |
|---|----------|---|
| Advanced<br>Database Systems                      | ITS62004 | The subject aims to broaden knowledge of the implementation<br>of database systems and to introduce emerging database<br>technologies, including information retrieval, and spatial<br>databases. File structures and indexing are discussed, and<br>analytical details presented, that enable students to<br>understand efficiency in query evaluation. The idea of the<br>transaction is introduced along with the necessity of<br>concurrency control and serialisability. Issues of backup and<br>recovery for databases are discussed.   |
| Artificial<br>Intelligence                        | ITS61403 | This course is designed to introduce to the students the techniques and algorithms used in Artificial Intelligence.   |
| C Programming                                     | ITS60304 | This course introduces the basics of structured programming,<br>functions, arrays, pointers, data structures and dynamic<br>memory allocation. Topics covered include Introduction to<br>Program Development Environment, Control Structures,<br>Functions, Arrays, Pointers, File Processing, Data Structures<br>and Dynamic Memory Management   |
| Communication<br>Practice for IT<br>Professionals | COM60303 | This practice-based course is designed to provide students with<br>knowledge and a practical understanding of the concepts and<br>theories of information and communication. The course aims<br>to equip students working with information systems with<br>information literacy and communication skills essential for<br>their academic work and for their future professional roles in<br>the IT industry. Lectures will provide the theoretical basis and<br>instruction while tutorials, practical sessions and group project<br>work will provide training in written and oral communication as<br>well as a realistic experience of working in teams. The<br>knowledge and training gained in this course will help develop<br>key skills necessary for life-long learning. |
| Computer Systems                                  | ITS60404 | This course introduces the fundamentals of computer systems.<br>Topics covered include data representation, data conversion,<br>logic circuits and digital arithmetic.  |
| Computing Theory                                  | ITS60403 | This subject aims to introduce students to foundational issues<br>in computer science. This includes the study of measuring how<br>long computations may take, probabilistic approaches to<br>difficult problems, the principles of cryptography, the use of<br>grammars to specify syntax rules, formal models of  |

| Module                                    | Code     | Synopsis  |
|---|----------|---|
|   |          | computation, and computability properties. The emphasis is on<br>understanding and application of techniques, rather than<br>formal mathematical proofs.  |
| Data Mining                               | ITS61504 | This course is designed to introduce the complexity of data<br>mining, algorithms used in data mining and the various<br>applications of data mining. Topics included are supervised and<br>unsupervised learning techniques, text mining, classification<br>techniques, neural networks and Naïve Bayes approach   |
| Data Structures<br>and Algorithms         | ITS60504 | This course introduces students to algorithm analysis and<br>discusses the working of various data structures in details.<br>Topics covered include Principles of Algorithms Analysis, Linked<br>Lists, Stacks and Queues, Trees and Recursion, Hashing, Sorting<br>Methods, Binary Search Trees and Graph Theory   |
| Distributed<br>Application<br>Development | ITS61604 | This course introduces the concepts of distributed application<br>development. Topics covered include client-server model and<br>programming in socket level and using Remote Method<br>Invocation (RMI). Laboratory instruction will include program<br>development and walk-through.  |
| E-Commerce                                | CSC60104 | This module provides a framework for understanding the issues and trends relating to electronic commerce. Its overall focus is on understanding how the technology can be used to support business applications. The starting point is therefore from the business perspective, to understand the business needs, and the social and legal aspects that affect electronic trading. A broad introduction to the technology then introduces how such systems can be constructed |
| Enterprise<br>Computing                   | ITS61703 | The purpose of this course is to provide students with a comprehensive understanding of enterprise resource planning (ERP) concepts, business processes, software configuration and system implementation. This is very much a hands-on course (with heavy lab sessions) and requires the active participation of enrolled students.  |
| Fundamentals of<br>Data<br>Communications | ITS60203 | This subject will provide a broad introduction to the fundamentals of data communications and network technology. Emphasis is on higher aspects of data communications from perspective of the computer scientist and information technologist in the communication of data, and the interaction of remote systems  |

| Module  | Code     | Synopsis   |
|---|----------|--|
| Fundamentals of<br>Database Systems               | ITS60604 | This course is an introduction to the principles, use, and<br>applications of database systems. Students who complete the<br>course will be able to design and create databases, be able to<br>extract information from databases, understand in broad terms<br>how database systems work, and understand the purposes for<br>which databases are used   |
| Fundamentals of<br>Software<br>Engineering        | ITS60704 | This course is about understanding what we need to know<br>before software is built, how to obtain that information, how<br>to analyse and understand and subsequently design it. It also<br>looks at the process and management you should incorporate<br>to discover and create this information.  |
| Internet<br>Fundamentals                          | CSC60204 | The subject advances the student's knowledge and<br>understanding of the role that internet and web applications<br>have in modern working and personal environments. It<br>provides theoretical and case-study perspectives on how<br>internet technology may help students to communicate with<br>the rest of the world. The student will be presented with the<br>previous and current internet technologies and web<br>applications, as well as the available of website development<br>tools. The student will encounter practical experience in<br>developing simple websites with both HTML and web<br>authoring tools. |
| Introduction to<br>Accounting                     | ACC60104 | This module is an introduction to the technical aspects of<br>financial accounting, as well as to the financial community. As a<br>member of the financial community you will be expected to be<br>update on current business and financial events. Now is a good<br>time to start a regular habit of reading the accounting and<br>financial press.   |
| Introduction to<br>Management                     | MGT60104 | This module is designed to provide the candidate with the basic<br>concepts and principles of management in organizations. It<br>focuses on the context of managerial activity and covers the<br>four major functions of management i.e. planning, organizing,<br>leading and controlling.   |
| Introduction to<br>Object-Oriented<br>Programming | ITS60804 | This course strengthens students' understanding of object-<br>oriented programming concept and introduces them to OO<br>concepts supported in C++. Topics covered include inheritance,<br>polymorphism, generic programming, Standard Template<br>Library, and design patterns.  |

| Module                                       | Code     | Synopsis  |
|--|----------|---|
| Mathematics for<br>Computing 1               | MTH60104 | This module will introduce the students to the discrete mathematical skills required in the field of computing and information technology.  |
| Mathematics for<br>Computing 2               | MTH60503 | This module will introduce the students to the discrete<br>mathematical skills and concepts of calculus required in the<br>field of computing, especially in programming and computing<br>theory.   |
| Object-Oriented<br>Programming using<br>Java | ITS61004 | This course introduces the fundamentals of Object-Oriented<br>Programming using Java. Topics covered include Object-<br>Oriented programming concepts, classes, inheritance,<br>polymorphism, abstract classes, interfaces, and exception<br>handling.  |
| Online Presence<br>Management                | CSC60103 | The module provides students with the state of the art training<br>in using cloud computing technologies and applications.<br>Provides hands-on project opportunities for students to build<br>online applications that can enhance business productivity,<br>create online presence, understanding and engaging customers<br>with social media and analyzing online presence using different<br>web tool technologies. |
| OO Programming<br>using C++                  | ITS61804 | This course strengthens students' understanding of object-<br>oriented programming concept and introduces them to OO<br>concepts supported in C++. Topics covered include inheritance,<br>polymorphism, generic programming, Standard Template<br>Library, and design patterns.   |
| Operating Systems                            | ITS60503 | This subject aims to introduce fundamental principles, strategies and algorithms used in operating systems.   |
| Organizational<br>Behaviour                  | OBM60104 | This module is designed to provide the candidate with an introduction to psychological and behavioural approaches to the study of work and organisations. The module introduces some of the basic analytical tools and concepts from the fields of organisational behaviour and work psychology that encourage an understanding of the behaviour of individuals and groups in the workplace.                            |
| Principles of<br>Marketing                   | MKT60104 | This module introduces students to the key marketing concepts<br>and strategies employed by marketers in facing the challenges<br>in a dynamic business environment. It develops an<br>understanding of the overall process of planning,<br>implementation and control in the contemporary business   |

| Module                                | Code     | Synopsis   |
|---------------------------------------|----------|--|
|                                       |          | environment. This module provides students with the needed<br>conceptual skills to identify analyse and solve marketing<br>problems. This module also provides a foundation for those<br>who intend to further study in the marketing field or other<br>business related courses.  |
| Professional<br>Computing<br>Practice | CSC60303 | This subject is an introduction to professional computing<br>practices. It is intended for computer science and IT students<br>who have not studied business principles, or who have little<br>work experience in the industry. The subject provides a survival<br>kit for computer science and IT graduates entering the work<br>force. The subject considers computer ethical issues, such as<br>information privacy, computer crime, computer misuse. The<br>subject considers the international legal framework available to<br>protect software system development. This includes non-<br>disclosure agreements, employment contracts, intellectual<br>property law (copyright, patent, licensing, royalties),<br>trademarks and warranty disclaimers. The subject also<br>considers the how ethics and law affect software system<br>development |
| Project<br>Management                 | CSC60703 | This subject is designed to establish the concept that effective<br>project management ensures that a project is completed on<br>time, within budget, and with high quality. It provides<br>theoretical and case-study perspectives on how project<br>management may help students to manage their projects.<br>Topics to be discussed include: Project Management Concepts,<br>Overview of Project Planning, Software Effort Management,<br>Risk Management, Resources Management, Project Monitoring<br>and Control.   |
| Software Design                       | ITS60603 | The subject advances the student's knowledge and<br>understanding of the fundamentals of software engineering;<br>focusing on the software design phase/stage. Students learn<br>and gain practical skills in software design architectures like the<br>role of decomposition, components / subsystems, interfaces,<br>separation of concerns, layers, architectural styles and<br>patterns. Students also are taught advanced software design<br>principle of design patterns; patterns definition, history of<br>patterns, pattern languages, pattern communities, designing<br>patterns both from general usage (i.e. model view controller,<br>iterator and wrapper). Students in the end are expected to<br>implement their knowledge using CASE tools and Java<br>programming.   |

| Module   | Code     | Synopsis  |
|--|----------|---|
| Software<br>Engineering Project<br>(Semester II) | PRJ60107 | This module is a two semester project comprising of Part1 (3credits) and Part2 (4 credits). Part1 culminates with Systems Analysis and Design while, Part2 culminates with the Software System relevant to the programme.—. Hence the learning outcomes of this module can only be met at the end of semester 2. Employers want to see that graduates who are capable of taking on a significant project and carrying it through to a successful completion. This module provides the opportunity to show that one can develop an idea for a piece of software, through the stages of research, analysis and design into an implemented product. Working over a period of about two semesters, you will have an individual supervisor who will provide assistance and guidance. You will typically produce a significant piece of software, substantial written report and attend a viva to demonstrate and articulate you findings and progress. |
| Software<br>Maintenance                          | ITS61003 | This course is about understanding of software maintenance<br>considerations which transcends the software life cycle<br>processes. Since software maintenance is a ubiquitous concern<br>in software engineering, this course prepares students to<br>provide cost-effective support to software using proven<br>techniques and established standards in software<br>maintenance.  |
| Software Process                                 | ITS60703 | This course aims to make students aware of the concept of a software process, the benefits associated with understanding the elements and structure of software processes, and ways to improve its effectiveness.   |
| Software Quality                                 | ITS60903 | This course is about understanding of software quality<br>considerations which transcends the software life cycle<br>processes. Since software quality is a ubiquitous concern in<br>software engineering, this course prepares students to manage<br>the development of high quality software using proven<br>techniques and established standards in software quality<br>assurance.   |
| Systems Analysis<br>and Design                   | ITS60103 | The course provides basic understanding and practical skills of<br>system analysis and design. It will help students to work in<br>information systems related field in the future.   |

| Module   | Code     | Synopsis   |
|--|----------|--|
| Technopreneurship                                  | CSC60403 | This course introduces students to the technopreneurship IT<br>Professionals, its process, the kind of mind-set is required,<br>starting a new business with a proper plan, financing the<br>venture and finally managing & growing the venture.                                     |
| UNIX Programming                                   | ITS61304 | This subject is designed to introduce the Unix System<br>Administration, Shell scripting and networking technology in<br>Unix system.  |
| Web Applications<br>using .NET<br>Technologies     | ITS61404 | This course introduces the ASP.NET, ADO.NET, security and<br>web services. Topics covered include the .NET framework in<br>relation to Web applications, ASP.NET server controls,<br>ADO.NET, SQL Server, .NET security, and web services  |
| Windows<br>Applications using<br>.NET Technologies | ITS61704 | This course introduces the .NET Framework using C#. Topics<br>covered include the .NET framework, C# constructs, classes,<br>inheritance, polymorphism, interfaces, exception handling,<br>collections, generics, delegates, indexers, specific C# features,<br>and .NET assemblies. |

| No.    | Module Title                                   | Code       | Prerequisite | Status             | Credit<br>Hours |
|--------|--|------------|--------------|--------------------|-----------------|
| Year 1 |  |            |              |                    |                 |
|        | S  | Semester 1 |              |                    |                 |
| 1.     | Computer Systems                               | ITS60404   | None         | Common<br>Core     | 4               |
| 2.     | Elective 1                                     |            |              | Elective           | 4               |
| 3.     | Mathematics for Computing 1                    | MTH60104   | None         | Common<br>Core     | 4               |
| 4.     | Systems Analysis and Design                    | ITS60103   | None         | Common<br>Core     | 3               |
|        |  |            | Т            | otal Credits       | 15              |
|        | 9  | Semester 2 | I            |                    |                 |
| 1.     | Communication Practice for IT<br>Professionals | COM60303   | None         | Common<br>Core     | 3               |
| 2.     | Fundamentals of Software<br>Engineering        | ITS60704   | None         | Common<br>Core     | 4               |
| 3.     | Internet Fundamentals                          | CSC60204   | None         | Discipline<br>Core | 4               |
| 4.     | Web Systems and Technologies                   | ITS61104   | None         | Discipline<br>Core | 4               |
|        |  |            | Т            | otal Credits       | 15              |
| Year 2 |  |            |              |                    |                 |
|        | 5  | Semester 3 |              |                    |                 |
| 1.     | E-Commerce                                     | CSC60104   | None         | Common<br>Core     | 4               |
| 2.     | Fundamentals of Data<br>Communications         | ITS60203   | None         | Common<br>Core     | 3               |
| 3.     | Fundamentals of Database<br>Systems            | ITS60604   | None         | Common<br>Core     | 4               |
| 4.     | Introduction to Object-Oriented<br>Programming | ITS60804   | None         | Common<br>Core     | 4               |
|        |  |            | T            | otal Credits       | 15              |
|        |  |            |              |                    |                 |

# Programme Structure - Bachelor Of Information Technology (Hons) (Internet Technologies)

| No. | Module Title                                    | Code       | Prerequisite | Status                            | Credit<br>Hours |  |  |
|-----|---|------------|--------------|-----------------------------------|-----------------|--|--|
|     | Semester 4                                      |            |              |                                   |                 |  |  |
| 1.  | Elective 2                                      |            |              | Elective                          | 3               |  |  |
| 2.  | Elective 3                                      |            |              | Elective                          | 3               |  |  |
| 3.  | Object-Oriented Programming using Java          | ITS61004   | ITS60804     | Discipline<br>Core                | 4               |  |  |
| 4.  | Operating Systems                               | ITS60503   | None         | Common<br>Core                    | 3               |  |  |
| 5.  | Web Database Applications                       | ITS62304   | ITS61104     | Discipline<br>Core                | 4               |  |  |
|     |   |            | T            | otal Credits                      | 17              |  |  |
|     |   | Year 3     |              |                                   |                 |  |  |
|     | S   | Semester 5 |              | 1                                 |                 |  |  |
| 1.  | Enterprise Computing*                           | ITS61703   |              | Common<br>Core                    | 3               |  |  |
| 2.  | Mobile Applications<br>Development              | ITS62204   | ITS60804     | Discipline<br>Core                | 4               |  |  |
| 3.  | Multimedia Systems                              | CSC60304   | ITS62304     | Common<br>Core                    | 4               |  |  |
| 4.  | Professional Computing Practice                 | CSC60303   | None         | Discipline<br>Core                | 3               |  |  |
| 5.  | Technopreneurship                               | CSC60403   | None         | Common<br>Core                    | 3               |  |  |
|     |   |            | T            | otal Credits                      | 17              |  |  |
|     | S   | Semester 7 |              |                                   |                 |  |  |
| 1.  | Elective 4                                      |            |              | Elective                          | 4               |  |  |
| 2.  | Final Year Project (Semester II)                | PRJ60207   | -            | Discipline<br>Core                | 4               |  |  |
| 3.  | Web Applications using .NET<br>Technologies     | ITS61404   | ITS60804     | Systems /<br>Internet<br>Elective | 4               |  |  |
| 4.  | Windows Applications using<br>.NET Technologies | ITS61704   | ITS60804     | Discipline<br>Core                | 4               |  |  |
| 5.  | XML Technologies                                | ITS62504   | ITS61104     | Internet<br>Elective              | 4               |  |  |
|     |   |            |              | otal Credits                      | 20              |  |  |

#### **Elective Modules**

| No  | Code     | Module Title             | Prerequisite | Status   | Credit Hours |
|-----|----------|--------------------------|--------------|----------|--------------|
| 1.  | ITS60304 | C Programming            | None         | Elective | 4            |
|     |          | Computer Crime and       |              |          |              |
| 2.  | ITS60904 | Digital Evidence         | None         | Elective | 4            |
|     |          | Data Structures and      |              |          |              |
| 3.  | ITS60504 | Algorithms               | ITS60304     | Elective | 4            |
|     |          | Introduction to          |              |          |              |
| 4.  | ACC60104 | Accounting               | None         | Elective | 4            |
|     |          | Introduction to          |              |          |              |
| 5.  | MGT60104 | Management               | None         | Elective | 4            |
|     |          | Object-oriented          |              |          |              |
| 6.  | ITS61804 | Programming using C++    | ITS60804     | Elective | 4            |
|     |          | Online Presence          |              |          |              |
| 7.  | CSC60103 | Management**             | None         | Elective | 3            |
| 8.  | OBM60104 | Organisational Behaviour | None         | Elective | 4            |
| 9.  | MKT60104 | Principles of Marketing  | None         | Elective | 4            |
| 10. | CSC60703 | Project Management       | ITS60704     | Elective | 3            |

\*Introduction to SAP ERP professional training embedded \*\*leads to Google Online Professional Certification

# Module Synopsis - Bachelor Of Information Technology (Hons) (Internet Technologies)

| Module  | Code     | Synopsis  |
|---|----------|---|
| C Programming                                     | ITS60304 | This module introduces the basics of structured programming,<br>functions, arrays, pointers, data structures and dynamic<br>memory allocation. Topics covered include Introduction to<br>Program Development Environment, Control Structures,<br>Functions, Arrays, Pointers, File Processing, Data Structures and<br>Dynamic Memory Management.  |
| Communication<br>Practice for IT<br>Professionals | COM60303 | This practice-based module is designed to provide students<br>with knowledge and a practical understanding of the concepts<br>and theories of information and communication. The module<br>aims to equip students working with information systems with<br>information literacy and communication skills essential for their<br>academic work and for their future professional roles in the IT<br>industry. Lectures will provide the theoretical basis and<br>instruction while tutorials, practical sessions and group project<br>work will provide training in written and oral communication as<br>well as a realistic experience of working in teams. The<br>knowledge and training gained in this course will help develop<br>key skills necessary for life-long learning.   |
| Computer Crime<br>and Digital<br>Evidence         | ITS60904 | The module looks into legal matters, and categories of computer crime: offences against confidentiality and integrity; computer-related offences (e.g. fraud, forgery, copyright etc.); content-related offences (e.g. child pornography). Students will explore the laws pertaining to computer crime: Malaysian Cyberlaws, the UK Computer Misuse Act 1990; the EU CyberCrime Convention 2003; and applicable international law may also be presented. Students will learn to apply law relating to evidence in Malaysia specifically, and selected countries of the world generally; and the challenges in applying existing legislation to forensic computing. Students will understand the responsibilities of a Forensic Computing practitioner: securing evidence; the need for impartiality; regulation and licensing. This module also explores computer crime investigation and incident response, and forms of digital evidence: emails, documents, images, residual information. This module also introduces students to the investigative strategies for digital evidence and computer crime scenes. |

| Computer Systems                          | ITS60404 | This module introduces the fundamentals of computer systems.<br>Topics covered include data representation, data conversion,<br>logic circuits and digital arithmetic.   |
|---|----------|--|
| Data Structures<br>and Algorithms         | ITS60504 | This course introduces students to algorithm analysis and<br>discusses the working of various data structures in details.<br>Topics covered include Principles of Algorithms Analysis, Linked<br>Lists, Stacks and Queues, Trees and Recursion, Hashing, Sorting<br>Methods, Binary Search Trees and Graph Theory.   |
| E-Commerce                                | CSC60104 | This module provides a framework for understanding the issues<br>and trends relating to electronic commerce. Its overall focus is<br>on understanding how the technology can be used to support<br>business applications. The starting point is therefore from the<br>business perspective, to understand the business needs, and<br>the social and legal aspects that affect electronic trading. A<br>broad introduction to the technology then introduces how such<br>systems can be constructed   |
| Enterprise<br>Computing                   | ITS61703 | The purpose of this module is to provide students with a comprehensive understanding of enterprise resource planning (ERP) concepts, business processes, software configuration and system implementation. This is very much a hands-on course (with heavy lab sessions) and requires the active participation of enrolled students.   |
| Final Year Project<br>(Semester II)       | PRJ60207 | This module is a two semester project comprising of Part1 (3credits) and Part2 (4 credits). Part1 culminates with Systems Analysis and Design while, Part2 culminates with the Software System relevant to the programme Hence the learning outcomes listed above can only be met at the end of semester 2. Employers want to see that graduates who are capable of taking on a significant project and carrying it through to a successful completion. This module provides the opportunity to show that one can develop an idea for a piece of software, through the stages of research, analysis and design into an implemented product. Working over a period of two semesters, you will have an individual supervisor who will provide assistance and guidance. You will typically produce a significant piece of software, substantial written report and attend a viva to demonstrate and articulate you findings and progress. |
| Fundamentals of<br>Data<br>Communications | ITS60203 | This module will provide a broad introduction to the fundamentals of data communications and network technology.<br>Emphasis is on higher aspects of data communications from perspective of the computer scientist and information technologist in the communication of data, and the interaction   |

|   |          | of remote systems   |
|---|----------|---|
| Fundamentals of<br>Database Systems               | ITS60604 | This module is an introduction to the principles, use, and<br>applications of database systems. Students who complete the<br>course will be able to design and create databases, be able to<br>extract information from databases, understand in broad terms<br>how database systems work, and understand the purposes for<br>which databases are used  |
| Fundamentals of<br>Software<br>Engineering        | ITS60704 | This module is about understanding what we need to know<br>before software is built, how to obtain that information, how to<br>analyse and understand and subsequently design it. It also looks<br>at the process and management you should incorporate to<br>discover and create this information  |
| Internet<br>Fundamentals                          | CSC60204 | The subject advances the student's knowledge and<br>understanding of the role that internet and web applications<br>have in modern working and personal environments. It provides<br>theoretical and case-study perspectives on how internet<br>technology may help students to communicate with the rest of<br>the world. The student will be presented with the previous and<br>current internet technologies and web applications, as well as<br>the available of website development tools. The student will<br>encounter practical experience in developing simple websites<br>with both HTML and web authoring tools. |
| Introduction to<br>Accounting                     | ACC60104 | This module is an introduction to the technical aspects of financial accounting, as well as to the financial community. As a member of the financial community you will be expected to be up date on current business and financial events. Now is a good time to start a regular habit of reading the accounting and financial press.  |
| Introduction to<br>Management                     | MGT60104 | This module is designed to provide the candidate with the basic<br>concepts and principles of management in organizations. It<br>focuses on the context of managerial activity and covers the<br>four major functions of management i.e. planning, organizing,<br>leading and controlling.  |
| Introduction to<br>Object-Oriented<br>Programming | ITS60804 | This module introduces the fundamentals of Object-Oriented<br>Programming using Java. Topics covered include Object-<br>Oriented programming concepts, classes, inheritance,<br>polymorphism, abstract classes, interfaces, and exception<br>handling.  |

| Mathematics for<br>Computing 1               | MTH60104 | This module will introduce the students to the discrete mathematical skills required in the field of computing and information technology.   |
|--|----------|--|
| Mobile<br>Applications<br>Development        | ITS62204 | This course will introduce students to mobile computing and<br>mobile application development. Mobile computing will be<br>discussed from three perspectives: mobile technology,<br>application development, and user interaction. The course first<br>overview various mobile computing applications, mobile web<br>applications and technologies. Next, students will be introduced<br>to and use mobile application frameworks and development<br>environments to reinforce concepts covered in lectures. User<br>interface and user experience will be discussed and application<br>development guidelines from various vendors will be discussed<br>and analysed. Lastly, the course will look at the Global<br>Positioning System and some current mobile web applications.<br>Students will be expected to implement the mobile applications<br>and mobile web application in their assignments |
| Multimedia<br>Systems                        | CSC60304 | This course will introduce students to multimedia system<br>incorporate various media such as text, graphics, audio and<br>video according to user-centred system design approach.<br>Students are required to design, implement and evaluate a<br>multimedia system based on the usability and user modelling   |
| Object-oriented<br>Programming<br>using C++  | ITS61804 | This module strengthens students' understanding of object-<br>oriented programming concept and introduces them to OO<br>concepts supported in C++. Topics covered include inheritance,<br>polymorphism, generic programming, Standard Template<br>Library, and design patterns.  |
| Object-Oriented<br>Programming<br>using Java | ITS61004 | This module introduces the fundamentals of Object-Oriented<br>Programming using Java. Topics covered include Object-<br>Oriented programming concepts, classes, inheritance,<br>polymorphism, abstract classes, interfaces, and exception<br>handling.   |
| Online Presence<br>Management                | CSC60103 | The module provides students with the state of the art training<br>in using cloud computing technologies and applications.<br>Provides hands-on project opportunities for students to build<br>online applications that can enhance business productivity,<br>create online presence, understanding and engaging customers<br>with social media and analyzing online presence using different<br>web tool technologies.  |
| Operating Systems                            | ITS60503 | This module aims to introduce fundamental principles, strategies and algorithms used in operating systems.   |

| Organisational<br>Behaviour           | OBM60104 | This module is designed to provide the candidate with an introduction to psychological and behavioural approaches to the study of work and organisations. The module introduces some of the basic analytical tools and concepts from the fields of organisational behaviour and work psychology that encourage an understanding of the behaviour of individuals and groups in the workplace.   |
|---------------------------------------|----------|--|
| Principles of<br>Marketing            | MKT60104 | This module introduces students to the key marketing concepts<br>and strategies employed by marketers in facing the challenges<br>in a dynamic business environment. It develops an<br>understanding of the overall process of planning,<br>implementation and control in the contemporary business<br>environment. This module provides students with the needed<br>conceptual skills to identify, analyse and solve marketing<br>problems. This module also provides a foundation for those<br>who intend to further study in the marketing field or other<br>business related courses.  |
| Professional<br>Computing<br>Practice | CSC60303 | This module is an introduction to professional computing<br>practices. It is intended for computer science and IT students<br>who have not studied business principles, or who have little<br>work experience in the industry. The module provides a survival<br>kit for computer science and IT graduates entering the work<br>force. The module considers computer ethical issues, such as<br>information privacy, computer crime, computer misuse. The<br>module considers the international legal framework available to<br>protect software system development. This includes non-<br>disclosure agreements, employment contracts, intellectual<br>property law (copyright, patent, licensing, royalties),<br>trademarks and warranty disclaimers. The module also<br>considers the how ethics and law affect software system<br>development. |
| Project<br>Management                 | CSC60703 | This module is designed to establish the concept that effective<br>project management ensures that a project is completed on<br>time, within budget, and with high quality. It provides<br>theoretical and case-study perspectives on how project<br>management may help students to manage their projects.<br>Topics to be discussed include: Project Management Concepts,<br>Overview of Project Planning, Software Effort Management,<br>Risk Management, Resources Management, Project Monitoring<br>and Control.  |
| Systems Analysis<br>and Design        | ITS60103 | The module provides basic understanding and practical skills of system analysis and design. It will help students to work in information systems related field in the future.  |

| Technopreneurshi<br>p                              | CSC60403 | This course introduces students to the technopreneurship IT<br>Professionals, its process, the kind of mind-set is required,<br>starting a new business with a proper plan, financing the<br>venture and finally managing & growing the venture.   |
|--|----------|--|
| Web Applications<br>using .NET<br>Technologies     | ITS61404 | This module introduces the ASP.NET, ADO.NET, security and web services. Topics covered include the .NET framework in relation to Web applications, ASP.NET server controls, ADO.NET, SQL Server, .NET security, and web services   |
| Web Database<br>Applications                       | ITS62304 | This module introduces students to the principles and practice<br>of implementing and designing medium-size web database<br>applications. Topics include server side scripting, session<br>management, authentication and authorization. 60% of the<br>assessment is assignment work, emphasizing the practical<br>nature of the subject.  |
| Web Systems and<br>Technologies                    | ITS61104 | This module introduces the student to the basics of web technology concepts, the principles and tools that can be used to develop web applications. Topics would include internet protocols, HTML and XML files, client processing with Javascript and server side processing with PHP.  |
| Windows<br>Applications using<br>.NET Technologies | ITS61704 | This module introduces the .NET Framework using C#. Topics covered include the .NET framework, C# constructs, classes, inheritance, polymorphism, interfaces, exception handling, collections, generics, delegates, indexers, specific C# features, and .NET assemblies.   |
| XML Technologies                                   | ITS62504 | Markup languages describe structure in documents and make<br>intended meaning explicit. The eXtensible Markup Language<br>(XML) is a markup language designed for use on the World<br>Wide Web. XML skills are now essential in many computer<br>science and information technology roles. This module is an<br>introduction to the principles, use, and application of document<br>markup languages, especially for use on the World Wide Web,<br>focussing on XML. Topics include document markup languages<br>(especially XML); document description languages (such as<br>Document Type Definitions (DTDs) and XML Schemas); XML<br>namespaces; document transformation and manipulation<br>(using eXtensibleStylesheet Language Transformations (XSLT)<br>and XML APIs, such as the Simple API for XML (SAX) and the<br>Document Object Model (DOM)); document query languages<br>(specifically XQuery); and XML databases. |
# Programme Structure - Bachelor Of Computer Science (Hons)

| No.    | Module Title                                   | Code       | Prerequisite | Status             | Credit<br>Hours |
|--------|--|------------|--------------|--------------------|-----------------|
| Year 1 |  |            |              |                    |                 |
|        |  | Semester 1 |              |                    |                 |
| 1.     | Computer Systems                               | ITS60404   | None         | Common<br>Core     | 4               |
| 2.     | Elective 1                                     |            |              | Elective           | 4               |
| 3.     | Mathematics for Computing 1                    | MTH60104   | None         | Common<br>Core     | 4               |
| 4.     | Systems Analysis and Design                    | ITS60103   | None         | Common<br>Core     | 3               |
|        |  |            | Т            | otal Credits       | 15              |
|        | I  | Semester 2 |              |                    |                 |
| 1.     | Communication Practice for IT<br>Professionals | COM60303   | None         | Common<br>Core     | 3               |
| 2.     | Elective 1                                     |            |              | Elective           | 3               |
| 3.     | Fundamentals of Software<br>Engineering        | ITS60704   | None         | Common<br>Core     | 4               |
| 4.     | Web Systems and Technologies                   | ITS61104   | None         | Discipline<br>Core | 4               |
|        |  |            | Т            | otal Credits       | 14              |
|        |  | Year 2     |              |                    |                 |
|        |  | Semester 3 |              |                    |                 |
| 1.     | Data Structures and Algorithms                 | ITS60504   | ITS60304     | Common<br>Core     | 4               |
| 2.     | Fundamentals of Data<br>Communications         | ITS60203   | None         | Common<br>Core     | 3               |
| 3.     | Fundamentals of Database<br>Systems            | ITS60604   | None         | Common<br>Core     | 4               |
| 4.     | Introduction to Object-Oriented<br>Programming | ITS60804   | None         | Common<br>Core     | 4               |
| 5.     | Software Design                                | ITS60603   | ITS60704     | Common<br>Core     | 3               |
|        |  |            | Т            | otal Credits       | 18              |
|        |  |            |              |                    |                 |

| No. | Module Title                                    | Code       | Prerequisite | Status             | Credit<br>Hours |
|-----|---|------------|--------------|--------------------|-----------------|
|     |   | Semester 4 | _            |                    |                 |
| 1.  | Computing Theory                                | ITS60403   | MTH60104     | Common<br>Core     | 3               |
| 2.  | Distributed Application<br>Development          | ITS61604   | ITS60804     | Discipline<br>Core | 4               |
| 3.  | Object-oriented Programming<br>using C++        | ITS61804   | ITS60804     | Discipline<br>Core | 4               |
| 4.  | Operating Systems                               | ITS60503   | None         | Common<br>Core     | 3               |
| 5.  | User Interface Programming and Graphics         | ITS60303   | ITS60804     | Common<br>Core     | 3               |
|     |   |            | Т            | otal Credits       | 17              |
|     |   | Year 3     |              |                    |                 |
|     |   | Semester 5 | T            |                    |                 |
| 1.  | Artificial Intelligence                         | ITS61403   | ITS60504     | Discipline<br>Core | 3               |
| 2.  | Elective 2                                      |            |              | Elective           | 3               |
| 3.  | Object-Oriented Programming using Java          | ITS61004   | ITS60804     | Discipline<br>Core | 4               |
| 4.  | Professional Computing Practice                 | CSC60303   | None         | Discipline<br>Core | 3               |
| 5.  | Technopreneurship                               | CSC60403   | None         | Common<br>Core     | 3               |
|     |   |            | Т            | otal Credits       | 16              |
|     |   | Semester 7 |              |                    |                 |
| 1.  | Advanced Database Systems                       | ITS62004   | ITS60604     | Discipline<br>Core | 4               |
| 2.  | Elective 3                                      |            |              | Elective           | 4               |
| 3.  | Elective 4                                      |            |              | Elective           | 4               |
| 4.  | Windows Applications using .NET<br>Technologies | ITS61704   | ITS60804     | Discipline<br>Core | 4               |
|     |   |            | Т            | otal Credits       | 16              |

#### **Elective Modules**

| No  | Code     | Module Title                           | Prerequisite | Status   | Credit |
|-----|----------|--|--------------|----------|--------|
| 1.  | ITS60904 | Computer Crime and<br>Digital Evidence | None         | Elective | 4      |
| 2.  | ITS61504 | Data Mining                            | ITS61004     | Elective | 4      |
| 3.  | ITS61703 | Enterprise Computing*                  | None         | Elective | 3      |
| 4.  | ITS62204 | Mobile Applications<br>Development     | ITS60804     | Elective | 4      |
| 5.  | CSC60304 | Multimedia Systems                     | ITS62304     | Elective | 4      |
| 6.  | CSC60103 | Online Presence<br>Management**        | None         | Elective | 3      |
| 7.  | ITS61304 | UNIX Programming                       | ITS60503     | Elective | 4      |
| 8.  | ITS61404 | Web Applications Using                 | ITS60804     | Elective | 4      |
| 9.  | ITS62304 | Web Database<br>Applications           | ITS61104     | Elective | 4      |
| 10. | ITS62504 | XML Technologies                       | ITS61104     | Elective | 4      |

\*Introduction to SAP ERP professional training embedded \*\*leads to Google Online Professional Certification

# Module Synopsis - Bachelor Of Computer Science (Hons)

| Module  | Code     | Synopsis  |
|---|----------|---|
| Advanced<br>Database Systems                      | ITS62004 | The subject aims to broaden knowledge of the implementation<br>of database systems and to introduce emerging database<br>technologies, including information retrieval, and spatial<br>databases. File structures and indexing are discussed, and<br>analytical details presented, that enable students to understand<br>efficiency in query evaluation. The idea of the transaction is<br>introduced along with the necessity of concurrency control and<br>serialisability. Issues of backup and recovery for databases are<br>discussed.   |
| Artificial<br>Intelligence                        | ITS61403 | This course is designed to introduce to the students the techniques and algorithms used in Artificial Intelligence.   |
| C Programming                                     | ITS60304 | This course introduces the basics of structured programming,<br>functions, arrays, pointers, data structures and dynamic<br>memory allocation. Topics covered include Introduction to<br>Program Development Environment, Control Structures,<br>Functions, Arrays, Pointers, File Processing, Data Structures and<br>Dynamic Memory Management.  |
| Communication<br>Practice for IT<br>Professionals | COM60303 | This practice-based course is designed to provide students with<br>knowledge and a practical understanding of the concepts and<br>theories of information and communication. The course aims to<br>equip students working with information systems with<br>information literacy and communication skills essential for their<br>academic work and for their future professional roles in the IT<br>industry. Lectures will provide the theoretical basis and<br>instruction while tutorials, practical sessions and group project<br>work will provide training in written and oral communication as<br>well as a realistic experience of working in teams. The<br>knowledge and training gained in this course will help develop<br>key skills necessary for life-long learning. |
| Computer Crime<br>and Digital<br>Evidence         | ITS60904 | The subject looks into legal matters, and categories of<br>computer crime: offences against confidentiality and integrity;<br>computer-related offences (e.g. fraud, forgery, copyright etc.);<br>content-related offences (e.g. child pornography). Students will<br>explore the laws pertaining to computer crime: Malaysian<br>Cyberlaws, the UK Computer Misuse Act 1990; the EU<br>CyberCrime Convention 2003; and applicable international law<br>may also be presented. Students will learn to apply law relating<br>to evidence in Malaysia specifically, and selected countries of<br>the world generally; and the challenges in applying existing   |

| Module                                    | Code     | Synopsis   |
|---|----------|--|
|   |          | legislation to forensic computing. Students will understand the<br>responsibilities of a Forensic Computing practitioner: securing<br>evidence; ensuring continuity of evidence; use of auditable<br>procedures when investigating evidence; admissibility of<br>evidence; the need for impartiality; regulation and licensing.<br>This subject also explores computer crime investigation and<br>incident response, and forms of digital evidence: emails,<br>documents, images, residual information. This subject also<br>introduces students to the investigative strategies for digital<br>evidence and computer crime scenes |
| Computer Systems                          | ITS60404 | This course introduces the fundamentals of computer systems.<br>Topics covered include data representation, data conversion,<br>logic circuits and digital arithmetic.   |
| Computing Theory                          | ITS60403 | This subject aims to introduce students to foundational issues in<br>computer science. This includes the study of measuring how<br>long computations may take, probabilistic approaches to<br>difficult problems, the principles of cryptography, the use of<br>grammars to specify syntax rules, formal models of<br>computation, and computability properties. The emphasis is on<br>understanding and application of techniques, rather than<br>formal mathematical proofs.   |
| Data Mining                               | ITS61504 | This course is designed to introduce the complexity of data<br>mining, algorithms used in data mining and the various<br>applications of data mining. Topics included are supervised and<br>unsupervised learning techniques, text mining, classification<br>techniques, neural networks and Naïve Bayes approach  |
| Data Structures<br>and Algorithms         | ITS60504 | This course introduces students to algorithm analysis and<br>discusses the working of various data structures in details.<br>Topics covered include Principles of Algorithms Analysis, Linked<br>Lists, Stacks and Queues, Trees and Recursion, Hashing, Sorting<br>Methods, Binary Search Trees and Graph Theory.   |
| Distributed<br>Application<br>Development | ITS61604 | This course introduces the concepts of distributed application<br>development. Topics covered include client-server model and<br>programming in socket level and using Remote Method<br>Invocation (RMI). Laboratory instruction will include program<br>development and walk-through.   |

| Module  | Code     | Synopsis  |
|---|----------|---|
| Enterprise<br>Computing                           | ITS61703 | The purpose of this course is to provide students with a comprehensive understanding of enterprise resource planning (ERP) concepts, business processes, software configuration and system implementation. This is very much a hands-on course (with heavy lab sessions) and requires the active participation of enrolled students.  |
| Fundamentals of<br>Data<br>Communications         | ITS60203 | This subject will provide a broad introduction to the fundamentals of data communications and network technology. Emphasis is on higher aspects of data communications from perspective of the computer scientist and information technologist in the communication of data, and the interaction of remote systems.   |
| Fundamentals of<br>Database Systems               | ITS60604 | This course is an introduction to the principles, use, and<br>applications of database systems. Students who complete the<br>course will be able to design and create databases, be able to<br>extract information from databases, understand in broad terms<br>how database systems work, and understand the purposes for<br>which databases are used.   |
| Fundamentals of<br>Software<br>Engineering        | ITS60704 | This course is about understanding what we need to know<br>before software is built, how to obtain that information, how to<br>analyse and understand and subsequently design it. It also looks<br>at the process and management you should incorporate to<br>discover and create this information.   |
| Introduction to<br>Object-Oriented<br>Programming | ITS60804 | This course introduces the fundamentals of Object-Oriented<br>Programming using Java. Topics covered include Object-<br>Oriented programming concepts, classes, inheritance,<br>polymorphism, abstract classes, interfaces, and exception<br>handling.  |
| Mathematics for<br>Computing 1                    | MTH60104 | This module will introduce the students to the discrete mathematical skills required in the field of computing and information technology.  |
| Mobile<br>Applications<br>Development             | ITS62204 | This course will introduce students to mobile computing and<br>mobile application development. Mobile computing will be<br>discussed from three perspectives: mobile technology,<br>application development, and user interaction. The course first<br>overview various mobile computing applications, mobile web<br>applications and technologies. Next, students will be introduced<br>to and use mobile application frameworks and development<br>environments to reinforce concepts covered in lectures. User |

| Module                                       | Code     | Synopsis  |
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|  |          | interface and user experience will be discussed and application<br>development guidelines from various vendors will be discussed<br>and analysed. Lastly, the course will look at the Global<br>Positioning System and some current mobile web applications.<br>Students will be expected to implement the mobile applications<br>and mobile web application in their assignments   |
| Multimedia<br>Systems                        | CSC60304 | This course will introduce students to multimedia system<br>incorporate various media such as text, graphics, audio and<br>video according to user-centred system design approach.<br>Students are required to design, implement and evaluate a<br>multimedia system based on the usability and user modelling  |
| Object-oriented<br>Programming using<br>C++  | ITS61804 | This course strengthens students' understanding of object-<br>oriented programming concept and introduces them to OO<br>concepts supported in C++. Topics covered include inheritance,<br>polymorphism, generic programming, Standard Template<br>Library, and design patterns.   |
| Object-Oriented<br>Programming using<br>Java | ITS61004 | This course introduces the fundamentals of Object-Oriented<br>Programming using Java. Topics covered include Object-<br>Oriented programming concepts, classes, inheritance,<br>polymorphism, abstract classes, interfaces, and exception<br>handling.  |
| Online Presence<br>Management                | CSC60103 | The module provides students with the state of the art training<br>in using cloud computing technologies and applications.<br>Provides hands-on project opportunities for students to build<br>online applications that can enhance business productivity,<br>create online presence, understanding and engaging customers<br>with social media and analyzing online presence using different<br>web tool technologies.   |
| Operating Systems                            | ITS60503 | This subject aims to introduce fundamental principles, strategies and algorithms used in operating systems.   |
| Professional<br>Computing Practice           | CSC60303 | This subject is an introduction to professional computing<br>practices. It is intended for computer science and IT students<br>who have not studied business principles, or who have little<br>work experience in the industry. The subject provides a survival<br>kit for computer science and IT graduates entering the work<br>force. The subject considers computer ethical issues, such as<br>information privacy, computer crime, computer misuse. The<br>subject considers the international legal framework available to<br>protect software system development. This includes non- |

| Module   | Code     | Synopsis  |
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|  |          | disclosure agreements, employment contracts, intellectual<br>property law (copyright, patent, licensing, royalties),<br>trademarks and warranty disclaimers. The subject also<br>considers the how ethics and law affect software system<br>development   |
| Software Design                                | ITS60603 | The subject advances the student's knowledge and<br>understanding of the fundamentals of software engineering;<br>focusing on the software design phase/stage. Students learn<br>and gain practical skills in software design architectures like the<br>role of decomposition, components / subsystems, interfaces,<br>separation of concerns, layers, architectural styles and patterns.<br>Students also are taught advanced software design principle of<br>design patterns; patterns definition, history of patterns, pattern<br>languages, pattern communities, designing patterns both from<br>general usage (i.e. model view controller, iterator and wrapper).<br>Students in the end are expected to implement their knowledge<br>using CASE tools and Java programming. |
| Systems Analysis<br>and Design                 | ITS60103 | The course provides basic understanding and practical skills of system analysis and design. It will help students to work in information systems related field in the future.   |
| Technopreneurship                              | CSC60403 | This course introduces students to the technopreneurship IT<br>Professionals, its process, the kind of mind-set is required,<br>starting a new business with a proper plan, financing the<br>venture and finally managing & growing the venture.  |
| UNIX Programming                               | ITS61304 | This subject is designed to introduce the Unix System<br>Administration, Shell scripting and networking technology in<br>Unix system.   |
| User Interface<br>Programming and<br>Graphics  | ITS60303 | Computer graphics has become such a large and important<br>field. The implementation of graphical human-computer<br>interfaces is an issue both in HCI and in graphics. The course<br>also covers linear algebra and 2D geometry relevant to<br>computer graphics and is intended to parallel and supplement<br>the more theoretical development presented in the first year<br>mathematics course  |
| Web Applications<br>Using .NET<br>Technologies | ITS61404 | This course introduces the ASP.NET, ADO.NET, security and web<br>services. Topics covered include the .NET framework in relation<br>to Web applications, ASP.NET server controls, ADO.NET, SQL<br>Server, .NET security, and web services   |

| Module   | Code     | Synopsis  |
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| Web Database<br>Applications                       | ITS62304 | This subject introduces students to the principles and practice<br>of implementing and designing medium-size web database<br>applications. Topics include server side scripting, session<br>management, authentication and authorization. 60% of the<br>assessment is assignment work, emphasizing the practical<br>nature of the subject.  |
| Web Systems and<br>Technologies                    | ITS61104 | This subject introduces the student to the basics of web technology concepts, the principles and tools that can be used to develop web applications. Topics would include internet protocols, HTML and XML files, client processing with Javascript and server side processing with PHP.  |
| Windows<br>Applications using<br>.NET Technologies | ITS61704 | This course introduces the .NET Framework using C#. Topics covered include the .NET framework, C# constructs, classes, inheritance, polymorphism, interfaces, exception handling, collections, generics, delegates, indexers, specific C# features, and .NET assemblies.  |
| XML Technologies                                   | ITS62504 | Markup languages describe structure in documents and make<br>intended meaning explicit. The eXtensible Markup Language<br>(XML) is a markup language designed for use on the World<br>Wide Web. XML skills are now essential in many computer<br>science and information technology roles. This subject is an<br>introduction to the principles, use, and application of document<br>markup languages, especially for use on the World Wide Web,<br>focussing on XML. Topics include document markup languages<br>(especially XML); document description languages (such as<br>Document Type Definitions (DTDs) and XML Schemas); XML<br>namespaces; document transformation and manipulation<br>(using eXtensibleStylesheet Language Transformations (XSLT)<br>and XML APIs, such as the Simple API for XML (SAX) and the<br>Document Object Model (DOM)); document query languages<br>(specifically XQuery); and XML databases. |

### SCHOOL OF EDUCATION

#### **Programme Structure - Bachelor Of Education**

| No. | Module Title  | Code          | Credit Hours |  |
|-----|---|---------------|--------------|--|
|     | Year 1  | -             |              |  |
|     | Semeste   | er 1          |              |  |
| 1.  | Educational Psychology I                                    | EDU61003      | 3            |  |
| 2.  | Grammar and Usage   | EDE60103      | 3            |  |
| 3.  | Introduction to Global History of                           | EDU61203      | 3            |  |
|     | Education   |               |              |  |
| 4.  | Nature of Science   | EDS60103      | 3            |  |
| 5.  | Numbers, Operations and                                     | EDM60103      | 3            |  |
| _   | Measurement at Primary Level                                |               |              |  |
| 6.  | Professional Practice 1: Teaching                           | EDP60101      | 1            |  |
| 7.  | Profession and Standards<br>Professional Practice 2: School | EDP60102      | 2            |  |
| 7.  | Culture and Teacher Assistantship                           |               | ۷.           |  |
|     | <u></u>   | Total Credits | 18           |  |
|     | Semeste   | er 2          |              |  |
| 1.  | Educational Psychology II                                   | EDU60202      | 2            |  |
| 2.  | Global Education  | EDU61303      | 3            |  |
| 3.  | Technology-enabled Teaching and                             | EDU60103      | 3            |  |
|     | Learning  |               |              |  |
|     |   | Total Credits | 8            |  |
|     | Semeste   | er 3          |              |  |
| 1.  | Education and Society                                       | EDU60303      | 3            |  |
| 2.  | Open Elective I   |               | 3            |  |
| 3.  | Philosophy of Education                                     | EDU61103      | 3            |  |
|     |   | Total Credits | 9            |  |
|     | Year 2  |               |              |  |
|     | Semeste   |               |              |  |
| 1.  | Assessing Learning  | EDU60403      | 3            |  |
| 2.  | Open Elective II  |               | 3            |  |
| 3.  | Open Elective III   |               | 3            |  |
| 4.  | Teaching Primary School English                             | EDE60105      | 5            |  |
|     | Language  | Total Cradita | 14           |  |
|     | Semeste   | Total Credits | 14           |  |
| 1.  | Managing Co-curriculum                                      | EDU60302      | 2            |  |
| 2.  |   |               |              |  |
| ۷.  |   | Total Credits | 7            |  |

| No. | Module Title   | Code          | Credit Hours |
|-----|--|---------------|--------------|
|     | Semeste  | er 6          |              |
| 1.  | Children's Literature  | EDE60203      | 3            |
| 2.  | Curriculum Development                                       | EDU61403      | 3            |
| 3.  | Geometry at Primary Level                                    | EDM60203      | 3            |
| 4.  | Professional Practice 4:Lesson<br>Preparation                | EDP60201      | 1            |
| 5.  | Professional Practice 5: Lesson<br>Delivery and Management   | EDP60301      | 1            |
| 6.  | Science - Diversity and Cycle                                | EDS60203      | 3            |
| 7.  | Teaching Primary School<br>Mathematics                       | EDM60105      | 5            |
|     |  | Total Credits | 19           |
|     | Year 3   | }             |              |
|     | Semeste  | r 7           |              |
| 1.  | Action Research  | RES60403      | 3            |
| 2.  | Introduction to Linguistics                                  | EDE60303      | 3            |
| 3.  | Professional Practice 6: Classroom<br>Management             | EDP60401      | 1            |
| 4.  | Professional Practice 7: Feedback<br>and Evaluation          | EDP60501      | 1            |
| 5.  | Science – Energy and Forces                                  | EDS60303      | 3            |
| 6.  | Statistics at Primary Level                                  | EDM60303      | 3            |
|     |  | Total Credits | 14           |
|     | Semeste  | er 8          |              |
| 1.  | Algebra at Primary Level                                     | EDM60403      | 3            |
| 2.  | Science - Systems and Interactions                           | EDS60403      | 3            |
| 3.  | Sociolinguistics   | EDE60403      | 3            |
|     |  | Total Credits | 9            |
|     | Semeste  |               |              |
| 1.  | Action Research Project                                      | RES60503      | 3            |
| 2.  | Professional Practice 3: Theory Into<br>Practice             | EDP60203      | 3            |
| 3.  | Professional Practice 8: Co-<br>curriculum in Primary School | EDP60601      | 1            |
| 4.  | Professional Practice 9: Reflective<br>Practice              | EDP60303      | 3            |
|     |  | Total Credits | 10           |

# Module Synopsis - Bachelor of Education (Primary Education)

| Module                      | Code     | Synopsis  |
|-----------------------------|----------|---|
| Action Research             | RES60403 | This is the first of the two courses that focus on classroom<br>research. Students will be introduced to action research in<br>theory and practice in relation to teaching in primary schools.<br>They will learn a range of classroom-based research methods to<br>develop their capacity to conduct a small-scale action research<br>to address a problem in a teaching context. Having this capacity<br>will enable the students to systematically examine and gain<br>deeper insights into the workings of a school, and develop as<br>reflective teachers and practitioner researchers. Topics include<br>the selection, framing and justification of a research problem,<br>literature review, different methods used in classroom-based<br>research, the process of data collection and analysis,<br>developing and writing research proposal, and ethical issues<br>classroom research. |
| Action Research<br>Project  | RES60503 | This is the follow-up from the Action Research course that<br>focuses on classroom research. Using the proposal developed<br>in the Action Research course, students will critically examine a<br>range of perspectives and theoretical frameworks relevant to<br>the school setting, conduct the research, collect and analyse<br>data and write a research report aimed developing practice.  |
| Algebra at Primary<br>Level | EDM60403 | This course introduces students to algebra in the primary<br>school mathematics. It exposes students to the aims of<br>teaching algebra in primary school mathematics, what algebra<br>is, the key ideas and concepts in algebra at primary level, and<br>the notion of algebraic thinking. It also analyses the<br>organisation of algebra contents in primary mathematics<br>curriculum and research on the learning of algebra at primary<br>level. Students will also learn how to solve and design problems<br>related to algebra at primary level taking into consideration the<br>mathematical thinking and processes involved in the context of<br>learning to be competent at teaching algebra in primary school.  |
| Assessing Learning          | EDU60403 | The course focuses on the centrality of assessment to quality<br>learning and teaching. The nature and roles of assessment,<br>including the principles, standards, procedures and practice of<br>good assessment will be discussed. Included too will be the<br>pivotal issues of validity, reliability, fairness and usability, and<br>the critical roles played by assessment in supporting learning as<br>well as improving teaching. Different approaches to assessment<br>– of, for and as learning – and their contributions to effective<br>learning and teaching, the critical roles of feedback, the  |

| Module                      | Code     | Synopsis   |
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|                             |          | importance of diversity of assessment processes and<br>instruments (vis-à-vis traditional and alternative assessment),<br>transparency and explicitness of assessment criteria and<br>scoring, reporting, assessment-related ethical issues, and<br>contemporary issues in assessment will also be discussed.  |
| Children's<br>Literature    | EDE60203 | This course focuses on the principles of using children's literary<br>texts in the primary classroom to enhance teaching and<br>learning. Students will be exposed to fiction and non-fiction<br>texts written for children: prose, fables, fairy tales, picture<br>books, biographies. autobiographies, poems and verse.<br>Techniques of incorporating these literary texts to enhance<br>teaching and learning will also be covered.  |
| Curriculum<br>Development   | EDU61403 | The focus of this course is to enable students to have a firm<br>grasp of what a school curriculum is all about, and hence<br>appreciate its centrality in shaping the kinds and quality of<br>learning students derived from the learning experiences<br>designed for them through the way the curriculum is stitched<br>together. The course will discuss the various meanings of<br>curriculum, its foundations, the approaches to curriculum,<br>design principles and the widely used models used in designing<br>it as well as the standards that have been employed to<br>benchmark and judge its quality. It is also intended to empower<br>students to analyse a curriculum as framed by its aims and<br>purpose. |
| Education and<br>Society    | EDU60303 | This course examines the social aspects of education and<br>schooling: the relationship between home, society, educational<br>institutions and educational values; the ways that social<br>inequalities are reproduced through schools; and the ways that<br>identities are formed through education. It also covers major<br>social theories that attempt to explain children's experience of<br>schooling and how schools reproduce society. Particular<br>attention will be paid to the way interactions within<br>educational settings have much larger implications within<br>society and vice-versa.   |
| Educational<br>Psychology I | EDU61003 | NA   |

| Module                       | Code     | Synopsis   |
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| Educational<br>Psychology II | EDU60202 | This course focuses on the strategies of effective management<br>of the classroom which includes organization of time, physical<br>space, curriculum, instruction, and pastoral care provision.<br>Students are introduced to various theories of classroom<br>management, techniques on how to establish a conducive<br>classroom climate to support and sustain learning and how to<br>work with students with different needs. Students are also<br>exposed to the pastoral responsibilities of primary school<br>teachers, monitoring and evaluation of pastoral care, and the<br>different types of pastoral activities concerned with meeting<br>the different needs of students.  |
| Geometry at<br>Primary Level | EDM60203 | This course introduces students to geometry in the primary<br>school mathematics. It exposes students to the aims of<br>teaching geometry in primary school mathematics, what<br>geometry is, the key ideas and concepts in geometry at primary<br>level and the notion of geometrical thinking. It also analyses<br>the organisation of geometry contents in primary mathematics<br>curriculum and research on the learning of geometry at primary<br>level. Students will also learn how to design and slove problems<br>related to geometry at primary level taking into consideration<br>the mathematical thinking and processes involved in the<br>context of learning to be competent at teaching geometry in<br>primary school. |
| Global Education             | EDU61303 | The focus of this course is to enable students to have an<br>understanding of what is meant by the term global education.<br>Introduction to the Maastricht Global Education Declaration<br>(2002). Issues related to global education: development<br>education, human rights education, education for<br>sustainability, education for peace and conflict prevention and<br>intercultural education.   |
| Grammar and<br>Usage         | EDE60103 | This course aims to improve the English language proficiency of<br>students. It offers an overview of English grammar. It equips<br>students with a deeper understanding of the grammar of the<br>English Language and provides students the opportunity to<br>familiarize themselves with the different parts of speech in the<br>language. It focuses on the rules of grammar and the analysis<br>of the language in use.  |

| Module  | Code     | Synopsis   |
|---|----------|--|
| Introduction to<br>Global History of<br>Education | EDU61203 | The module focuses on both the concept of history and its<br>influence on education. Students will be exposed on how<br>social, economic, political, religious, cultural, scientific and<br>technological events of the past have influenced the direction<br>and meaning of what is education.  |
| Introduction to<br>Linguistics                    | EDE60303 | This course seeks to introduce students to the study of the English language. The study includes the development, social context, syntax, structure, meaning and sound system of the English Language.   |
| Managing Cu-<br>curriculum                        | EDU60302 | This course focuses on the concept, aims and rationale of co-<br>curriculum in primary schools. It discusses the various kinds of<br>co-curricular activities in schools in relation to the aims of co-<br>curriculum in primary schools, and compare and contrast<br>between these activities.<br>It provides students with the opportunity to participate in<br>various kinds of co-curriculum activities and be acquainted with<br>co-curriculum activities in primary schools. It prepares students<br>to meet the objectives, planning, implementation and<br>evaluation of co-curriculum activities in schools.                                      |
| Nature of Science                                 | EDS60103 | This course introduces students to the nature of science and its<br>importance to be literate in science. It also exposes students to<br>the stands of philosophers about the scientific inquiry and the<br>scientific enterprise. Students will analyse nature of science in<br>the context of primary science education standards and the<br>role of teachers in imparting the sound understanding on<br>nature of science to their future students will also be discussed.<br>This course will also expose the students to the prevalent<br>misconceptions on nature of science so that they can be<br>competent at teaching science in primary school. |

| Module  | Code     | Synopsis   |
|---|----------|--|
| Numbers,<br>Operations and<br>Measurement at<br>Primary Level                 | EDM60103 | This course introduces students to numbers, operations and<br>measurements in the primary school mathematics. It exposes<br>students to the aims of teaching numbers, operations and<br>measurements in primary school mathematics, what numbers<br>is and the key concepts in numbers, operations and<br>measurements at primary level. It also discusses the<br>organisation of numbers, operations and measurements<br>contents in primary mathematics curriculum and research on<br>the learning of statistics at primary level. Students will also<br>learn how to solve problems related to numbers, operations<br>and measurements at primary level with emphasis on the<br>mathematical thinking and processes involved in the context of<br>learning to be competent at teaching numbers, operations and<br>measurements in primary school. |
| Philosophy of<br>Education  | EDU61103 | This course examines the philosophical ideas that influence<br>primary school education. These ideas extend from the<br>Western secular tradition to Eastern religious perspective<br>involving philosophers from Socrates to Imam Ghazali. From<br>these ideas questions such as "What is education?", "What<br>does it mean to be an "educated" person?", "What factors<br>distinguish a "good" from a "bad education?" and a few others<br>will be explored. The intent of the course is to enable students<br>to be more informed and have the capacity to develop a<br>personal educational philosophy.   |
| Professional<br>Practice 1:<br>Teaching<br>Profession and<br>Standards        | EDP60101 | The course is designed as the first part of student's professional<br>practice, where it focuses on the roles and responsibilities of a<br>primary school teacher in a changing environment. Students<br>will explore the ethical, social and legal dimensions of the<br>teaching profession including examining the teaching<br>standards. Through the practical experience in school, students<br>will be able to examine the teaching profession in a more<br>informed way under the guidance of an experienced teacher in<br>the primary school.   |
| Professional<br>Practice 2: School<br>Culture and<br>Teacher<br>Assistantship | EDP60102 | The course will give the student the opportunity to learn from<br>being in a school environment and immerse in the school<br>culture, in addition to gaining valuable practical experience in<br>helping teachers to plan lessons, prepare resources, manage<br>pupils, and organize school events. Through these experiences<br>and the ensuing reflections they will develop a more nuanced<br>and deeper understanding of the role of a teacher, in particular<br>a primary school teacher, and the challenges of teaching.   |

| Module   | Code     | Synopsis  |
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| Professional<br>Practice 3: Theory<br>Into Practice              | EDP60203 | This course is designed to provide students with the practical<br>experience of teaching within a school system. Students will<br>gain insight through their management of both curricular and<br>co-curricular activities in primary schools. Students will design<br>and critique their lesson plans and teaching materials and gain<br>practical experience in presenting their materials in classroom<br>settings. This course will enable students to put into practice<br>various theories that have been learned in this programme.<br>Students will acquire knowledge, skills and predisposition<br>necessary for effective teaching through the mentoring process<br>by working under the guidance of an experienced teacher in<br>the primary school. |
| Professional<br>Practice 4:Lesson<br>Preparation                 | EDP60201 | The course is designed as the forth of a series of student's professional practice, where it focuses on the importance and strategies for lesson preparation. Students will explore the objectives of a lesson, various learning activities and the resources to be used to prepare for a lesson. Through the practical experience in school, students will be able to examine the teaching profession in a more informed way under the guidance of an experienced teacher in the primary school.   |
| Professional<br>Practice 5: Lesson<br>Delivery and<br>Management | EDP60301 | The course is designed as the fifth of a series of student's professional practice, where it focuses on the lesson delivery and management. Students will explore how the lesson is introduced and concluded, the pacing of lesson components, ways of giving clear instructions in class, the questioning techniques, and on ways of organizing individual and group learning. Through the practical experience in school, students will be able to examine the teaching profession in a more informed way under the guidance of an experienced teacher in the primary school.   |
| Professional<br>Practice 6:<br>Classroom<br>Management           | EDP60401 | The course is designed as the sixth of a series of student's professional practice, where it focuses on the classroom management. Students will explore the interactions during lesson, how supportive learning environments are established, ways in encouraging good behaviour in the classroom and ways of establishing rules and routines. Through the practical experience in school, students will be able to examine the teaching profession in a more informed way under the guidance of an experienced teacher in the primary school.  |

| Module   | Code     | Synopsis   |
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| Professional<br>Practice 7:<br>Feedback and<br>Evaluation          | EDP60501 | The course is designed as the seventh of a series of student's professional practice, where it focuses on the assessment. Students will explore how feedback is given, how understanding is monitored, how written work is designed, as well as understanding the assessment procedures. Through the practical experience in school, students will be able to examine the teaching profession in a more informed way under the guidance of an experienced teacher in the primary school.   |
| Professional<br>Practice 8: Co-<br>curriculum in<br>Primary School | EDP60601 | The course is designed as the eight of a series of student's professional practice, where it focuses on primary school co-<br>curriculum. It enables students to understand the concept of physical education and co-curriculum. It provides students with the opportunity to participate in various kinds of co-curriculum activities and be acquainted with co-curriculum activities in primary schools. It prepares students to meet the objectives, planning, implementation and evaluation of co-curriculum activities in schools.  |
| Professional<br>Practice 9:<br>Reflective Practice                 | EDP60303 | The course is designed as the last of a series of student's professional practice, where it focuses on the notion of reflective practice. It act as an approach to enable teachers as professionals to learn from experience, specifically to understand how they use their knowledge in practical situations and how they can combine practice and learning in a more effective way. The course will explore deeper the notion of reflective practice and the reflective practitioner in the context of the teaching profession by putting it in practice.  |
| Science - Systems<br>and Interactions                              | EDS60403 | This course introduces students to the themes of systems and<br>interactions in the primary science subject. It exposes students<br>to the aims of teaching systems and interactions in primary<br>school and what are systems and interactions at primary level.<br>It also discusses the organization of systems and interactions in<br>primary science curriculum and research on the learning of<br>these two themes at primary level. Students will also learn how<br>to design and solve problems related to systems and<br>interactions at primary level to be competent at teaching<br>systems and interactions in primary school. |
| Science – Diversity<br>and Cycle                                   | EDS60203 | This course introduces students to the themes of diversity and<br>cycles in the primary science subject. It exposes students to the<br>aims of teaching diversity and cycles in primary school and<br>what are diversity and cycles at primary level. It also discusses<br>the organization of diversity and cycles in primary science   |

| Module   | Code     | Synopsis  |
|--|----------|---|
|  |          | curriculum and research on the learning of these two themes at<br>primary level. Students will also learn how to solve problems<br>related to diversity and cycles at primary level to be competent<br>at teaching diversity and cycles in primary school.  |
| Science – Energy<br>and Forces                 | EDS60303 | This course introduces students to the themes of energy and<br>forces in the primary science subject. It exposes students to the<br>aims of teaching energy and forces in primary school and what<br>are energy and forces at primary level. It also discusses the<br>organization of energy and forces in primary science curriculum<br>and research on the learning of these two themes at primary<br>level. Students will also learn how to design and solve problems<br>related to energy and forces at primary level to be competent<br>at teaching energy and forces in primary school.   |
| Sociolinguistics                               | EDE60403 | In this module, students will engage critically with topics with regards to the relationship between language and society. The module will focus on how language use varies in relation to a range of social factors, such as social class, age, gender and ethnicity. The topics covered will range across macro-level issues such as language planning and policy, language variation and education, through issues concerned with multilingualism, pidgins & creoles, to more micro-issues like code-switching and code-mixing.  |
| Statistics at Primary<br>Level                 | EDM60303 | This course introduces students to statistics in the primary<br>school mathematics. It exposes students to the aims of<br>teaching statistics in primary school mathematics, what<br>statistics is and the key ideas and concepts in statistics at<br>primary level. It also analyses the organisation of statistics<br>contents in primary mathematics curriculum and research on<br>the learning of statistics at primary level. Students will also<br>learn how to design problems related to statistics at primary<br>level taking into consideration the mathematical thinking and<br>processes involved in the context of learning to be competent<br>at teaching statistics in primary school. |
| Teaching Primary<br>School English<br>Language | EDE60105 | This course aims to enable students to have an overview of the issues of learning the English language as a first and second language. It examines the developments of English language teaching in primary school education. It helps to develop students' knowledge and understanding in current developments in English language teaching by exposing students to varied approaches, methods, procedures and techniques in teaching the four language skills.  |

| Module  | Code     | Synopsis  |
|---|----------|---|
| Teaching Primary<br>School<br>Mathematics       | EDM60105 | This course focuses on the why, what and how of primary<br>school mathematics teaching. Students will be exposed to the<br>aims and framework of primary mathematics curriculum, the<br>nature of mathematical thinking and mathematical<br>communication in the classroom, the psychological theories of<br>learning and teaching mathematics and formation of<br>mathematics concepts, pedagogical principles of mathematics<br>teaching including various teaching strategies and the purpose<br>and use of drill and practice in primary mathematics. Also<br>covered will be strategies for teaching the five strands of<br>primary school mathematics: numbers and operations, data,<br>measurement, geometry and algebra. Included too techniques<br>and procedures for diagnosing and teaching pupils with<br>mathematical difficulties as well as gifted and high ability<br>pupils, and the development of schemes of work, lesson plans<br>and assessment tasks. |
| Teaching Primary<br>School Science              | EDS60105 | This course focuses on the why, what and how of primary<br>school science teaching. Students will be exposed to the<br>scientific inquiry, aims and framework of primary science<br>curriculum, the theories of learning and teaching science and<br>formation of science concepts, pedagogical principles of<br>science teaching in primary schools, including various teaching<br>strategies. Students will also be exposed to principles of<br>developing schemes of work, lesson plans and assessment tasks<br>for primary science. In addition, students will have<br>opportunities to construct deep and rich understandings of a<br>select number of ideas in science such as diversity, cycles,<br>systems, energy and interaction of forces.   |
| Technology-<br>enabled Teaching<br>and Learning | EDU60103 | The course focuses on the use of technology for effective<br>teaching and learning in primary schools. Students will be<br>exposed to various technologies that can be incorporated into<br>teaching and learning in the primary classroom. Theory will be<br>combined with pedagogical use of technology to enhance<br>teaching and learning. Lesson planning incorporating different<br>technologies as well as evaluation criteria for assessing the use<br>of technology in classrooms will also be discussed.  |

### SCHOOL OF ENGINEERING

#### Programme Structure – Bachelor of Engineering (Hons) Chemical Engineering

| No.    | Module Title  | Code       | Prerequisite | Status       | Credit<br>Hours |
|--------|---|------------|--------------|--------------|-----------------|
| Year 1 |   |            |              |              |                 |
|        | 2   | Semester 2 |              |              |                 |
| 1.     | Biochemical Processes                                 | CHE60203   | None         | Core         | 3               |
| 2.     | Engineering Design & Ergonomics                       | PRJ60203   | PRJ60103     | Core         | 3               |
| 3.     | Engineering Mathematics II                            | MTH60203   | MTH60103     | Core         | 3               |
| 4.     | Malaysian Studies 3                                   | MPU3173    | None         | MPU1         | 3               |
| 5.     | Properties and Applications of<br>Materials           | ENG60503   | None         | Core         | 3               |
| 6.     | Thermodynamics and Heat<br>Transfer                   | ENG60303   | None         | Core         | 3               |
|        |   |            | Тс           | otal Credits | 18              |
|        |   | Year 2     |              |              |                 |
|        | 5   | Semester 3 | I            |              |                 |
| 1.     | Chemical Engineering<br>Thermodynamics and Simulation | CHE60303   | ENG60303     | Core         | 3               |
| 2.     | Computing Applications for<br>Engineers               | ENG60104   | None         | Core         | 4               |
| 3.     | Engineering Mathematics III                           | MTH60303   | MTH60203     | Core         | 3               |
| 4.     | Multidisciplinary Engineering<br>Design               | PRJ60303   | PRJ60203     | Core         | 3               |
| 5.     | Process Integration and Unit<br>Operations I          | CHE60603   | CHE60103     | Core         | 3               |
|        |   |            | Тс           | otal Credits | 16              |
|        | S   | Semester 4 |              |              |                 |
| 1.     | Engineering Design & Innovation                       | PRJ60403   | PRJ60303     | Core         | 3               |
| 2.     | Engineering Mathematics IV                            | MTH60403   | MTH60303     | Core         | 3               |
| 3.     | Managing Projects for Success                         | ENG60703   | None         | Core         | 3               |
| 4.     | Mass Transfer   | CHE60403   | ENG60303     | Core         | 3               |
| 5.     | Process Integration and Unit<br>Operations II         | CHE60903   | CHE60603     | Core         | 3               |
| 6.     | Reactor and Catalysis                                 | CHE60503   | CHE60203     | Core         | 3               |
|        |   | •          | Tc           | otal Credits | 18              |
|        |   |            |              |              |                 |

| No.           | Module Title   | Code             | Prerequisite  | Status       | Credit<br>Hours |
|---------------|--|------------------|---|--------------|-----------------|
|               |  | Year 3           |   |              |                 |
|               | 5  | Semester 5       |   |              |                 |
| 1.            | Advanced Heat and Momentum<br>Transfer                       | CHE60703         | CHE60403  | Core         | 3               |
| 2.            | Chemical Process Modelling                                   | CHE60803         | MTH60403  | Core         | 3               |
| 3.            | Data Measurement, Analysis and<br>Experimental Design        | ENG61103         | None  | Core         | 3               |
| 4.            | Engineering Economics  | CHE61303         | None  | Core         | 3               |
| 5.            | Introduction to Electronics and<br>Electrical Power Machines | ENG60903         | None  | Core         | 3               |
| 6.            | Leading in the 21st Century                                  | UCM60402U2       | None  | MPU2         | 2               |
|               |  |                  | To  | otal Credits | 17              |
|               | S  | Semester 6       |   |              |                 |
| 1.            | Advanced Heat and Momentum<br>Transfer                       | CHE60703         | CHE60403  | Core         | 3               |
| 2.            | Chemical Process Control                                     | CHE61103         | CHE60803  | Core         | 3               |
| 3.            | Data Measurement, Analysis and Experimental Design           | ENG61103         | None  | Core         | 3               |
| 4.            | Engineering Economics  | CHE61303         | None  | Core         | 3               |
| 5.            | Malaysian Food Heritage                                      | UCM60102U3       | None  | MPU3         | 2               |
| 6.            | Safety in Process Plant Design                               | CHE61403         | None  | Core         | 3               |
| Total Credits |  |                  |   |              |                 |
|               | Year   | 4 (Semester 7)   |   |              |                 |
| 1.            | Chemical Engineering Group<br>Project 1                      | PRJ 61103        | PRJ60403<br>CHE61903                                | Core         | 3               |
| 2.            | Engineering Economics  | CHE61303         | None  | Core         | 3               |
| 3.            | Final Year Engineering Project 1                             | PRJ60703         | PRJ60403<br>Complete at<br>least 95<br>credit hours | Core         | 3               |
|               | (  | Choose Electives |   |              |                 |
|               | Business Skills for Engineers                                | BUS60403         | None  | Elective     | 3               |
|               | Computational Fluid Dynamics                                 | MEC60703         | None  | Elective     | 3               |
|               | Computer Aided Engineering & Geometric Modeling              | ENG60603         | None  | Elective     | 3               |
|               | Renewable & Alternative Energies                             | MEC61003         | None  | Elective     | 3               |
|               |  |                  | Тс  | otal Credits | 15              |

| No. | Module Title                                    | Code             | Prerequisite         | Status       | Credit<br>Hours |
|-----|---|------------------|----------------------|--------------|-----------------|
|     | S   | emester 8        |                      |              |                 |
| 1.  | Chemical Engineering Group<br>Project 2         | PRJ61203         | PRJ61103<br>CHE61903 | Core         | 3               |
| 2.  | Final Year Engineering Project 2                | PRJ60206         | PRJ60703             | Core         | 6               |
|     | (   | Choose Electives |                      |              |                 |
|     | Business Skills for Engineers                   | BUS60403         | None                 | Elective     | 3               |
|     | Computational Fluid Dynamics<br>(CFD)           | MEC60703         | None                 | Elective     | 3               |
|     | Computer Aided Engineering & Geometric Modeling | ENG60603         | None                 | Elective     | 3               |
|     | Renewable & Alternative Energies                | MEC61003         | None                 | Elective     | 3               |
|     |   |                  | Тс                   | otal Credits | 15              |

# Module Synopsis – Bachelor of Engineering (Hons) Chemical Engineering

| Module                                     | Code      | Synopsis   |
|--|-----------|--|
| Advanced Heat and<br>Momentum<br>Transfer  | CHE60703  | This module covers critical theoretical material for momentum<br>transport and addresses viscous and turbulent flows between<br>solid boundaries. The principle of similitude is applied to the<br>design and analysis of pumped flow systems and cost<br>optimisation is applied to the design of pipelines. Engineering<br>applications such as complex pipe networks and combined<br>pipe-pump systems are analysed. Computer based methods of<br>solution of heat and mass transfer problems are introduced<br>and applied to some process examples.   |
| Biochemical<br>Processes                   | CHE60203  | This module introduces some fundamental aspects of<br>chemical and biochemical processing, focusing on reactor<br>design and basic purification-separation technologies. The<br>basic concepts and language of biology are introduced, in<br>order that students are equipped to understand biochemical,<br>food and environmental engineering applications. Reaction<br>engineering, including kinetics, simple contacting schemes and<br>how to create the right conditions for efficient conversion of<br>reactants into products are then introduced. The final focus is<br>on purification of products leaving the reactor using mass<br>transfer devices such as plate and packed columns. The<br>concept that a process is an integrated whole and not just an<br>assembly of unit operations is introduced.  |
| Business Skills for<br>Engineers           | BUS60403  | Covers the engineering and management and business<br>environment, including the financial and legal aspects of doing<br>business and E-Commerce.  |
| Chemical<br>Engineering Group<br>Project 1 | PRJ 61103 | In this module, students work in groups (of approximately five) to produce group and individual reports concerning the design of a chemical/biochemical/minerals processing plant. They also make formal and informal oral presentations. All reports and presentations are to be to of commercial and professional standard. The design work is supported by frequent classes and seminars, and if possible, a site visit. The plant design calculations and simulations are done using software such as PROII and UniSim software. In most cases, a manufacturing or commercial organisation will provide background material and data, and the supporting involvement of staff from such organisations is encouraged. Each student group reports to the supervisor in charge, who takes responsibility for administering the project, the progress and welfare of the design teams and marking. |

| Module  | Code      | Synopsis   |
|---|-----------|--|
| Chemical<br>Engineering Group<br>Project 2                  | PRJ 61203 | This module is a continuation of PRJ61103. Students continue<br>to work in their groups to produce group reports concerning<br>the theoretical design of a chemical/biochemical/minerals<br>processing plant. They also continue to make formal and<br>informal oral presentations. All reports and presentations are<br>to be to of commercial and professional standard. The design<br>work is supported by frequent lectures, tutorials and<br>seminars, and if possible, a site visit. Each student group<br>continues to report to a "board" or group of about 4 – 5 under<br>supervision of academic staff, who takes responsibility for<br>administering the project, the progress and welfare of the<br>design teams and marking. The Design Project exploits much<br>prior learning, being the culmination of the students learning.<br>It is the module above all that requires a holistic approach to<br>chemical engineering. It is necessary to pass this module to<br>fulfil the taught design requirement of the Institution of<br>Chemical Engineers, for subsequent achievement of<br>Professional Engineer or Chartered Engineer status. |
| Chemical<br>Engineering<br>Thermodynamics<br>and Simulation | CHE60303  | This module deals with a variety of topics such as the basic<br>laws of Thermodynamic, Maxwell Relationships and energy,<br>Equations of State and predictions of pure component<br>properties, Phase Equilibria and Chemical Equilibria. Simulator<br>is intended to introduce students to the fundamentals of<br>computer-aided process synthesis, simulation, analysis and<br>optimisation. Practical problems are used as examples.  |
| Chemical Process<br>Control                                 | CHE61103  | This module builds upon the primarily conceptual knowledge<br>gained in the prerequisite module (CHE60803), to cover the<br>basic principles of analysis and design of process level control<br>systems, and the appropriate mathematical tools. Topics<br>discussed include transfer functions, ideal dynamic systems,<br>classical PID controllers, feedback control block diagram<br>analysis, stability concept and analysis, structure and<br>components of modern control loops, and practical aspects of<br>industrial process control.   |
| Chemical Process<br>Modelling                               | CHE60803  | This module consists of three elements: matrix modelling<br>methods, mathematics and dynamic modelling techniques,<br>and issues in modern process control and modelling. Students<br>are taught how to construct and analyse advanced dynamic<br>models of chemical engineering systems. A number of<br>mathematical techniques with applications in chemical<br>engineering are covered. It also covers the mathematical tools<br>required to analyse and solve linear and non-linear chemical   |

| Module   | Code     | Synopsis  |  |
|--|----------|---|--|
|  |          | engineering-based models, with examples.  |  |
| Computational<br>Fluid Dynamics<br>(CFD)                       | MEC60703 | Present the essential concepts and skills for CFD using both a theoretical approach and practical approach using commercial software.   |  |
| Computer Aided<br>Engineering &<br>Geometric<br>Modeling       | ENG60603 | This subject presents the processes of CADCAM from the conceptual design stage to the manufacturing stage via hands-<br>on experience of component shape design and virtual and real RPM-machining.   |  |
| Computing<br>Applications for<br>Engineers                     | ENG60104 | Provides skills that promote the effective use of Microsoft<br>Office Suite: Word, Excel, Project and PowerPoint. Introduces<br>programming with MATLAB and C Programming.  |  |
| Data<br>Measurement,<br>Analysis and<br>Experimental<br>Design | ENG61103 | This module introduces the statistical methodologies necessary to design and analyse a range of industrial experiments.   |  |
| Engineering Design<br>& Ergonomics                             | PRJ60203 | This module provides foundation in designing products that<br>work in accordance with the way humans think, see and<br>behave. Products that are compatible with people with<br>dramatically reduce human error, fatigue, discomfort and<br>stress and have a profound positive impact on overall end-<br>user performance. |  |
| Engineering Design<br>& Innovation                             | PRJ60403 | This module equips engineering students with innovation techniques such as design thinking and TRIZ, sharpening their innovation skills. This will empower them to develop financially and economically sustainable solutions and enable.   |  |
| Engineering<br>Economics                                       | CHE61303 | This module deals with principles and the basic equations for<br>the value of money and alternative selections. It considers the<br>factors in the engineering economy, interest rates, present<br>worth, annual worth, rate of return, income tax and<br>breakeven analysis.   |  |
| Engineering<br>Mathematics II                                  | MTH60203 | This module covers more essential mathematical knowledge and techniques for solving engineering problems.   |  |
| Engineering<br>Mathematics III                                 | MTH60303 | This module covers the mathematical modelling of<br>engineering problems using differential equations and<br>introduces various techniques for solving the problems.  |  |

| Module   | Code       | Synopsis  |
|--|------------|---|
| Engineering<br>Mathematics IV                                      | MTH60403   | This module covers the transformation of system representation between time and complex frequency domains and its analysis and solution. This module also covers basic statistics and probability theories and their applications.  |
| Final Year<br>Engineering Project<br>1                             | PRJ60703   | This is an individual research project. Student selects a project<br>from a given list. Project is awarded based on higher CGPA<br>should more than one student select the same project. The<br>pre-requisite for this module is that the student must be in the<br>final two semesters of study (completed at least 95 credit<br>hours), and has completed all the project based modules<br>required from semester 1 to semester 6.  |
| Final Year<br>Engineering Project<br>2                             | PRJ 60206  | This is a continuation of the Final Year Engineering Project I (PRJ60703). Students continue their research work: collecting data, conducting experiments, or through whatever approach that has been decided upon in PRJ60703. The project concludes with a thesis, oral defense, EURECA conference and Engineering Fair.  |
| Introduction to<br>Electronics and<br>Electrical Power<br>Machines | ENG60903   | The aim of this module is to introduce aspects of electronics<br>and electrical engineering to students of other engineering<br>disciplines in the context of applications in their discipline. This<br>should develop their confidence when interacting with<br>electrical engineers in industry. The module begins with a<br>review of the areas where electronic and electrical<br>engineering principles are applied in civil, chemical,<br>manufacturing and mechanical engineering and materials<br>science. An introduction to basic concepts of electronics leads<br>into DC circuits and circuit analysis, power and energy. An<br>appreciation of linear and non-linear components is provided<br>through the diode and LED. Active learning in the lecture<br>environment will be a key feature of this section. The concept<br>of electrical transducers as a means of interfacing to, and<br>monitoring, the real world leads to the simple application of<br>operational amplifiers. Examples of uses of transducers and<br>actuators in engineering industry will emphasise the<br>importance of proper calibration. As an exercise students will<br>specify a transducer for a particular application to achieve the<br>appropriate range, gain and accuracy. |
| Leading in the 21st<br>Century                                     | UCM60402U2 | At the end of the programme, students will be able to avoid<br>common leadership pitfalls by mastering relevant skills set<br>such as decision-making, goal-setting, motivation, conflict<br>management and teamwork.   |

| Module  | Code       | Synopsis   |
|---|------------|--|
| Malaysian Food<br>Heritage                      | UCM60102U3 | This module will take the students through the historical event<br>that brought changes to the culinary environment in Malaysia<br>specifically to the ingredients availability, and the techniques<br>used to prepare the food. The students will also have the<br>opportunity to discuss about the impact of current issues such<br>as shortage of food ingredients, improvement of technology<br>that will change the authenticity of the food itself.  |
| Malaysian Studies<br>3                          | MPU3173    | Malaysian Studies encompasses the story of; early history of<br>Malaya up to the formation of Malaysia, administrative system<br>of Malaysia and Malaysian economic, social and foreign<br>policies.   |
| Managing Projects<br>for Success                | ENG60703   | Ensuring projects run successfully has become very critical in<br>today's fast changing world. The module will cover the<br>knowledge areas and explore the key factors for completing<br>projects on time within budget and allocated resources.<br>Practical tools and techniques will be introduced to guide and<br>manage projects to success  |
| Mass Transfer                                   | CHE60403   | This module covers the theory behind mass transfer. This includes 1-dimensional and 2-dimensional steady and unsteady state mass transfer. The analogy between heat and mass transport process is developed and explained. Chemical engineering processes such as membrane separations, drying, humidification and cooling, absorption, adsorption, and extraction are described.  |
| Multidisciplinary<br>Engineering Design         | PRJ60303   | The main features of this module are the System Thinking,<br>multidisciplinary and complexity level of the design encounter<br>with focus on satisfying contradicting stakeholder's<br>requirements and sustainability. While working in<br>multidisciplinary teams students will create products and<br>processes that are designed for manufacturability,<br>affordability, recyclability and sustainability.  |
| Process Integration<br>and Unit<br>Operations I | CHE60603   | This module introduces the methodologies for the synthesis of<br>a new process and discusses the factors governing process<br>selection. It also introduces problem-solving approaches<br>reflecting current trends in process integration such as<br>efficient material and energy usage and emissions reduction.<br>Pinch technology is introduced and used to develop heat<br>exchanger networks, with software demonstrations. Starting<br>with the unit operations of distillation and drying, the<br>interactions and interdependency between different process<br>units are next discussed via case studies. Stoichiometry and<br>Processes Applications (CHE60103) is a prerequisite module, |

| Module   | Code     | Synopsis  |  |
|--|----------|---|--|
|  |          | because that is where the concept that a process is an integrated whole and not just an assembly of unit operations has been introduced.  |  |
| Process Integration<br>and Unit<br>Operations II | CHE60903 | In this module, the interactions and interdependency between<br>different process units are further developed via case studies.<br>The module builds on these principles by introducing more<br>unit processes such as liquid-liquid extraction, crystallisation<br>and leaching (solid-liquid extraction), as well as advanced<br>multiphase separations (including ion exchange, affinity<br>chromatography, and gel filtration) with particular emphasis<br>on the selection of the appropriate methods to meet process<br>requirements. |  |
| Properties and<br>Applications of<br>Materials   | ENG60503 | This module introduces the range of materials used in<br>engineering applications along with some basic selection rules<br>for determining the appropriate materials for a given<br>application. The module also introduces fundamental science<br>that determines the properties of materials, such as bonding<br>types and atomic / molecular structures.   |  |
| Reactor and<br>Catalysis                         | CHE60503 | This module covers the fundamentals of reactors and catalysis,<br>particularly in the context of formulation engineering. It<br>introduces the effects of temperature in ideal reactors,<br>catalysts and catalytic reactors, intra particle transport<br>phenomena, transport phenomena in fixed bed reactors and<br>fluidised beds, reactor design for functional products,<br>introduced through supported metal catalyst formulation and<br>production of a food product.   |  |
| Renewable &<br>Alternative<br>Energies           | MEC61003 | Renewable energies, solar energy, bioenergy, hydroelectricity, tidal power, wave energy, wind energy, geothermal energy, integration.   |  |
| Safety in Process<br>Plant Design                | CHE61403 | This module covers hazards, human errors, HAZOPS, safety standards, risk assessment methodology and safety management in details for industrial safety.   |  |
| Thermodynamics<br>and Heat Transfer              | ENG60303 | This module combines the knowledge related to both energy<br>transfer (as heat) and thermodynamics to expose the students<br>to a wide variety of topics that will be instrumental in their<br>academic and career advancement like the applications of the<br>first and second laws of thermodynamics and the mechanisms<br>with which heat transfers. This is tied closely to the analysis of<br>heat engines, heat pumps, heat cycles and heat exchangers.   |  |

| Programme Structure – Bachelor of Engineering (Hons) Electrical & Electronic Engineering |
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| No.    | Module Title                            | Code       | Prerequisite | Status       | Credit<br>Hours |  |
|--------|---|------------|--------------|--------------|-----------------|--|
| Year 1 |   |            |              |              |                 |  |
|        | Se                                      | emester 2  |              |              |                 |  |
| 1.     | Circuit and Devices                     | EEE60403   | None         | Core         | 3               |  |
| 2.     | Digital Electronics                     | EEE60203   | None         | Core         | 3               |  |
| 3.     | Engineering Design & Ergonomics         | PRJ60203   | PRJ60103     | Core         | 3               |  |
| 4.     | Engineering Mathematics II              | MTH60203   | MTH60103     | Core         | 3               |  |
| 5.     | Malaysian Studies 3                     | MPU3173    | None         | MPU1         | 3               |  |
|        |   |            | Тс           | otal Credits | 15              |  |
|        |   | Year 2     |              |              |                 |  |
|        | Se                                      | emester 3  | Γ            |              |                 |  |
| 1.     | Analogue Electronics                    | EEE60503   | EEE60403     | Core         | 3               |  |
| 2.     | Data Communications and Networks        | EEE60803   | None         | Core         | 3               |  |
| 3.     | Electromagnetic Fields and Waves        | EEE60703   | MTH60203     | Core         | 3               |  |
| 4.     | Engineering Mathematics III             | MTH60303   | MTH60203     | Core         | 3               |  |
| 5.     | Leading in the 21st Century             | UCM60402U2 | None         | MPU2         | 2               |  |
| 6.     | Multidisciplinary Engineering<br>Design | PRJ60303   | PRJ60203     | Core         | 3               |  |
|        |   |            | Тс           | otal Credits | 17              |  |
|        | Se                                      | emester 4  |              |              |                 |  |
| 1.     | Analogue Electronics                    | EEE60503   | EEE60403     | Core         | 3               |  |
| 2.     | Electrical Power Systems                | EEE61303   | EEE60703     | Core         | 3               |  |
| 3.     | Engineering Design & Innovation         | PRJ60403   | PRJ60303     | Core         | 3               |  |
| 4.     | Engineering Mathematics IV              | MTH60403   | MTH60303     | Core         | 3               |  |
| 5.     | Managing Projects for Success           | ENG60703   | None         | Core         | 3               |  |
| 6.     | Signals and Systems                     | EEE60303   | EEE60103     | Core         | 3               |  |
|        |   |            | To           | otal Credits | 18              |  |
|        |   |            |              |              |                 |  |
|        |   |            |              |              |                 |  |
|        |   |            |              |              |                 |  |

| No.        | Module Title                               | Code       | Prerequisite  | Status       | Credit<br>Hours |
|------------|--|------------|---|--------------|-----------------|
|            |  | Year 3     |   |              |                 |
|            |  | emester 5  |   |              |                 |
| 1.         | Control Systems                            | EEE61203   | EEE60103  | Core         | 3               |
| 2.         | Digital Signal Processing                  | EEE61003   | EEE60303  | Core         | 3               |
| 3.         | Electrical Engineering Group<br>Project I  | PRJ60903   | PRJ60403  | Core         | 3               |
| 4.         | Electrical Power Systems                   | EEE61303   | EEE60703  | Core         | 3               |
| 5.         | Malaysian Food Heritage                    | UCM60102U3 | None  | MPU3         | 2               |
| 6.         | Power Electronics                          | EEE61403   | EEE63103  | Core         | 3               |
|            |  | ·          | Тс  | otal Credits | 17              |
|            | S  | emester 6  |   |              |                 |
| 1.         | Business Skills for Engineers              | BUS60403   | None  | Core         | 3               |
| 2.         | Digital Signal Processing                  | EEE61003   | EEE60303  | Core         | 3               |
| 3.         | Electrical Engineering Group<br>Project II | PRJ61003   | PRJ60903  | Core         | 3               |
| 4.         | Electrical Power Systems                   | EEE61303   | EEE60703  | Core         | 3               |
| 5.         | Power Electronics                          | EEE61403   | EEE63103  | Core         | 3               |
|            | 1  |            | Tc  | tal Credits  | 15              |
|            |  | Year 4     |   |              |                 |
| Semester 7 |  |            |   |              |                 |
| 1.         | Design of Electrical Apparatus             | EEE61903   | EEE63103  | Elective     | 3               |
| 2.         | Electrical Power Systems                   | EEE61303   | EEE2113   | Core         | 3               |
| 3.         | Final Year Engineering Project 1           | PRJ60703   | PRJ61003<br>Complete at<br>least 95<br>credit hours | Core         | 3               |
| 4.         | Power System Protection and Switchgear     | EEE62503   | EEE3513   | Core         | 3               |
| 5.         | VLSI Design                                | EEE61603   | EEE60203  | Elective     | 3               |
|            |  |            | Тс  | otal Credits | 15              |
| Semester 8 |  |            |   |              |                 |
| 1.         | Design of Electrical Apparatus             | EEE61903   | EEE63103  | Elective     | 3               |
| 2.         | Final Year Engineering Project 2           | PRJ60206   | PRJ60703  | Core         | 6               |
| 3.         | Power System Protection and Switchgear     | EEE62503   | EEE3513   | Core         | 3               |
| 4.         | VLSI Design                                | EEE61603   | EEE60203  | Elective     | 3               |
|            | ·  | •          | To  | otal Credits | 15              |
|            |  |            |   |              |                 |

# Module Synopsis – Bachelor of Engineering (Hons) Electrical & Electronic Engineering

| Module                                       | Code     | Synopsis  |  |  |
|--|----------|---|--|--|
| Analogue<br>Electronics                      | EEE60503 | This module deals with semiconductor diode rectifier and filter circuits. It also introduces the design and analysis of BJT FET, Op-Amp, Feed back, Oscillator and Power Amplifier circuits.  |  |  |
| Business Skills for<br>Engineers             | BUS60403 | Covers the engineering and management and business<br>environment, including the financial and legal aspects of doing<br>business and E-Commerce.   |  |  |
| Circuit and Devices                          | EEE60403 | This module deals with the circuits and the physics of conduction in solids and the effects of electric fields. The terminal characteristics of basic devices are derived from first principles.  |  |  |
| Control Systems                              | EEE61203 | This module deals with the open loop and closed loop control<br>systems. It introduces mathematical models of differen<br>physical systems. Time domain and frequency domain analysis<br>are applied to determine the stability of systems. Concepts o<br>state space analysis are introduced.                |  |  |
| Data<br>Communications<br>and Networks       | EEE60803 | This modules deals with the data communications, network<br>and protocols associated with digital transmission application<br>e.g. internet.  |  |  |
| Design of Electrical<br>Apparatus            | EEE61903 | Design of Electrical Machines from the first principles of<br>electromagnetics. It covers the design of electrical machine<br>through modelling tool design with emphasis on the design<br>constraints during the design process.   |  |  |
| Digital Electronics                          | EEE60203 | This module deals with the theory and practice of logic, digital circuit design and digital representation of information.  |  |  |
| Digital Signal<br>Processing                 | EEE61003 | This module deals with the ideas of digital signal processing,<br>its advantages and applications. It introduces the engineering<br>applications of Z-transform, discrete Fourier transform and<br>fast Fourier transform. It also deals with the design and<br>realization of digital filters.               |  |  |
| Electrical<br>Engineering Group<br>Project I | PRJ60903 | A technical specification is issued to self-selected groups of<br>students. These groups then decide on their technical and<br>managerial approach to the task. The groups are assessed on<br>technical merit, added-value, end-product and demonstrable<br>team working skills developed during the project. |  |  |

| Module  | Code     | Synopsis  |
|---|----------|---|
| Electrical<br>Engineering Group<br>Project II | PRJ61003 | This is a continuation of PRJ60903, where groups continue<br>working on their projects, carrying them to completion. The<br>groups are assessed on technical merit, added-value, end-<br>product and demonstrable team working skills developed<br>during the project.  |
| Electrical Power<br>Systems                   | EEE61303 | This module deals with generation, transmission and distribution of electrical power. It introduces the switch gear and protection of power system. It also deals with load flow analysis, fault analysis and power system stability.   |
| Electromagnetic<br>Fields and Waves           | EEE60703 | This module deals with vector analysis, electrostatic fields and<br>magnetic fields. The behaviour of time varying signals along<br>transmission lines is investigated by considering appropriate<br>applications.  |
| Engineering Design<br>& Ergonomics            | PRJ60203 | This module provides foundation in designing products that<br>work in accordance with the way humans think, see and<br>behave. Products that are compatible with people with<br>dramatically reduce human error, fatigue, discomfort and<br>stress and have a profound positive impact on overall end-<br>user performance.   |
| Engineering Design<br>& Innovation            | PRJ60403 | This module equips engineering students with innovation techniques such as design thinking and TRIZ, sharpening their innovation skills. This will empower them to develop financially and economically sustainable solutions and enable.   |
| Engineering<br>Mathematics II                 | MTH60203 | This module covers more essential mathematical knowledge and techniques for solving engineering problems.   |
| Engineering<br>Mathematics III                | MTH60303 | This module covers the mathematical modelling of engineering problems using differential equations and introduces various techniques for solving the problems.  |
| Engineering<br>Mathematics IV                 | MTH60403 | This module covers the transformation of system representation between time and complex frequency domains and its analysis and solution. This module also covers basic statistics and probability theories and their applications.  |
| Final Year<br>Engineering Project<br>1        | PRJ60703 | This is an individual research project. Student selects a project<br>from a given list. Project is awarded based on higher CGPA<br>should more than one student select the same project. The<br>pre-requisite for this module is that the student must be in the<br>final two semesters of study (completed at least 95 credit<br>hours), and has completed all the project based modules |

| Module                                  | Code       | Synopsis  |
|---|------------|---|
|   |            | required from semester 1 to semester 6.   |
| Final Year<br>Engineering Project<br>2  | PRJ60206   | This is a continuation of the Final Year Engineering Project I (PRJ60703). Students continue their research work: collecting data, conducting experiments, or through whatever approach that has been decided upon in PRJ60703. The project concludes with a thesis, oral defense, EURECA conference and Engineering Fair.  |
| Leading in the 21st<br>Century          | UCM60402U2 | At the end of the programme, students will be able to avoid<br>common leadership pitfalls by mastering relevant skills set<br>such as decision-making, goal-setting, motivation, conflict<br>management and teamwork.   |
| Malaysian Food<br>Heritage              | UCM60102U3 | This module will take the students through the historical event<br>that brought changes to the culinary environment in Malaysia<br>specifically to the ingredients availability, and the techniques<br>used to prepare the food. The students will also have the<br>opportunity to discuss about the impact of current issues such<br>as shortage of food ingredients, improvement of technology<br>that will change the authenticity of the food itself. |
| Malaysian Studies 3                     | MPU3173    | Malaysian Studies encompasses the story of; early history of<br>Malaya up to the formation of Malaysia, administrative system<br>of Malaysia and Malaysian economic, social and foreign<br>policies.  |
| Managing Projects<br>for Success        | ENG60703   | Ensuring projects run successfully has become very critical in<br>today's fast changing world. The module will cover the<br>knowledge areas and explore the key factors for completing<br>projects on time within budget and allocated resources.<br>Practical tools and techniques will be introduced to guide and<br>manage projects to success   |
| Multidisciplinary<br>Engineering Design | PRJ60303   | The main features of this module are the System Thinking,<br>multidisciplinary and complexity level of the design encounter<br>with focus on satisfying contradicting stakeholder's<br>requirements and sustainability. While working in<br>multidisciplinary teams students will create products and<br>processes that are designed for manufacturability,<br>affordability, recyclability and sustainability.   |

| Module                                       | Code     | Synopsis  |
|--|----------|---|
| Power Electronics                            | EEE61403 | This module deals with the principle of operation and<br>characteristics of power switching devices and their<br>applications in converter, inverter, chopper and<br>cycloconverter circuits.           |
| Power System<br>Protection and<br>Switchgear | EEE62503 | To enhance understanding of power system protection and<br>analyze the behavior and coordination of protection<br>equipment when applied to various protection schemes in a<br>power system network.    |
| Signals and<br>Systems                       | EEE60303 | This module deals with signal analysis and the signal transmission through systems. It provides Laplace transform, Z-transform and probability mathematical background for signals and system analysis. |
| VLSI Design                                  | EEE61603 | To outline the VLSI design process and methodologies used in system implementation. To give working knowledge of Verilog.   |

# Programme Structure – Bachelor of Engineering (Hons) Mechanical Engineering

| No.           | Module Title  | Code       | Prerequisite | Status | Credit<br>Hours |
|---------------|---|------------|--------------|--------|-----------------|
| Year 1        |   |            |              |        |                 |
| Semester 2    |   |            |              |        |                 |
| 1.            | Computer Aided Engineering and<br>Geometric Modelling | ENG60603   | None         | Core   | 3               |
| 2.            | Engineering Design & Ergonomics                       | PRJ60203   | PRJ60103     | Core   | 3               |
| 3.            | Engineering Mathematics II                            | MTH60203   | MTH60103     | Core   | 3               |
| 4.            | Malaysian Studies 3                                   | MPU3173    | None         | MPU1   | 3               |
| 5.            | Thermodynamics and Heat<br>Transfer                   | ENG60303   | None         | Core   | 3               |
| Total Credits |   |            |              |        | 15              |
| Year 2        |   |            |              |        |                 |
| Semester 3    |   |            |              |        |                 |
| 1.            | Computing Applications for<br>Engineers               | ENG60104   | None         | Core   | 4               |
| 2.            | Engineering Dynamics                                  | ENG60403   | None         | Core   | 3               |
| 3.            | Engineering Mathematics III                           | MTH60303   | MTH60203     | Core   | 3               |
| 4.            | Leading in the 21st Century                           | UCM60402U2 | None         | MPU2   | 2               |
| 5.            | Multidisciplinary Engineering<br>Design               | PRJ60303   | PRJ60203     | Core   | 3               |
| 6.            | Properties and Applications of<br>Materials           | ENG60503   | None         | Core   | 3               |
|               | Total Credits   |            |              |        | 18              |
| Semester 4    |   |            |              |        |                 |
| 1.            | Engineering Design & Innovation                       | PRJ60403   | PRJ60303     | Core   | 3               |
| 2.            | Engineering Mathematics IV                            | MTH60403   | MTH60303     | Core   | 3               |
| 3.            | Engineering Solids Mechanics                          | MEC60103   | ENG60103     | Core   | 3               |
| 4.            | Malaysian Food Heritage                               | UCM60102U3 | None         | MPU3   | 2               |
| 5.            | Managing Projects for Success                         | ENG60703   | None         | Core   | 3               |
| 6.            | Manufacturing Engineering                             | MEC60203   | None         | Core   | 3               |
|               | Total Credits   |            |              |        | 17              |
|               |   |            |              |        |                 |
| No.        | Module Title  | Code       | Prerequisite   | Status       | Credit<br>Hours |
|------------|---|------------|--|--------------|-----------------|
|            |   | Year 3     |  |              |                 |
| Semester 5 |   |            |  |              |                 |
| 1.         | Community Service Initiative                                      | UCM60102U4 | None   | MPU4         | 2               |
| 2.         | Data Measurement, Analysis and<br>Experimental Design             | ENG61103   | None   | Core         | 3               |
| 3.         | Introduction to Electronics and<br>Electrical Power Machines      | ENG60903   | None   | Core         | 3               |
| 4.         | Mechanical Engineering Group<br>Project I                         | PRJ60503   | PRJ60403   | Core         | 3               |
| 5.         | Numerical Analysis for Engineers<br>with Applications using ANSYS | ENG61203   | None   | Core         | 3               |
| 6.         | Theory of Machines and<br>Mechanisms                              | MEC60303   | ENG60403   | Core         | 3               |
|            |   | -          | To   | otal Credits | 17              |
|            |   | Semester 6 |  |              |                 |
| 1.         | Automatic Control and<br>Instrumentation                          | ENG61003   | ENG60903   | Core         | 3               |
| 2.         | Business Skills for Engineers                                     | BUS60403   | None   | Core         | 3               |
| 3.         | Data Measurement, Analysis and<br>Experimental Design             | ENG61103   | None   | Core         | 3               |
| 4.         | Mechanical Engineering Group<br>Project II                        | PRJ60603   | PRJ60503<br>ENG61203<br>(Co-<br>requisite<br>MEC60803) | Core         | 3               |
| 5.         | Theory of Machines and<br>Mechanisms                              | MEC60303   | ENG60403   | Core         | 3               |
|            |   |            | Тс   | otal Credits | 15              |
|            |   |            |  |              |                 |

| No. | Module Title                             | Code             | Prerequisite  | Status       | Credit<br>Hours |  |  |
|-----|--|------------------|---|--------------|-----------------|--|--|
|     | Year 4                                   |                  |   |              |                 |  |  |
|     |  | Semester 7       | -   |              |                 |  |  |
| 1.  | Automatic Control and<br>Instrumentation | ENG61003         | ENG60903  | Core         | 3               |  |  |
| 2.  | Electronics and Microprocessors          | ENG61603         | ENG60903  | Core         | 3               |  |  |
| 3.  | Final Year Engineering Project 1         | PRJ60703         | PRJ60603<br>Complete at<br>least 95<br>credit hours | Core         | 3               |  |  |
| 4.  | Mechanical Vibration                     | MEC60503         | None  | Core         | 3               |  |  |
|     | Chc                                      | ose Electives    |   |              |                 |  |  |
|     | Computational Fluid Dynamics<br>(CFD)    | MEC60703         | None  | Elective     | 3               |  |  |
|     | Engineering Economics                    | CHE61303         | None  | Elective     | 3               |  |  |
|     | Renewable and Alternative<br>Energies    | MEC61003         | None  | Elective     | 3               |  |  |
|     | Total Quality Management                 | ENG4413          | None  | Elective     | 3               |  |  |
|     |  |                  | Tc  | otal Credits | 15              |  |  |
|     | S  | Semester 8       |   |              |                 |  |  |
| 1.  | Final Year Engineering Project 2         | PRJ60206         | PRJ60703  | Core         | 6               |  |  |
| 2.  | Professional Engineers & Society         | ENG61503         | None  | Core         | 3               |  |  |
|     |  | Choose Electives | 1   | 1            |                 |  |  |
|     | Computational Fluid Dynamics<br>(CFD)    | MEC60703         | None  | Elective     | 3               |  |  |
|     | Engineering Economics                    | CHE61303         | None  | Elective     | 3               |  |  |
|     | Renewable and Alternative<br>Energies    | MEC61003         | None  | Elective     | 3               |  |  |
|     | Total Quality Management                 | ENG4413          | None  | Elective     | 3               |  |  |
|     |  |                  | Тс  | otal Credits | 15              |  |  |

# Module Synopsis –Bachelor of Engineering (Hons) Mechanical Engineering

| Module   | Code       | Synopsis  |
|--|------------|---|
| Automatic Control<br>and<br>Instrumentation                    | ENG61003   | Overview of instrumentation system elements, control system<br>basics, process controllers, correction elements, PLC systems,<br>system models, transfer functions, system response, and<br>frequency response.   |
| Business Skills for<br>Engineers                               | BUS60403   | Covers the engineering and management and business<br>environment, including the financial and legal aspects of doing<br>business and E-Commerce.   |
| Community Service<br>Initiative                                | UCM60102U4 | This module is to enable students to engage in the practice<br>and theory of service learning, to familiarise with<br>empowerment and social actions and to understand the role<br>of education in a changing multi-ethnic society.   |
| Computational<br>Fluid Dynamics<br>(CFD)                       | MEC60703   | Present the essential concepts and skills for CFD using both a theoretical approach and practical approach using commercial software.   |
| Computer Aided<br>Engineering and<br>Geometric<br>Modelling    | ENG60603   | This module presents the processes of CAE from the conceptual design stage to the manufacturing stage via hands-<br>on and virtual experience of component shape design.  |
| Computing<br>Applications for<br>Engineers                     | ENG60104   | Provides skills that promote the effective use of programming with MatLab and C Programming.  |
| Data<br>Measurement,<br>Analysis and<br>Experimental<br>Design | ENG61103   | This module introduces the statistical methodologies<br>necessary to design and analyse a range of industrial<br>experiments.   |
| Electronics and<br>Microprocessors                             | ENG61603   | This module introduces the students to basic knowledge needed to work with microprocessors in a variety of situations.  |
| Engineering Design<br>& Ergonomics                             | PRJ60203   | This module provides foundation in designing products that<br>work in accordance with the way humans think, see and<br>behave. Products that are compatible with people with<br>dramatically reduce human error, fatigue, discomfort and<br>stress and have a profound positive impact on overall end-<br>user performance. |

| Module                                 | Code     | Synopsis  |
|--|----------|---|
| Engineering Design<br>& Innovation     | PRJ60403 | This module equips engineering students with innovation techniques such as design thinking and TRIZ, sharpening their innovation skills. This will empower them to develop financially and economically sustainable solutions and enable.   |
| Engineering<br>Dynamics                | ENG60403 | This module builds upon the concepts and techniques used in<br>Engineering Statics (ENG60103) and introduces the students<br>to the scope of kinematics and kinetics. Newton's Laws of<br>Motion will be introduced and developed to allow the student<br>to deal with problems related to automotive and machine<br>motion. The three dimensional nature of motion is considered<br>and explored using simple vector concepts and basic calculus.<br>The basic methods of force/acceleration, impulse/momentum<br>and work/energy are developed and applied. |
| Engineering<br>Economics               | CHE61303 | This module deals with principles and the basic equations for<br>the value of money and alternative selections. It considers the<br>factors in the engineering economy, interest rates, present<br>worth, annual worth, rate of return, income tax and<br>breakeven analysis.   |
| Engineering<br>Mathematics II          | MTH60203 | This module covers more essential mathematical knowledge and techniques for solving engineering problems.   |
| Engineering<br>Mathematics III         | MTH60303 | This module covers the mathematical modelling of engineering problems using differential equations and introduces various techniques for solving the problems.  |
| Engineering<br>Mathematics IV          | MTH60403 | This module covers the transformation of system representation between time and complex frequency domains and its analysis and solution. This module also covers basic statistics and probability theories and their applications.  |
| Engineering Solids<br>Mechanics        | MEC60103 | Overview of analysis of stress and strain in different structures together with plastic deformation and fracture mechanics.   |
| Final Year<br>Engineering Project<br>1 | PRJ60703 | This is an individual research project. Student selects a project<br>from a given list. Project is awarded based on higher CGPA<br>should more than one student select the same project. The<br>pre-requisite for this module is that the student must be in the<br>final two semesters of study (completed at least 95 credit<br>hours), and has completed all the project based modules<br>required from semester 1 to semester 6.  |
| Final Year                             | PRJ60206 | This is a continuation of the Final Year Engineering Project I  |

| Module   | Code       | Synopsis  |
|--|------------|---|
| Engineering Project<br>2   |            | (PRJ60703). Students continue their research work: collecting data, conducting experiments, or through whatever approach that has been decided upon in PRJ60703. The project concludes with a thesis, oral defense, EURECA conference and Engineering Fair.   |
| Introduction to<br>Electronics and<br>Electrical Power<br>Machines | ENG60903   | The aim of this module is to introduce aspects of electronics<br>and electrical engineering to students of other engineering<br>disciplines in the context of applications in their discipline.<br>This should develop their confidence when interacting with<br>electrical engineers in industry. The module begins with a<br>review of the areas where electronic and electrical<br>engineering principles are applied in civil, chemical,<br>manufacturing and mechanical engineering and materials<br>science. An introduction to basic concepts of electronics leads<br>into DC circuits and circuit analysis, power and energy. An<br>appreciation of linear and non-linear components is provided<br>through the diode and LED. Active learning in the lecture<br>environment will be a key feature of this section. The concept<br>of electrical transducers as a means of interfacing to, and<br>monitoring, the real world leads to the simple application of<br>operational amplifiers. Examples of uses of transducers and<br>actuators in engineering industry will emphasise the<br>importance of proper calibration. As an exercise students will<br>specify a transducer for a particular application to achieve the<br>appropriate range, gain and accuracy. |
| Leading in the 21st<br>Century                                     | UCM60402U2 | At the end of the programme, students will be able to avoid<br>common leadership pitfalls by mastering relevant skills set<br>such as decision-making, goal-setting, motivation, conflict<br>management and teamwork.   |
| Malaysian Food<br>Heritage   | UCM60102U3 | This module will take the students through the historical event<br>that brought changes to the culinary environment in Malaysia<br>specifically to the ingredients availability, and the techniques<br>used to prepare the food. The students will also have the<br>opportunity to discuss about the impact of current issues such<br>as shortage of food ingredients, improvement of technology<br>that will change the authenticity of the food itself.   |
| Malaysian Studies 3  | MPU3173    | Malaysian Studies encompasses the story of; early history of<br>Malaya up to the formation of Malaysia, administrative<br>system of Malaysia and Malaysian economic, social and<br>foreign policies.  |

| Module  | Code     | Synopsis  |
|---|----------|---|
| Managing Projects<br>for Success              | ENG60703 | Ensuring projects run successfully has become very critical in<br>today's fast changing world. The module will cover the<br>knowledge areas and explore the key factors for completing<br>projects on time within budget and allocated resources.<br>Practical tools and techniques will be introduced to guide and<br>manage projects to success   |
| Manufacturing<br>Engineering                  | MEC60203 | This module introduces the range of materials used in<br>engineering applications along with some basic selection rules<br>for determining the appropriate materials for a given<br>application. The module also introduces fundamental science<br>that determines the properties of materials, such as bonding<br>types and atomic / molecular structures.   |
| Mechanical<br>Engineering Group<br>Project I  | PRJ60503 | The students will work in teams to solve an engineering problem, analyse an engineering failure or build an engineering product. Student evaluation for this module is in two parts: group and individual (50:50). The individual component is assessed through student logbooks and individual reports, while the group effort (equal to all) is based on the artefact made.                                   |
| Mechanical<br>Engineering Group<br>Project II | PRJ60603 | The students will continue working in teams to solve a continuing engineering problem, analyse an engineering failure or build an engineering product. Student evaluation for this module is in two parts: group and individual (50:50). The individual component is assessed through student logbooks and individual reports, while the group effort (equal to all) is based on the artefact made.             |
| Mechanical<br>Vibration                       | MEC60503 | Introduction to vibrations, degrees of freedom, harmonic response, general forced response, vibration suppression.  |
| Multidisciplinary<br>Engineering Design       | PRJ60303 | The main features of this module are the System Thinking,<br>multidisciplinary and complexity level of the design encounter<br>with focus on satisfying contradicting stakeholder's<br>requirements and sustainability. While working in<br>multidisciplinary teams students will create products and<br>processes that are designed for manufacturability,<br>affordability, recyclability and sustainability. |

| Module  | Code     | Synopsis  |
|---|----------|---|
| Numerical Analysis<br>for Engineers with<br>Applications using<br>ANSYS | ENG61203 | Present the numerical methods and introduce the use of ANSYS to understand a range of issues that are related to how does numerical commercial packages operate.  |
| Professional<br>Engineers & Society                                     | ENG61503 | To study the various roles and responsibilities of an Engineer<br>in society, also highlighting the moral and ethical<br>responsibilities of Professional Engineers as well as the role of<br>Engineering as a profession in improving the quality of life and<br>addressing societies Grand Challenges.  |
| Properties and<br>Applications of<br>Materials                          | ENG60503 | This module introduces the range of materials used in<br>engineering applications along with some basic selection rules<br>for determining the appropriate materials for a given<br>application. The module also introduces fundamental science<br>that determines the properties of materials, such as bonding<br>types and atomic / molecular structures.   |
| Renewable and<br>Alternative<br>Energies                                | MEC61003 | Renewable energies, solar energy, bioenergy, hydroelectricity, tidal power, wave energy, wind energy, geothermal energy, integration.   |
| Theory of Machines<br>and Mechanisms                                    | MEC60303 | Provide a range of skills related to mechanics of machines like degrees of freedom, and the design and analysis of important mechanism such as slider crank, four bar mechanism, cams.  |
| Thermodynamics<br>and Heat Transfer                                     | ENG60303 | This module combines the knowledge related to both energy<br>transfer (as heat) and thermodynamics to expose the students<br>to a wide variety of topics that will be instrumental in their<br>academic and career advancement like the applications of the<br>first and second laws of thermodynamics and the mechanisms<br>with which heat transfers. This is tied closely to the analysis of<br>heat engines, heat pumps, heat cycles and heat exchangers. |
| Total Quality<br>Management   | ENG4413  | This module comprises three interlinked modules<br>fundamentals of TQM, methods of TQM and process<br>management and improvement - and provides an integrated<br>approach to this increasingly important business strategy.   |

### TAYLOR'S BUSINESS SCHOOL

### **Programme Structure - Bachelor of Business (International Business)**

| No.    | Module Title                              | Code      | Prerequisites | Status             | Credit<br>Hours |  |
|--------|---|-----------|---------------|--------------------|-----------------|--|
| Year 1 |   |           |               |                    |                 |  |
|        | Se  | mester 1  | 1             | 1                  |                 |  |
| 1.     | Business Communication                    | COM60104  | None          | Core               | 4               |  |
| 2.     | Introduction to Accounting                | ACC60104  | None          | Core               | 4               |  |
| 3.     | Introduction to Management                | MGT60104  | None          | Core               | 4               |  |
| 4.     | Microeconomics                            | ECN60104  | None          | Core               | 4               |  |
| 5.     | Quantitative Methods for Business         | STA60104  | None          | Core               | 4               |  |
|        |   |           | Тс            | otal Credits       | 20              |  |
|        | Se  | emester 2 |               |                    |                 |  |
| 1.     | Introduction to Finance                   | ECN60204  | None          | Core               | 4               |  |
| 2.     | Macroeconomics                            | FIN60104  | ECN60104      | Core               | 4               |  |
| 3.     | Organisational Behaviour                  | OBM60104  | None          | Core               | 4               |  |
| 4.     | Principles of Marketing                   | MKT60104  | MGT60104      | Core               | 4               |  |
|        |   |           | To            | otal Credits       | 16              |  |
|        |   | Year 2    |               |                    |                 |  |
|        | Se  | emester 3 |               |                    |                 |  |
| 1.     | Business Law                              | LAW60104  | None          | Core               | 4               |  |
| 2.     | Elective Yr 2                             |           |               | Elective           | 4               |  |
| 3.     | Human Resource Management                 | HRM60104  | None          | Core               | 4               |  |
| 4.     | Introduction to International<br>Business | BUS60104  | None          | Core               | 4               |  |
|        | •   |           | Тс            | otal Credits       | 16              |  |
|        | Se  | mester 4  |               |                    |                 |  |
| 1.     | Elective Yr 2                             | COM61104  |               | Elective           | 4               |  |
| 2.     | Export Practices and Management           | EVT60203  | BUS60104      | Specialis<br>ation | 4               |  |
| 3.     | International Finance                     | PRL60404  | None          | Specialis<br>ation | 4               |  |
| 4.     | Research Methods                          | EVT60403  | None          | Specialis<br>ation | 5               |  |
| 5.     | Supply Chain Management                   | EVT60303  | None          | Specialis<br>ation | 4               |  |
|        |   |           | Тс            | otal Credits       | 20              |  |
|        |   |           |               |                    |                 |  |

| No. | Module Title                                      | Code           | Prerequisites | Status             | Credit<br>Hours |
|-----|---|----------------|---------------|--------------------|-----------------|
|     |   | Year 3         |               |                    |                 |
|     | S   | emester 5      | I             | []                 |                 |
| 1.  | Business Ethics and Values                        | BUS60204       | None          | Core               | 4               |
| 2.  | Elective Yr 3                                     |                |               | Elective           | 4               |
| 3.  | Elective Yr 3                                     |                |               | Elective           | 4               |
| 4.  | Transnational Management                          | MGT60604       | BUS60104      | Specialis<br>ation | 4               |
|     |   |                | Тс            | otal Credits       | 16              |
|     | S   | emester 6      |               |                    |                 |
| 1.  | Elective Yr 3                                     |                |               |                    | 4               |
| 2.  | Elective Yr 3                                     |                |               |                    | 4               |
| 3.  | International Business Issues and Policies        | BUS60404       | BUS60404      | BUS6040<br>4       | 4               |
| 4.  | Strategic Management                              | MGT60504       | MGT60504      | MGT605<br>04       | 5               |
|     | Total Credits                                     |                |               |                    | 16              |
|     | Electives F                                       | or The Program | ime           |                    |                 |
| 1.  | Entrepreneurship and Small<br>Business            | BUS60304       | None          | Elective           | 4               |
| 2.  | Intercultural Communication for<br>Business       | COM60204       | None          | Elective           | 4               |
| 3.  | International Human Resource<br>Management        | HRM60804       | None          | Elective           | 4               |
| 4.  | International Marketing                           | MKT60704       | MKT60104      | Elective           | 4               |
| 5.  | International Trade and<br>Multinational Business | ECN60404       | None          | Elective           | 4               |
| 6.  | Management Accounting                             | ACC60404       | ACC60104      | Elective           | 4               |
| 7.  | Organisational Studies                            | OBM60204       | OBM60104      | Elective           | 4               |
| 8.  | Production and Operation<br>Management            | MGT60204       | None          | Elective           | 4               |

# Module Synopsis - Bachelor of Business (International Business)

| Module                                 | Code      | Synopsis  |
|--|-----------|---|
| Business<br>Communication              | MGT60104  | Business Communication equips students with the<br>necessary written and spoken skills for effective business<br>communication. Students are exposed to various business<br>correspondences and taught practical strategies to write<br>convincing messages. Students are also taught to<br>strategise, and to use appropriate and ethical approaches<br>in writing not only routine messages, but also persuasive<br>and negative messages. Listening and speaking skills are<br>also focused on to ensure effective interpersonal<br>communication This module also emphasis the need for<br>business communication to be seen in a global context<br>where various considerations such as technological<br>advances and ethical considerations play a vital role in<br>ensuring that all business messages achieve their aims in<br>a positive manner. |
| Business Ethics and<br>Values          | BUS60204  | This module provides an understanding of the ethical<br>issues and dilemmas affecting managers in organisations<br>and developing an appreciation for, professional<br>responsibility and integrity. It aims to raise awareness of<br>the practical issues facing people in business, introduce a<br>framework or guidelines for analysis and decision making,<br>and enhance students' ability in reasoning towards<br>resolving the dilemmas based on ethical principles. The<br>discussions of ethical issues are used as an avenue for<br>further improvement in analytical and communication<br>skills.  |
| Business Law                           | LAW 60104 | NA  |
| Entrepreneurship and<br>Small Business | BUS60304  | This course is for students who wish to learn the principles and processes of small business and entrepreneurship. It is designed for individuals interested in starting a new business venture, acquiring an existing business, or working in industries that serve entrepreneurs. The course provides an overview of the many principles and processes of entrepreneurship and small business management.   |
| Export Practices and<br>Management     | MGT60304  | There are new opportunities & challenges arising in global<br>marketing and exporting. In order for any organisation to<br>take advantage of the opportunities present as well as to<br>rise above the challenges faced, it has to be adaptable to  |

| Module   | Code     | Synopsis  |
|--|----------|---|
|  |          | changes. Opportunities are expanding as international<br>trade continues to grow rapidly. The role of ecommerce is<br>to enable even the smallest business to find potential<br>customers and means of distribution across the globe.<br>The challenges of it would be increased competition,<br>disruptions of trade flows (military), natural disasters etc.  |
| Human Resource<br>Management                     | HRM60104 | This module helps students develop an understanding of<br>the fundamentals of human resource management. It<br>explores the central, strategic role that human resource<br>plays in making organisations more competitive. Students<br>will be exposed to the human resource concepts,<br>functions and practices including recruitment and<br>selection, training and development, compensation and<br>benefits, performance management, employee rights,<br>health and safety, industrial relations and trade unions.   |
| Intercultural<br>Communication for<br>Business   | COM60204 | This module introduces students to the role of cultural patterns, and cultural profiles of nations in different parts of the world. At the end of the module, students will be able to increase their understanding of the relationship between culture and communication from various cultural backgrounds. They will be able to identify and analyse the role of cultural patterns and obstacles to competent intercultural collaboration in the development of intercultural group working relationships, thus making business deals easier and avoiding costly misunderstandings.   |
| International<br>Business Issues and<br>Policies | BUS60404 | The international business issues and policy is the capstone module for the International Business major. In this module, we will examine both the principles associated with the formation and implementation of business strategy, as well as the latest research about business strategy, which challenges traditional ways of thinking. We will apply those ideas via case studies and simulations. Globalisation means that almost every company is affected by competition from foreign enterprises. Many firms are seeking opportunities to enter new foreign markets and expand in ones they already have penetrated. Managing in a globalizing environment requires knowledge of the regulatory and policy systems of international trade. This module provides this essential knowledge explaining both the theoretical and practical dimensions. The broad aim is to |

| Module  | Code     | Synopsis   |
|---|----------|--|
|   |          | provide insight into current issues that play a dramatic<br>role in the business landscape and to understand the<br>current challenges facing businesses as constituents in<br>the broader societal context. In addition students will be<br>familiar with the strategic and management issues<br>currently faced by various organisations through a<br>consideration of the structure and challenges of the<br>industry at the global, national and provincial levels.  |
| International Finance                         | FIN61104 | This module introduces main concepts and methods<br>associated with international financial decision-making<br>for multinational business: the concept of multinational<br>financial management, FOREX, risk analysis and tools,<br>financing foreign trade, international portfolio investment<br>and corporate strategy.   |
| International Human<br>Resource<br>Management | HRM60804 | Human resource management issues play a significant<br>role in strategy and decision making- whether a company<br>is considering its international presence, transitioning to a<br>global entity or acquiring new business lines. Students will<br>examine the critical role that HRM plays in the<br>competitive and collaborative world of international<br>business. The course topics include strategic HRM in<br>multinational companies, international staffing, managing<br>expatriate, international compensation, careers and<br>repatriation, issues in the management of industrial<br>relations in international firms, contemporary and<br>emerging issues in international human resource<br>management. |
| International Human<br>Resource<br>Management | HRM60804 | Human resource management issues play a significant<br>role in strategy and decision making- whether a company<br>is considering its international presence, transitioning to a<br>global entity or acquiring new business lines. Students will<br>examine the critical role that HRM plays in the<br>competitive and collaborative world of international<br>business. The module topics include strategic HRM in<br>multinational companies, international staffing, managing<br>expatriate, international compensation, careers and<br>repatriation, issues in the management of industrial<br>relations in international firms, contemporary and<br>emerging issues in international human resource<br>management. |
| International<br>Marketing                    | MKT60704 | This module is designed to introduce students to advanced marketing concepts and practices in a global   |

| Module   | Code     | Synopsis  |
|--|----------|---|
|  |          | business environment. A comprehensive overview of the<br>dynamics and trends in international marketing include<br>market analysis, strategic planning, market selection and<br>entry strategies, product positioning, integrated<br>marketing communications, distribution, and pricing.<br>Special emphasis will be placed on the development and<br>delivery of international marketing plan where students<br>have the opportunity working with a Malaysian firm. The<br>module addresses the skills necessary for evaluating,<br>developing, and delivering marketing programmes for a<br>global and multicultural audience.   |
| International Trade<br>and Multinational<br>Business | ECN60404 | In an ever progressing and changing business<br>environment; trade, finance and investment play a crucial<br>and significant role in the world economy. This module<br>concentrates on the introduction of the key theories<br>explaining international trade, finance and investment.<br>Framework of this module will give importance to expose<br>learners with to the fundamental concepts of<br>international trade, finance and investment and tools that<br>are essential for them to understand and analyse the<br>operation of international currency markets and the<br>different types of exchange rate regimes. It complements<br>other Level Two Economics/Finance modules and<br>provides a basis for Level Three Economics/Finance<br>modules. |
| Introduction to<br>Accounting                        | ACC60104 | This module is an introduction to the technical aspects of financial accounting, as well as to the financial community. As a member of the financial community you will be expected to be updated on current business and financial events. Now is a good time to start a regular habit of reading the accounting and financial press.  |
| Introduction to<br>Finance                           | FIN60104 | This module introduces main concepts and methods<br>associated with financial decision-making for individuals<br>and enterprises: the concept of cash flow valuation,<br>evaluation of financial performance, valuation of<br>securities, risk and returns, capital budgeting, and an<br>overview of international finance.   |
| Introduction to<br>International<br>Business         | BUS60104 | The module is designed to provide students with an<br>insight into International Business. It covers a practical<br>framework for understanding the key issues, current<br>relevant principles and concepts to be considered in   |

| Module                        | Code     | Synopsis  |
|-------------------------------|----------|---|
|                               |          | doing business abroad. The goal of the module is to help<br>students to understand the basic principles of<br>international business and their impact on the world's<br>economy. International Business introduces students to<br>various issues and challenges associated with the<br>formulation and implementation of strategies in business<br>organisations whose operations stretch across national<br>borders. Throughout the module, students will be<br>systematically introduced to the complexities and<br>challenges of leading and managing a "global" company.<br>Further, the module will provide students with an<br>opportunity to integrate business decisions with the<br>ethical and social responsibility considerations inherent to<br>playing on a global field. |
| Introduction to<br>Management | MGT60104 | This module is designed to provide the candidate with the basic concepts and principles of management in organisations. It focuses on the context of managerial activity and covers the four major functions of management i.e. planning, organising, leading and controlling and places them in a historical, political and economic context.  |
| Macroeconomics                | ECN60204 | In an increasingly globalised world, countries and their<br>governments need to be able to make quick, well<br>informed and correct decisions in order to achieve their<br>macroeconomic objectives. This module looks into the<br>workings of a domestic economy and the policies that<br>governments may implement to improve the business<br>environment. The module outlines the various<br>macroeconomic tools of analysis and analytical<br>frameworks that are essential for business students to<br>learn and understand to enable them to comprehend the<br>national and global economy in a structured way. It<br>complements other Year One business modules and<br>provides a basis for Year Two and Three modules in both<br>business and economics.                       |
| Management<br>Accounting      | ACC60404 | This module is an introduction to the basic techniques of<br>management accounting and its role in the manufacturing<br>and service business environments. Management<br>accounting techniques are applied in all organisations.<br>Students learn that with the current competitive business<br>environment, good application of costing system would<br>help organisations to compete.  |

| Module                                    | Code     | Synopsis   |
|---|----------|--|
| Microeconomics                            | ECN60104 | In a continuously ever changing globalised business<br>environment, businesses need to make quick, well<br>informed and correct decisions in order to survive. This<br>module is concerned about the principles of<br>microeconomics as they apply to the business<br>environment. The module outlines the various<br>microeconomic tools of analysis and analytical<br>frameworks that are essential for business students to<br>learn and understand to enable them to comprehend the<br>economic environment of business in a structured way. It<br>complements other Year One business modules and<br>provides a basis for Year Two and Three modules in both<br>business and economics. |
| Organizational<br>Behaviour               | OBM60104 | This module is designed to provide the candidate with an introduction to psychological and behavioural approaches to the study of work and organisations. The module introduces some of the basic analytical tools and concepts from the fields of organisational behaviour and work psychology that encourage an understanding of the behaviour of individuals and groups in the workplace.   |
| Organizational<br>Studies                 | OBM60204 | This module is designed to provide the candidate with the capacity to analyse an organisation from a multiple perspective framework that involves 'reading' the organisations and interpreting organisational situations from these different perspectives so as to understand better how the organisation functions.  |
| Principles of<br>Marketing                | KT60104  | This module introduces students to the key marketing<br>concepts and strategies employed by marketers in facing<br>the challenges in a dynamic business environment. It<br>develops an understanding of the overall process of<br>planning, implementation and control in the<br>contemporary business environment. This module<br>provides students with the needed conceptual skills to<br>identify, analyse and solve marketing problems. This<br>module also provides a foundation for those who intend<br>to further study in the marketing field or other business<br>related modules.   |
| Production and<br>Operation<br>Management | MGT60204 | This subject details the management perspective on the production and operations function in a business. It provides a strong review of the important concepts which underpins the POM task, and sets the relevant issues and  |

| Module                             | Code     | Synopsis  |
|------------------------------------|----------|---|
|                                    |          | techniques within the broader context of the<br>management and control of the whole business.<br>Contemporary topics on global competition, quality<br>management, customer service and JIT, their influences<br>are discussed.   |
| Quantative Methods<br>for Business | STA60104 | This module is designed to provide students with an<br>appreciation of the application of analytical tools to<br>business decision contexts. It also develops students'<br>abilities to access and critically interpret statistics and<br>business information. The module places strong emphasis<br>on developing a clear theoretical understanding of<br>various analytical tools. This is particularly true in<br>business where learning to deal with randomness,<br>variation and uncertainty is a vital skill for anyone<br>intending to apply their knowledge in any employment.<br>Students will also gain an introduction to many of the<br>quantitative techniques which will be used throughout<br>their further studies in their chosen discipline.   |
| Research Methods                   | RES60104 | This module examines research designs commonly used<br>in business decision making. Topics include research<br>design, implementation and finally interpretation of<br>research as these are related to problems in an<br>organisational setting. This module will also cover issues<br>on access and research ethics. This module provides a<br>guide to the research process and the needed knowledge<br>and skills to undertake research as well as highlights some<br>common research pitfalls. At the end of this module,<br>students will learn a range of research approaches,<br>strategies and methods in handling their research<br>projects. Skill development in statistical applications<br>software is also one of the objectives of this module.<br>Students are required to submit a research proposal as<br>part of the module requirements. |
| Strategic<br>Management            | MGT60504 | This module is designed to provide the candidate with a comprehensive understanding on how organisations are managed strategically with the emphasis of putting theory into practice. The major areas in strategic management that includes strategy formulation, implementation and evaluation are taught together with appropriate case analysis.   |

| Module                      | Code     | Synopsis  |
|-----------------------------|----------|---|
| Supply Chain<br>Management  | MGT60404 | Supply Chain (SC) is a network of business entities<br>consisting of suppliers' suppliers, suppliers, customers<br>and customers' customers. Supply chain management<br>deals with the management of material flows,<br>information flows and financial flows that cut across<br>multiple business entities (companies). The co-ordination<br>and integration of these flows both within and across<br>companies are critical to compete successfully in today's<br>market place. Companies have always acknowledged the<br>fact that the integration and co-ordination among<br>multiple functional areas will create competitive<br>advantages. Having said that one might ask "What is so<br>new about SCM?". The answer lies in the dimension, viz.,<br>extended enterprise integration (coordination). As<br>companies become more global and the competitive<br>pressures are more intense, companies must think<br>beyond functional integration and need to think for<br>integration and co-ordination at extended enterprise<br>level. An increasing number of Fortune 500 companies<br>such as Chrysler, Hewlett Packard, IBM, P&G, Unilever,<br>and Xerox have been stressing importance of SCM and<br>are leveraging advances in IT and opportunities to form<br>strategic alliances to tightly integrate their supply chain.<br>Considering these developments in business<br>environment, this module aims to introduce you to the<br>field of SCM. |
| Transnational<br>Management | MGT60604 | This module focuses on management's challenge<br>associated with developing strategies, designing<br>organisations and managing operations of companies<br>whose activities stretch across national boundaries.<br>Operating in an international arena will provide various<br>opportunities for the company. This is because having<br>worldwide operations not only gives a company access to<br>new markets and specialized resources but it also opens<br>up new sources of information as well as knowledge and<br>broadens the options of strategic moves the company<br>might make in competing with its domestic and<br>international rivals. Like any other opportunities provided<br>by cross-border management, companies will still have to<br>face the challenges of managing strategy, organisation<br>and operations that are innately complex diverse and<br>uncertain. In this module a conceptual baseline would<br>provide for a more detailed discussion of the various<br>issues faced in the cases presented. Some typical  |

| Module | Code | Synopsis  |
|--------|------|---|
|        |      | attitudes and mentalities would normally shape the<br>actions of managers in MNCs (Multi-National Companies)<br>and suggest how these attitudes and mentalities evolve<br>as their off-shore operations progress from the state of<br>initial investments to a fully integrated worldwide<br>network of affiliates. |

### SCHOOL OF HOSPITALITY, TOURISM AND CULINARY ARTS

- Please use this form as Module Registration Form.
- This is applicable to:
  - 1. Bachelor of Culinary Arts & Food Service Management (Hons)
  - 2. Bachelor of International Tourism Management (Event Management)(Hons)
  - 3. Bachelor of International Hospitality Management (Hons)
  - Bachelor of International Tourism Management (Travel & Recreation Management)(Hons)
  - 5. BSc Culinology

#### **IMPORTANT NOTE:**

1- Applicants must register for a semester exchange in a Bachelor Degree similar to their current one

2- Modules offered are suitable for students having completed at least three semesters of their bachelor degree

3- Applicants should select between 5 and 7 modules. The total number of credit must be above 12 credits and below 20 Credits (1 Cr= 1.5 ECTS)

4- The "Recommended Modules" shows the block of modules offered for semester-exchange students

5- Applicants can replace one or two modules from the recommended block modules list below. However, it is subject to availability at the beginning of the semester

# Bachelor of Culinary Arts & Foodservice Management (Hons) MODULE REGISTRATION

| Recommended Modules block for BC (take at least 5) |  |           |         |      |
|--|--|-----------|---------|------|
| Module<br>Code                                     | Module Title                               | Total SLT | Credits | Tick |
| CUL60303   | Foodservice Project Planning & Engineering | 120       | 3.0     |      |
| ECN60103   | Tourism Economics                          | 120       | 3.0     |      |
| FIN60103   | Financial Management                       | 120       | 3.0     |      |
| FRE60202   | French 2 -Intermediate                     | 80        | 2.0     |      |
| CUL60202   | Food Supply Chain Management               | 80        | 2.0     |      |
| CUL60402   | Nutritional and Sensorial Analysis         | 80        | 2.0     |      |
| COM60202   | Professional Food Writing                  | 80        | 2.0     |      |

| Alternate Modules (take between 0 and 2) |  |           |         |      |
|--|--|-----------|---------|------|
| Module<br>Code                           | Module Title                               | Total SLT | Credits | tick |
| LAW60103                                 | Tourism & Hospitality Law                  | 120       | 3.0     |      |
| RES60102                                 | Research Methodology                       | 80        | 2.0     |      |
| FRE60102                                 | French 1 -Basic                            | 80        | 2.0     |      |
| CUL60302                                 | Psycho Sociology of Food and Eating Habits | 80        | 2.0     |      |
| CUL60103                                 | Kitchen Operations 3 (Asian Cuisine)       | 120       | 3.0     |      |

| Applicant Name and Signature                     | Date: |
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| Approval from Home Institution                   | Date: |
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| Verified By                                      | Date: |
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| (GLOBAL MOBILITY OFFICE)                         |       |
| Approved By                                      | Date: |
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| School of Hospitality, Tourism and Culinary Arts |       |

Final Module offered is subject to availability.

### Bachelor of International Hospitality Management (Hons) MODULE REGISTRATION

| Recommended Modules Block for BH (take at least 5) |  |           |         |      |
|--|--|-----------|---------|------|
| Module Code  | Module Title   | Total SLT | Credits | Tick |
| HRM60103   | Hospitality Human Resource Management                      | 120       | 3.0     |      |
| ECN60103   | Tourism Economics  | 120       | 3.0     |      |
| MGT60202   | Revenue Management   | 80        | 2.0     |      |
| FRE60202   | French 2 -Intermediate                                     | 80        | 2.0     |      |
| BUS60103   | Entrepreneurship for Hospitality                           | 120       | 3.0     |      |
| REC60203   | Recreational Management Applications: Resort<br>Management | 120       | 3.0     |      |

### Alternate Modules (take between 0 and 2)

| Module Code | Module Title                       | Total SLT | Credits | tick |
|-------------|------------------------------------|-----------|---------|------|
| LAW60103    | Tourism & Hospitality Law          | 120       | 3       |      |
| FRE60102    | French 1 -Basic                    | 80        | 2       |      |
| MKT60203    | Integrated Marketing Communication | 120       | 3       |      |
| ACC60203    | Management Accounting              | 120       | 3       |      |
| HOS60602    | Hospitality Simulation             | 80        | 2.0     |      |

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### Final Module offered is subject to availability.

### Bachelor of International Tourism Management (Event Management) (Hons) MODULE REGISTRATION

| Recommended Modules Block for BE (take at least 5) |  |           |         |      |
|--|--|-----------|---------|------|
| Module Code  | Module Title                           | Total SLT | Credits | Tick |
| HRM60103   | Hospitality Human Resources Management | 120       | 3.0     |      |
| MKT60203   | Integrated Marketing Communications    | 120       | 3.0     |      |
| FIN60103   | Financial Management                   | 120       | 3.0     |      |
| FRE60202   | French 2 -Intermediate                 | 80        | 2.0     |      |
| EVT60603   | Special Events & Festivals             | 120       | 3.0     |      |
| EVT60703   | Live Event Project                     | 120       | 3.0     |      |

### Alternate Modules (take between 0 and 2)

| Module Code | Module Title              | Total SLT | Credits | tick |
|-------------|---------------------------|-----------|---------|------|
| LAW60103    | Tourism & Hospitality Law | 120       | 3.0     |      |
| RES60102    | Research Methodology      | 80        | 2.0     |      |
| FRE60102    | French 1 -Basic           | 80        | 2.0     |      |
| MGT60202    | Revenue Management        | 80        | 2.0     |      |

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| School of Hospitality, Tourism and Culinary Arts |       |

# Final Module offered is subject to availability

# Bachelor of International Tourism Management (Travel & Recreation Management) (Hons) MODULE REGISTRATION

| Recommended Modules for BR (take at least 5) |   |              |         |      |
|--|---|--------------|---------|------|
| Module<br>Code                               | Module Title  | Total<br>SLT | Credits | Tick |
| HRM60103                                     | Hospitality Human Resources Management                  | 120          | 3.0     |      |
| ECN60103                                     | Tourism Economics                                       | 120          | 3.0     |      |
| FIN60103                                     | Financial Management                                    | 120          | 3.0     |      |
| FRE60202                                     | French 2 -Intermediate                                  | 80           | 2.0     |      |
| REC60403                                     | Recreational Management Applications: Spa<br>Management | 120          | 3.0     |      |
| TOU60402                                     | Tourism Marketing                                       | 80           | 2.0     |      |

#### Alternate Modules (take between 0 and 2)

| Module<br>Code | Module Title                    | Total<br>SLT | Credits | tick |
|----------------|---------------------------------|--------------|---------|------|
| LAW60103       | Tourism & Hospitality Law       | 120          | 3.0     |      |
| FRE60102       | French 1 -Basic                 | 80           | 2.0     |      |
| RES60102       | Research Methodology            | 80           | 2.0     |      |
| TOU60703       | Socio-anthropology of Tourism   | 120          | 3.0     |      |
| TOU60502       | Sustainable Tourism Development | 80           | 2.0     |      |

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|  |       |
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Final module offered is subject to availability.

# BSc Culinology® MODULE REGISTRATION

| Modules Block for BS (take the 4 modules) |  |           |         |      |
|---|--|-----------|---------|------|
| Module Code                               | Module Title                             | Total SLT | Credits | Tick |
| FSC60203                                  | Sensorial Analysis                       | 120       | 3       |      |
| FSC60504                                  | Food Processing                          | 160       | 4       |      |
| CUL60703                                  | Psycho-Sociology of Food & Eating Habits | 120       | 3       |      |
| CUL60503                                  | Experimental Food Products & Practices   | 120       | 3       |      |

| Optional Module (take between 0 and 1) |                                  |           |         |      |
|--|----------------------------------|-----------|---------|------|
| Module Code                            | Module Title                     | Total SLT | Credits | Tick |
| RES60102                               | Research Methodology             | 80        | 2       |      |
| NUT 60204                              | Introduction to Human Nutrition  | 160       | 4       |      |
| FBC60104                               | Manufacturing & Packaging        | 160       | 4       |      |
| FSC60403                               | Food Safety & Quality management | 120       | 3       |      |

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| School of Hospitality, Tourism and Culinary Arts |       |

Final module offered is subject to availability.