Table : Summary of Information on each course/module

(Subject 1)

No.	Item	Detailed Information
1.	Name of Course/Module	Introduction to Information System
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - • Explain the factors influencing information systems usability, the latest technological developments and trends in the IT industry. - • Identify the basic components of computer system hardware and the various types of software. - • Identify the concepts of information processing and enterprise computing. - • Describe the process of systems development, data communication and IT personnel structure. - • Identify the concept of ethics in a typical IT environment and explore the social implications of IT. - • Justify the need for integrity, security, and management provisions in information system. - understand the human aspect of Information Systems, in relation to ethical issues - the dos and don'ts of computing.
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
INTRODUCTION TO COMPUTERS A word of computers What Is Computer? The Components Of A Computer Why Is A Computer So Powerful? Networks And The Internet Computer Software Categories Of Computers Elements Of An Information System Example Of Computer Usage Computer Applications In Society	6	8	**14**
THE COMPONENT OF THE SYSTEM UNIT The system unit Processor Data representation Memory Expansion slots and adapter cards Ports and connectors Buses Bays Power supply Mobile computer and devices Putting it all together	6	8	**14**

INPUT What is input? What are input device? • Input device for physically challenged users	4	4	**8**
OUTPUT What is output? Display devices • Other Output Devices • Output Device for physically challenged users	4	4	**8**
STORAGE USB Floppy & Zip Disk Hard Disk CDs and DVDs Tape PC Cards Miniature Mobile Storage Media Microfilm and Microfiche Enterprise Storage	4	4	**8**
APPLICATION SOFTWARE Application software Business software Graphics and multimedia software Software for home, personal, and educational use Application software for communications Application software on the web	4	4	**8**
OPERATING SYSTEMS AND UTILITY PROGRAM System Software Operating Systems Operating System Functions Operating Systems Utility Programs Types Of Operating Systems • Stand Alone Operating Systems • Network Operating Systems • Embedded Operating Systems	6	8	**14**
THE INTERNET AND WORLD WIDE WEB The internetHistory of the internetHow the internet worksThe world wide webOther internet servicesNetiquetteWeb publishing	4	4	**8**
COMMUNICATIONS AND NETWORKS Communications Uses Of Computer Communications Networks Communications Software Communications Over The Telephone Network Communications Devices Home Networks Communications Channel Physical Transmission Media Wireless Transmission Media	4	4	**8**

	DATABASE MANAGEMENT Data and Information The Hierarchy Of Data Maintaining Data File Processing Versus Database Database Management Systems Relational, Object-Oriented and Multidimensional Databases Web Databases Database Administration	6	8	**14**
	COMPUTERS AND SOCIETY,SECURITY, PRIVACY AND ETHICS Computer Security Risks Computer Viruses, Worms and Trojan Horses Unauthorized Access and Use Information Theft System Failure Backing Up – The Ultimate Safeguard Internet Security Risks Ethics and Society Information Privacy Health Concerns of Computer Use	4	4	**8**
	INFORMATION SYSTEM DEVELOPMENT What is the System development Cycle? What iniatiates the System Development Cycle? • Planning Phase • Analysis Phase • Design Phase • Implementation Phase • Support Phase	4	4	**8**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 2)

No.	Item	Detailed Information
1.	Name of Course/Module	Introduction to Problem Solving and Programming
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - • apply the principles of modular, top-down design in designing problem solving algorithms; - • correctly translate algorithm designs into corresponding pseudocode or flowchart solutions; - • demonstrate program-testing techniques to debug a solution algorithm; - • design, implement, test and document computer programs using C language.
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Historical Overview Of Computers **-** What is a Computer System - Hardware - Software - Programming languages	4	5	**9**
Computer Programming **-** Introduction - What is Programming? - Classical Software Life Cycle	4	5	**9**
Applying the software development method **-** Case study - Algorithms	4	5	**9**
Flowchart **-** Flowcharting symbols - Structured Programming - Programming Guidelines	4	5	**9**
Problem solving and programming **-** Top down design and Structured programmings	4	5	**9**
Sequence - Flowchart and algorithms	4	5	**9**
Selection - Flowchart and algorithms	4	5	**9**
Repetition (loop) **-** Flowchart and algorithms	6	8	**9**

	Programming Process **-** Editing, compiling, and linking a C language program - Error types in Programming, What is a Program? - Sample C language Program	6	8	**14**
	The C Programming Language **-** Background, keywords, identifiers, constants, string constants, operators, punctuators, The printf function, The scanf function	6	8	**14**
	The C Programming Language **-** Expressions, Operators & Assignments - Selection - Making Decisions - LOGICAL OPERATORS / RELATIONAL OPERATORS: * If statement; * if…else Statements * switch STRUCTURES	6	8	**14**
	The C Programming Language **-** Loops: While loops, Do_While loops, The for Statement	6	8	**14**
	The C Programming Language **-** Functions: Introduction to Functions; Storage Duration & Scope	6	8	**14**
	The C Programming Language - Arrays: Introduction, Arrays and Functions	6	7	**13**
	Total Student Learning Time	**70**	**90**	**160**

Subject 3

No.	Item	Detailed Information		
1.	Name of Course/Module	INTRODUCTION TO BUSINESS		
2.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Introduction to Business • Business: 2006 and Beyond	6	10	**16**
	Business Ethics and Social Responsibility • Ethical and Societal Issues • The New Ethical Environment	8	10	**18**
	Economic Challenges for Global Dimensions of Business • The Forces of Demand and Supply • Types of Competition • Business Cycle, Monetary and Fiscal Policy	8	10	**13**
	Competing in Global Markets • Absolute Advantage, Comparative Advantage • Balance of Trade, Balance of Payments	8	10	**18**
	Starting and Growing your Business Options for Organising Small and Large Businesses • Major Forms of Businesses • Advantages and Disadvantages of Small Businesses	8	10	**18**
	Starting Your Own Business: The Entrepreneurship Alternative • Categories of Entrepreneurs • Factors Supporting and Expanding Opportunities for Entrepreneurs • Characteristics of Entrepreneurs	8	10	**18**
	Management, Leadership, and the Internal Organisation • The Management Hierarchy • Managerial Functions: Planning, Organising, Directing, and Controlling. • Types of Planning and its Importance	8	10	**18**
	Marketing Management Customer-Driven Marketing • Evolution of the Marketing Concept • Developing a Marketing strategy • Marketing Segmentation	8	10	**18**
	Managing Financial Resources Financial Management and Institutions • Role of Financial Manager • Sources of Funds	8	10	**18**

	• The Financial Systems and Financial Institutions			
	Total Student Learning Time	**70**	**90**	**160**

(Subject 4)

No.	Item	Detailed Information		
1.	Name of Course/Module	INTRODUCTION TO ACCOUNTING		
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Identify the users of accounting information and their needs - Explain the accounting process - Apply the double entry system of recording and preparation of financial statements Evaluate accounting statements, systems and reports. Create a set of transactions for a business of their own choice and apply the accounting process		
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Introduction to Accounting Accounting equations and balance sheets	3	4	**7**
	Assets, liabilities and owner's equity Ascertainment and recording of data	7	7	**14**
	Business entries: Systems of book-keeping Books of original entry and supporting documents Ledger accounts, Trial Balance & Account and flowcharts	7	8	**15**
	Periodic measurement of financial performance Revenue statements – preparation and role Measuring revenue and expenses,	8	9	**17**
	Accounting concepts	8	9	**17**
	Balance day adjustments: Prepayments and Accruals Depreciation Bad and doubtful debts, Closing entries, Reversing entries	8	9	**17**
	Preparation of financial statements Statement of Financial Performance Statement of Financial Position	8	9	**17**
	Analysis and interpretation of financial statements **Ratio analysis**	7	9	**16**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 5)

No.	Item	Detailed Information
1.	Name of Course/Module	Computing Mathematics
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - understand various number representations; - identify and describe a number of mathematical concepts needed in the study of computer arithmetic; - apply the techniques of propositional calculus to decide the validity of arguments; - identify the various concepts of sets and relations; - differentiate between logic gates; - simplify logic circuits; - solve an equation or a large system of equations; - apply the concepts of probability and combinatorial analysis
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Binary Number System: Decimal System, Binary System, Binary Addition and Multiplication Binary Substraction and Division, Complements	4	4	**8**
Computer Codes: Number System, Octal System, Hexadecimal System	4	4	**8**
Computer Arithmetic Mathematical Preliminaries, Exponential Form, Internal Representation, Computer Arithmetical & Errors	4	4	**8**
Logic Truth Tables: Conjunction, Disjunction, Propositions and Truth Tables, Tautologies and Contradiction	4	4	**8**
Logic Truth Tables: Logical Equivalence, Algebra of Propositions, Conditional and Biconditional Statements, Arguments, Logical Implications	4	4	**8**
Sets and Relations: Sets and Elements, Universal Set, Empty Set, Subsets, Venn Diagrams, Union and Intersection, Complements,	4	4	**8**
Sets and Relations: Algebra of sets, finite sets, Classes of Sets, Ordered Pair, Relations, Function.	4	5	**9**
Boolean Algebra and Logic Gates: Duality, Basic Theorems, Order and Boolean Algebras	4	5	**9**
Boolean Algebra and Logic Gates: Boolean Expressions; Sum of Products Form, Logic Gates, Logic Circuits	4	5	**9**
Simplification of Logic Circuits: Minimal Boolean Expressions, Karnaugh Maps, Minimal AND-OR Circuits	4	5	**9**

	Vectors, Matrices, Subscripted Variables Vectors, Matrices, Matrix Addition and Scalar Multiplication, Summation Symbol, Matrix Multiplication, Square Matrices, Invertible Matrices, Determinants, Invertible Matrices and Determinants, Subscripted Variables	4	5	**9**
	Linear Equations Linear Equations in One Unknown, Linear Equations in Two Unknowns, System of Two Linear Equations in Two Unknowns, System of n Linear Equations in n Unknowns, Solution of a Triangular System, Gaussian Elimination, Determinants and Systems of Linear Equations	4	5	**9**
	Combinatorial Analysis Factorial Notation, Binomial Coefficients, Permutations, Permutations with Repetition, Partitions, Combinations, Tree Diagrams	4	5	**9**
	Probability Sample Spaces and Events, Finite Probability Spaces, Theorems on Finite Probability Spaces, Conditional Probability, Independence, Repeated Trials	4	5	**9**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 6)

No.	Item	Detailed Information
1.	Name of Course/Module	Business Information Systems
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - demonstrate an understanding of the role of information systems - solve problems and make decisions in organisations, - describe the common business infrastructures of today's organisations and how these fit with strategic directions of business - describe the management of data and information within business information systems and how this supports the operational, tactical and strategic activities of an organisation - Identify the concept of ethics in a typical IT environment and explore the social implications of IT. - Justify the need for integrity, security, and management provisions in information system.

3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Introduction to Information Systems (IS) Fundamental Concepts: Information Systems & Technologies The Need for IS: Business Applications, Development and Management	6	8	**14**
	Problem Solving and Decision Making in the organizational Information Systems Context IS supporting Decision-making (a component of problem solving)	6	8	**14**
	Developing E- Business Systems:- Stages of IS development cycle, computer-aided and prototyping Implementing E-Business Systems	8	8	**16**
	Process and Data Modelling Data Resource Management:- *Types of Databases, Data warehousing and mining, database structures, Data administration, Database developments and Database access methods*	8	10	**18**
	Hardware, Operating Systems and Networks Computer Systems: End User & Enterprise Computing Computer Peripherals: Input, Output and Storage Technologies	6	8	**14**

Application Software/Databases Software for End- user Applications Managing Data Resources	6	8	**14**
Telecommunications & Networks, Internet, Intranet and Portals Trends & Functions of telecommunications networks Technical telecommunications alternatives Internetworked E-business Enterprise for communication and collaboration	6	8	**14**
Organisational Infrastructure Solving Operational Business Problems Electronic Business Systems: cross-functional integrated enterprise applications	6	8	**14**
Electronic Commerce Solving Tactical & Strategic Business Problems E-Business Decision Support: Development of a Management Information Systems for management decision making	6	8	**14**
Current and Future Directions Trends and Changes in E-business decision support systems:- Executive Information Systems, Expert Systems and Artificial Intelligence Technologies in Business Enterprise and Global Management of E-business Technology	6	8	**14**
Security, Privacy and Ethics in IS and Internet Security controls on IS systems Security management of E-Business:- strategies and defenses for security of E-business applications Ethical and Societal Challenges of E-business	6	8	**14**
Total Student Learning Time	**70**	**90**	**160**

(Subject 7)

No.	Item	Detailed Information
1.	Name of Course/Module	Data Management
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - explain the role of database systems in information management - recognize the suitability of various database paradigms - normalise a set of file structures - apply the principles of relational database systems - demonstrate the operation of the underlying storage mechanism used by database systems - formulate complex SQL commands - develop an application using fourth generation systems.

3. **Content outline of the Course/Module and the Student Learning Time per Topic**

Topic	GLT	ILT	Total
Introduction to Databases **-** Databases and databases users	3	4	**7**
Database Environment **-** Database system concepts and Architecture	8	9	**17**
Data Model **-** Data Modelling using Entity-Relationship Modelling - Enhanced Entity-Relationship Modelling and UML modelling	8	9	**17**
Relational Model **-** The Relational Model and Relational database constraints - Relational Algebra	8	9	**17**
Normalization **-** Functional Dependencies and Normalization for Relational Databases	6	8	**14**
Database Design **-** Practical Database Design Methodology using UML	7	8	**15**
SQL **-** Schema definition, constraints and queries **-** Assertions, Views and Programming techniques	7	8	**15**
Data Storage, Indexing **-** Disk organization, Views and Programming Techniques	5	5	**10**
Integrity and Security **-** Database Security, Authorization and Encryption **-** Transaction processing concepts and Theory	4	4	**8**
Total Student Learning Time	**56**	**64**	**120**

4.	**Practical Topics**	**GLT**	**ILT**	**Total**
	Structured Query Language (SQL) using MySQL ver 4.1. SQL: Data manipulation - CREATE, ALTER, DROP statements	7	11	18
	Structured Query Language (SQL) using MySQL ver 4.1. SQL: Data Definition - INSERT, UPDATE, DELETE Statemets	7	11	18
	Total	**14**	**22**	**36**

(Subject 8)

No.	Item	Detailed Information
1.	Name of Course/Module	English
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Improve their reading comprehension of college level materials. - Write with sufficient basic rules of grammar and with sufficient and correct vocabulary. - Write with sufficient basic rules of grammar and with sufficient and correct vocabulary. - Choose, narrow, and focus a subject. - Write a thesis statement. - Develop paragraphs with one main focus and sufficient support. - Organize essays in logical and effective patterns.
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Introduction to the course. The Writing Process Stage 1: - Prewriting • Free Writing • Clustering • Journal • Asking Questions • Brainstorming	4	5	**9**
The Writing Process Stage 1: - Prewriting Stage 2: - Planning - Drafting Stage 3: - Revising - Proofreading	4	5	**9**
Punctuation Rules • Commas • Semicolons • Colons • Quotation Marks	4	5	**9**

	Types of sentences • Clauses - Independent Clauses - Dependent Clauses • Kinds of sentences - Simple Sentences - Compound Sentences - Complex Sentences - Writing Compound – Complex Sentences • Style	4	4	**8**
	Paragraph Structure • The Three Parts of a Paragraph • The Topic Sentence • Supporting Sentences • The Concluding Sentence	4	5	**9**
	Unity and Coherence • Unity • Coherence Coherence Through Related Sentence - Repetition of Nouns and Pronouns - Synonyms and Substitutions - Transitional Expressions Coherence Through Order - Time order - Space order - Order of Importance	4	5	**9**
	Chronological order: Process Essays -Logical Division Of Ideas	4	4	**8**
	Moving from Paragraph to Essay- Introduction : Stating the thesis- Body : Developing the thesis- Conclusion : Restating / Reemphasizing the thesis- Conclusion : Restating / Reemphasizing the thesis transitions between paragraphs	4	6	**10**
	Cause and Effect Essay • Organization for Cause and Effect Order - Block Organization - Chain Organization • Cause and Effect Signal Words	4	4	**8**
	Comparison and Contrast Essay • Organization of Comparison and Contrast Order - Point- by-Point Organization - Block Organization • Comparison and Contrast Signal Words	4	5	**9**

	Paraphrase & Summary • Paraphrasing - Plagiarism - Using paraphrases as support • Summarizing	4	4	**8**
	Argumentative Essays • Organization of Argumentative essay	4	4	**8**
	Parallel structures • Parallelism with coordinators and correlative • Sentence problems	4	4	**8**
	Noun , Adverb & Adjective clauses • Sentences • Punctuations	4	4	**8**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 9)

No.	Item	Detailed Information
1.	Name of Course/Module	Business Programming with Java 1
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- • Develop basic programs using JAVA programming language. • Differentiate and effectively use Control Structures in programming, such as the Selection and Repetition Control Structures • Understand and demonstrate the basic object concepts of Inheritance, Polymorphism, Encapsulation in program design • Define and use classes to perform specified tasks. • Compile and Debug JAVA program code.

3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Introduction - Programming concepts and principles - OOP features	5	6	**11**
	Design and Primitive Data Types	7	8	**15**
	Errors and Selection - Logical errors - Syntax errors - IF, IF..ELSE and SWITCH..CASE statements	6	8	**14**
	OO Concepts and String API - Class - Object - Encapsulation - Polymorphism and Overloading - Inheritance	6	8	**14**
	Keyboard Input and OO Implementation	6	8	**14**
	Iteration - While() loop - do..while() loop - for() loop	6	8	**14**
	Primitive and reference types	7	9	**16**
	Variable Scope and Access specifier - Class variable - Instance variable - Local variable - Private, Public, default access specifier	6	8	**14**
	Arrays & 2D arrays	7	8	**15**
	Testing	5	7	**12**

	Documentation: Packages, Random Number, output format	3	5	**8**
	Interface, Searching and Sorting	6	7	**13**
	Total Student Learning Time	**70**	**90**	**160**
4.	**Practical Topics**	**GLT**	**ILT**	**Total**
	Editing, compiling, running	2	3	5
	Java Introduction	2	3	5
	Error, selection, keyboard Input	2	3	5
	Selection, String API	3	3	6
	Compilation, error	2	3	5
	Keyboard Input	2	3	5
	OO Implementation	2	3	5
	OO Implementation, Iteration	2	3	5
	Iteration, Input process, Scope	2	3	5
	ArrayList and Array	2	3	5
	2D Array	3	3	6
	Random numbers, number formatting	2	3	5
	Searching, Sorting	2	2	4
	Total	**28**	**38**	**66**

(Subject 10)

No.	Item	Detailed Information
1.	Name of Course/Module	Internet Technology
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - • Develop original web pages with HTML. - • Format web pages with Cascading Style Sheets. • Write client-side scripts with JavaScript. • Write server-side scripts with PERL/ PHP.
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Introduction to HTML / Font Color and Character Entities - What is Hypertext ? - Tags, Attributes , Value	6	8	**14**
List & Tables - Types Of List - List Attributes and Value - Why do we use tables? - ROWSPAN - COLSPAN	8	8	**16**
Links and Images, Frames and Image Maps - Types Of Hyperlink - The usage of Frames - How to targeting your frames - Using images as a hyperlink	8	8	**16**
Cascading Style Sheets - What is CSS - The different types of CSS - Local and Global CSS - How to CREATE a CSS - How to APPLY a CSS	8	8	**16**
Introduction to JavaScript - What is JavaScript ? - History of JavaScript - Alert Box, Confirm Box, Prompt Box - JavaScript Applets - Miscellaneous Application of JS Applets	8	8	**16**

	Selection Statements & Switch Statements- The Control Structure : * SEQUENTIAL * SELECTION * ITERATION * CASE		6	8	**14**
	Functions and Objects & Arrays - What is Function? - What is Array ? - Applying Functions and Array.		4	6	**10**
	The HTML <Form> Tag & The String Objects - What are the FORM Properties?		4	6	**10**
	Introduction to Perl - What is server side scripting? - Array in Perl - Forms		4	4	**8**
	Total Student Learning Time		**56**	**64**	**120**
4.	Other Additional Information	**Practical**	**GLT**	**ILT**	**Total**
		Basic HTML **-** Tags , Attributes , Value	2	4	**6**
		List & Tables - Types Of List - List Attributes and Value - Why do we use tables? - ROWSPAN - COLSPAN	4	4	**8**
		Links and Images, Frames and Image Maps - Types Of Hyperlink - The usage of Frames - How to targeting your frames - Using images as a hyperlink	4	4	**8**
		Cascading Style Sheets - What is CSS - The different types of CSS - Local and Global CSS - How to CREATE a CSS	4	4	**8**

		- How to APPLY a CSS			
		Introduction to JavaScript- What is JavaScript ?- History of JavaScript - Alert Box, Confirm Box, Prompt Box- JavaScript Applets- Miscellaneous Application of JS Applets	4	4	**8**
		Selection Statements & Switch Statements - The Control Structure : * SEQUENTIAL * SELECTION * ITERATION * CASE	4	4	**8**
		Functions and Objects & Arrays - What is Function? - What is Array ? - Applying Functions and Array.	2	4	**6**
		The HTML <Form> Tag & The String Objects - What are the FORM Properties?	2	4	**6**
		Introduction to Perl - What is server side scripting?	2	4	**6**
Total Student Learning Time			**28**	**36**	**64**

(Subject 11)

No.	Item	Detailed Information		
1.	Name of Course/Module	Communication Skills		
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Justify reason(s) for their communication decisions. - Justify the importance of integrated communication [writing skills/speaking skills/presentation via visual and data] as part of workplace expectations. - Address ethical issues that affect workplace communication.		
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Part 1: Communicating in the Workplace 1a. Characterizing workplace communication - Intro to Technical Communication - Rhetorical Elements (overview)	4	5	**9**
	1b. Understanding workplace culture - Culture and various definitions of culture - Cultural awareness/ parallel - Localization/ globalization 1c. Reading technical information - Reasons for reading tech. info - Strategies for reading	4	5	**9**
	1d. Addressing audiences - Audience roles/ types/ purposes - Things that matter to audience 1e. Collaborating in workplace communication - Definition(s) and types of collaboration - Reasons for collaboration	4	5	**9**
	Part 2: Managing Critical Processes 2a. Locating and using information - Information/ knowledge - Available resources	4	4	**8**
	2b. Plan, Draft, Revise and Edit - Writing process(s)	4	5	**9**
	2c. Ensuring usability - Problem- solving approach	4	5	**9**
	Part 3: Shaping Information 3a. Organizing and designing information - Basic principles for information design	4	4	**8**

	3b. Using visual forms and designing electronic communication - Functions of visuals - Characteristics of electronic communication	4	6	**10**
	Part 4: Applying strategies 4a. Explaining processes and procedures - Steps in effective process explanation	4	4	**8**
	Part 5: Preparing professional communication 5a. Engaging in oral interaction - Public speaking skills - Power Point Presentation	4	5	**9**
	5b. Preparing correspondence - Business letter - Memo/ Fax/ E-mail	4	4	**8**
	5c. Preparing proposals - Proposal processes - Persuasion in proposals	4	4	**8**
	5d. Preparing reports - Types of reports - Planning a report	4	4	**8**
	5e. Preparing instructions and manuals - Value of instructions - Accessibility, Usability and Comprehensibility (analyze)	4	4	**8**
	Total Student Learning Time	56	64	**120**

(Subject 12)

No.	Item	Detailed Information
1.	Name of Course/Module	Human Computer Interaction
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Communication between human factors engineers and soon-to-be computer scientists on user interface development projects is improved. - The future user interface designer with concepts and strategies for making design decisions are constructive. - Expose the future user interface designer to tools, techniques, and ideas for interface design provides the opportunity to refine skills in usability. - Introducing HCI literature to students will form future leaders of software design. - To stress the importance of good user interface design.

3. **Content outline of the Course/Module and the Student Learning Time per Topic**

Topic	GLT	ILT	Total
The Human • To get started with HCI • Fundamentals of HCI: The advantages and contribution of HCI • Appreciating HCI • Defining and using HCI	**4**	**4**	**8**
The Computer • Accessing computers for all ages • Interacting with computers with ease • Deeper understanding of computer design in terms of flexibility.	**4**	**4**	**8**
The Interaction • The ability to design interactive systems. • Observes the principles of interactive systems • Code walkthrough of operator application	**4**	**4**	**8**
Paradigms • Apply strategies for building interactive systems in the real – world of design. • Understand the principles of usability paradigms	**4**	**4**	**8**
Interaction design basics • Independent and skilled in interactivity. • Test specific error conditions in design • Applying Models to give good start points in design	**4**	**4**	**8**
HCI in the software process - Integrating software engineering into usability. • To learn how to use the software process.	**4**	**4**	**8**

	Design rules • Create user-defined functions and Sub procedures	**4**	**5**	**9**
	Implementation support • Understand the purpose implementation support. • Analyze the purpose of programming support tools.	**4**	**5**	**9**
	Evaluation Techniques • analytic methods • review methods • Model-based methods. • Refine designs of software and systems with the use of evaluation techniques	**4**	**5**	**9**
	Universal design	**4**	**5**	**9**
	User support **-** User support will be on: • accurate and robust • Consistent and flexible. • presentation issues •Implementation issues.	**4**	**5**	**9**
	Cognitive models • Understand the roles of Cognitive Models • Appling the Cognitive Models	**4**	**5**	**9**
	Socio-organizational issues and stakeholders requirements - capture both human and technical requirements.	**4**	**5**	**9**
	Communcation and Collaboration models • face-to-face communication involves eyes, face and body	**4**	**5**	**9**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 13)

No.	Item	Detailed Information
1.	Name of Course/Module	Visual Programming
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Create console applications and windows forms in VB.net - Declare variables, arrays and operators in VB.net - Error handling - Implement the concepts of delegates in VB.net - Implement OOP's features such as overloading, overriding, virtual methods and interfaces in VB.net
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Introduction to .NET Framework • Getting started with VB.net • Understand and familiarise with Visual Studio.NET environment (IDE) • Defining and using constants • Declaring and referencing variables • Assigning values to variables (use variables to store data)	6	8	14
Data types and operators • Identify the differences & use of arithmetic, concatenation, comparison & logical operators. • Code walkthrough of operator application • Operator precedence and parentheses in a formula statement	7	9	16
Controls and Loop Statements • Understand and apply Loop clauses (Do..While, Do..Until, For...Next) • Understand and apply Conditional Statement clauses (If…Else, If...ElseIf...Else, Select Case)	9	11	20
Procedures and Functions • Understand the context of procedures, sub procedures, methods and functions • Create user-defined functions and Sub procedures • Call user-defined procedures • Advantages of general-purpose procedures • Writing function procedures • Using function to perform specific task	9	12	21

	Windows Form Controls - Windows Properties - Windows Tool Bar - Windows Solution Explorer		10	14	24
	Event Handlers • How to implement an event • Explain what is an event handler and the different types of event raiser / triggers • Event declaration syntax		7	9	16
	Arrays • Creating and accessing arrays (fixed-size & dynamic arrays) • Working with array elements • Using arrays • Additional types of arrays (control arrays & structures) • Dimensioning arrays (single & two dimensional arrays)		7	9	16
	Error handling • Manage runtime errors using the Try…Catch error handler • Test specific error conditions using the Catch When statement • Use the Err.Number and Err.Description properties to identify exceptions • Build nested Try…Catch statements		6	8	14
	OOP concepts in .NET framework - Class and Objects - Overloading - Overriding - Virtual Methods - Interfaces		9	10	19
	Total Student Learning Time		**70**	**90**	**160**
19.	Other Additional Information	**Practical**	**GLT**	**ILT**	**Total**
		Introduction to .NET IDE	**2**	**3**	**5**
		Data types and operator precedence	**2**	**3**	**5**
		Conditional Statements	**2**	**3**	**5**
		Loop Statements	**2**	**3**	**5**
		Windows Form Control	**2**	**4**	**6**
		Textbox and label control	**2**	**4**	**6**
		Checkbox, Radiobuttons and Picturebox	**2**	**4**	**6**
		Listbox, Combobox and Groupbox	**2**	**4**	**6**
		Listview, Color, Font and Dialogbox	**2**	**4**	**6**
		Trackbar, Timercontrol, Menus	**3**	**4**	**7**
		Arrays, Functions and Procedures	**3**	**4**	**7**

		Database Objects and Controls	**4**	**8**	**12**
	Total Student Learning Time		**28**	**48**	**76**

(Subject 14)

No.	Item	Detailed Information
1.	Name of Course/Module	Management Principles
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- 1. understand and analyse the work of managers and the management process 2. analyse the ethical and social responsibilities of managers identify how effective and efficient managers use the organisation's 3. resources to achieve the organisation's goals and objectives 4. identify the significant environmental challenges and opportunities that managers, organisations and businesses face 5. analyse the impact and influence of motivational strategies and leadership styles on the effective management of workplace behaviour explain how organisations are structured to get work done and how and why organisations differ from one another in their structure and design.

3. **Content outline of the Course/Module and the Student Learning Time per Topic**

Topic	GLT	ILT	Total
Introduction To Management - Management Functions and Roles- Essential Managerial skills- Managers, Diversity and Change	5	5	**10**
The Evolution of Management Theory - Management History - Classical Approach: Taylor (ScienctificManagement), Henri Fayol, Max Weber - Organisational Behaviour Approach - Contemporary Viewpoints	5	5	**10**
Organisational Culture and Environment - Internal Environment: Organisational Design and Culture External Environment: Assessing the Environment & Minimizing External Environment	5	6	**11**
International Management & Global Economy **-** Multinational and transnational corporations - National culture & Diversity at Workplace	5	6	**11**
Social Responsibility and Managerial Ethics **-** Classical and Socio-economic views of social responsibility - Corporate social responsibility and economic performance - Managerial Ethics	5	6	**11**

Foundations of Planning - Purposes, Myths & Types of Plans - Contingency Factors & Criticisms of Planning	5	6	**11**
Strategic Management and Decision Making - Levels of strategic planning - Strategic management process: SWOT, BCG Matrix	5	6	**11**
Foundations of Organising - Organisation structure & application of organisational design - Job designs & job characteristics	5	6	**11**
Managing Change and Innovation **-** Forces of change, Resistance to change, - Techniques for managing change, - Contemporary issues in managimg change:- TQM, Re-engineering, Learning Organisations, Stimulating Innovation	5	6	**11**
Foundations of Behaviour - Organisational Behaviour, Attitudes, Personality, Perception Motivation - Motivation Theories: Maslow, Mc Gregor, Hertzberg, Mc Clelland, Reinforcement Theory, Expectancy Theory	5	6	**11**
Leadership & Foundations of Control - Leadership Style Behavoual Theories, Contingency Theories (Fiedler Contigency, Hersey-Blanchard, Path-goal Model) Contemporary Issues in leadership - Foundations of Control Control process, Types & Focus of Controls Effective control, Dysfunctional controls	6	6	**12**
Total Student Learning Time	**56**	**64**	**120**

(Subject 15)

No.	Item	Detailed Information
1.	Name of Course/Module	Business System Analysis and Design
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - • Describe and demonstrate various roles of a systems analyst/developer - • Apply analysis and design methodologies to a wide variety of problem domains, not just those involving the computer - • Effectively use software development tools like Ms-Visio for data modelling

3. **Content outline of the Course/Module and the Student Learning Time per Topic**

Topic	GLT	ILT	Total
1. Introduction to System Analysis and Design Methods. **-**Understanding the Information System - The role of a system analyst	4	4	**8**
2. Analyzing the Business Case **-** What is business process - Feasibility Studies	6	8	**14**
3. Requirements Modeling - JAD - RAD	6	10	**16**
4. Data and Process Modeling **- DFD** **-** ERD	4	6	**10**
5. Communications Tools & CASE Tools **-** Visio - MsProject	4	4	**8**
6. Object Modeling **- UML** **-** Use Case Diagram	2	2	**4**
7. Development Strategy **-**Analyzing Cost and Benefit - In-House or Over The Shelf?	2	2	**4**
8. Financial Analysis Tools **-** Payback Analysis - ROI - NAV	4	6	**10**

	9. Project Management Tools **-** PERT / CPM Diagram - Gantt Chart - Ms Project		4	4	**8**
	10. Output and User Interface Design **-** Input Design (Data Entry, Display) - Output Design (Report , Printed Copy)		4	6	**10**
	11. Data Design **-** Data Structures		6	6	**12**
	12. System Architecture **-** Client-Server **-** Internet-Based		4	2	**6**
	13.System Implementation - Training - Data Conversion - System ChangeOver		4	2	**6**
	14. Systems Operation, Support, and Security **-** User Support - System Maintenance - System Security		2	2	**4**
	Total Student Learning Time		**56**	**64**	**120**
19.	Other Additional Information	**Practical**	**GLT**	**ILT**	**Total**
		Research : Example Of Information System	**1**	**1**	**2**
		Research : Role Of System Analyst	**1**	**1**	**2**
		3 Company's Sample of Mission Statement and Business Profile	**1**	**1**	**2**
		Organization Chart	**1**	**1**	**2**
		Fact Finding Technique	**1**	**1**	**2**
		Process Modeling	**1**	**2**	**3**
		Data Modeling	**1**	**2**	**3**
		System Modeling	**1**	**2**	**3**
		System Design	**1**	**1**	**2**
		Process Design	**1**	**2**	**3**
		Data Design	**1**	**2**	**3**
		Input Design	**1**	**2**	**3**
		Output Design	**1**	**2**	**3**
		Prototype	**1**	**2**	**3**
	Total Student Learning Time		**14**	**22**	**36**

(Subject 16)

No.	Item	Detailed Information
1.	Name of Course/Module	Multimedia Technology
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - • Explain various technologies associated to Multimedia - • Identify the different elements of Multimedia such as 2D images, 3D animations, digital video, and digitals sound editing. - • Create and manipulate audio and video elements using multimedia softwareforms in typical fluid mechanical applications. - • Create 3D animation presentation - • Explain the importance steps of Multimedia Integration, - Authoring and Application development - Digital sound and music
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Introduction to Multimedia - Why Multimedia - Getting started in Multimedia. Principles and some history of the field first provide a sense of place.	4	4	**8**
Multimedia Applications: Hardware and Software - Hardware - Software	5	5	**10**
Multimedia Elements • Text • Audio • Video • Image	5	5	**10**
Creating Multimedia Using Gimp - Create animated text - Create animated pictures - Change background/ gardient	6	6	**12**
Multimedia Development Process • Development and Multimedia Art Team • Guidelines to Development and Content Management • Methodology and Documentation Design	5	5	**10**
Multimedia and Internet Future Trends	5	5	**10**
2D Graphic Design - create 2D graphic design	6	6	**12**
3D Graphic Design - create 3D graphic design	5	7	**12**

	Sound Editing - edit and record sound	5	5	**10**
	Morphing - do morphing with pictures	5	8	**13**
	Video Editing - create short movies in movie maker	5	8	**13**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 17)

No.	Item	Detailed Information
1.	Name of Course/Module	Business Statistics
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- 1. To distinhuish between descriptive statistics and inferential statistics. 2. To gain skills to gather, organize, summarize, and present data using statistics techniques. 3. To recognize certain probability distributions as models of generic situations. 4. To apply those models to estimate parameters and form hypothesis tests that aid decision-making. 5. To apply data analyis by developing a mathematical equation to express the relationship between variables.
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
What is Statistics? Types of Statistics Types of Variables Levels of Measurement	6	7	**13**
Describing Data: Frequency Distributions and Graphic Presentation Frequency Distribution Graphic Presentation Histogram Stem-and-leaf etc.	6	7	**13**
Describing Data: Measures of Central Tendency & Mesures of Dispersion Mean, Median & Mode Range, Variance & Standard Deviation Quartiles, Deciles & Percentiles Box Plots	6	7	**13**
Probability Concepts Definitions of Probability Rule of Probability	6	7	**13**
Discrete & Continuous Probability Distributions Probability Distribution & Random Variable Mean, Variance & Standard Deviation Binomial Probability Distribution The Normal Approximation to the Binomial	6	7	**13**
Sampling Methods & The Central Limit Theorem Sampling & Sampling Distribution The Central Limit Theorem Standard Error of the Mean	6	7	**13**
Estimation & Confidence Intervals Estimation of Population Mean Confidence Interval for Population Mean	6	7	**13**

	Tests of Hypothesis (One Sample & Two Sample Means) Procedure for Hypothesis Testing Large Sample Test Small Sample Test	6	7	**13**
	Simple Linear Regression Scatter Diagram Least Squares Regression Line	8	8	**16**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 18)

No.	Item	Detailed Information			
1.	Name of Course/Module	Advanced Web Development			
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Work Internet based Computer Program to support online resource presentation on the World Wide Web - Implement the existing need for a more effective and efficient web site - understand Web Technology and data organisation for a web based program on computer system and the information need for an online presentation			
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**				
	Topic		**GLT**	**ILT**	**Total**
	Introduction Server side programming history		2	3	**5**
	Style Sheets **Definitions of CSS, Usage**		3	4	**7**
	Scripting **Comparision of Scripting languages**		4	5	**9**
	Interactive Programming DHTML, Javascripts		4	5	**9**
	PHP Programming 1 **Input, Output, Variables**		4	5	**9**
	Introduction to PHP 2 Looping, conditions		3	5	**8**
	Database Programming 1 **MySql Introduction, Connect to database**		6	7	**13**
	Database Programming 2 **Insert, Modify, Remove data**		4	5	**9**
	Stock List **Design of E-commerce site**		3	4	**7**
	Business Rules **Develop Business site**		3	4	**7**
	Advanced PHP techniques 2 **Cookies, Sessions etc**		3	4	**7**
	XML **Concepts and Development**		3	4	**7**
		Total Student Learning Time	**42**	**55**	**97**
4.	Other Additional Information	**PRACTICAL**	**GLT**	**ILT**	**Total**

		CSS Style Sheet	3	3	6
		PHP Introduction, Syntax, Variables	3	3	6
		PHP Installation	4	4	8
		PHP Condition, Loops, Arrays	3	3	6
		PHP Functions, Forms, File	3	6	9
		MySql Introduction, Syntax	3	3	6
		MySql Connect	3	4	7
		MySQL create, insert, remove, where	3	6	9
		PHP ODBC	3	3	6
		XML,	3	3	6
		Total	28	35	63

(Subject 19)

No.	Item	Detailed Information
1.	Name of Course/Module	MARKETING PRINCIPLES
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - explain theoretical prinicples and concepts that are supported by research and evidence from economics , the behavioural science and modern management theory. - demonstrate and apply these theoretical principles by analyzing a series of cases - explain the role of marketing within a business, government or non-profit - organisation or in the economy as a whole

3. **Content outline of the Course/Module and the Student Learning Time per Topic**

Topic	GLT	ILT	Total
Inroduction to Marketing - The evolution of marketing - The modern marketing concept: Concept of Exchange - Marketing Management & Tools to Facilitate Exchange: Strategic Planning, research, Marketing Mix	3	6	**9**
Seeking Competitive Advantage Strategic Planning SWOT Analysis, Internal Value Chain, 7-S Framework	9	11	**20**
Environmental Analysis - Macro Environment - Micro Environment	9	11	**20**
Market research - Marketing Intelligence Systems - Market Research Gathering Information	9	11	**20**
Understanding Customers - Consumer and Organisational Buying Behaviour	8	11	**19**
Understanding Market - Market Segmentation, Targeting and Positioning	7	11	**18**
Marketing Mix - Product Decisions & Lifecycle - Pricing strategy - Placement (Distribution) - Promoting	7	10	**17**

	Harmonising marketing activities - Internal Marketing - Relationship Marketing	5	8	**13**
	Developing Competitive Advantage	5	8	**13**
	Summarising the Marketing Process	4	7	**11**
	Total Student Learning Time	**66**	**94**	**160**

(Subject 20)

No.	Item	Detailed Information
1.	Name of Course/Module	ACCOUNTING, DECISIONS AND ACCOUNTABILITY
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	Upon successful completion of the course, the student should be able to: - identify and explain the role of accounting in society. - outline how individuals and organisations use accounting information. - record accounting data in a systematic manner. - understand, apply and be able to critically analyse, the concepts that underlie the major accounting reports. - prepare and use common financial and management accounting reports. - communicate findings from accounting information.

3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Introduction to accounting The changing environment of accounting Decision making process & economic decisions Nature of accounting & users of accounting information Accounting information and decisions Management and financial accounting Differences in Accounting Systems – a comparison with other countries Ethics and accounting	6	8	**14**
	Organisations and the accounting process Types of business ownership Management functions Basic financial statements A = L + OE Effects of transactions on the accounting equation and financial statements Transactions Source documents Accounting cycle The ledger account	6	8	**14**
	Recording accounting data General ledger Chart of accounts Double-entry accounting General journal Transaction analysis Trial balance Preparation of financial statements	6	8	**14**
	Preparation of financial statements from Accounting Data Measurement of profit The accounting cycle – further expansion Classification of adjusting entries	6	8	**14**

Adjusted trial balance to financial statements Worksheet and financial statements Financial statement and decision making			
Accounting for retailing/merchandise Inventory Retail business operations Retailing and GST Periodic V Perpetual inventory system Detailed income statement Profitability analysis for decision making	6	8	**14**
Using financial accounting reports for decision making - Analysis and interpretations of financial statement Sources of financial information The need for analytical techniques Percentage analysis Ratio analysis Limitation of financial analysis - Conceptual framework for Financial Accounting Qualitative characteristics of financial information Definitions and recognition of elements in financial statements - Asset, Liability, Owner's equity, Income and Expense Underlying assumptions of financial statements	6	8	**14**
Cash Flow Statements Purpose and general format of cash flow statement Concept of cash Classification of cash flow activities Analysing the cash flow statement Limitation of the cash flow statement	6	8	**14**
Management Accounting: - The Entities Within (Deparmental Accounting) Responsibility accounting Departmental/ segmental accounting - Departmental profit - Departmental contribution	7	8	**15**
Planning & Control via Budgeting The nature of budgetary planning and control Organizational structure and budgeting Management participation and acceptance Benefits of budgeting The master budget Operating budgets and retail budgets for - service entities - retail entities - manufacturing entities Financial control with budgeting	7	8	**15**
Quantitative Methods for management decision making;- **1. Cost-volume-profit (CVP) analysis** Cost behavior Assumptions of CVP analysis Profit planning with CVP analysis Break-even analysis Margin of safety and target sales Analysing CVP relationships for profit planning	7	9	**16**

	Quantitative Methods for management decision making;- **2. Capital Budgeting** Capital budgeting decisions Capital budgeting methods based on time value of money Net present value Present value index Internal rate of return Other capital budgeting methods Payback period Return on investment		7	9	**16**
	Total Student Learning Time		**70**	**90**	**160**
4.	Other Additional Information	**Tutorial**	**GLT**	**ILT**	**Total**
		Case Study 1	7	8	**15**
		Case Study 2	7	8	**15**
		Case Study 3	7	8	**15**
		Case Study 4	7	8	**15**
	Total Student Learning Time		**28**	**32**	**60**

(Subject 21)

No.	Item	Detailed Information
1.	Name of Course/Module	Industrial Training
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Gain first-hand experience of working as an IT or Business professional, including the technical application of various methods. - Work with other IT & Business professionals. - Experience the discipline of working in a professional organisation. - Develop technical, interpersonal and communication skills, both oral and written. - Observe interactions of professional with other professional groups.

3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	• A form attesting to the Industrial Training undertaken must be signed by an employer for each period of Industrial Training. o The total approved work experience must exceed 60 working days. (at least cover a minimum of 8 weeks duration and 6 hours per day) . Not be in full-time permanent employment	1	1	2
	• Course Briefing	1	1	**2**
	• Attending A week of intensive class with the Industrial Training Coordinator before the commencement of the Industrial Training	20	20	**40**
	• Monthly Report & Final Report o A report describing each period of Industrial Training undertaken must be handed to the IT Department, with the signed form, for recording in the Office and approval by the Industrial Training Coordinator. The report must be typed and authored by the applicant.	40	60	**100**
	• Site Visit Assessment	6	6	**12**
	• Presentation	2	2	**4**
	Total Student Learning Time	**70**	**90**	**160**

4.	Other Additional Information	**Practical**	**GLT**	**ILT**	**Total**
		Acceptance Of Internship Letter Of Offer.	**1**	**1**	**2**

		A form attesting to the Industrial Training undertaken must be signed by an employer for the period of Industrial Training	**1**	**1**	**2**
		Internship Briefing Project Proposal	**8**	**16**	**24**
		Feasibility Study Internship Execution	**30**	**30**	**60**
		1st Draft Of Industrial Training Report	**4**	**10**	**14**
		Presentation	**2**	**2**	**4**
		Final Documentation	**4**	**10**	**14**
		Total Student Learning Time	**50**	**70**	**120**

Subject 22

No.	Item	Detailed Information		
1.	Name of Course/Module	E-Commerce		
2.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	E-Commerce Business Models & Concepts - E-Commerce Models - Major Business-to-Consumer Business Models - Major Business-to-Business Business Models - Business Models in Emerging E-Commerce Areas - How the Internet and the Web Changes Business	5	6	**13**
	Competitive Advantage & Strategies	5	6	**11**
	E-Commerce Marketing Concepts & Strategies - Consumer Online: The Internet Audience and Consumer - Basic Marketing Concepts - Internet Marketing Strategies - B2C and B2B E-Commerce Marketing and Branding Strategies - Online Market Research: Knowing Your Customer	5	6	**11**
	In-depth Look at E-Retailing - The Retail Sector - Analyzing the Viability of Online Firms - E-Commerce in Action: E-tailing Business Models - Some Common Themes in Online Retailing	5	6	**11**
	M-Commerce	5	6	**11**
	Portal and Communities - Auctions - E-Commerce Portals - Online Communities	5	6	**11**
	In-depth Look at Online Services - The Service Sector: Offline and Online - Online Financial Services - Online Travel Services - Career Services	5	7	**12**
	B2B E-commerce - B2B E-Commere and Supply Chain Management - Net Marketplaces - Private Industrial Networks	5	7	**12**
	Group Project Presentation	6	8	**14**
	E-Commerce Infrastructure - The Interner: Technology Background - The Internet Today - Internet II: The Future Infrastructure - The World Wide Web - The Internet and the Web: Features	6	8	**14**

	Security & Encryption - The E-Commerce Security Environment - Security Threats in the E-Comemrce Environment - Technology Solutions - Policies, Procedures, and Laws	6	8	**14**
	E-Commerce Payment Systems **-** Payment Systems - Credit Card E-Commerce Transcations - E-Commerce Digital Payment Systems in the B2C Arena - Electronic Billing Presentment and Payment - B2B Payment Systems	6	8	**14**
	Ethical, Social & Political Issues - Understanding Ethical, Social, and Political Issues in E-Commerce - Privacy and Information Rights - Intellectual Property Rights - Governance - Public Safety and Welfare	6	8	**14**
	Total Student Learning Time	**70**	**90**	**160**

(Subject 23)

No.	Item	Detailed Information
1.	Name of Course/Module	Project Deployment
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - • Select and apply appropriate Software Development Life Cycle techniques to a given project (including appropriate use of knowledge); - • Express concepts and structures using programming languages like Java, Pascal or any 4GL; - • Program software application; - heightened their learning experiences by project examples and assignments. - Design and develop a desktop computer hard disk environment for Windows-based systems that will maximize computer resources and data security without unnecessarily compromising user access. - Prepare and present written and oral reports on all phases of a computer information system life cycle.
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Introduction - CIS in the Small Enterprise, - SDLC, - Prob. Identification	4	4	
Approval of proposal - Student Skills Survey - Teams Formed	3	3	6
Preliminary Investigation - Intro. Portfolio Project, - Process Modeling (DFDs) - Contract Due	4	8	12
Background Study, Requirement Analysis - Data Modeling (ERDs) - Object Modeling	3	5	8
Project Planning - Project Management	3	10	13
Requirements Modeling - System Modeling - System Design	3	5	8
Data Flow Design - Menu Tree - FDD - Process Design - Coding	6	10	16

User Interface Design - Input and Output Design - File and Form Design - Report and Query Design	9	9	18
Design Review - Prototyping - 4GL Programming	6	6	12
System Testing - Networks - Testing - Training	9	10	19
Documentation - Maintenance and Review - User Manual - Final Report	20	20	40
Total Student Learning Time	70	90	160

4.	Other Additional Information	**Practical**	**GLT**	**ILT**	**Total**
		Writing Proposal	**2**	**2**	**4**
		Team Contract	**1**	**1**	**2**
		Fact Findings	**2**	**4**	**6**
		Project Contract	**2**	**2**	**4**
		Gantt Chart	**1**	**1**	**2**
		Process Modeling	**2**	**4**	**6**
		Data Modeling	**2**	**4**	**6**
		System Modeling	**2**	**4**	**6**
		System Design	**2**	**4**	**6**
		Process Design	**2**	**4**	**6**
		Data Design	**2**	**2**	**4**
		Input Design	**2**	**4**	**6**
		Output Design	**2**	**4**	**6**
		Prototype	**2**	**4**	**6**
		User Manual & Report	**2**	**4**	**6**
		Total Student Learning Time	**28**	**48**	**76**

(Subject 24)

No.	Items	Detail Information		
1.	Name of Course/Module	CONSUMER BEHAVIOUR		
2.	Learning Outcomes	At the end of this course, students are able to :- - explain the environmental influences and their effects on consumers which include factors such as culture, social group, social class and family - describe the psychological factors such as motivation, attitudes and perception and their influences on consumption behaviour. - possess knowledge and skills necessary to analyse consumers' behaviour to develop effective marketing strategies.		
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Consumer Behaviour **.** Roles of consumers/customers & consumer behaviour . Research Perspectives and methodologies in consumer research Framework for Culture Formation and Change . Common characteristics, Various perspectives & Elements of culture . Culture within the marketing context	5	5	**10**
	Subcultures Types of subcultures: social group, social class, family Macro influences: gender, age, lifestyles, and situational influences on consumers and business buyers.	5	5	**10**
	Social Class Symbols of social status, social class systems Measurement of social classes & its problems Social class differences & its implications of social classes on marketing	5	5	**10**
	Groups Constitution of a group, Classification of groups (Influence & Reference groups) Types of reference groups and its influence on marketing Social Group: Family - Family vs. household; Stages of family life cycle Relevance of the stages of family life cycle in segmentation and marketing Family decision making process & family's influences on counsumer socialisation	5	5	**10**

Lifestyle Definition, Measurement of lifestyle and Importance of lifestyle in marketing Income Types of Income considered in consumer research Consumer sentiment & its impact on purchasing behaviour Relative-income hypothesis; Permanent-income hypothesis	5	5	**10**
Personality General nature of personality Qualitative and Quantitative personality theories Self-concept theory	5	5	**10**
Emotion Concept of emotion, Common emotional elements Use of emotions in marketing	5	5	**10**
Learning - - Basic learning principles Positive and negative reinforcement Classical and instrumental conditioning Cognitive learning theory; Memory systems	5	5	**10**
Motivation - Concept of needs, wants, goals and motives - Characteristics & Functions of motives - Motivation process: Maslow's hierarchy of needs	5	5	**10**
Perception Stages of Perceptual Process; Subliminal Perception Dynamics of perception: selective perception, expectations, perceptual organization, distortion influences Variety of cues used to perceive the quality of products/services Perceived risk	5	5	**10**
InvolvementConcept of involvement; Factors influencing involvementHow involvement influences purchasing decisionsMarketing implications of involvement	5	5	**10**
Brand Preferences Repeat purchase markets Generalisable patterns of buyer behaviour;- Dirichlet model Double Jeopardy patterns Duplication of Purchase Law	5	5	**10**
Innovation Continuous, Dynamic continuous and Discontinuous innovations ; Diffusion process Stages of the adoption process; Categories of adopters Role of the utility awareness theory	5	5	**10**
Market Segmentation Criteria for market segmentation: demographic, psychographic Techniques used to determine segmentation bases A priori and post hoc segmentation: Positioning	5	5	**10**

	Consumer Research Paradigms of positivism and interpretivism Exploratory and problem-solving research Qualitative & quantitative research; Primary and secondary data Consumer research process	5	5	**10**
	Consumption and Purchasing Behaviour Traditional decision making process, Problem recognition Information search & Process of identifying alternative Decision rules Post-purchase evaluation; Input-process-output model	5	5	**10**
	Total Student Learning Time	**80**	**80**	**160**

Table 3: Summary of Information on Elective subjects

(Subject 1)

No.	Item	Detailed Information		
1.	Name of Course/Module	Human Resource Management		
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- 1. an application of the human resource management role in organisations, its different facets and its contribution to the achievement of corporate goals 2. an ability to tackle behavioural and work related problems and an appreciation of aspects of employee relations, equal opportunity and affirmative action. 3. an appreciation of employees as invested human capital to secure competitive advantage for the company.		
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Development of Human Resource Management (HRM) Evolution of HRM, Challenges of the Contemporary Environment	7	7	**14**
	HRM Department and the Organisation, and HR Planning Role and responsibility of HRM department & its impact on the organisaiton, Importance of organizational goals and corporate plans, HRM accounting, Recruitment and Selection Processes	7	7	**14**
	Performance Appraisal Programs Purposes of perfromance appraisal (PA), Relationship of PA with other HRM functions, Development of an evaluation program, Performance Appraisal methods, Feedback of appraisals, Improving Performance	7	7	**14**
	Career Planning and Staff Counselling Role of human resourses in career planningStages in employee career planning, Career plateaus, Mid-career crisisCounselling: basic skills, counseling process, element of counselling	7	7	**14**
	Training and Development Training: training needs analysis, principles of learning, trainng techniques, evaluating training, induction training, Development: development process & needs, job rotation, on-the-job experience, environment development techniques, external seminars	7	7	**14**
	Organisational Morale Job satisfaction, productivity, work groups, management styles, reward systems, fringe beebfits, absenteeism, employee turnover, disrimination, change	7	7	**14**
	Equal Opportunity and Affirmative Action Equal Employment Opportunity (EEO), discrimination and affirmative action; Sexual Harassment at work, Guidelines for EEO practice Affirmative Action: for women,legislation & corporate costs	7	7	**14**

	Industrial Relations Role of trade unions; Government regulations, Employer association structures Awards, agreements, Conciliation & Arbitaration procedures;Collective bargaining, Disciplinary policies and Procedures; Dismissing employees, Negotiated grievances procedures	7	7	**14**
	Occupational Health and Safety Health and Safety and the Responsibilites of Managers, Legal responsibilities; Workers' compensation, Accident Prevention, Health hazards at work, Stress management	8	8	**16**
	Job Design Role content developments, job enrichment, job rotation, job enlargement, Job design principles, Job analysis & job descriptions	8	8	**16**
	Employee Benefits Growth of employee benefis, Problems relating to benefits, Types of benefis, Early Retirement	8	8	**16**
	Total Student Learning Time	**80**	**80**	**160**

(Subject 2)

No.	Item	Detailed Information
1.	Name of Course/Module	Malaysian Economics
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- 1. describe the economics environment in which individuals, firms and governments within a country 2. explain the meaning of economic terms, measurements and objectives; 3. use relevant and useful analytical models in order to describe existing behaviour and predict the likely impact of changes in the economic environment 4. critically evaluate current events, policy issues and debate from an economic perspective

3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Economic Perspective- Economic problem of scarcity; Concept of Opportunity Cost- Methodologies and conceptual framework- Economic Model: Production Posssibility curve- Macroeconomic Choices - Markets and the Modern Mixed Economy- Characteristics of different economic systems	5	6	**11**
	Supply & Demand - Role of Prices, Market Equilibrium - Application of demand and supply on macro settings - - Money market, Labour Market - Impact of Government Intervention: price floors, price ceilings, tax, subsidies	5	6	**11**
	National Objectives and Measurement of Economic Performance - Circular Flow Model; Business Cycles - National Objectives: Economic Growth and GDP, Full Employment, Price Stability, External Viability & Balance of Payments	5	6	**11**
	Aggregate Expenditures Model /Keynesian Macro Analysis & the Multiplier	5	6	**11**
	Aggregate Demand and Aggregate Supply Model - Link Between AE and AD/AS	6	6	**12**
	Fiscal Policy - Discretionary vs. Non-discretionary - Methods of Financing Expenditure & its implications - Effectiveness of Fiscal policy - Public Debt	6	6	**12**

	Money and the Financial System -Role of Central Bank -Money Supply and Demand: Credit Creation	6	7	**13**
	Monetary Policy -Changes in Demand for and of Supply of Money -Cash rate and Exchange Settlement Account -Cause-effect chain of monetary changes -Effectiveness of Monetary policy	6	7	**13**
	International Economy -Exchange Rates Determinationa & Purchasing Power Parity -External Trade Policy; Protectionism	6	7	**13**
	Demand Management Policies - Phillips Curve & Stagflation	6	7	**13**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 3)

No.	Item	Detailed Information		
1.	Name of Course/Module	Financial Management		
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - Understand and explain the factors influencing stock prices, risks and returns on investment in a wide variety of securities;		
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Debt Financing and valuation - Describe the different types of govt and corporation bonds and how bond prices are established. - How investors estimates the rates of return and various types of risks	11	11	**22**
	Equity financing and valuation - How stock prices are established - How investors estimate the types of return they expect to earn.	11	11	**22**
	Investing in Long-Term Assets: Capital Budgeting - Cost of Capital - The Basics of Capital Budgeting- - Cash Flow Estimation and Risk Analysis - Estimating and identifying cash flow - Evaluating capital budgeting process - Introduction to project risk analysis	11	11	**22**
	Capital Structure and Dividend Policy - Capital Structure and Leverage - Dividends and Share Repurchases	11	11	**22**
	Working Capital Management - Managing Current Assets and liabilities - Financing Current Assets - sources, forms and costs of short-term credit Mortgages and other consumer loans Finance Leases - Borrowings with unequal ash flows - Unequal cash flows and intervals - Complications in borrowing decisions	12	12	**24**
	Current Asset Management- Rationale for the firm holding cash- Concepts of collection and disbursement of cash- Variations in liquid assets holdings- Accounts-receivable management - Inventory management, Just-in-time inventory control	12	12	**24**

	Derivative and risk management - - Various types of risks and risk management - Hedge against risk	12	12	**24**
	Total Student Learning Time	**80**	**80**	**160**

(Subject 4)

No.	Item	Detailed Information
1.	Name of Course/Module	Work & Organisation
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	Setelah mengikuti mata pelajaran ini, pelajar dapat : - explain the significance of the institutionalisation and organisation of work and its management. - demonstrate an awareness of the relationship between internal and external socialisation processes. - identify and analyse organisational problems and then select the means for their resolution. - critically assess the value of change strategies for an organisation.

3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Understanding Work and Organisation. The nature and meaning of work; The purposes of organisations The theories of organizations:- bureaucratic organisation, scientific management of work, social organisation of work, classical universal theory of management , socio-technical systems	4	8	**12**
	The Challenge to Contingency Theory Contingency approach - Population ecology theory Institutional theory Resource dependence theory Organizational economics:- agency theory, transaction cost theory	4	8	**12**
	Structural Tensions in Work Organisations. Vertical and Horizontal dimensions; Departmentation and Coordination; Division of labour; Centralisation versus Decentralization Distribution and legitimating of authority	4	4	**8**
	Control: The Maintenance of Workforce Compliance - Control processes; Means of Control - Control and the organization of work: Braverman & Labour Process theory, Karl Marx, Harry Baverman, Taylorism - Control by management design	5	5	**10**
	Technology, Work and Organization Post-Fordism - Technology and production systems; Performance and Productivity Learning from Japan	5	5	**10**

	The Individual at Work. Perception; Individual Differences	6	6	**12**
	Motivation and Orientations to Work. Theories of motivation Job restructuring and organisational development	6	6	**12**
	Social Relations at Work. Formal and Informal group; Group and Inter-group behaviour Group Effectiveness	5	5	**10**
	Human Resource Management. Roles of HRM and its impact on work and organization;- complementing with organization mission & goals; boosting productivity at workplace (career planning, training, job satisfaction, employee reward scheme)	5	5	**10**
	Organisation Culture	4	4	**8**
	Conflict Management and Dispute Resolution. Sources, Forms and Perspectives on conflict Management strategies for handling conflict	4	4	**8**
	Transitional Dimensions of Work and Organisation Management Levels in an Organisation Functional Areas in an Organisation Qualities of Valuable Information Types of Information Systems Sources, Forms and Perspectives on conflict Management strategies for handling conflict	4	4	**8**
	Total Student Learning Time	**56**	**64**	**120**

(Subject 5)

No.	Item	Detailed Information
1.	Name of Course/Module	DECISION SUPPORT MANAGEMENT
2.	Learning Outcomes	Upon successful completion of the course, the student will: a) appreciate the complexity of management decision making b) recognize the value of information as a means of planning and control for a business c) distinguish the hard and soft characteristics of system development problems for administrators and end-user developers d) map the range of systems development problems against the choice of systems development methods and methodologies design and implement a user friendly decision support system for a business
3.	**Content outline of the Course/Module and the Student Learning Time per Topic**	

Topic	GLT	ILT	Total
Decision Making as a Management Function Schools of Management Thinking Levels, types and stages of decision-making Models of decision-making Information technology and information systems in managerial decision-making	3	4	**7**
Control and Feedback Role of management and relationship with control and information Decision-making under certainty and uncertainty conditions Classical control systems model of feedback	3	4	**7**
Models of Decision-Making Simon's model of decision making Vicker's alternative view of decision-making	4	6	**10**
Decision-Making, Systems, Modelling and Support Major components of a system Identify the environment of a system Open and closed systems Phases of intelligence, design and choice Decision modelling tools	6	7	**13**
Decision Support Tools: EIS - Definition of decision support concepts Characteristics of a decision support system Types of decision-making & decision support systems Benefits & Limitations of a decision support system	6	7	**13**
Designing a Spreadsheet Model: Planning the Content Designing a Spreadsheet Model: Defining the Layout	2	4	**6**

	Decision Support Tools: Group Decision Suppport Systems Major characteristics of group decision support systems Types of problem suited for group decision support systems - Types of decision supported by group decision support systems - Benefits and limitations of a group decision support system		6	8	**14**
	Decision Support Tools: Expert Systems - Characteristics of expert systems - Types of problem suited to expert systems - Types of decision supported by expert system Benefits and limitations of expert systems		6	8	**14**
	End-User DevelopmentProblems of end-user developmentRoles and responsibilities as end-user developersInformation gathering to understanding business requirementsVarious approaches to Decision Support Systems Analysis and Design		6	7	**13**
	Total Student Learning Time		**42**	**55**	**97**
19	Other Additional Information	**PRACTICAL**	**GLT**	**ILT**	**Total**
		Introduction to Microsoft Excel: What is a Spreadsheet?	3	3	**6**
		Gaining Proficiency: Copying, Formatting and Isolating Assumptions	3	3	**6**
		Spreadsheets in Decision Making: What If?	4	4	**8**
		Graphs and Charts: Delivering a Message	3	3	**6**
		List and Data Management: Converting Data to Information/	3	6	**9**
		Spreadsheet Audit	3	3	**6**
		Designing a Spreadsheet Model: Planning the Content	3	4	**7**
		Consolidating Data: 3-D Workbooks and File Linking	3	6	**9**
		Designing a Spreadsheet Model: Defining the Layout	3	3	**6**
		Automating Repetitive Tasks: Macros and Visual Basic/Solver	3	3	**6**
		Total	28	35	**63**

(Subject 6)

No.	Item	Detailed Information
1.	Name of Course/Module	Web Programming in Java
2.	Learning Outcomes 15. Mapping of the Course/Module to the Programme Aims 16.Mapping of the Course/Module to the Programme Learning Outcomes	At the end of this course, students are able to :- - List and discuss the importance of dynamic web page - distinguish between Servlet and Java Server Page (JSP) - Explain and demonstrate the concept of JSP, JavaBeans, cookies, sessions and JSP tag extension and libraries - Explain how Java application is used to control and manipulate SQL queries by going into Java Database Connectivity - Discuss the 3-tier architecture of application. Understand the Big Picture of connecting the Client, Application Logic and Data.

3.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	Overview and setup of Servlet and JSP - Installing the server - Configuring the server setup	4	6	**10**
	Servlet basics - Handling Client Request: Form data - Handling Client Request: Request Header - Generate server response - Handling cookies - Session Tracking.	24	26	**50**
	JSP Basics - Invoke Java code with JSP scripting elements. - Controlling structure of generated Servlets - Include Files and applets in JSP - JavaBeans components in JSP - Integrating Servlets and JSP: The model view controller (MVC) Architecture - Simplifying Access to Java code - Basic concepts of PDEs - Classification of 2nd order linear PDES into basic types - Boundary and initial value problems - Method of separation of variables - Solution by Fourier series	24	26	**50**
	Supporting Technology - Accessing database with JDBC - Creating and processing HTML forms	4	6	**10**
	Total Student Learning Time	**56**	**64**	**120**
19	**Practical Topics**	**GLT**	**ILT**	**Total**

	Java Servlet ~ Handling Client Request: Form data ~ Handling Client Request: Request Header ~ Generate server response ~ Handling cookies ~ Session Tracking	4	6	10
	JSP ~ Invoke Java code with JSP scripting elements ~ Controlling structure of generated Servlets ~ Include Files and applets in JSP ~ JavaBeans components in JSP ~ Integrating Servlets and JSP ~ Creating Custom JSP Tag libraries ~ Simplifying MVC and Access to Java code	8	10	18
	Supporting Technology: ~ Accessing database with JDBC ~ Configuring MS Access, MYSQL, and oracle 9i	2	6	8
	Total	14	22	36

(Subject 7)

No.	Item	Detailed Information		
1.	Name of Course/Module	Computer System		
2.	**Content outline of the Course/Module and the Student Learning Time per Topic**			
	Topic	**GLT**	**ILT**	**Total**
	PART 1: An overview of computer systems Introduction to system architecture concepts	6	6	**12**
	PART 2: Data in the computer Number systems Data format Representing Integer Data Floating Point Numbers	16	18	**34**
	PART 3: Computer Architecture and Hardware operation The Little Man computer The CPU and Memory CPU and memory: Design, Implementation, & Enhancement Input/Output Computer peripherals Modern Computer Systems, Clusters, and Networks Three system examples	28	32	**60**
	PART 4: The software component Operating systems: An Overview	6	8	**14**
	Total Student Learning Time	**56**	**64**	**120**

HELP College of Arts and Technology

CENTRE FOR INFORMATION TECHNOLOGY STUDIES

DIPLOMA IN BUSINESS INFORMATION SYSTEM (DBIS)

Year		Course Code	Course Name	Credit	Status	REMARKS
Year 1 (2012)	Semester 1 (7 weeks)	CIS1006	Introduction to Information Systems	3	Major	Jan 9 - Mar 4 : Lecture (7 weeks)
		CIS 1007	Introduction to Problem Solving & Programming	4	Major	Mar 5 -Mar 11 : Study week (1 week)
		MPW1113/1112	Bahasa Kebangsaan	3	Compulsory	Mar 12 -March 18 : Exam week (1 week)
						Semester Break - 2 weeks
						(March 19 - April 1)
				10		
	Semester 2 (14 weeks)	MGT 1008	Introduction to Business	3	Major	April 2 - July 15 : Lecture (14 weeks)
		ACC 1006	Introduction to Accounting	4	Major	July 16 -July 22 : Study week (1 week)
		MTH 1001	Computing Mathematics	3	Major	July 23 -July 29 : Exam week (1 week)
		ENL1007	English	3	Minor	Semester Break - 3 weeks
		CIS 1010	Business Information Systems	3	Major	(July 30 - Aug 19)
		CIS 2005	Data Management	4	Major	
				20		
	Semester 3 (14 weeks)	ENL 1008	Communication Skills	3	Major	Aug 20 - Dec 2 : Lecture (14 weeks)
		CIS 3001	Internet Technology	3	Major	Dec 3 - Dec 9 : Study week (1 week)
		CIS 2001	Business Programming with Java I	4	Major	Dec 10 - Dec 16 : Exam week (1 week)
		CIS 1001	Electronic Commerce	3	Major	Semester Break - 3 weeks
		CIS 1012	Human Computer Interaction	3	Major	(Dec 17 - Jan 6, 2013)
		MPW1143/1153	Islamic / Moral Studies	3	Compulsory	
				19		
Year 2 (2013)	Semester 1 (7 weeks)	CIS2008	Industrial Training / Internship	6	Major	Jan 1 - Mar 3 1: Practical (12 weeks)
						Mar 11 -March 17 : Presentation week (1 week)
				6		
	Semester 2 (14 weeks)	CIS 2004	Business Systems Analysis & Design	3	Major	April 1 - July 14 : Lecture (14 weeks)
		CIS 3003	Multimedia Technology	3	Major	July 15 -July 21 : Study week (1 week)
		MKT 3005	Consumer Behaviour	3	Major	July 22 -July 28 : Exam week (1 week)
		CIS 2013	Visual Programming	4	Major	Semester Break - 3 weeks
		MGT 2022	Management Principles	3	Major	(July 29 - Aug 18)
		CSC2022	Programming with Java II	4	Major	
				20		
	Semester 3 (14 weeks)	MPWDIP1133	Pengajian Malaysia (Malaysian Studies)	3	Compulsory	Aug 18 -Dec 1 : Lecture (14 weeks)
		STAT 2001	Business Statistics	3	Major	Dec 2 - Dec 8 : Study week (1 week)
		CIS 2018	Advanced Web Development	3	Major	Dec 9 - Dec 15 : Exam week (1 week)
		MKT 1004	Marketing Principles	3	Major	Semester Break - 3 weeks
		CIS 2009	Project Deployment	4	Major	(Dec 16 - Jan 5, 2014)
				16		

Total Credits		91

	Elective Subjects			
	MGT3006	Human Resource Management	3	Elective
	CIS2014	Computer System	3	Elective
	CSC3004	Web Programming in Java	3	Elective
	CSC2021	Object-Oriented Analysis & Design	4	Elective