

**DIPLOMA IN INFORMATION  
TECHNOLOGY**

**Curriculum Program Summary  
Diploma in Information Technology**

# **YEAR 1**

## **YEAR 1 SEMESTER I**

---

### **UMB 1011                      ENGLISH FOR ACADEMIC PURPOSES**

#### **SYPNOSIS:**

English for Academic Purposes focuses on fulfilling students' academic requirements such as the acquisition of reading, writing, speaking and listening skills in English. The course also provides opportunities for students to acquire note taking and study skills. Students will be reinforced on aspects of English language oral and written skills that are most relevant to them in their academic work. By the end of the course, students should be able to use English for wide range of academic activities.

#### **REFERENCES:**

1. n.a. (2004). "*Koleksi Kertas Soalan MUET Oktober 2003*. Kuala Lumpur" : Pearson Malaysia.
2. Ng. K. S. et al. (2000). "*Study Skills for the Malaysian University English Test*. Kuala Lumpur : Federal Publication.
3. Pfeiffer, W.S. (2000) *Technical Writing: A Practical Approach*. New Jersey. Prentice Hall.
4. Teoh, S. A. & Zainab Mohd. Noor (2000). *Test-Taking Strategies for MUET*. Kuala Lumpur : Penerbit Fajar Bakti.

**UMB 1112**

**TECHNICAL COMMUNICATION 1**

**SYPNOSIS:**

This course introduces students to report writing skills needed at tertiary level. Students will learn basic report writing skills such as proposals, progress report and analytical report. In order to do this, they will learn how to collect data using questionnaires. Prior to that, students will also be trained to polish up their skills in definitive and descriptive essays using accurate grammar, vocabulary and sentence structure.

**REFERENCES:**

1. Finkelstein, J. (2008). *Pocket Book of technical writing*. 3<sup>rd</sup> ed. Singapore: McGraw Hill.
2. Kolin, P.C. (2006). *Successful writing at work*. Concise ed. USA: Houghton Mufflin Company.
3. Salbiah Seliman et. al. (2004). *English Communication for learners in engineering*. Malaysia: Prentice Hall.
4. Lakshmy Anantha Krishnan et. al. (2003). *Engineering your report: from start to finish*. Singapore: Prentice Hall.

**UQK 1\*\*1**

**CO-CURRICULUM 1**

**SYPNOSIS:**

This course will be offer to both degree and diploma students to expose students in different kind of activities. Three activites that will be offer are Sport and Recreation, Club/ Society and Uniform society.

**UMA 1172 ISLAMIC STUDIES**

**SYNOPSIS:**

This course explains about Islamic concept as ad-din. The discussion scopes include al-Quran studies and al-Hadith; Akidah Ahli Sunnah wal Jamaah; Principle of Muamalat; Islamic Criminal Law; Islamic Family Law issues and current issues.

**REFERENCES:**

1. Harun Din, (Dr.), (2001), *Manusia Dan Islam*, Kuala Lumpur: Dewan Bahasa dan Pustaka.
2. Ismail Hj. Ali, (1995), *Pengertian dan Pegangan Iktikad yang benar: Ahli Sunnah Wal Jamaah*: Kuala Lumpur: Penerbit al-Hidayah.
3. Mustafa Abd. Rahman, (1998), *Hadith Empat Puluh*, Kuala Lumpur: Dewan Pustaka Fajar.
4. Mustafa Hj. Daud, (1995), *Konsep Ibadah Menurut Islam*. Kuala Lumpur: Dewan Bahasa dan Pustaka

**UMA 1142 MORAL STUDIES**

**SYNOPSIS:**

This subject explores the moral concepts, some aspects related to the morality and its importance in our daily lives, some western moral theories, moral values in great religions of the world, morality and ethics in professional careers and contemporary moral issues.

**REFERENCES:**

1. Eow Boon Hin. 2002. *Moral Education*. Longman.
2. Ahmad Khamis. 1999. *Etika Untuk Institusi Pengajian Tinggi*. Kuala Lumpur. Kumpulan Budiman.
3. Mohd Nasir Omar. 1986. *Falsafah Etika; Perbandingan Islam dan Barat*. Kuala Lumpur. JPM.
4. Mohd Janib Johari. 1994. *Moral; Teori, Aplikasi dan Permasalahan*. Johor Bharu. Penerbitan UTM.

**DIT 1033                      MATHEMATICS IT I**

**SYNOPSIS:**

Set, relationship and functions, limit, differentiation, differential equations, Integral, sequences series and matrices.

**REFERENCES:**

1. Ken, B and Joan, D. (2001). *"Calculus; Concept and Methods"*. Cambridge.
2. Joshi, K.D., (2002). *"Calculus for Scientists and Engineers: An Analytical Approach"*. Alpha Science International Ltd, Middlesex.
3. Margaret, L.L., Raymond, N.G. and Nathan, P.R., (2002). *"Calculus with Applications"*. 7<sup>th</sup> ed., Addison Wesley, Boston
4. Jain, S.K., Gunawardena, A.d., (2004). *Linear Algebra: An Interactive Approach"*. Thomson, Australia.

**DIT 1064                      PRINCIPLES OF PROGRAMMING**

**SYNOPSIS:**

The course introduces student to algorithm method in problem solving and the program development environment. The course covers the development of Alkharizmi, Introduction to Programming Concepts, Problem Solving, Writing an Algorithm, Basic Programming Structure, Input and Output, Control Structures (Selection, Looping) and Functions.

**REFERENCES:**

1. Mohd Zainuri Saringat et. al., ( 2002). *"Modul Pengajaran : Pengaturcaraan C"*, Penerbitan KUITTHO.
2. Deitel, H. M dan Deitel, P.J. (2004). *"C How to Program 4<sup>th</sup> Edition"*, Prentice Hall Inc.
3. Hanly, R. J. and Koffman, B.E. (2003). *"Problem Solving and Program Design in C"*, McGraw-Hill.
4. Baharuddin Mohamed dan rakan-rakan. (2002). *"A Book on C."* Kuala Lumpur: Mc Graw Hill.

**DIT 1053**

**INTRODUCTION TO INFORMATION  
TECHNOLOGY**

**SYNOPSIS:**

This course provides the understanding of information technology, computer hardware, computer software, file and database, information system, telecommunication technology, internet and the information technology current issues.

**REFERENCES:**

1. Dr. Ahmad Zaharin Abdul Aziz. *"Menguasai Internet"*, Pustaka Cipta Sdn. Bhd.
2. Brian K. Williams, *"Using Information Technology : Practical Introduction to Computer and Communications"*. Mc Graw Hill, 1999.
3. Peter Norton, *"Introduction to Computer"*, McGraw-Hill.
4. *"Teknologi dan Sistem Maklumat"*, Fakulti Sains Komputer dan Sistem Maklumat", ACE, 2000.





**UMA 3032**

**AQIDAH KETUHANAN DAN SAINS**

**SYNOPSIS:**

This course will concentrate on two main issues, which are strong in aqidah and diversity view on science. The effects of the studies will show the existence of the relationship between those two effects via discussion based on holistic knowledge concept.

**REFERENCES:**

1. Aminuddin Ruska Al-Dawamy et al (1998). "*Aqidah Ketuhanan dan Sains*". Skudai. Pusat Pengajian Islam dan Pembangunan Sosial, Universiti Teknologi Malaysia.
2. Hussain Othman (2001). "*Iman dan Sains: Satu Pengenalan*". Pusat Pengajian Kemanusiaan dan Komunikasi.
3. Haron Din et al, 3 jilid (1994). "*Manusia dan Islam*". Kuala Lumpur: Dewan Bahasa dan Pustaka.
4. Titus, Harold H dan Marilyn S. Smith. (1974). "*Living Issues In Philosophy*". New York. D. Van Nostrand Company.

**DIT 1073**

**IT MATHEMATICS II**

**SYNOPSIS:**

This course focuses on introduction to statistic, probability distribution functions, discrete probability distribution, continuous probability distribution, and confidence interval.

**REFERENCES:**

1. Larson, R and Farber, B., (2006). "*Elementary Statistics:Picturing the World*". Pearson Education Malaysia, Pte. Ltd.
2. Navidi, W., (2006). "*Statistics for Engineers and Scientists*", Mc Graw Hill, New York.
3. Crawshaw, J. and Chambers, J., (2001). "*A Concise Course in Advanced Level Statistics*". Nelson Thornes Ltd, United Kingdom.

**DIT 1104                      PROGRAMMING**

**PREREQUISITE:        DIT 1064  
                                  (PROGRAMMING PRINCIPLE)**

**SYNOPSIS:**

This course provides introduction to programming concept using high level language such as C++. The course covers problem definition and solution before writing coding, variable and identifier, types of identifier or variable, data input and output, control statement, functions, array and structure, pointer, and input and output files.

**REFERENCES:**

1. Deitel & Deitel, *"C++ How to Program"*, Prentice-Hall, 2003.
2. Henri & Dick, *"Programming Language Essentials"*, Addison-Wesley 2002.
3. Uckan, *"Problem Solving Using C++"*, Irwin Publishing, 1999.

**DIT 1143                      MULTIMEDIA CONCEPT**

**SINOPSYS:**

This course provides brief history on the emerging of multimedia. The course covers multimedia definition and multimedia system: text, graphic, animation, video; multimedia project development process; user interface definition; understanding the importance of good user interface design; graphical user interface (GUI); hypertext and documentation; and multimedia applications.

**REFERENCES:**

1. Vaughan, T (2001). *"Multimedia Making It Work"*, Mc Graw Hill.
2. Barfield, L (2004). *"Design For New Media"*, Pearson Education Limited.
3. Shneiderman, B. and Plaisant, C. (2004). *"Designing the User Interface (Fourth Edition)"*. Addison Wesley
4. Sklar, J (2005). *"Principles of W"*, 3<sup>rd</sup> Edition, Thomson Learning.

**DIT 1043**

**FUNDAMENTAL OF COMPUTER  
ARCHITECTURE**

**SYNOPSIS:**

This course introduces students about internal computer structure. The topics covers computer architecture, bus system, memory organisation, operator system, input/output, computer arithmetic, instruction set, CPU structure and functions, Control Unit.

**REFERENCES:**

1. Stallings, William. (2006). "*Computer Organization And Architecture (7<sup>th</sup> Edition)*", Prentice-Hall.
2. Carpinelli, John (2001). "*Computer Systems Organization and Architecture*". Addison Wesley.
3. Hayes, John P. (1997). "*Computer System Architecture And Organization*", Mc Graw Hill.
4. Heuring, Vincent and Jordan, Harry. (2004). "*Computer System Design and Architecture*". Addison Wesley.

# **YEAR 2**

## YEAR 2 SEMESTER I

---

### UMS 1133                      NATIONHOOD            AND            CURRENT DEVELOPMENT OF MALAYSIA

#### **SYNOPSIS:**

This subject introduces the basic concept, and the process of Malaysia development. The topics will discuss the survival of the Malaysian society in facing colonialism and imperialism. Students will also be able to understand about the countris development including the social, politics and economis achievements. Students can relate the countrys development with the succesful performance of this country. Lastly, students can interpret the meaning of 'jihad' in the context of self development, society, nation and country.

#### **REFERENCES:**

1. Ahmad Esa, Harliana Halim, Khairul Azman Mohd Suhaimy, Ku Hasnan Ku Halim, Marwan Ismail, Mohd Akbal Abdullah, Shamsaadal Sholeh Saad dan Zahrul Akmal Damin (2004). *"Ikhtisar Sejarah Kenegaraan & Pembangunan Malaysia."*Johor Bahru: Muapakat Jaya Percetakan Sdn. Bhd.
2. Ahmad Esa dan Khairul Azman Mohd Suhaimy (2000). *"Ikhtisar Sejarah Pembangunan Sosio Politik dan Ekonomi Malaysia"* . Johor Bharu: Muapakat Jaya Percetakan Sdn. Bhd.
3. Mardiana Nordin dan Hasnah Hussiin. (2000). *"Pengajian Malaysia"*. Shah Alam: Penerbit Fajar Bakti Sdn. Bhd.
4. Nazarudin Mohd. Jali, Ma'rof Redzuan, Asnarulkhadi Abu Samah dan Ismail Mohd. Rashid (2005). *"Pengajian Malaysia"*. Petaling Jaya: Prentice Hall.

**DPK2022**

**INTRODUCTION TO MANAGEMENT**

**SYPNOSIS:**

Introduction: Introduction to management, management evolution, organisation environment, ethic and social responsibility. Discussion: Basic planning and making decision. Organisation: Fundamental of designing organisation, human aspect in organisation and managing changing. Leadership: Motivation, leadership, communication, team and group. Control; Basic control.

**REFERENCES:**

1. Robbins, S.P. dan Decendo, D.A. (2004). "*Fundamentals of Management: Essential, Concepts And Application*. 4<sup>rd</sup> edition". New Jersey: Prentice-Hall.
2. Jones, G. R., George, J.M. dan Hill, C.W.L. (1998)."*Contemporary Management*". New York: Mc Graw-Hill
3. Malaysian Institute of Management (Ed.) (2003). "*Management In Malaysia*." (2<sup>nd</sup> Edition) Institute Pengurusan Malaysia
4. Daft, R.L. (1997). "*Management*. 4<sup>th</sup> Edition". Fort Worth: Dryden Press

**DIT 2014                      DATA STRUCTURE**

**PRE REQUISITE:      DIT 1104  
(PROGRAMMING)**

**SYNOPSIS:**

This course develops students' understanding on how a data structure is applied in program development. The topics covers include Introduction to Data Structure, Data Types and Abstract Data Types, Link List, Stack, Queue, Searching and Hashing, and Tree and Graph.

**REFERENCES:**

1. Frank M. Carrano (2005). *"Data Abstraction and Problem Solving With C: Walls and Mirrors"*. 4<sup>th</sup> Edition. Addison Wesley Publishing, United States of America.
2. Main, M and Savitch. W. (2004). *"Data Structures and Others Objects Using C++"*. 3<sup>rd</sup> Edition. Addison Wesley Publishing, United States of America.
3. Drozdek, A. (2005). *"Data Structures and Algorithms In C++"*. Thomson Learning, United States of America.
4. Goodrih, Michael T. et. al. (2004). *"Data Structures and Algorithms In C++"*. John Wiley, Ney York.



**DIT 2023                      FUNDAMENTAL OF ANALYSIS AND  
DESIGN SYSTEM**

**SYNOPSIS:**

This course introduce students to system development methodology, focusing into system analysis and design in developing system with efficient and effective method. The topic covers Software Development Environment, Introduction to System Analysis and Design, Identifying and Choosing Project, Identifying System Requirement, Logic and Processing Model, Data Model, Shifting from Analysis to Design, Designing Input, Output, Interface and Structure System.

**REFERENCES:**

1. Marakas G. (2006). "*Systems Analysis And Design-an Active Approach (2<sup>nd</sup> Edition)*", Singapore: McGraw-Hill International Edition.
2. Dennis, A. and Wixom, B.H. (2003). "*System Analysis Design. 2<sup>nd</sup> Edition*", New York: John Wiley.
3. Whitten, J.L., Bentley, L.D. and Dittman, K. (2004). "*System Analysis and Design Methods. 6<sup>th</sup> edition*", Massachusetts: Mc Graw Hill.
4. Kendall, K.E., Kendall, J.E. (2005). "*Systems Analysis and Design (6<sup>th</sup> Edition)*". New Jersey: Prentice Hall.

**DIT 2033                      OPERATING SYSTEM PRINCIPLE**

**SYNOPSIS:**

Introduction to operating system, computer system structure, operating system structure, CPU (Center Processing Unit) scheduling, deadlocks, memory management and file system.

**REFERENCES:**

1. Silberschatz, A., (2004). *Operating System Concepts*, (7<sup>th</sup> Edition), John Wiley and Son.
2. S. Tanenbaum, (2001). "*Modern Operating Systems*". 2<sup>nd</sup> Edition, Prentice Hall.
3. Stalling, (2001). *Operating Systems International & Design Principles*, (4<sup>th</sup> Edition), Prentice Hall.
4. Nutt, Gary, (2001). "*Operating System: A Modern Perspective*". Addison Wesley.

**DIT 2152      INFORMATION TECHNOLOGY  
PROFESSIONAL ETHICS**

**SYNOPSIS:**

Introduction to ethics, computer and confidentiality, intellectual property, originality in journal writing, freedom of speech, courtesy, pornography, censorship issues, security, current cyberlaw practises in Malaysia.

**REFERENCES:**

1. Deborah G. Johnson. (2001). *“Computer Ethics. 3<sup>rd</sup> Edition.”* Prentice Hall.
2. Barbara MacKinnon. (2001). *“Ethics: Theory and Contemporary Issues. 3<sup>rd</sup> Edition”*. Thomson Learning.
3. Deborah G. Johnson. (1995). *“Computer Ethics & Social Values.”* Prentice Hall.
4. Sara Baase. (2003). *“A Gift of Fire. Social, Legal and Ethical Issues for Computer and The Internet. 2<sup>nd</sup> Edition.”* Prentice Hall.

## **YEAR 2 SEMESTER II**

---

### **UMF 1312                      FRENCH LANGUAGE**

#### **SYNOPSIS:**

This course is offered to students focusing on the learning of the basic of French. Students are exposed to the skills of listening, reading, speaking and writing with basic vocabulary, grammar and structure. Students are also provided with a lot of opportunities to practice their communication and writing skills.

#### **REFERENCES:**

1. Girardet, Jacky et Cridlig, Jean-Marie, 1996. *Méthod de français: PANORAMA 1*. Paris. CLE International.
2. Hatier, 1995. *Le Nouveau Bescherelle Complete Guide 12 000 French Verbs*. Paris: LIBRAIRIE HATIER.
3. Kaneman-Pougatch, Massia et al, 1997. *Méthod de français: Café Crème 1*. Paris. HACHETTE F.L.E..
4. Grégoir, Maïa et al, (1995). *Grammaire Progressive du Français avec 250 exercices*. Paris: CLE International.

## **UMG 1312                      JERMAN LANGUAGE**

### **SYNOPSIS:**

This course is designed for students to learn the basic of German language. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using German language.

### **REFERENCES:**

1. Nur Zakiah binti Amir Hamzah *Guten Tag der deutschen sprache*, Pejabat Penerbit UTHM.
2. Angela Wilkes. 2006. *GERMAN FOR BEGINNERS*, London: Usborne Publishing Ltd.
3. Hartmurt Aufderstrasse. 1998. *Themen Neu 1*, Lehrwerk fuer Deutsch als Fremdsprache, Textbook. Muenchen: Max Hueber Verlag.
4. Dr. Albert H. Small. 1991. *German â la Cartoon*. German Grammar through Cartoons. Passports Books.

## **UMJ 1312                      JEPUN LANGUAGE**

### **SYNOPSIS:**

This course is designed for students to learn basic Japanese language such as speaking, listening, reading, and writing. Students will be exposed to the real daily conversations which will enable them to communicate in basic Japanese language.

### **REFERENCES:**

1. *Kodansya`s Furigana Japanese Dictionary (2005)*
2. *Minna no Nihongo Listening (2006)* Second Published : 3A Corporation Tokyo.
3. *Minna no Nihongo Jap-English (2006)* Second Published : 3A Corporation Tokyo.
4. *Japanese Conversation for Beginners (2006)* Bonjinsha, Tokyo Japan.

**UMK 1312                      KOREA LANGUAGE**

**SYNOPSIS:**

This course is prepared for students to learn the basic Korean language. Students will be exposed to some skills in listening, reading, speaking, writing some basic words, vocabulary and sentences. Students will be exposed with a lot of training in writing and communication skills.

**REFERENCES:**

1. *Korean 1 ( 1993 )* Seoul National University Korea Language Research Institute,
2. *Speaking Korean Revised Edition Book 1 ( 1994 )* Francis Y.T Park, Hollym International Corp.
3. *Korean 2 ( 1993 )* Seoul National University Korea Language Research Institute
4. *Dong-As New Little English Dictionary ( 1981 )*

**UMM 1312                      MANDARIN LANGUAGE**

**SYNOPSIS:**

This course is offered to students focusing on the learning of the basic of mandarin. Students are exposed to the skills of listening, reading, speaking and writing with basic vocabulary, grammar and structure. Students are also provided with a lot of opportunities to practice their communication and writing skills.

**REFERENCES:**

1. Liang An Xiang, 2002. EPH Publishing (M) Sdn. Bhd., K.L
2. Shi Yun, 2002. EPH Publishing (M) Sdn. Bhd. K.L,.
3. Claudia Ross & Jing-heng Sheng Ma. 2006. Routledge. London.
4. Dr.Lim Choon Bee 2005 Universiti Putra Malaysia Press. Serdang.

## **UMP 1312                      SEPANISH LANGUAGE**

### **SYNOPSIS:**

This course is designed for students to learn the basic Spanish language. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Spanish language.

### **REFERENCES:**

1. Nurul Sabrina Zan: *Español, Aprender y Usarla* First Edition Batu Pahat: Penerbit UTHM.
2. Joy Renjilian – Burgay, Ana Beatriz Chiquito y Susan M. Mraz: *Caminos*.
3. Salina Husain: *Vamos a aprender español lengua extranjera*.
4. Gail Stein: *The Complete IDIOT'S GUIDE to Learning Spanish on Your Own Second Edition*.

## **UMR 1312                      ARABIC LANGUAGE**

### **SYNOPSIS:**

This course is designed for students to learn the basic Arabic. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Arabic language.

### **REFERENCES:**

1. Mohd Hisyam Abdul Rahim; Ahmad Sharifuddin Mustapha; Mohd Zain Mubarak. 2008. *Bahasa Arab UMR 1312*. Batu Pahat: Penerbit UTHM.
2. Mohd Hisyam bin Abdul Rahim. 2005. *Senang Berbahasa Arab*. Batu Pahat: Penerbit KUiTTTHO.
3. Ab. Halim Mohammed; Rabiyah Hajimaming; Wan Muhammad Wan Sulong. 2007. *Bahasa Arab Permulaan*. Serdang: Penerbit UPM.
4. Mohd Khairudin Khudri. 2006. *Akar Umbi Pembelajaran Bahasa Arab* . Kajang: One Touch Creative.

## **UMT 1312                      TAMIL LANGUAGE**

### **SYNOPSIS:**

This course is prepared for students to learn the basic Tamil language. Students will be exposed to some skills in listening, reading, speaking, writing some basic words, vocabulary and sentences. Students will be exposed with a lot of training in writing and communication skills.

### **REFERENCES:**

1. Tamil Akara 1. Beach, L.W. and Creamer, Feder Chris et. (1984). *“Language ; Skills and Use”*. 2<sup>nd</sup> Edition. Illinois; Scott, Foresman and Company.
2. Tann, Sarah. (1991). *“Developing Language in the Primary Classroom”*. United Kingdom; Cassel
3. Roberts. (1992). *“Teaching Children to Read and Write”*. New York; Simon and Schuster Education.
4. A.K. Paranthamanar. (1992) *“Nalla Tamil Ezhuta Venduma”*. Madras, India: Orient Longman.

## **DIT 2072                      ACCOUNTING AND FINANCES**

### **SYNOPSIS:**

This course orientation is to introduce basic accounting and finance information used in business environment to the students. It includes elements of basic accounting, financial and management such as recording system, business transaction, application and interpretation of financial statement and decision making in organization based on given financial information..

### **REFERENCES:**

1. Lazar, J. (2006). *“Accounting and Finance for Non-Accountants”*. Second Edition, Leeds Publication, Malaysia.
2. Gowthorpe, C (2003). *“Business Accounting and Finance for Non Specialists”*. Thomson Learning, London.
3. Birt, J et.al. (2005). *“Accounting: Business Reporting for Decision Making, John Wiley & Son Australia”*.
4. Dyson, J.R (2004). *“Accounting for Non-Accounting Students”*. Sixth edition, Prentice Hall, London.

**DIT 2142                      INFORMATION TECHNOLOGY SKILLS**

**SYPNOSIS:**

This course focuses on introducing three (3) basic skills in information technology: PC troubleshooting, computer network and audio-video production. Topics covered in this course are Introduction to Computer Component, Computer Assembly, Operating System Installation, Introduction to Basic Concept of Networking, Maintenance of Network Hardware and Devices, Network Cabling, Introduction to Audio-Video Production and Digital Audio-Video Publishing.

**REFERENCES:**

1. Clint, Saxton, (2000). "*A+ Lab Manual for Guide to Managing & Maintaining Your PC*". Thompson Learning.
2. S.Grodzinsky, Frances, (1999). "*Networking & Data Communications Laboratory Manual*", Prentice Hall.
3. Lozano, J., (2000). "*Multimedia: Sound and Video*", Que E & T.
4. Derfler, Frank & Freed, Les,(2000). "*Practical Network Cabling*". Que.



**DIT 2044                      DATABASE**

**SYNOPSIS:**

This course consists of Database Concepts, Entity Relational Model, Introduction to the SQL Statement, Database Normalization and Database Design.

**REFERENCES:**

1. Connolly T. & Begg C. (2005). "*Database Systems: A Practical Approach To Design, Implementation and Management*", 4<sup>th</sup> Edition ; Addison-Wesley,
2. Garcia-Molina H., D. Ullman J. and Widom J., (2002). "*Database System: The Complete book, International Edition*". Prentice Hall.
3. Date C.J. (2000). "*An Introduction to Database System*". Publishing Company.
4. Atzemi P., Para Boschi S. and Torlone R. (1999). "*Database System: Concept, Language and Architectures*". Mc Graw Hill.

**DIT 2054                      PRINCIPLE OF OBJECT-ORIENTED  
PROGRAMMING**

**PRE REQUISITE:      DIT 1104  
(PROGRAMMING)**

**SYNOPSIS:**

This course aims to introduce students about characteristics of object oriented programming (OOP). Topics covered under this course are Introduction to OOP, Object and Class, Inheritance, Polymorphism, Overloading and Exceptions.

**REFERENCES:**

1. Rosziati Ibrahim and Sapiee Jamel. (2005). *“Object-Oriented Programming Using C++ - An Introduction”*. Kuala Lumpur. McGraw-Hill.
2. Deitel, H.M and Deitel, P.J. (2003). *“C++ How to Program”*. Pearson Education International.
3. Savitch, W. (2003). *“Problem Solving with C++, the Object of Programming”*. Addison Wesley.
4. Farrell, J. (2001). *“Object-Oriented Programming Using C++, Second Edition”*. Thomson Course Technology.

**DIT 2123                      FUNDAMENTAL OF COMPUTER  
NETWORK**

**SYPNOSIS:**

This course consists of Introduction to the Computer Network, Local Area Network (LAN), Wide Area Network (WAN), Internetworking, Internet, Network Operating System and Introduction to the Latest Technology in Compter Network.

**REFERENCES:**

1. Stalling, William (2005). *“Business Data Communications”*. 5<sup>th</sup> ed., New York: Prentice Hall.
2. Forouzan, Behrouz A. , (2003). *“Data Communications and Networking( 2<sup>th</sup> ed)”*., McGraw-Hill.
3. Stallings,.William. (2001). *“Data and Computer Communication, (6<sup>th</sup> ed)”*, MacMillan.
4. Comer, Douglas dan Droms, Ralph. (2004). *“Computer Networks and Internets with Internet Applications”*. Prentice-Hall.

# **YEAR 3**

## **YEAR 3 SEMESTER I**

---

### **DPK 2032                      ENTEPRENEURSHIP**

#### **SYNOPSIS:**

Economic environment and business, rules and support facilities, entrepreneurship, method to identify, study and choose business opportunities, types of rules, business planning, managing medium and small size business, advertising planning, operation planning, financial planning, issues in entrepreneurship.

#### **REFERENCES:**

1. .... (1999). "*Keusahawanan*", MEDEC, UiTM
2. Saridan Abu Bakar, (1997). "*Penyediaan Rancangan Perniagaan*", MEDEC UiTM
3. Wan Liz Ozman Wan Omar dan Sulzari Mohamed, (2002), "*Memperkasakan Usahawan: Panduan Lengkap Pengurusan Perniagaan dan Penjanaan Usahawan*", Utusan Publications & Distributors Sdn Bhd.
4. Robert D. Hisrich dan Michael P. Peters, (2002), "*Entrepreneurship*", Fifth Edition, McGraw-Hill.

**DIT 3243**

**WEB-BASED PROGRAMMING**

**SYNOPSIS:**

This course provides the important of understanding three tier programming; advantages and disadvantages of two tier programming architecture. Introduce to the web programming components; hardware, software and database. Implement techniques in accessing and storing data. Web Programming technique using variables, operator and arithmetic. Control statements; if, if..else, and switch. Repeat command; for, while and do..while. Using array and function; passing parameter. Introduce to plug in programming by using available function such as use date, time or Java function.

**REFERENCES:**

1. Leon Atkinson, (2001). *“Core PHP Programming”* Prentice Hall Publishing Company.
2. Roger Fournier, (1998). *“Web Application Development”* Prentice Hall.
3. Craig Hilton & Jeff Willis, (2000). *“Building Database Applications on the Web Using PHP3”*. Addison Wesley.

**DIT 3254      DEVELOPMENT E-BUSINESS APPLICATION**

**SYPNOSIS:**

This course introduces students to the e-business elements and the related technology. It will be give emphasis to general rules of e-business, current technology, business strategy, web security issues and electronic payments.

**REFERENCES:**

1. Efram Turban et al., (2004). *"Electronic Commerce 2004: A Managerial Perspective"*. Prentice Hall, Pearson Education International.
2. William S. Davis & John Benamati, (2003). *"E-Commerce Basics: Technology Foundation and E-Business Applications"*, Addison Wesley.
3. Anne Nelson & William H.M Nelson III, (2002). *"Building Electronic Commerce With Database Constructions"*, Addison Wesley
4. Robert C. Nickerson, (2001), *"Business and Information Systems"*, 2nd Edition, Prentice Hall.

**DIT 3223                      MODELLING AND 3D ANIMATION**

**PRE REQUISITE:      DIT 1093  
(INTRODUCTION TO MULTIMEDIA)**

**DIT 1143  
(MULTIMEDIA CONCEPT)**

**SYNOPSIS:**

This course provides the understanding of advanced 3D animation. Introduce advanced 3D animation, advanced transformation, advanced character modelling, kinematics tutorial, modelling scene, environments and animations, mechanical and stylistic animation, Animation organic and realistic.

**REFERENCES:**

1. Lab. C. & Keller, K (1997). *"Multimedia Animation"*. Macmillan Computer Publishing.
2. Backer, R.M (1998). *"Picture Driven Animation"*, Montvale Inc.
3. Casanova, J.V. & Elias, L.F (1997). *"Multimedia Graphics."* Macmillan Computer Publishing
4. Casanova, J.V & Molina, L (1997). *"An Interactive Guide to Multimedia"*. Miami Dade Community College.

**DIT 3324**

**JAVA PROGRAMMING**

**SYNOPSIS:**

This course provides the students understanding on the concept of Introduction to Programming Concept using Java language. Topics covered under this course are Structure, Identifier, Data Type, Variable, Operator, Control Structures, Array, Class Design, Text Based Application, Graphic User Interface and Event Handling.

**REFERENCES:**

1. Malik D.S., Nair P.S., (2003). *“Java Programming: From Problem Analysis to Program Design”*. Thomson Course Technology: USA
2. Judy Scholl. (2003). *“Java Programming: From Problem Analysis to Program Design Lab Manual”*. Thomson Course Technology: USA
3. Glenn Rowe. (1999). *“The Essence of Java Programming”*. Prentice Hall: UK
4. Shelly G.B., Cashman T.J., Starks J.L (2001). *“Java Programming: Complete Concepts and Techniques”*. Thomson Course Technology: USA

**YEAR 3**  
**SEMESTER II**

---

**DIT 3419**

**INDUSTRIAL TRAINING**

**PRE REQUISITE :** STUDENTS SHOULD HAVE TAKEN AT  
LEAST 80% FROM ALL COURSE  
SUBJECTS

**SYNOPSIS:**

Students must attend industrial training for 18 weeks at any public or private agencies. During that period, they will be given task or project that approved by the faculty and the agency they allocated with.