



الكلية التكنولوجية بصلالة  
Salalah College Of Technology  
Information Technology Department  
COURSE DESCRIPTIONS

**DIPLOMA - INFORMATION SYSTEMS (IS)**

**LIST OF COURSES**

- |     |          |                                      |     |
|-----|----------|--------------------------------------|-----|
| 1)  | MATH1102 | Pure Math                            |     |
| 2)  | MATH1103 | Applied Math                         | N/A |
| 3)  | ENTW1100 | Technical Writing I                  |     |
| 4)  | ITAD1100 | Advanced I T Skills                  |     |
| 5)  | BAMG1100 | Introduction To Business             |     |
| 6)  | BAMA1101 | Business Mathematics                 |     |
| 7)  | ITDB1102 | Introduction To Database             |     |
| 8)  | BAMG1207 | Principles Of Management             |     |
| 9)  | BACO1212 | Job Search Techniques                |     |
| 10) | BAMG2111 | Entrepreneurship                     |     |
| 11) | ENTW1200 | Technical Writing I I                |     |
| 12) | ITDB1204 | Applied Database                     |     |
| 13) | ITSE1203 | Introduction To Web Technology       |     |
| 14) | BAEC1203 | Principles Of Microeconomics         |     |
| 15) | BAMK1205 | Principles Of Marketing              |     |
| 16) | ITBS1201 | Introduction To Information System   |     |
| 17) | ENGL2100 | Technical Communication              |     |
| 18) | ITDB2101 | System Analysis And Design           |     |
| 19) | ITSE2200 | Visual Basic For Information System  |     |
| 20) | BAMG2100 | Production & Operation Management    |     |
| 21) | MATH1201 | Managerial Statistics                |     |
| 22) | BAAC1102 | Principles Of Accounting             |     |
| 23) | PHIL3108 | Business Ethics                      |     |
| 24) | ITBS2101 | Management Information System        |     |
| 25) | ITPJ2202 | Course Project                       |     |
| 26) | ITSE2102 | Introduction To Software Engineering |     |
| 27) | ITMM2200 | Fundamentals Of Multimedia           |     |
| 28) | PHIL2200 | Formal Logic                         |     |
| 29) | ITBS2203 | E-Commerce For I T                   |     |



**1) MATH1102 PURE MATH**

This course deals with Functions and Graphs, Definition of a function schematic, functions defined by set of ordered pairs, functions defined by equations, domain and range of a function, exponential functions, logarithmic functions , division and synthetic division), division algorithm, remainder theorem. Trigonometric functions, inverse sine and cosine identities, evaluation of inverse, trigonometric identities. Sequence and series-definition of a sequence, finite series and infinite series, Sum formula for finite geometric series, sum of an infinite geometric series. Descriptive and Inferential Statistics, Sample space, random experiment, events(mutually exclusive events, Independent events), probability, multiplication rule, probability rules.

**2) MATH1103 APPLIED MATH**

Missing

**3) ENTW1100 TECHNICAL WRITING I**

This course deals with basic academic writing skills so as to communicate effectively and clearly. This includes knowledge of reading analysis and understanding which will aid written assignments and projects. This also includes grammatical structures; pays attention to layout; spelling and punctuation; helps students to locate source materials in the library and on the internet; evaluating their usefulness; credibility; relevance; etc.

**4) ITAD1100 ADVANCED I T SKILLS**

The course builds on the skills acquired in the IT foundation course to train students on important software applications such as E-Learning, Desktop Publishing, Web applications, Advanced Spreadsheets and Databases. The students should be able to Demonstrate their ability to use the E-Learning portal, Design publications using publishing software and develop web sites using a web developing software, Apply advanced functions in MS-Excel and develop databases.

**5) BAMG1100 INTRODUCTION TO BUSINESS**

This course deals with the general knowledge of the modern business environment which enhances the understanding of the characteristics and activities of a business organization. This also includes types; functions; advantages and disadvantages of different business organizations; economic, social, legal & ethical aspects of business; regional & global business environment as well as with some case studies.

**6) BAMA1101 BUSINESS MATHEMATICS**

This provides a step-by-step guidance through sample problems and solutions relating to banking; credit; basic finance & investment. It also deals with financial instruments and terminologies used in business finance such as compound interest; annuities & promissory notes. This also includes calculation of simple and compound interest rates; computation of annuities; capitalized costs; stocks and bonds; using the results of mathematical calculation for financial decisions; etc.

**7) ITDB1102 INTRODUCTION TO DATABASE**

Introduction to Database course is designed to focus on the principles, design, implementation and applications of database management .All the way through this course the basics concepts, terms and operation of relational model are taught. It covers the areas of logical database design principles including ER diagram, Normalization, Relational Algebra, and design and manipulation of relational databases using SQL. Students will gain the required knowledge to describe, define, design and manage Relational Databases using SQL on Oracle Platform.



**8) BAMG1207 PRINCIPLES OF MANAGEMENT**

This course covers fundamental concepts and principles of management which deals with roles; functions and responsibilities of Management. It includes historical development; theoretical aspects and practical application of managerial process. This also includes roles and functions of management such as planning; organizing; supervising and controlling; various management theories; steps in planning & decision making process; current management topics such as ethical issues; global issues; etc.

**9) BACO1212 JOB SEARCH TECHNIQUES**

This course is to assist student to gain confidence necessary to obtain or improve employment. This course also emphasis on job search techniques and strategies, resume writing, interviewing skills, and improving employment opportunities.

**10) BAMG2111 ENTREPRENEURSHIP**

This course introduces the student to entrepreneurship phenomenon. The student will be exposed to the theory as well as experience associated with entrepreneurship. This course covers areas such as financial management and planning, legal regulation, concepts and tools in developing new venture, communication tools in small business.

**11) ENTW1200 TECHNICAL WRITING I I**

This course is a continuation of the ENTW 1100. It deals with effective and appropriate writing based on real life situations. This includes expository writing and skills integrated with listening, reading and speaking skills. This also teaches students how to communicate effectively in oral and written English; editing skills, teamwork skills, information gathering and research skills and critical thinking skills.

**12) ITDB1204 APPLIED DATABASE**

This course focuses on writing Windows based applications that interface with a database management system [SQL server] using the VB.Net language. Covers using data sources and datasets for Rapid Application Development, three-layer Windows Forms applications, using reporting features of Visual Studio. After completing this course student will be able to develop database driven applications using VB.NET as they are familiarize with all necessary windows controls and database controls for data

**13) ITSE1203 INTRODUCTION TO WEB TECHNOLOGY**

This course introduces the Internet principles and World Wide Web (WWW) concepts to the students and equips them with the techniques of Hyper Text Markup Language tags, HTML Forms, Java Script Introduction, JavaScript Methods and Events, Cascading Style Sheet. At the end of this course, the students should be able to define the features and elements of WWW and Internet principles. Demonstrate the ability to utilize HTML tags for web page design. Understand and utilize how JavaScript can contribute to web page design and create client side validation.

**14) BAEC1203 PRINCIPLES OF MICROECONOMICS**

This course gives a basic understanding of Micro-economics concepts and behavior of small economic decision units; individuals; household; firms; industries and resource owners. This also includes central economic problems; elasticity of demand; demand; supply; equilibrium analysis; costs of production; marketing structure; role of competition policy and regulation of natural monopolies in economic performance; etc.



**15) BAMK1205 PRINCIPLES OF MARKETING**

This course gives an overview of the nature; significance and main concepts of marketing function in modern business organization and the effect of marketing environment on it. It includes some marketing techniques in a wide variety of settings. This also includes marketing research; its role and effect on business organization; marketing mix which includes various channels of distribution; different pricing methods; methods of marketing promotion and product. This also deals with case reports.

**16) ITBS1201 INTRODUCTION TO INFORMATION SYSTEM**

This course introduces the concepts of Information Systems and how they are applied. It provides an introduction to computers and corporate computing. It gives the basics of various Business Information Systems It covers the impact of computers on society and ethical issues. In addition, students will get acquainted with hardware/software applications, including databases, spreadsheets, word processors, graphics, the internet, and operating systems.

**18) ITDB2101 SYSTEM ANALYSIS AND DESIGN**

Systems Analysis and Design- This course is designed for students to acquire and apply the concepts and skills required to perform the job of system analyst in system development following the phases of Systems Development Life Cycle methodology. The course guide students on proper conduct of system analysis, design and implementation of business solution applications using various techniques and tools.

**19) ITSE2200 VISUAL BASIC FOR INFORMATION SYSTEM**

This course acquaints students with the logic and application design, development, testing and documentation of Visual BASIC programs. Visual BASIC's object oriented event driven (OOED) interface is used to program sequential, conditional, and repetition structures. Sequential data files are created and accessed in Visual BASIC programs. Upon completion, students should be able to design, code, test and debug at a beginning level.

**20) BAMG2100 PRODUCTION & OPERATION MANAGEMENT**

This course provides students with the information about the management in industrial and production companies. It deals with the production cost, direct and indirect, variable and fixed costs, methods of deciding the best method to rational production process, inventories and project planning.

**21) MATH1201 MANAGERIAL STATISTICS**

This course provides The nature of Probability and statistics- Descriptive and Inferential statistics, Variables and Types of data, Random sampling, Random numbers.Frequency Distribution and Graph-Organizing the data, Histograms, Frequency polygon and Ogives and Pie -charts.Data Description- Measures of variation and Dispersion, Measures of Position, Deciles and Percentiles.Counting Rules and Probability- Counting rules, Sample spaces, Probability of an Event, Addition rules of probability and the multiplication rules of probability. Correlation and Regression- Scatter plots, Correlation, Regression. The Normal Distribution- Standard Normal Distribution, Z-Table, Area Under Normal Curve and Applications of Normal Distribution. Hypothesis Testing - Statistical Hypothesis, Z-Test for Mean ( One tailed test).

**22) BAAC1102 PRINCIPLES OF ACCOUNTING**

This is an introductory course related to the understanding of the environment; role and basic principles of accounting primarily from the standpoint of the user of financial information.This also includes analysis of business transactions using accounting and financial terms; post journal entries to general and subsidiary ledger accounts; preparation of financial statements; preparation of accounts for partnership and corporate business; preparation of bank reconciliation statement; etc.

**23) PHIL3108 BUSINESS ETHICS**

This course is to equip the student with the highest ethical standards that will guide him/her through real life dilemmas. It also enable the student to understand the concept of value, Islamic and Omani values, appreciate and respect ethnic and cultural diversity

**24) ITBS2101 MANAGEMENT INFORMATION SYSTEM**

Management Information System – This course provide students a comprehensive understanding on the principles of IT applications and its components and how it is applied in the different functional areas in business to gain success and competitive advantage. Further, it stresses more on its integration to management decision making and problem-solving activities utilizing the latest IT trends to cope up with the changing business paradigms.



**25) ITPJ2202 COURSE PROJECT**

The aim of the project is to expose students to the real-world experience where students will need to synthesize and apply what they have learned. The course project is designed to demonstrate the skills of a student to design and develop an IT based project. The project is an opportunity for students to bring together the breadth of knowledge and skills developed during their education and training. It should be able to illustrate a student's technical knowledge as well as project management competence. The realization of such projects will develop students to become excellent programmers, systems analysts, researchers, database administrators, and the like, who will contribute to the country's development effort.

**26) ITSE2102 INTRODUCTION TO SOFTWARE ENGINEERING**

The course deals with fundamentals concepts and principles of Software Engineering. This course is useful for students to understand the primary characteristics of the software, stake holders, models, cost estimation techniques, testing techniques, and design techniques used to develop the software. The course also deals with exemplifying the roles and responsibilities of software engineer and its importance to the organization and society. After completing this course students will be able to analyze and apply the knowledge in the development of live projects in the real world.

**27) ITMM2200 FUNDAMENTALS OF MULTIMEDIA**

In this course students learn the concepts, standards and components of multimedia through practical using an appropriate software /tool to design, manipulate and animate images. Students Develop multimedia systems for industrial, educational and personal applications. The course starts learning with various elements of multimedia such as text, graphics, sound, video, animation, and virtual reality using the latest tools, technologies, techniques, and standards. Student also learns how to apply principles of multimedia to project management and distribution.

**28) PHIL2200 FORMAL LOGIC**

This course develops the ability to think and function effectively, logically and analytically, effectively using oral and written communication. This includes the concept of value; Islamic and Omani values; ethnic and cultural diversity; etc.

**29) ITBS2203 E-COMMERCE FOR IT**

This course explores the concepts, theories and technologies used in E-Commerce. Topics include overview of E-commerce, e-commerce models, consumer behaviors, payment option and other related concepts. Students will also gain practical exposure and experience in designing and developing their own web-based E-Commerce applications using PHP and MySQL.