

King Fahd University of Petroleum & Minerals

Deanship of Educational Services

University Diploma Programs



Picture

**Bulletin of University Diploma
Programs**

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Introduction

In its continuous endeavor to develop its programs, King Fahd University of petroleum & Minerals (KFUPM) plans to introduce special courses to the secondary school graduates giving the diploma degrees in a variety of majors. These up-to-date courses conform with the latest training systems and satisfy the local business needs. KFUPM, also, concentrates in fields like engineering, computer sciences, business management and environmental design. The courses are designed to be more flexible to match the students' different abilities until they get the diploma.

The University seeks to bring about human resources capable of work in the fields of its majors and allow outstanding students to complete their academic education. Registration in these programs is subject to the implementation rules laid down by the university board.

Diploma Programs:

- 1) The University offers a list of courses and the student is allowed to join one or more courses.
- 2) The student is allowed to join any course according to the suggested plan if he wishes to finish the diploma program in a specific period (e.g. two years). At the end of these two years, the student will graduate and get the diploma degree if he adheres to the training plan.

Diploma Course Duration:

Course duration for diploma programs is not less than two years and it may be increased if the student lacks the required skills like English and Math.

Diploma Training Plan:

The satisfactory completion of any Program requires finishing 16-24 courses and the student has a better chance of finishing the program in the specific time if he follows the training plan in a methodical way.

Current Diploma Programs

Diploma in Computer Technology & Programming

Diploma in Electronic Equipment Maintenance

Diploma in Business Administration

Diploma Program in Computer Technology & Programming

The Program:

The program prepares students to have strong backgrounds in the development of computer programming . The program gives students a wide base of knowledge about important facets of computer technology.

Objectives:

The objective is to produce graduates that have the abilities to write computer applications in the day-to-day operations of organizations, to maintain computing environments effectively and efficiently for the organizations, and to develop automated procedures for routine organizational tasks.

Areas Taught:

The program covers the following areas: computer hardware, system software, internet services and web development, and system administration and management.

Skills Acquired:

The graduates of the program will have the following skills: They can design, write and maintain industrial application programs, maintain computing environments effectively and efficiently, design and build databases, help network administrators, and work for an Internet service providers and web development organizations.

Employment Opportunities:

Our graduates can receive jobs from any of the following companies or institutions: Saudi Aramco, SABIC, Saudi Airlines, Financial Institutions, SCECO, Software Houses, Internet Service Providers, the Royal Commission for Jubail & Yanbu, and the Ministry of Interior.

Diploma Curriculum in Computer Technology & Programming

COURSE	TITLE	LT	LB	CR
Preparatory Year				
First Semester				
ENGL 003	Preparatory English I	15	5	8
MATH 003	Preparatory Math I	3	1	4
Sub-total		18	6	12
Second Semester				
ENGL 004	Preparatory English II	15	5	8
MATH 004	Preparatory Math II	3	1	4
ICS 004	Preparatory Computer Applications	0	2	1
Sub-total		18	8	13
Total Credits required in Preparatory Year: 25				
First Year				
First Semester				
ICS 011	Computer Programming	2	3	3
ENGL 011	English Composition I	3	0	3
IAS 011	Islamic Ideology	2	0	2
MATH 011	Applied Calculus	3	2	4
PHYS 011	Applied Physics I	3	3	4
Sub-total		13	8	16
Second Semester				
ICS 012	Visual Programming I	2	3	3
ICS 013	Computer Organization	2	2	3
ICS 014	Database Applications	2	4	4
ICS 015	System Analysis & Design	2	2	3
ENGL 012	English Composition II	3	0	3
Sub-total		11	11	16
Second Year				
First Semester				
ICS 021	Visual Programming II	2	4	4
ICS 022	Computer Networking	2	4	4
ICS 023	PC Operating Systems	2	4	4
XXX 021	Science Elective I	3	3	4
Sub-total		9	15	16
Second Semester				
ICS 024	PC Maintenance & Troubleshooting	2	4	4
ICS 025	Internet services & Web Authoring	3	3	4
ICS 026	Capstone Project	1	6	3
IAS 021	Objective writing	2	0	2
XXX 022	Science Elective II	2	2	3
Sub-total		10	15	16

Total credits for Diploma Program in Computer Technology & Programming: 64

Course Description

ICS 004 Preparatory Computer Applications (0-2-1)

Computer components, use of computers in work environment, Introduces the commonly used software packages. Emphasizes the hands on experience of the commonly used software packages with regard to creating, organizing, and maintaining directories/ files or documents.

ICS 011 Computer Programming (2-3-3)

Problem solving. Introduction to a typical programming language. Basic data types. Selection structures. Repetition structures. Arrays and studying. Procedures and functions. Simple algorithm development.

ICS 012 Visual Programming I (2-3-3)

Introduction to the principles of visual programming for windows such as Visual Basic or other visual programming environment. Event driven programming. Control structures. Data types and structures. Properties, events, and methods of control of forms. Modular programming.

ICS 013 Computer Organization (2-2-3)

Overview of computer hardware, communication hardware, and peripherals. Functional level description of computer organization, various functional units and different cards/peripherals.

ICS 014 Database Applications (2-4-4)

This course is an introduction to database management. Using appropriate database software, students will learn how to design, create, manipulate, and maintain data in an organized, accessible, and accurate manner. Emphasis is placed on the use of PC-based relational database management software for common business applications.

Co-requisite: ICS 012

ICS 015 System Analyses & Design (2-2-3)

Introduces software life cycle. Requirements collection. Software design. Software project management.

Co-requisite: ICS 012, ICS 014

ICS 021 Visual Programming II (2-2-4)

Students will program windows applications while learning menu layout, programming logic, form design and control, structured testing and debugging, user interface, conditional logic and loops, input validation, form connecting, introduction to object-orientation, and database front end design.

Prerequisite: ICS 012, ICS 014

ICS 024 PC Maintenance and Troubleshooting (2-4-4)

Overview of system features and components. Microprocessor types and specifications. Motherboards, bus slots and I/O cards, memory, power supply, input devices, video display hardware, audio hardware. Floppy disk drives and controllers, hard disk drives and controllers, CD-ROM drives, and network cards. Preventive maintenance, backups, and warranties. Software and hardware diagnostic tools. Software and hardware troubleshooting.

Prerequisite: ICS 013

ICS 022 Computer Networking (2-4-4)

The course provides a comprehensive study of microcomputer networking. Topics include the selection, installation, maintenance, and management of network software and hardware.

Prerequisite: ICS 013

ICS 023 PC Operating Systems (2-4-4)

The course will focus on the study of disk-based operating systems used in micro-computer systems. Laboratory practice will give the student a working knowledge of MS DOS, UNIX, and MS WINDOWS.

Prerequisite: ICS 012, ICS 013

ICS 027 Computer Systems Management (2-2-3)

Introduces the computer systems administration including login, file system, security, print services, network architecture, performance monitoring, and event viewing. In the lab specific environment like Windows NT will be used to give the students hand-on experience.

Prerequisite: ICS 023

ICS 025 Internet Services and Web authoring (2-4-4)

Electronic mail and file transfer. Information retrieval services and tools. Multimedia applications:

Audio-video conferencing; networked hypertext and hypermedia; visual cyberspace. World wide Web (WWW) page and program development. The Hypertext Markup Languages and the Hypertext Transfer Protocols. Common Gateway Interfaces, Java Script. Web page style and design.

Prerequisite: ICS 021, ICS 022

ICS 026 Capstone Project (1-6-3)

This course is designed to give students the experience of tackling a realistic problem. The intent is to show how to put theoretical knowledge gained into practical use by starting from a word description of a problem and proceeding through various design phases to end up with a practical solution. The project advisor guides the student in conducting feasibility study, preparation of specifications, and the methodology for the design. Detailed design and implementation of the project are carried out followed by testing, debugging, and documentation. An oral presentation and final report are given at the end of the semester.

Prerequisite: ICS 014, ICS 021

Diploma Program in Electronic Equipment Maintenance

The Program:

The diploma program in Electronic Equipment Maintenance is designed for updating the information and skills of these already working in this area and for training those wishing to join this area. The graduate is expected to be able to understand the operation of different electronic equipment and writing a report about them.

Objectives:

Graduating skilled technicians able to deal with the different electronic equipment now in use in different industries in Saudi Arabia, especially chemical, petroleum and food industry.

Areas Taught:

1. Principles of operation of electronic devices.
2. Practical applications of electronic devices in constructing useful circuits and systems.
3. Troubleshooting and repairing of electronic circuits and systems.

Skills Acquired:

1. Ability to read, understand and troubleshoot electronic circuits and systems.
2. Ability to repair some of the problems and / or writing reports about them.

Employment Opportunities:

Electronic Equipment Technicians, in various industries, petroleum, chemical, food, etc., in Saudi Arabia.

Diploma Curriculum in Electronic Equipment Maintenance

COURSE	TITLE	LT	LB	CR
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Preparatory Year

First Semester

ENGL 003	Preparatory English I	15	5	8
MATH 003	Preparatory Math I	3	1	4
Sub-total		18	6	12

Second Semester

ENGL 004	Preparatory English II	15	5	8
MATH 004	Preparatory Math II	3	1	4
ICS 004	Preparatory Computer Applications	0	2	1
Sub-total		18	8	13

Total Credits required in Preparatory Year: 25

First Year

First Semester

MATH 011	Applied Calculus	3	0	3
ENGL 011	English Composition I	3	0	3
EET 011	Electric Circuits I	3	3	4
PHYS 011	Applied Physics I	3	2	4
EET 012	E. Workshop I	1	3	2
Sub-total		13	8	16

Second Semester

ICS 016	Advanced Computer Applications	2	3	3
PHYS 012	Solid State Physics	3	2	4
ENGL 012	English Composition II	3	0	3
EET 013	Digital Circuits	3	3	4
EET 014	E. Workshop II	1	3	2
Sub-total		12	11	16

Second Year

First Semester

EET 021	Analog Electronic Circuits	3	3	4
EET 022	Digital Electronic Circuits	3	3	4
EET 023	E. Workshop III	1	3	2
IAS 021	Objective Writing	2	0	2
EET 024	Microprocessor Control	2	3	3
Sub-total		11	12	15

Second Semester

EET 025	Electronic Troubleshooting	0	5	2
EET 026	E. Workshop IV	1	3	2
EET 027	Electronic Instrument	2	3	3
EET 028	Programmable logic Controllers (PLC)	2	3	3
EET 029	Introduction to Communication	2	3	3
Sub-total		7	17	13

Total credits for Diploma Program in Electronic Equipment Maintenance: 60

Course Description

EET 011 - Electric Circuits (3-3-4)

Voltage and current sources. Resistance, conductance, Ohm's law, power and energy. Series and parallel circuit. Kirchhoff's laws. Circuit theorems. Inductors and capacitors. AC circuit analysis; Phasors. Impedance and admittance. Real and Reactive power. Power factor. Polyphase system. **Prerequisites: None**

EET 012 Electronic Workshop I (1-3-2)

Provides a background in basic electronic shop techniques. The topics covered include the correct use of hand and power tools, reading specifications, sheetmetal layout, chassis panel and enclosure fabrication. Component assembly, lead preparation, terminal connections, hard wiring, printed circuit board assembly, hand and dip soldering, inspection, quality control and testing. **Prerequisites: None**

EET 013 - Digital Circuits (3-3-4)

Number systems and Logic minimization; logic circuits, flip-flops and sequential logic circuits, counters, registers and applications. **Prerequisites: EET 011**

EET 014 – Electronic Workshop II (1-3-2)

This course introduces basic printed circuit artwork layout, printed circuit board fabrication, component assembly and printed circuit board dip soldering. Further experience is gained in the area of sheet metal fabrication, wiring, reading specifications, quality control and testing. **Prerequisite: EET 012**

EET 021 – Analog Electronic Circuits (3-3-4)

RC coupled amplifiers. Operational amplifiers and their applications. Introduction to feedback concept and applications to amplifiers and oscillator. Timers and their applications. **Prerequisite: PHYS 012, EET 011**

EET 022 – Digital Electronic Circuits (3-3-4)

Logic families: TTL, ECL, CMOS, Basic characteristics of each family. Applications including small projects. **Prerequisite: PHYS 012, EET 013**

EET 023 – Electronic Workshop III (1-3-2)

Topics covered include specification for the conversion of advanced circuit schematic to component and conductor pattern layouts with emphasis on peripheral connections and packaging problems. Assembly and testing of simple electronic circuits e.g. D.C.Power Supply and amplifiers.

Prerequisites: EET 014

EET 024 - Microprocessor Control (2-3-3)

Microprocessor structure. Assembly language, analog to digital converters A/D, digital to analog converters D/A, input/output interfacing, signal condition, and data acquisition, memory subsystem (RAM, ROM, H.D.)

Prerequisites: EET 013, PHYS 012

EET 025 - Electronic Troubleshooting (0-5-2)

Introduction to circuit analysis and troubleshooting techniques, schematic reading, signal analysis, repair and calibration of electronic equipment to analyze various electronic circuit operational behaviors.

Co-requisite: EET 021, EET 022

EET 026 -Electronic Workshop IV (1-3-2)

This course requires the construction and testing of a solid-state advanced electronic circuit e.g. an FM radio receiver, having 4-watt stereo audio amplifier system. Lectures cover safety habits and guidance for use of advanced electronic laboratory equipment.

Prerequisites: EET 023

EET 027 –Electronic Instruments (2-3-3)

Overview of transducer. Strain gauge transducers. Linear variable differential transformer transducer. Thermal transducers. Optical transducers. Photoconductive and photovoltaic cells. Ultrasonic transducers. Environmental transducers. Electromechanical transducers. Magnetic transducers. Transducer interfacing system.

Prerequisites: EET 021, EET 022

EET 028 –Programmable Logic Controllers (2-3-3)

Introduction to control systems; Fundamentals of programmable logic controllers. Logic concept, processing unit, input/output systems, peripheral devices, programming techniques, applications and interfacing.

Prerequisites: EET 024

EET 029 –Introduction to Communication (2-3-3)

Basic principles of analog and digital Communication system. Analog Communication techniques: AM,FM,PM. Pulse modulation techniques, PAM,PWM & PPM, PCM. FSK and PSK systems.

Prerequisites: EET 021, EET 022

Diploma Program in Business Administration

The Program:

The program prepares students with a wide range of courses in Business Administration including Management, Marketing, MIS, Accounting, and Finance and Economics.

Objectives:

The main objective is to prepare students for employment upon graduation with a degree in Business Administration.

Areas Taught:

After the Preparatory Year, the students take general education and business foundation courses. In the second year, the students take a variety of courses in business areas such as Management, Marketing, MIS, Accounting, Finance and Economy.

Skills Acquired

Graduates of the program will be equipped with the necessary skills to enter the labor market in the fields of commerce, banking, and manufacturing.

Employment Opportunities:

Graduates can receive jobs in any of the following positions: Assistant Clerk, Assistant Manager, Assistant Market Manager, Sales Specialist, and Bankers.

Diploma Curriculum in Business Administration

COURSE	TITLE	LT	LB	CR
Preparatory Year				
First Semester				
ENGL003	Preparatory English I	15	5	8
MATH003	Preparatory Math I	3	1	4
Sub-total		18	6	12
Second Semester				
ENGL004	Preparatory English II	15	5	8
MATH004	Preparatory Math II	3	1	4
Sub-total		18	6	12
Total Credits required in Preparatory Year: 24				
First Year				
First Semester				
MGT 011	Introduction to Business Management	3	0	3
ECON 011	Introduction to Economics	3	0	3
ENGL 011	English Composition I	3	0	3
MATH 011	Applied Calculus	3	2	4
MIS 011	Computer Application I	2	3	3
Sub-total		14	5	16
Second Semester				
ENGL 012	English Composition II	3	0	3
ACCT 011	Principles of Accounting I	2	3	3
MKT 011	Principles of Marketing	2	3	3
MIS 012	Principles of MIS	2	2	3
IAS 011	Islamic Ideology	2	0	2
MATH 012	Finite Mathematics	3	0	3
Sub-total		14	8	17
Second Year				
First Semester				
ACCT 021	Principles of Accounting II	2	3	3
MGT 021	Business Communication	2	3	3
OM 021	Business Statistics	3	0	3
IAS 021	Objective Writing	2	0	2
MIS 021	Computer Applications II	2	3	3
XXX 021	Free Elective I	3	0	3
Sub-total		14	9	17
Second Semester				
MGT 022	Organization Behavior	3	0	3
MGT 023	International Business	3	0	3
FIN 021	Principles of Banking	2	0	2
MKT 021	Professional Sales	2	3	3
MKT 022	Promotional Strategy	2	3	3
Sub-total		12	6	14

Total credits for Diploma Program in Business Administration: 64

Course Description

Accounting

ACCT 001 Principles of Accounting I (2-3-3)

Financial accounting and its environment, components of the accounting system and its records, the accounting cycle and financial statements preparation, accounting for cash transactions, assets and liabilities including accounts and notes receivable, merchandise inventory, property, plant and equipment, current liabilities and payroll accounting, accounting for partnership.

Prerequisite: Math 011

ACCT 021 Principles of Accounting II (2-3-3)

Introduction to management accounting and definitions, budgetary process and master budget, contribution margin and applications in cost-volume profit analysis, product costing, flexible budget and cost controls, responsibility accounting and reports, preparation and uses of cash flow statement in decision making, special decisions and relevant financial information.

Prerequisite: ACCT 011

Economics

ECON 011 Introduction to Economics (3-0-3)

An introduction to economics analysis; relationship among household, business and government sectors; saving and investment decisions, unemployment; inflation; national income accounts using demand, cost, and production functions.

Prerequisite: None

Banking

FIN 021 Principles of Banking (2-0-2)

This course touches on nearly every aspect of banking from the fundamentals of negotiable instruments to contemporary issues and developments within the industry.

Management

MGT 011 Introduction to Business Management (3-0-3)

Basic functions of business enterprise, business environment, ownership, management and organization, human resources management, marketing, financing, information management and decision making, international business, career development in business.

Prerequisite: None

MGT 022 Organization Behavior (3-0-3)

This is an experiential examination of interpersonal relationships as they affect one's ability to function in the world of work. Topics include self-understanding, as well as the understanding of others, motivation, morale, conflict, stress, ethics, diversity, and self-managed work teams.

Prerequisite: MGT 011

MGT 024 Human Resource Management (3-0-3)

This course is a study of the techniques of supervising and coordinating the work of others including employment interview methods, training procedures, supervision of employees, improvement of interpersonal relationships, policies for labor-management relations, and labor legislation.

Prerequisite: MGT 011

MGT 021 Business Communication (2-3-3)

Written and verbal communication techniques in business, report and business letter writing, presentations, business meetings, briefing and interviewing, skill development and analysis of communication.

Prerequisite: ENGL 012

MGT 023 International Business (3-0-3)

This is an introductory course in international business environments. The course explores reasons companies choose to enter the international market, various marketing approaches, government regulations, and career opportunities.

Prerequisites: MKT 011 and MGT 011

Management Information Systems (MIS)

MIS 012 Principles of Management Information system (2-2-3)

An overview of the role of computer information systems in business management, MIS requirement sin organizations, hardware functions, computer programming, system development and computer operations.

Prerequisite: MIS 011

Marketing

MKT 011 Principles of Marketing (2-3-3)

Marketing processes and strategies; product development; pricing, promotion, and distribution, and their applications to businesses, land the individual consumer.

Prerequisite: ECON 011

MKT 021 Professional Sales (2-3-3)

This is an analysis of the principles and practices upon which the preparation for selling and the actual steps in the selling process are predicated. Included in the course is an actual experience performing a sales presentation.

Prerequisite: MKT 011

MKT 022 Promotional Strategies (2-3-3)

An academic investigation is provided in this class followed by practical applications of the step-by-step procedures involved in formulating advertising and public relations messages and transmitting them through various media and/or other promotional public relations programs.

Prerequisite: MKT 011

Statistics

OM 021 Business Statistics (3-0-3)

Frequency tables, histogram, measures of central tendency and dispersion, correlations, probability descriptions and theory,sampling, estimation and confidence intervals, applications for managerial decision.

Prerequisite: Math 012

General Course Description

ENGL 003 Preparatory English I (15-5-8)

ENGL 004 Preparatory English II (15-5-8)

Students follow a two-semester (600-hour) intensive English as a foreign language program at the advanced beginning/intermediate level. Emphasis is on building the skills of reading, listening, writing and speaking in the context of academic studies in science and technology. Instruction in vocabulary and grammar serves to support the development of these skills. At the same time, study skills are taught and attitudes to study and work are reshaped.

ENGL 011 English Composition I (3-0-3)

The main composition element of this introduction to academic discourse is organized on the basis of the principle methods of exposition (comparison, causal analysis, classification, etc.) at the sentence, paragraph, and composition levels. Attention is also paid to such important aspects of text as coherence, unity, conciseness, and sentence readability, and to problem areas of grammar and sentence structure such as fragments, fused sentences, and subject-verb agreement. The reading element focuses on ways to improve student reading of technically oriented textbooks, encyclopedias, and specialist periodicals.

ENGL 012 English Composition II (3-0-3)

Composition II is generally referred to as English 102. The general objective of the course is to provide students with skills to write a 600 to 800 word term paper on an assigned topic.

The course starts with learning to paraphrase and synthesize ideas from several different sources. Learning to use the library is the next step. Students are familiarized with the University Library's Circulation and Reference sections. They are taught how to locate printed materials by using the library's computer catalog. They are also introduced to the library's indexes and the microfilm/microfiche facilities. Other basic research skills taught include the writing of bibliographies and the use of documentation. Finally, students are instructed in selecting and narrowing a topic, taking notes from sources and formatting a term paper.

MATH 003 Preparatory Mathematics I (3-1-4)

MATH 004 Preparatory Mathematics II (3-1-4)

Concepts and manipulations in algebra, trigonometry, elementary analytical geometry. Introduction to concepts of calculus. Preparation for rigorous study of mathematics.

MATH 131 Finite Mathematics (3-0-3)

Linear equations and inequalities, systems of linear equations, basic material on matrices, elementary introduction to linear programming. Counting techniques, permutations and combinations. Probability for finite sample space, basic concepts in statistics. Topics in the mathematics of finance.

MATH 132 Applied Calculus (3-0-3)

The derivative, rules for differentiation, derivative of logarithmic, exponential, and trigonometric functions, differentials, growth and decay models. Definite and indefinite integrals, techniques of integration, integrals involving logarithmic, exponential and trigonometric functions, integration by tables, area under a curve and between curves. Functions of several variables, partial derivatives and their applications to optimization.

ICS 004 Preparatory Computer Applications (0-2-1)

Computer components, use of computers in work environment, Introduces the commonly used software packages. Emphasizes the hands on experience of the commonly used software packages with regard to creating, organizing, and maintaining directories/ files or documents.

IAS 011 Islamic Ideology (2-0-2)

A course to vitalize the students' knowledge of, and commitment to, Islamic doctrines, seeking thereby to fortify them against the onslaught of godless ideologies. Topics include the following: An introduction to faith, its foundations and sources; the fundamentals of belief: divinity, prophethood, and after-life; the treatment of different subjects in the Qur'an which deal with the universe, man, and life; and a consideration of the position of the contemporary Muslim vis-a-vis the different alien doctrines and the need for his adherence to Islam and renunciation of all false ideologies.

IAS 021 Objective Writing**(2-0-2)**

The course will introduce the students to methods of research, exposing its theoretical and practical aspects, and will attempt to develop students' linguistic and literary potential, both in reading and writing. The course will be especially concerned with the essay, dealing with its different varieties, purposes, styles, and forms -- religious, scientific, literary, and journalistic. In its practical aspect, the course will require students to study essays of a few outstanding writers and to write compositions on six subjects. Moreover, the course will require students to practice oral self-expression, with the instructor correcting and discussing the mistakes of students, both those that are commonly spread among Arabic speakers and those that the individual students might make.

PHYS 011 Applied Physics I**(3-2-4)****PHYS 012 Solid State Physics****(3-2-4)**

Future Diploma Programs

Diploma Program in Banking and finance

**Diploma Program in Heating Ventilation & Air-Conditioning
Maintenance (HVAC)**

Diploma Program in Office Administration

Diploma Program in Marketing Skills

Diploma Program in Management Information Systems

Diploma Program in Accounting

Diploma Program in **Construction Materials**

Diploma Program in **Water Technology and Waste Management**

Diploma Program in **Chemical Laboratory Techniques**

Diploma Program in **Cost Engineering**

Diploma in Computer Science Networks

Diploma Program in Geography Information Systems

Diploma Program in Banking & Finance

Introduction

The field of banking and finance has witnessed an exciting period of change and growth. Today, financial managers are increasingly employing new techniques and computer resources to help in their decision-making. The future promises to be an even more exciting time for banking and finance professionals. The impact of the internet on all areas of business practice has revolutionized timely information access and increased competitive pressures on financial managers. To incorporate these changes, diploma in banking and finance program is designed with a series of academic evening courses for entry level financial managers to meet the expected future challenge. The two-year program consists of forty-eight (48) credit hours. The first academic year covers introductory level in general education and business foundation courses. The second academic year covers vigorous courses in banking and finance to provide students with the necessary skills to enter the labor market. Upon successful completion of this program, graduates are eligible to receive the Diploma in Banking and Finance.

Objectives of the Program

The primary objective of this program is to provide education and contemporary training in banking and finance. The program is developed to prepare, train, and provide background for general business knowledge and skill that could help graduates seek employment in banking, financial services, and related industries.

The main objectives of the program are:

- To provide specialized educational courses and training designed to enhance the knowledge and developments of future skilled financial managers in the field of banking and finance.
- To provide an entry-level diploma to the national manpower in the areas of banking and finance.
- To enhance prospective candidate's skills for problem solving in financial, economic, and managerial fields for strategic decision-making.
- To upgrade the quality of Saudi human resources employed in banking and finance.

Diploma in Banking and Finance requires successful completion of 48 credit hours

Diploma Program in Heating Ventilation & Air-Conditioning Maintenance (HVAC)

The focus of this program is on developing skills and knowledge in the area of HVAC maintenance. The demand for qualified heating, ventilation and air conditioning technicians makes this industry one of this country's most stable industries. HVAC technicians are indispensable specialists in a wide variety of fields. Wherever people live, work or play, the need for HVAC technicians is essential.

Objectives:

The primary educational objective of the HVAC diploma is to teach students the specific technical and professional skills required for employment in the Heating, Ventilation and Air Conditioning industry. Although our goal is to provide each student with the potential for immediate employment within the HVAC industry, the long range focus is a productive, rewarding career for each student. Technical skills covered in the program enable students to meet the demand for skilled technicians. Some technical skills students master during this program include diagnosing, installing, maintenance and troubleshooting of heating, ventilation and air conditioning systems.

Diploma Requirements:

A student must complete 48 credit hours, which include 6 credit hours of elective courses in the area of HVAC. The student has to pass English and Math as a prerequisite for Diploma requirements. (Prep Year English, Math 24 credit hours).

Diploma program in Office Administration

The Program in Office Administration is designed for the student who wishes to have a thorough secretarial/administrative preparation based on little or no previous experience in office administration. The program offers academic and business subjects essential to the training of an efficient office administrator (secretary) in the minimum time needed to acquire technical skills required by employers.

Objective:

- To offer a thorough secretarial/administrative preparation based on little or no previous experience in office administration.
- To provide the student with a broad understanding of business concepts and micro-computer theory, as well as actual hands-on experience with the most common micro-computer applications as they apply to business.
- To provide additional emphasis in accounting and office management to offer the student the variety and breadth of knowledge needed in any business setting.
- To achieve advanced typewriting and transaction skills.
- To provide thorough knowledge and practice in office equipment/machinery and the foundations of initiative, professionalism and decision-making in all areas of office enterprise.

Career Opportunities:

Holders of the Office Administration diploma are qualified to be hired as office managers, administrative assistants and as secretaries in the business and public sectors.

Diploma Requirements:

A student must complete 59 credit hours. The student has to pass English and Math as a prerequisite for Diploma requirements.

Diploma Program in Marketing Skills

Objective:

The goals of this program is to give the students exposure to the issues and opportunities presented by the domestic, as well as the global market. In addition to the core of business and marketing courses, the student will develop a basic competency in two technical areas of specialization i.e. retail sales and advertising.

Careers in Marketing Skills:

The Marketing Program is designed to provide knowledge and skills necessary to pursue marketing related careers in retail, industrial sales, advertising, and distribution. Major job categories include specialists or supervisory positions in this field. The program is designed to prepare students for employment or advancement upon completion of an associate degree.

Diploma Requirements:

A student must complete successfully 60 credit hours before being awarded a diploma in Marketing Skills. He should demonstrate proficiencies in English and Math as a prerequisite before being enrolled in this diploma program.

Diploma Program in Management Information Systems

Management Information Systems involves the use of computers in organizations and the integration of computer skills with the functional areas of management. The objective of the program is to provide students with the necessary tools to understand MIS in both the wider managerial context and in the narrower confines of the selection, support, design and development of computer applications.

Career Opportunities:

Holders of a diploma in Management Information Systems are qualified to pursue careers in information technology in relation to the use, analysis, design, implementation, and operation of computer-based information systems.

Diploma Requirements:

A student must complete 62 credit hours. The student has to pass English and Math as a prerequisite Diploma requirements.

Diploma Program in Accounting

Objectives:

Accounting is a crucial part of every business operation. The primary objective of the Accounting Diploma Program is to prepare students for general accounting work emphasizing manual and computerized accounting systems.

The program is designed to provide specialized classroom instruction and practical experience to prepare students for employment as accounting technicians or to provide supplemental training for persons previously or currently employed as accounting technicians.

The program prepares individuals to provide technical administrative support to professional accountants and other financial management personnel. It includes instruction in bookkeeping, accounting software operation, and general accounting principles and practices. Moreover, the program provides basic background and orientation in business, economics, financial management and management information systems.

Diploma Requirements:

A student must complete 60 credit hours. The student has to pass English and Math as a prerequisite Diploma requirements.

Diploma Program in Construction Materials

Program Description:

The properties of construction materials used in engineering projects are quite variable. Therefore, the ability to assess their properties and judge their performance is the backbone for the success of construction or maintenance projects. Construction materials including soils, granular bases, Portland cement concrete, asphalt concrete, and/or steel reinforcement, require daily supervision and follow-up to verify compliance to specifications and project requirements which are essential for the success of these projects.

In the Saudi construction industry, there is presently a vital need for qualified material supervisors to run and deal with materials testing laboratories, foundation materials, buildings, highways, airports, dams, bridges and/or any engineering project.. The material supervisor is considered the right arm for the civil engineer in the field, laboratory and materials reports preparation.

Objectives:

The main objectives, for the Diploma in Construction Materials, is to graduate materials supervisors coupled with the following capabilities:

- Appropriate selection and assessment of construction materials according to the required specifications.
- Proper supervision of existing projects dealing with soils, granular bases, Portland cement concrete, asphalt concrete, steel reinforcement and quality control and quality assurance.
- Direct supervision of work sites and labor force under the guidance of civil engineers.
- Sufficient knowledge of surveying principles and interpretation of construction drawings.

Requirements:

Students must successfully pass the Preparatory Year Program, which includes 24 credit hours of English, and Mathematics. In addition, the student must complete 48 credit hours of core course within the two years following the Preparatory Year. Details of the program requirements are shown in the enclosed table.

Diploma Program in

Water Technology and Waste Management

During the last few decades, the Kingdom witnessed a vast industrial and urban development, which affected positively the standard of life of the citizens. However, enormous types of wastes with tremendous quantities were generated as a side effect of this development. If not properly managed, these wastes (solids, liquids, or gases) will severely impact our environment. Having well trained personnel is the key element in the process of environmental conservation and decontamination.

Objective:

The main objective of this degree is to produce graduates possessing the following capabilities:

- The graduate should be able to operate efficiently domestic wastewater treatment plants. These plants exist in a huge number in the kingdom. However, most of them are encountering operational problems.
- The graduates should be able to operate industrial waste treatment facilities. This waste could be liquid, solid, or gas. The pollution control facilities could be inside or outside the factory.
- The graduates should be able to operate hazardous and non hazardous waste disposal facilities owned by the private sector.
- The graduates should be capable of environmentally auditing industrial complexes.

General Program Description:

The courses of the program will consist of classroom instruction, laboratory work, and field training and can be broadly categorized in to the following phases:

Phase 1 This phase will concentrate on comprehensive knowledge of English, basic skills in math, and introduction to graphics. In this phase a student becomes ready to enter the program.

Phase 2 This phase will cover general and basic knowledge and skill development to prepare the student for the core of the program. This includes aspects of general and environmental chemistry, statistics, skills in PC applications and computer graphics, and introduction to environmental pollution issues.

Phase 3 This phase is the core of the program where students will develop the necessary skills to achieve the objectives set for the program. The principles of water and wastewater treatment processes including industrial wastewater will be taught in depth during this phase. The operation and maintenance of wastewater treatment plants will be concentrated on. Solid and hazardous waste management and disposal will be covered. Environmental auditing and management issues will be taught.

Requirements:

Students must successfully pass the Preparatory Year Program, which includes 24 credit hours of English and Mathematics. In addition, the student must complete 48 credit hours of program courses following the Prep year.

Chemical Laboratory Techniques

Objectives:

This programs offers training in basic and advanced chemical laboratory techniques, quality control and classical and modern chemical instrumentation techniques of analysis as well as the associated computer, management and statistical topics. After completing the course the graduate should be able to:

- assemble and operate laboratory equipment including glass blowing.
- analyze materials and products, conduct quality assurance tests and other routine tests.
- synthesize basic organic compounds and prepare solutions.
- possess general understanding of laboratory quality control statistics and prepare graphs and report results.
- possess the essential knowledge of the principles and techniques of handling modern chemical instrumentation.
- possess the basic knowledge and skills in computer applications in the relevant areas.

Careers in Chemical Laboratory Techniques:

Graduates of this Diploma may be involved in various chemical laboratories as well as marketing and sales. Career opportunities are widespread in government agencies, educational institutions, various industries and environmental agencies. With the Diploma in Chemical Laboratory Techniques, the graduates are going to have a wide range of careers, including:

- Quality assurance laboratories
- Industries including: petroleum and petrochemicals, detergents, foods, pharmaceuticals, fertilizers, desalination and others.
- Standard testing (ASTM and others) for petroleum and petroleum products.
- Testing for various Environmental contaminants.
- Educational institutions including: universities, technical colleges and schools.
- Technical sales and services.
- Research and development laboratories.

Program Description:

In a developing industrial economy and in a society, which demands a cleaner environment and quality products, the science of chemistry has become increasingly important. The typical function of this training program in chemistry includes, carrying out various chemistry experiments and interpreting and correlating data, quantitative and qualitative analysis, quality control of raw materials and finished products, environmental and petroleum testing, handling the various instrumental techniques and supervising or managing laboratory operations.

The first year will provide the student with the basic principles and techniques involved in chemistry (general, analytical, organic, inorganic and physical chemistry) as well as the computer applications. The second year will emphasize the advanced analytical techniques involving a wide range of instrumentation as well as the petroleum and environmental testing and statistical interpretation and presentation of data.

Diploma Requirements:

The student should complete a total of 48 credit hours that include 6 credit hours as elective courses. The student has to pass the English and Mathematics prerequisite Diploma requirements, namely, 24 credit hours of the prep year English and Math.

Diploma Program in Cost Engineering

Objectives:

The objective of this program is to provide students with the necessary theoretical and technical knowledge in cost engineering. The program will prepare students for a career as cost engineering in different types of organizations. The program is designed to meet the Association for the Advancement of Cost Engineering International Certification requirements (AACE).

Careers in Cost Engineering:

The diploma in cost engineering will qualify graduates for a career in the area of cost estimating, cost analysis and management. Employment opportunities are available in almost all private and government organization involved in the construction and maintenance of different type of facilities. Examples include ministries, large governmental organizations, construction companies, consultants, educational facilities, health care facilities and industrial facilities. The graduate with diploma in cost engineering can work as a cost estimator, project control cost engineer, project estimator and cost analyst.

Diploma Requirements:

A student must complete 48 credit-hours as set in the degree plan. The student has to pass English and Math as a pre-requisite for diploma requirements (24 credit-hours of Preparatory English and Mathematics).

Diploma Program in Computer Networks

This program includes courses in math, principles of computers, operation systems, programming, visual basics, computer networks, principles of business administration and office automation.

Diploma Program in Geographical Information System Technology

This program introduces principles of geographical information systems and its application at present and in future. The program enables students to learn the requirements of designing implementing , and administering a successful geographical information system.

Admission in the Diploma Program:

An applicant for admission to the University must satisfy the following conditions:

- 1- He must have the secondary school certificate or its equivalent and satisfy all University requirements needed for the specific program he intends to enroll in.
- 2- He must successfully pass the preparation tests in English Language and calculus or the preparation courses required.
- 3- He must successfully pass any examination or personal interviews as determined by the admission rules.
- 4- He must follow all University rules during the program period.
- 5- He must pay the tuition of any training courses he needs to take before the registration.

Tuition:

When evaluating these courses, the University gave priority to serving the community and producing qualified technicians. For this, it asks a minimal tuition fee to join these programs paid before the registration for any course. The cost of one credit hour is SR650 for individuals and SR1500 for organizations and companies.

This fee does not meet the real cost of offering these materials and the rest of it is financed from other sources.

For more information please contact:

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