

Undergraduate Programs 2010-11

BBA & BS (CS)



Institute of
Business Administration
Karachi

Leadership and Ideas for Tomorrow

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The BBA Program

The BBA Philosophy

A Bachelor of Business degree prepares you for an entry level position in business and industry. A Bachelor of Business degree teaches students about management, marketing principles, accounting, mathematical statistics and business law. The degree allows students to enter the business field as educated workers and provides them with an opportunity to explore possible areas of specialization. A BBA degree is essential for advancement in business and industry. Successful completion ensures that the graduate understands the relationship between marketing, quantitative analysis, accounting, economics, and human resources.

Why a BBA Degree?

Why do you need a BBA degree as compared to a Bachelor degree in any other discipline? The answer to this question is very simple. There has been a tremendous growth in industry and commerce. The world has witnessed a sustained period of economic growth and prosperity. This has led to the creation of entry level positions in business and finance. Although businesses need leaders to move forward, they also need skilled workers in putting their ideas forward. A BBA degree will help you with a solid foundation to establish your career. A BBA degree ensures that you have professionally relevant skills that will help you perform your job in a better manner.

A BBA degree will give you the opportunity to help implement the concepts and ideas designed by business leaders. It will help you get the hands-on experience that will help you to face future challenges and career promotions.

Why a BBA Degree from IBA?

The Institute of Business Administration (IBA), Karachi was established in 1955 as a USAID financed project. Initially the Wharton School of Finance, University of Pennsylvania, provided the technical support; later, the University of Southern California got the contract to set up various facilities at the Institute and several prominent American professors were assigned to the IBA. A large number of Pakistani faculty members received advanced degrees from the Wharton and the University of Southern California. Till 1994, the University of Karachi awarded degrees to IBA graduates. In that year, Sind Assembly elevated the Institute's status to a degree awarding institution. In spite of a rapid increase in the number of business schools, the IBA has maintained its position as the premier institute of higher learning in the field of management and business administration. The IBA initially offered programs only for Masters degrees in Business Administration. In 1982, a three-year BBA (Honors) Program was introduced, which has now been upgraded to a four-year BBA program.

The IBA faculty comprises of teachers with high academic

achievement as well as successful & practical business management experience. Most have advanced degrees in their fields of specialization from foreign reputable institutions. The faculty members are well-regarded for their insight and command over current issues facing business and industry. They are frequently invited to participate in seminars, symposia, discussions and conferences across the country and overseas. The faculty ensures that the system of education at the IBA is a unique blend of the best in classroom instruction, case studies, role-playing, business games, class presentations, research and practical training in business organizations.

In view of increasing professionalism in management and growing competition in Pakistan, job opportunities for qualified business administration graduates will continue to grow. Multinational firms and professionally managed Pakistani companies hire IBA graduates with confidence because of the high level of professionalism instilled in them during their course of study. The Institute offers a flexible curriculum, diverse student body and faculty that is willing to embrace and encourage new ideas. This provides the students with the tools, values, and confidence to become leaders in the organizations of the present and the future.



Curriculum BBA Program

Composition of the BBA Program

Core Courses	42
Electives	5
Total Number of Courses	47
Duration	4 Years
Credit Hours	144

Courses of the Freshman year - Semester 1

ECO103	Principles of Microeconomics	} Core Courses
SSC101	English Grammar & Composition	
MGT111	Information Management	
SSC102	Foundations of Human Behavior	
MTS105	College Algebra	
MIS103	Introduction to Computer Applications	

Courses of the Freshman year - Semester 2

ACC111	Principles of Accounting I	} Core Courses
ECO114	Intermediate Macroeconomics	
HUM131	International Relations	
SSC103	Social Psychology and Self Development	
SSC154	Research Methods in Social Sciences	
MTS102	Introduction to Statistics	

Students must take any one **Social Sciences Elective Course** from the following:

SSC151	Pakistan History	} Electives
SSC152	General History	
SSC153	Media Studies	
SSC156	History of Ideas	
SSC253	Corporate Social Responsibility	

Program Directors



Aman U. Saiyed
BBA Program
Main Campus, Extension (217)
City Campus, Extension (1313)



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Curriculum... (Contd.)

Semester 3,4,5,6,7 & 8

Students in semester 3,4,5,6,7 & 8 may choose a minimum of '4' core or elective courses per semester from the lists provided below, provided that they have met the prerequisite requirement.

BBA Core Courses... (Contd)



ACC201	Principles of Accounting II
ACC381	Managerial Accounting
LAW205	Business Law
LAW204	Corporate Law
MIS102	Management Information Systems
MIS105	Introduction to Computer Administration
MTS101	Calculus I
MTS103	Business Mathematics
MTS202	Statistical Inference
MTS203	Linear Algebra
ECO211	Analysis of Pakistani Industries
ECO301	Development Economics
ECO440	Econometrics
FIN201	Introduction to Business Finance
FIN301	Financial Institutions and Markets
FIN401	Financial Management
MGT201	Principles of Management
MGT211	Business Communication
MGT221	Organizational Behavior
MGT301	Ethics in Corporate Society
MGT311	Production and Operations Management
MGT400	Management Theory & Practice
MGT401	Small Business Management
MGT411	Comparative Management
MGT421	Entrepreneurship
MGT502	Managerial Policy
HRM401	Human Resource Management
MKT201	Principles of Marketing
MKT301	Methods in Business Research
MKT401	Marketing Issues in Pakistan
SSC111	Philosophy, Logic and Ethics
SSC154	Research Methods in Social Sciences
SSC201	Speech Communication
SSC301	Socioeconomic Philosophy of Islam

MIS Specialization

Students wishing to specialize in the area of Management Information Systems (MIS) will be given a balanced exposure to business, computer science and MIS subjects. They will be required to take **22 core business courses** along with **14 core MIS courses** and 10 electives, which may be either business or MIS courses. In the first year, students will take courses according to the given schedule. After the second semester, the courses may be taken in any order provided the relevant prerequisites have been met. Normal course load is **6 courses** per semester.



Business Core Courses

ACC111	Principles of Accounting I
ACC201	Principles of Accounting II
ACC381	Managerial Accounting
ECO103	Principles of Microeconomics
ECO113	Principles of Macroeconomics
FIN201	Introduction to Business Finance
FIN401	Financial Management
HRM401	Human Resource Management
LAW205	Business Law
MGT111	Information Management
MGT201	Principles of Management
MGT221	Organizational Behavior
MGT301	Ethics in Corporate Society
MKT201	Principles of Marketing
MKT401	Marketing Issues in Pakistan
MTS101	Calculus I
MTS102	Introduction to Statistics
MTS103	Business Mathematics
MTS105	College Algebra
MTS202	Statistical Inference
MTS203	Linear Algebra
SSC101	English Grammar & Composition
SSC102	Foundations of Human Behavior
SSC103	Social Psychology and Self Development
SSC131	International Relations

MIS Core Courses

CSE141	Introduction To Programming
CSE142	Object Oriented Programming Techniques
CSE243	Data Communication & Networking
CSE308	Web Based Application Development
CSE341	Database Systems
MIS103	Introduction to Computer Applications
MIS202	Technical Report Writing
MIS241	Information Systems Development
MIS302	Decision Support Systems
MIS304	Business Process Modeling & Simulation
MIS305	Software Project and Quality Management
MIS343	Data Warehousing
MIS402	Change Management & Business Process Reengineering
MIS491	MIS Project

Students specializing in MIS need to take ten electives. These may be chosen from any undergraduate courses offered by IBA provided their prerequisites have been met.

All Undergraduate Students are required to take 6 hours of any of the three languages being offered. IBA currently offers Chinese, French and Arabic. These 6 hours are non credit and should be taken in two consecutive semesters.

Course Descriptions Core Courses BBA Program



Department of Accounting & Law

Accounting Courses

ACC111 Principles of Accounting-I

The objective of this course is to familiarize and develop in the students a thorough understanding of the accounting concepts, principles and procedures involved in the analysis and recording of business transactions and the preparation of financial statements for service and trading concerns. Accounting concepts and techniques underlying income determination and valuation of current and long-term assets, together with their related internal control measures and their presentation in the financial statements are emphasized.

ACC201 Principles of Accounting-II

This course is the continuation of Principles of Accounting-I and concentrates on the discussion of accounting principles and procedures relating to stock holder's equity, long-term and current liabilities with reference to corporate organizations. Modules offered include formation of corporations, issuance of shares, treasury stock, dividends, appropriations of retained earnings, bonds payable, analysis of financial statements and preparation of statement of cash flow.

Prerequisite: ACC111

ACC381 Managerial Accounting

The aim of this course is to equip students with the managerial accounting concepts and techniques used for sound business decision-making. Modules offered include basic cost accounting concepts, their nature and behavior, cost-volume-profit relationships, absorption and variable costing, relevant costs & differential analysis,

standard costing and variance analysis, gross profit analysis and capital budgeting techniques.

Prerequisite: ACC201

Law Courses

LAW204 Corporate Law

This course provides an understanding of corporate law principles. The formation of companies, fiduciary duties of the management, problems incidental to Corporate Governance, Proxies, Derivative law suits, mergers and acquisitions and winding up of corporations are some of the pertinent topics of discussion in this course. A thorough analytical statutory interpretation of the amended Companies Ordinance 1984 is also to be undertaken as a part of this course.

Prerequisite: LAW205

LAW205 Business Law

The contents of this course include Contract Act, Sales of Goods Act, Negotiable Instruments, Partnerships, and Company Acts. This course aims to provide a basic introduction to these laws and an appreciation of the legal system in Pakistan.



Department of CS & MIS

CS & MIS Courses

CSE141 Introduction to Programming (3,1,4)

This is a first of a series of programming-based courses. It introduces fundamental problem solving skills and algorithm development with the help of a programming language. It covers topics like Variables & Data Types, Selection and Iteration Structures, Methods and Recursive Methods, Arrays and Structures, File I/O and optionally elementary 2D Graphics based on certain toolkits. It also covers flowchart design and pseudo-code approaches for representing solution to problems as well as debugging and testing techniques. Many programming languages support the required functionalities for this course.

Prerequisite: None

CSE142 Object Oriented Programming Techniques (3,1,4)

This course describes Object-Oriented Programming paradigm for managing cost and complexity of software. Principles of Abstraction, Encapsulation, Inheritance and Polymorphism are explored. Specific topics include class definition, constructors, destructors, access control, method overloading and overriding, static and dynamic binding, exception handling, object life cycle and garbage collection, and namespaces. Java, C+ or C++ is used as a tool for implementation of concepts learned in this course.

Prerequisite: CSE141, or CSE145

CSE243 Data Communication & Networking (3,1,4)

This is an introductory course in data communications and networking. It is a 4 credit course comprising of 3 hours of theory and 3 hours of lab teaching per week. It familiarizes the students with the techniques, applications and control of modern data communications networks. Topics included are network models, digital and analog transmission, multiplexing, circuit and packet switching, LAN, WLAN and WAN Networks.

Prerequisite: None

CSE308 Web Based Application Development (3,0,3)

This course introduces technology and design issues of web applications. It discusses principle Internet communication protocols, the purpose, strengths, and weaknesses of client- and server-side program components, and the structure of N-tier web-based applications. Students are required to develop small web-based applications to provide complete system functionality by using appropriate methodology for design, development, and testing.

Prerequisite: CSE142

CSE341 Database Systems (3,1,4)

The course covers the foundations, design and implementation of database systems using Oracle, or SQL Server, etc. Topics include fundamentals of database architecture, relational algebra, data models, schema normalization, denormalization,

data security, data integrity, query optimization, transactions management, introduction to distributed and object-oriented databases and data warehousing.

Prerequisite: CSE246

MIS102 Management Information Systems (3,0,3)

This course familiarizes the students with the foundations of information systems. It introduces the entire spectrum of different types of information systems available for managerial decision-making like executive information systems, decision support systems, expert systems and data warehouses. The course not only discusses new and emergent business applications such as e-business, e-CRM, but also looks at the development processes and managerial challenges such as security, globalization and IT strategy.

MIS103 Introduction to Computer Application (2,1,3)

The course provides a fundamental understanding of the computer application with the course focus on Microsoft Office Application (Microsoft Word, Microsoft Excel and Microsoft PowerPoint). This is a complete lab based course where students will be learning these applications by working on class assignments in the lab. The course topics include Basics and Fundamentals of Microsoft Word, Microsoft Excel and Microsoft PowerPoint. Students will also be covering the basic concepts in Computer Hardware and Operating Systems and the usage of the Internet and conversion of Microsoft file format into various other file formats (e.g. Adobe Acrobat).

MIS202 Technical Report Writing (3,0,3)

Topics covered in this course include a study of the particular requirements of technical report writing, coupled with a review and refinement of basic grammar and composition skills. Students will be taught about the research process and analytical reports: how to gather, analyze, and organize data for writing a formal research report on an identified and approved business-related topic, write references using required MLA or APA styles and document design.

Prerequisite: MGT211

MIS241 Information Systems Development (3,1,4)

The course is designed to give students a broad and thorough exposure to the themes and issues involved in Information System Development (ISD). The course will familiarize students with various paradigms and methodologies of ISD. It develops a holistic understanding of ISD, including its technical and social aspects. Key issues that arise from the interaction of technology with its social contexts are analyzed. Theoretical and practical aspects of the subject are given equal emphasis.

Prerequisite: MIS211

MIS302 Decision Support Systems (3,0,3)

This course provides an overview of techniques and applications of intelligent decision support systems. A

series of case studies are used to illustrate the application of the methodologies discussed in the course. Students are expected to implement a DSS for risky decision problems using spreadsheets, databases and other tools. Topics included are the decision-making process, structuring decisions, what-if analysis, sensitivity analysis, risk attitude, enterprise information systems, neural networks, and decision trees.

Prerequisite: MTS102, CSE141, MIS102

MIS304 Business Process Modeling & Simulation (2,1,3)

The course highlights Business System Modeling using linear, non-linear dynamic programming, PERT, CPA, inventory models, forecasting models, regression analysis, queuing theory, simulation, transportation models, assignment models, Markov chain and simulation, use of modeling in financial analysis and decision-making, funds management, treasury, cash flow variance, budgeting, text management, capital spending, annual profits planning, project controls, tax rate analysis, and design and implementation of business models.

Prerequisite: MIS211, MTS102

MIS305 Software Project & Quality Management (3,0,3)

This course addresses process considerations in software systems development. It discusses advanced material in software planning, mechanisms for monitoring and controlling projects, and leadership and team building. Furthermore, it provides knowledge and understanding of the concepts, principles, techniques, and tools that are used in the management of software projects. Some of the topics included are size and cost estimation, schedule plan, risk management, quality management and configuration management. Students work in a team to develop a plan for a small project according to the established standards based on best practices of the global IT industry.

Prerequisite: CSE312 Or MIS241

MIS343 Data Warehousing (3,1,4)

This course provides an opportunity to capture the concepts, principles, methods and evaluation techniques that are common throughout Data Warehousing. Topics included are planning & requirements gathering, conceptual modeling of Data Warehouses (DWs) and logical data models (Star Schema, Snow Flake etc.), ETL, DW loading (refreshing), assuring efficient execution of OLAP queries, materialized views, data analysis techniques, metadata management, implementation and managing the evolution of DWs real-time, and active data warehouses, and warehousing complex data. Case studies are also used to analyze the implementation of successful DWs.

Prerequisite: CSE341

MIS105 Introduction to Computer Administration (2,1,3)

This course is intended for non-CS major students with an interest in System Administration. The course presents the fundamentals of modern computer systems in terms of

structure and function. Hands-on experience will complement lectures. Major topics are: Installation of systems (client/server) which also include hardware and software installation, Accounts Management, Job Scheduling, Security and Threats, Performance Monitoring and Tuning, Documentation and Testing, Networking (client/server), Peripherals Management, Memory Management, Script Writing, Running Specialized Services / Servers, and Maintenance.

Prerequisite: MIS103

MIS402 Change Management and Business Process Re-engineering (3,0,3)

The aim of this course is to teach students the preconditions for success and failure of BPR, process innovation, BPR implementation, tools, role of IT, TQM, management of organizational changes that occur as a result of BPR and the use of information technologies that support BPR. The course includes the study of models such as the value process framework for strategic alignment of business forces for organizational transformation.

Prerequisite: MIS304

MIS491 MIS Project (0,3,3)

This is an MIS project under faculty supervision. Students propose their own projects for departmental approval or apply for a project proposed by a faculty member.

Prerequisite: Minimum of 45 MIS/CSE credit hours.

MTS101 Calculus-I (3,0,3)

Topics included are real and complex numbers, absolute values, average rate of change of a function, the derivative of a function, the differential of a function, rectangular coordinates, functions and graphs, limits and continuity functions, higher derivatives, differentiation of algebraic functions, applications of derivatives, fundamental theorems of differential calculus and techniques of integration, 1st and 2nd order differential equations.

Prerequisite: MTS105

MTS102 Introduction to Statistics (3,0,3)

The course content includes: types of data, frequency distributions, measures of central tendency and dispersion, exploratory data analysis, introduction to set and probability theory, events and laws of probability, independence, conditional probability, discrete random variables, Binomial and Poisson distributions, index numbers and time series, introduction to MINITAB (the statistical software).

Prerequisite: MTS105

MTS103 Business Mathematics (3,0,3)

This is an introductory course. The most important objective of the course is to pass on knowledge of the paraphernalia that helps in solving the problems of business, economics and industry. It is a 3 credit course comprising of 3 hours of theory teaching per week. Topics included are elements of algebra, function and graphs, linear equations, depreciation,

rates, proportions, payroll, taxes, percentages, simple interest and discount, averages, compound interest, commission and basic statistical measures.

Prerequisite: MTS105

MTS105 College Algebra (3,0,3)

College Algebra is necessary for studying advance courses like Business Mathematics and Calculus. The main purpose here is to teach the course with the spirit of teaching Mathematics without any particular emphasis on applications. The application part will be covered in Business Mathematics course. This is a remedial course that can be bypassed by taking the college algebra exam. A-level Math students (or equivalent) do not need to take this course.

MTS202 Statistical Inference (2,1,3)

The content of this course includes distribution of random variables, some special discrete and continuous probability distributions, sampling theory, estimation of statistical parameters, testing of hypothesis, inferences about mean proportion and variance for one and two populations, analysis of variance, one-way and two-way classifications, inferences about regression, categorical data analysis, non-parametric.

Prerequisite: MTS102

MTS203 Linear Algebra (3,0,3)

This course familiarizes students with binary operations, groups, rings and fields, vector spaces, linearly dependent and independent vectors, linear transformations, matrices of linear transformations, properties of matrices, matrix algebra, elementary row/column operations, Echelon form, normal form, rank and inverse of matrices, solution of equations, consistency criteria, elimination method and Gauss Jordan method, determinants and their properties, Cramer's rule and computations through MATLAB.

Prerequisite: MTS105

Department of Economics & Finance

Economics Courses

ECO103 Principles of Microeconomics

This course examines supply and demand analysis, various elasticity concepts and applications, theories of demand and production, and the derivation of cost curves. In addition to these topics, the behavior of product and factor markets (such as pure competition, monopoly, monopolistic competition, oligopoly, and monopsony) are also discussed. This course also introduces concepts of general equilibrium, efficiency, and public goods.

ECO114 Intermediate Macroeconomics

This course analyzes a variety of issues such as recession, unemployment, debt crisis, trade deficits and economic growth. The course content includes topics like IS-LM model, consumption, savings and investment, money creation, monetary and fiscal fluctuations, exchange rates, balance of payment systems and the role of public policy.

ECO211 Analysis of Pakistan's Industries

This course traces the history of Pakistan's industrial development and discusses the effect of local environment on the strategic decision-making processes in business and industry. It also provides a framework for general industrial environment of the country. Individual industries are discussed in detail to provide the students an insight into the different sectors.

Prerequisites: ECO103, ECO104 & ECO113/114

ECO301 Development Economics

This course focuses on factors that spur economic growth and analyzes the equation between economic growth and human welfare. It also critically examines various measures taken for human welfare. In addition, changes in economic structures such as sectoral output and employment relations and various developmental policies/strategies regarding distribution of income and sectoral development are focused upon.

Prerequisites: ECO103 / ECO104 & ECO113 / ECO114

ECO440 Econometrics

This course focuses on the application of statistical methods to the testing and estimation of economic relationships. After developing the primary tools in empirical analysis, the method of least squares the common problems associated with this method are discussed with an examination of methods for resolving them. The course also covers the identification, estimation, and testing of econometric models.

Prerequisites: MTS202, ECO103/ECO104, ECO113/ECO114

Finance Courses

FIN201 Introduction to Business Finance

This course is aimed at introducing the fundamental tools of business finance. The main concepts examined include financial analysis, financial decision-making, time value of money, valuation of financial assets, risk and return analysis, and management of short-term assets of the firm.

FIN301 Financial Institutions and Markets

This course is designed to provide a look at the broad framework of the financial system, as well as insight into the nature and operations of different financial institutions and markets. These institutions and markets include the banking industry, the non-banking financial institutions, the stock market, the bond market and the foreign exchange market.

Prerequisite: FIN201

FIN401 Financial Management

The course, building upon the background provided in the core accounting and finance courses, aims to enhance students' understanding of the theory and practice of the financial management of a firm. Topics covered include financial analysis and planning, capital budgeting process, long term financing, working capital management and mergers and acquisitions.

Prerequisite: FIN201

Department of Management

Management Courses

MGT111 Information Management

Throughout their stay at the IBA students carry out research in numerous business fields, including management, economics, accounting, etc. This generalized course is designed to acquaint them with various sources of information. Centered on group discussions and assignments, this course introduces students to research journals, newspapers, magazines, books, online research and research agencies in a very practical manner.

MGT201 Principles of Management

This course focuses on basic managerial functions of planning, organizing, staffing, leading and controlling. It is specially designed to orient students to modern management practices essential for successful management of large organizations having a diverse work force and operating in the changing global, political, economic, social and technological scenarios.

MGT211 Business Communication

The course focuses on the theory and practice of effective communication techniques in business environments. It polishes verbal and non-verbal communication skills for effective participation in business meetings and other activities. It prepares students to write formal business reports and to add value to previous work through further library research and fieldwork.

MGT221 Organizational Behavior

This course inculcates a positive approach in managing productive relationships with peers, superiors and subordinates by examining teams, individuals and networks in a business environment. Topics such as group culture, individual motivation and behavior, collective and individual performance, decision making, interpersonal communication, small group behavior and inter-group conflict are extensively covered. This course exposes students to frameworks for diagnosing and dealing with problems in organizational settings.

MGT301 Ethics in a Corporate Society

The course examines the importance of ethics in the corporate society. It highlights the need to draw an analytical distinction between ethics and morality, good and bad, right and wrong so as to develop a criterion of judgment for socially responsive behavior. This course will examine the relationship between value judgment and attitude formation, informed by the teleology of various ethical theories. Through this course the ethical relevance of such values like honesty, justice, fairness and equity in relation to the dynamics of corporate society will be highlighted. Distinction will be made between personality ethics and character ethics to draw the contours of corporate behavior. Special attention will be paid to the legislative nature of intentionality as the foundation of the principles of ethics.

Fundamentals of lessons of Islamic society and those of all other religions are also included. "Treat others the way you would like to be treated yourself" and "Enjoin the good and forbid the wrong" will be the guiding principles for our ethical, moral, social and corporate deliberations.

Prerequisites: MGT201, ACC301, MKT201

MGT311 Production and Operations Management

This course includes design, planning, and control of firms' capabilities and resources. The coursework is intended to strengthen students' conceptual understanding and skills in the areas of operations, strategy and technology, forecasting, capacity and materials management, and design of productive systems.

Prerequisites: MGT201, MKT201, FIN201

MGT400 Management Theory and Practice

The course presents an overview of the basic theoretical concepts in the field of management. It also highlights the linkage between management theory and management practice. Various implications of the theoretical concepts will be discussed. The course will provide an opportunity to the class participants to evaluate various selected theoretical concepts and to see how they are applied to the real world business organizations.

MGT401 Small Business Management

This interdisciplinary course emphasizes the importance of small businesses in the economy. The course deals with the adoption of managerial concepts to small business, essentials of business startup, determinants of choice of business capital, location, structure, size, etc. It aims at motivating enterprising students to choose small business at entry stages of their careers, contribute to economic growth and setup their own enterprise later on.

Prerequisites: MGT201, MKT201, FIN201

MGT411 Comparative Management

The purpose of studying Comparative Management is to provide students with comprehensive knowledge of various management systems/models practiced by managers in different countries, with the aim of preparing them to manage international organizations successfully. The course includes the study of various systems/models and cross cultural issues such as the Japanese Managerial System, the western model, the (Ex-) socialist countries models, the developing countries models, and the Islamic Countries Models as well as the Gulf Countries Models.

Prerequisites: MGT201, MKT201, MGT221

MGT421 Entrepreneurship

The objectives of this course are:

- ✓ To appreciate the role of entrepreneurship in economic growth and thereby personal career growth of business managers.
- ✓ To acquaint the students with the virtues of entrepreneurship for the society so as to enable them to consider it as one of the early or late career options.

The course imparts knowledge about entrepreneurial & intrapreneurial process, business lifecycle, principle concepts and general guidelines for establishing a new business enterprise at a small or large level in a dynamic business environment.

Prerequisites: MGT201, FIN201, MKT201

MGT502 Managerial Policy

This is an advanced management course in strategic planning, policy formulation and implementation that develops an integrated organizational viewpoint by inter-relating the functional areas of finance, marketing, production, human resource and the general business environment. As a course in business statesmanship and leadership, it intensively uses case studies to develop class discussions on real life situations.

Prerequisites: MGT201, MGT211, MGT221, FIN201, MKT201, HRM401, ECO103, ECO113.

Human Resource Management (HRM) Course

HRM401 Human Resource Management

This course focuses on the human element of the firms and provides a framework for understanding and thinking strategically about employment relations and the management of human resources in organizations. The course covers the overview of the following areas: impact of economic, legal, social, psychological and cultural forces on employment relations, performance evaluation, compensation and benefits, promotion, job design, training, layoffs, retention and turnover and the human resource implications of business strategies.

Prerequisite: MGT201/MGT400

Department of Marketing

Marketing Courses

MKT201 Principles of Marketing

This is an introductory course for exposing students to the discipline of marketing by equipping them to analyze the political, economic, social and technological environments. Students are encouraged to make observations about their marketing environment, detect signals about changes in the market place, formulate need analysis, learn about consumer and organizational markets, learn about personalities and their impact on consumer behavior, observe about how marketing departments are organized, explore pricing mechanisms, decide about the appropriate

distribution channels and structures, learn about various promotional techniques and tools, and the challenges which the explosion of new media pose in the marketers' world.

MKT301 Methods of Business Research

In today's borderless and highly competitive environment, the research culture needs to be nourished. This course is designed to conceive, implement, and apply research programs in organizations. The managerial aspects of conducting research are discussed thoroughly with applications from various facets of business covering all the aspects of business entities and business functions. This course empowers the students towards the scientific research methodology so that students can observe business processes, formulate hypothesis, conduct experiments, draw conclusions and disseminate these conclusions for organizational benefits. In short, this course helps students to improve the quality of decision-making in the business environment.

MKT401 Marketing Issues in Pakistan

The launch of this course is an outcome of an understanding that any marketing strategy that does not reflect local environment and nuances, will be ineffective. This course fills the need for understanding marketing in the local environment because the text books are of foreign origin. The course discusses problems as well as opportunities in marketing. Substantial discussions are on the emerging focus on the bottom of the pyramid markets, rural markets and critique of marketing operations of various organizations in Pakistan.



Department of Social Sciences

Social Sciences Courses

SSC 101 English Grammar & Composition

This course highlights the key aspects of English Grammar & Composition. The grammatical concepts will be taught in context. This will bring in reading skills as a key element as this input is essential for quality output in the form of writing. The course also focuses on embedding in students the concept that writing is a recursive process. This part of the course takes into account important concepts related to composition with reading as a secondary focus.

SSC102 Foundations of Human Behavior

Human behavior familiarizes students with theories, research findings and concepts necessary to describe, explain and understand human behavior. It attempts to prepare students to monitor behavior of their peers in an organization and understand why people behave the way they do and not the way they should.

SSC103 Social Psychology and Self Development

This is an elective course (Group-II) for the students of BBA-II. It gives an insight to socio-psychological skills in interpersonal relationship management. It teaches students to organize their personal lives better and reduce physical and mental stress in a corporate setting. In this course, students will learn about how people think, behave, and interact in different social environments. It will enable them to learn more about human behavior which in time will aid them in making informed managerial and human resource decisions.

SSC111 Philosophy Logic and Ethics

It is a core course offered at BBA-IV level. The purpose of the course is to acquaint students with basic

philosophical concepts, and to inculcate logical thinking and promote awareness of ethical issues in business environment. The course has been designed to promote an understanding of philosophical issues among the youth. Works of major philosophers are introduced. Various dimensions of social, political and economics philosophies are the main focus.

HUM131 International Relations

This course attempts to explain some of the major developments in the world since the end of Cold War. It stimulates discussion and analysis of various forces and events dominating world politics. Contemporary issues such as globalization, environmental issues, human rights, conflicts and their resolutions, role of United Nations and Pakistan's foreign policy are looked into.

SSC151 Pakistan's History

This is a comprehensive course on the history of Pakistan from earliest times to present day. Emphasis is laid on highlighting the historical and cultural aspects of Pakistan through various phases of history. The objective is to expose students to the record of human existence and struggle in this land and develop in them an appreciation for their culture and world. The course content includes the freedom struggle for Pakistan and history of the country since independence.

SSC152 General History

The objectives of this course are to stimulate interest and enthusiasm for study of the past, an understanding of the nature, use of historical evidence and an understanding of the nature of cause and consequence, continuity and change. The course content includes political, cultural, and intellectual history.



SSC153 Media Studies

The purpose of the course is to highlight the role of media in the world today. The course mainly deals with historical evolution of the discipline, its roles in society and as a tool of interaction between societies. Media studies draws on traditions from the social sciences and related discipline. This course will also explore history, development, production, influence and interpretation of media.

SSC154 Research Methods in Social Sciences

The main aim of the course is to develop an understanding of research methods so as to enable students to employ research based knowledge to understand issues related to research and choose a research design. The course also aims at assisting students in data collection and analysis along with critical evaluation of research material.

SSC156 History of Ideas

It is an elective course (Group I) and will be offered in BBA-II. It presents a survey of the ideas which have ruled the world, shaped human societies and determined the destinies of mankind. History of ideas is replete with instances that when ideas change, paradigms also change, resulting in the change of world views. Such changes generate creative

tension experienced in the movement of thinking and begin from the “thus it is” to the “ thus it ought to be.” History of ideas is a procession of man’s responses to the socio-cultural, moral and ethical, scientific and technological, political and economic issues and problems of his age. It is the story of his success or failure in the management of his personal and corporate affairs.

SSC201 Speech Communication

It is a core course for the students of BBA-II. The course aims to enable students to understand, analyze and acquire communication skills for both business and personal areas. Oral presentation experiences are heavily intergraded throughout the course with a focus on public speaking design and delivery. The goal is to help students communicate through oral messages and hence groom them, in particular for effective presentations, speeches, interviews, meetings and interpersonal communication in general.

SSC301 Socioeconomic Philosophy of Islam

The course has been designed to give students an insight to the Islamic interpretations of socio economic systems. The dynamics of Islamic philosophy in this regard will be stressed and compared with other socio-economic systems.



Curriculum BS (Computer Science) Program

Composition of the BS (Computer Science) Program

Section No.	Knowledge Area	Credit Hours
A.	Core Courses	62
B.	Supporting Sciences	21
C.	General Education	15
D.	Computer Science Electives	21
E.	General Electives	18
Total*		137

* Please note that these are minimum credit requirements. Further credit requirements may be added in due course of the program.

Section A - Core Courses

Course Title	Subject Code	Total
Introduction to Programming	CSE141	4
Object Oriented Programming Techniques	CSE142	4
Introduction to Computing	CSE145	4
Numerical Analysis and Algorithms (Analysis of Algorithms)	CSE209	3
Digital Logic Design	CSE241	4
Data Communications and Networking	CSE243	4
Data Structures and Algorithms	CSE246	4
Introduction to Artificial Intelligence	CSE307	3
Theory of Automata	CSE309	3
Computer Architecture and Assembly Language	CSE310	3
Software Engineering (Introduction to Software Development)	CSE312	3
System Programming	CSE315	3
Numerical and Symbolic Computation	CSE316	3
Database Systems	CSE341	4
Operating Systems	CSE342	4
Computer Science Project (I & II)	CSE491 & 492	6
Logic and Discrete Structures	MTS201	3

Section B - Supporting Sciences

Course Title	Subject Code	Total
Calculus-I (Calculus and Analytical Geometry)	MTS101	3
Introduction to Statistics (Probability and Statistics)	MTS102	3
Linear Algebra	MTS203	3
Calculus-II (Multivariate Calculus)	MTS232	3
Differential Equations	MTS401	3
Physics- I (Electromagnetism)	SCI105	3
Physics- II (Mechanics)	SCI205	3

Section C - General Education

Course Title	Subject Code	Total
Business Communication	MGT211	3
Technical Report Writing	MIS202	3
Audit, Ethics & IS Issues	MIS454	3
English Composition	SSC101	3
One course from Group I	SSC	3

Group I

Course Title	Subject Code	Total
International Relations	HUM131	3
Pakistan's History	SSC151	3
General History	SSC152	3
English Literature	SSC112	3

Section D - Elective Computer Science Courses (Not Limited to the List below)

Course Title	Subject Code	Total
Object Oriented Design and Implementation	CSE311	3
Compiler Design	CSE344	4
Microprocessor Interfacing	CSE448	4
Introduction to Game Programming and Robotics	CSE460	3
Software Project and Quality Management	MIS305	3
Data Warehousing	MIS343	4
Social Computing	MIS406	3
E-Commerce	MIS456	3
Enterprise Resource Planning	MIS458	3
Customer Relationship Management	MIS459	3
SAP ABAP Programming-I	MIS541	4
SAP ABAP Programming-II	MIS542	4
Logistic and Supply Chain Management	MIS550	3

Section E - General Electives-Recommended Courses (Not Limited to the List below) (18 credits)

Course Title	Subject Code	Total
Principles of Accounting I	ACC111	3
Principles of Microeconomics	ECO103	3
Principles of Macroeconomics	ECO113	3
Introduction to Business Finance	FIN201	3
International Relations	HUM131	3
Principles of Management	MGT201	3
Principles of Marketing	MKT201	3
Social Psychology and Self Development	SSC103	3
Foreign Language (Chinese , French & Arabic)	SSC	3

Course Descriptions Core Courses BS Program



Section - A

CSE141 Introduction to Programming (3,1,4)

This is a first of a series of programming based courses. It introduces fundamental problem solving skills and algorithm development with the help of a programming language. It covers topics like Variables & Data Types, Selection and Iteration Structures, Methods and Recursive Methods, Arrays and Structures, File I/O and optionally elementary 2D Graphics based on certain toolkits. It also covers flowchart design and pseudo-code approaches for representing solution to problems as well as debugging and testing techniques. Many programming languages support the required functionalities for this course.

Prerequisite: None

CSE142 Object Oriented Programming Techniques (3,1,4)

This course describes another paradigm as a better replacement for structured/procedural programming paradigm (CSE141) for managing large programs to segregate code into reusable chunks called classes. Principles of Abstraction, Encapsulation, Inheritance and Polymorphism are explored as well as developing an understanding of code structuring and design philosophies. It requires a thorough understanding of fundamentals of programming. Topics include class definition, constructors, destructors, access control, method overloading and overriding, inheritance, static and dynamic binding, exception handling, object life cycle and garbage collection, and namespaces. Either Java, C# or C++ is used as a tool for implementation of concepts learnt in this course.

Prerequisite: CSE141, CSE145

CSE145 Introduction to Computing

This course takes a breadth-wise approach to different areas in the discipline of computer science. It overviews topics from number representation, hardware architecture,

operating systems, databases, some computing models, languages and grammars, software development and engineering, networking and graphics. Java or C is used to demonstrate certain concepts.

Prerequisite: None

CSE209 Numerical Analysis & Algorithms (3,0,3)

This course introduces concepts and analysis of numerical methods. Topics covered are solutions of nonlinear equations (interval-halving, linear interpolation, Newton, Fixed point, etc.), Interpolating polynomials, various types of differences, representation of polynomials by difference operators and their relation, symbolic derivation, interpolation with unequal intervals, inverse interpolation, 2nd and 3rd dimensional interpolations, numerical differentiation and integration.

Prerequisites: CSE246, MTS203

CSE208 Digital Logic Design (3,0,3)

This course introduces basic concepts of digital computer logic including switching logic, combinational circuits, minimization methods, adders, comparators, multiplexers, synchronous and asynchronous sequential circuits, registers, counters, flip flops, encoders, decoders, buffers, RAM, switches, PLDs, instruction set design, processor implementation techniques, serial and parallel arithmetic units, pipelining, and memory hierarchy.

Prerequisite: CSE145, MTS201

CSE243 Data Communication and Networking (3,1,4)

This is an introductory course in data communications and networking. It is a 4 credit course comprising of 3 hours of theory and 3 hours of lab teaching per week. It familiarizes the students with the techniques, applications and control of modern data communications networks. Topics included are network models, digital and analog transmission, multiplexing, circuit and packet switching, LAN, WLAN and WAN Networks.

Prerequisite: None

CSE246 Data Structures and Algorithms (3,1,4)

The purpose of this course is to provide students a solid foundation in the basic concepts of programming: data structures and algorithms. Students are taught how to select and design data structures and algorithms that are appropriate for problems that they might encounter. The course focuses on comparing algorithms and studying their correctness and computational complexity. Students are provided a mixture of theoretical knowledge and practical experience using any programming language (C, C++, C# or JAVA). Other topics covered in the course include analysis of algorithms, primitive types, arrays, stack, queues, recursion, link list, trees, binary search trees, multi-way search trees, priority queues and graphs, sorting, searching, and hash table.

Prerequisites: CSE142, MTS201

CSE307 Introduction to Artificial Intelligence (3,0,3)

This course provides an overview of the theoretical and practical aspects of designing intelligent computer systems. Students are expected to implement the concepts learned during the course using standard and AI-specific programming languages and tools. Topics included are history and overview of artificial intelligence, state space representation, uninformed and informed search techniques, search in games, decision trees, neural networks, evolutionary algorithms, propositional and predicate logic, inference in logic, probabilistic reasoning, robotics and various machine learning and computational intelligence techniques.

Prerequisites: CSE246, MTS201

CSE309 Theory of Automata (3,0,3)

This course is about the theoretical foundations of computer science. Mathematical and abstract computational models are explored with special reference to the theory of programming languages. Topics include Kleene's Closure, Regular Expressions and Languages, Deterministic and Non-Deterministic Automata, Transition Graphs, Context Free Grammars and Derivations, Push-Down Automata and Pumping Lemma, Turing Machines and other equivalent machines, and Chomsky Hierarchy of Languages. The domains and limitations of each computational model are also explored.

CSE310 Computer Architecture & Assembly Language (3,0,3)

This course is an introduction to computer system structure and organization. Topics include representation of information, processor architecture, input/output, CPU, ALU, memory hierarchy, arithmetic circuits, micro and macro instructions, arithmetic shifts, overflow and underflow situations, fixed point and floating point data, instruction codes, super scalar structures, VLIW, and other modern CPU architectures.

Prerequisites: CSE141, CSE208

CSE312 Software Engineering (3,0,3)

This course introduces students to the fundamental principles and methodologies of large-scale software development. Students learn about the theory and practice of software engineering. It requires a programming background. Students apply the taught practices on their individual programming effort to identify their strengths and shortcomings through the use of Personal Software Process (PSP). Additionally, they work as part of a team on a full lifecycle software project that includes planning, software specification, software design, coding, inspections, and testing.

Prerequisite: CSE246

CSE341 Database Systems (3,1,4)

The course covers the foundations of database systems, database management systems and the design and implementation of database systems using industries top DBMS such as Oracle, SQL Server, etc. Topics included are fundamentals of database architecture, focusing on basics such as the relational algebra and data model, deriving a physical design from the logical design, schema normalization & denormalization, data security, data integrity, query optimization, transactions management, and introduction to distributed databases, object oriented databases and data warehousing.

Prerequisite: CSE246

CSE342 Operating Systems (3,1,4)

The objective of this course is to introduce the organization of operating systems. Topics included are process management and scheduling, interaction of concurrent processes, interrupts, I/O, device handling, memory and virtual memory management and file management. A survey is carried out of the design and implementation of distributed operating systems, both by introducing basic concepts and considering examples of current systems: UNIX and recently developed operating systems such as Linux, Vista are presented.

Prerequisites: CSE246, CSE310

CSE491 Computer Science Project I (0,3,3)

This is a two semester development project under faculty supervision. Students may propose their own projects for departmental approval or may apply for a project proposed by a faculty member.

Prerequisites: CSE311, CSE312, CSE341

CSE492 Computer Science Project II (0,3,3)

Prerequisite: CSE491

MTS201 Logic & Discrete Structures (3,0,3)

This course teaches topics of logic, propositional equivalences, predicate and quantifiers, sets, relations, functions, sequences and series, the growth of functions and complexity algorithms, the integers and division, matrices, methods of proof, mathematical induction, recursive relations, generation functions the basics of

counting, the pigeonhole principle, permutations and combinations, discrete probability, graphs, graph isomorphism, connectivity, Euler and Hamilton paths, introduction to trees, Boolean functions, logic gates and minimization of circuits.

Prerequisite: MTS105

Section - B (Supporting Sciences)

MTS101 Calculus-I (3,0,3)

Topics included are real and complex numbers, absolute values, average rate of change of a function, the derivative of a function, the differential of a function, rectangular coordinates, functions and graphs, limits and continuity functions, higher derivatives, differentiation of algebraic functions, applications of derivatives, fundamental theorems of differential calculus and techniques of integration, and 1st and 2nd order differential equations.

Prerequisite: MTS105

MTS102 Introduction to Statistics (3,0,3)

The course content includes: types of data, frequency distributions, measures of central tendency and dispersion, exploratory data analysis, introduction to set and probability theory, events and laws of probability, independence, conditional probability, discrete random variables, Binomial and Poisson distributions, index numbers and time series, introduction to MINITAB (the statistical software).

Prerequisite: MTS105

MTS203 Linear Algebra (3,0,3)

This course familiarizes students with binary operations, groups, rings and fields, vector spaces, linearly dependent and independent vectors, linear transformations, matrices of linear transformations, properties of matrices, matrix algebra, elementary row/column operations, Echelon form, normal form, rank and inverse of matrices, solution of equations, consistency criteria, elimination method and Gauss Jordan method, determinants and their properties, Cramer's rule and computations through MATLAB.

Prerequisite: MTS105

MTS232 Calculus-II (3,0,3)

This course covers topics of definite integrals, improper integrals, Laplace transformations, infinite sequences, Fourier Series, curves in two dimensions, three dimensional geometry, gradient, divergence and curl, directional derivatives and theorems of Gauss & Green.

Prerequisite: MTS 131

MTS401 Differential Equations

This is an advanced course on differential equations. The objective of the course is to impart knowledge about the bits and pieces that help in understanding the different areas of computer science. It is a 3 credit course comprising of 3 hours of theory teaching per week. Topics included are analytic, numerical, and qualitative analysis of ordinary differential equations, linear equations, linear and non-linear systems, application to mechanics, biology, physics, and the

social sciences. Existence and uniqueness of solution and visual analysis using computer graphics is a part of this course. Topics selected from Laplace transforms, power series solutions, chaos, and numerical solutions are taught as well.

Prerequisite: MTS232

SCI105 Physics- I (Electromagnetism) (3,1,4)

The contents of this course includes vectors, mechanics of particles, Newton's laws of motion, work, energy, and power, impulse and momentum, conservation laws, mechanics of rigid bodies, rotation, equilibrium, fluids, heat, thermodynamics, periodic motion, electricity and magnetism, Coulomb's law, electric fields, potential capacitance, resistance, D.C. circuits, magnetic fields, fields due to currents, induction, magnetic properties, wave motion, vibration and sound, interference, and light are also covered.

Section - C (General Education)

MGT211 Business Communication

The course focuses on the theory and practice of effective communication techniques in business environments. It polishes verbal and non-verbal communication skills for effective participation in business meetings and other activities. It prepares students to write formal business reports and to add value to previous work through further library research and fieldwork.

MIS202 Technical Report Writing (3,0,3)

Topics covered in this course include a study of the particular requirements of technical report writing, coupled with a review and refinement of basic grammar and composition skills. Students will be taught about the research process and analytical reports: how to gather, analyze, and organize data for writing a formal research report on an identified and approved business-related topic, write references using required MLA or APA styles, and document design.

Prerequisite: MGT211

MIS454 Audit, Ethics & IS Issues (3,0,3)

The course analyzes the impact of computers on society. Topics included are privacy issues, changing patterns of interaction, security, control of information systems, breakdowns, vulnerability, hazards, computer crimes, fraud, defenses, access controls, audit planning and execution, disaster recovery and risk management.

Prerequisite: MIS102

SSC 101 English Grammar & Composition

This course highlights the key aspects of English Grammar & Composition. The grammatical concepts will be taught in context. This will bring in reading skills as a key element as this input is essential for quality output in the form of writing. The course also focuses on embedding in students the concept that writing is a recursive process. This part of the course takes in to account important concepts related to composition with reading as a secondary focus.

Group I

HUM131 International Relations

This course attempts to explain some of the major developments in the world since the end of Cold War. It stimulates discussion and analysis of various forces and events dominating world politics. Contemporary issues such as globalization, environmental issues, human rights, conflicts and their resolutions, role of United Nations and Pakistan's foreign policy are looked into.

SSC151 Pakistan's History

This is a comprehensive course on the history of Pakistan from earliest times to present day. Emphasis is laid on highlighting the historical and cultural aspects of Pakistan through various phases of history. The objective is to expose students to the record of human existence and struggle in this land and develop in them an appreciation for their culture and world. The course content includes the freedom

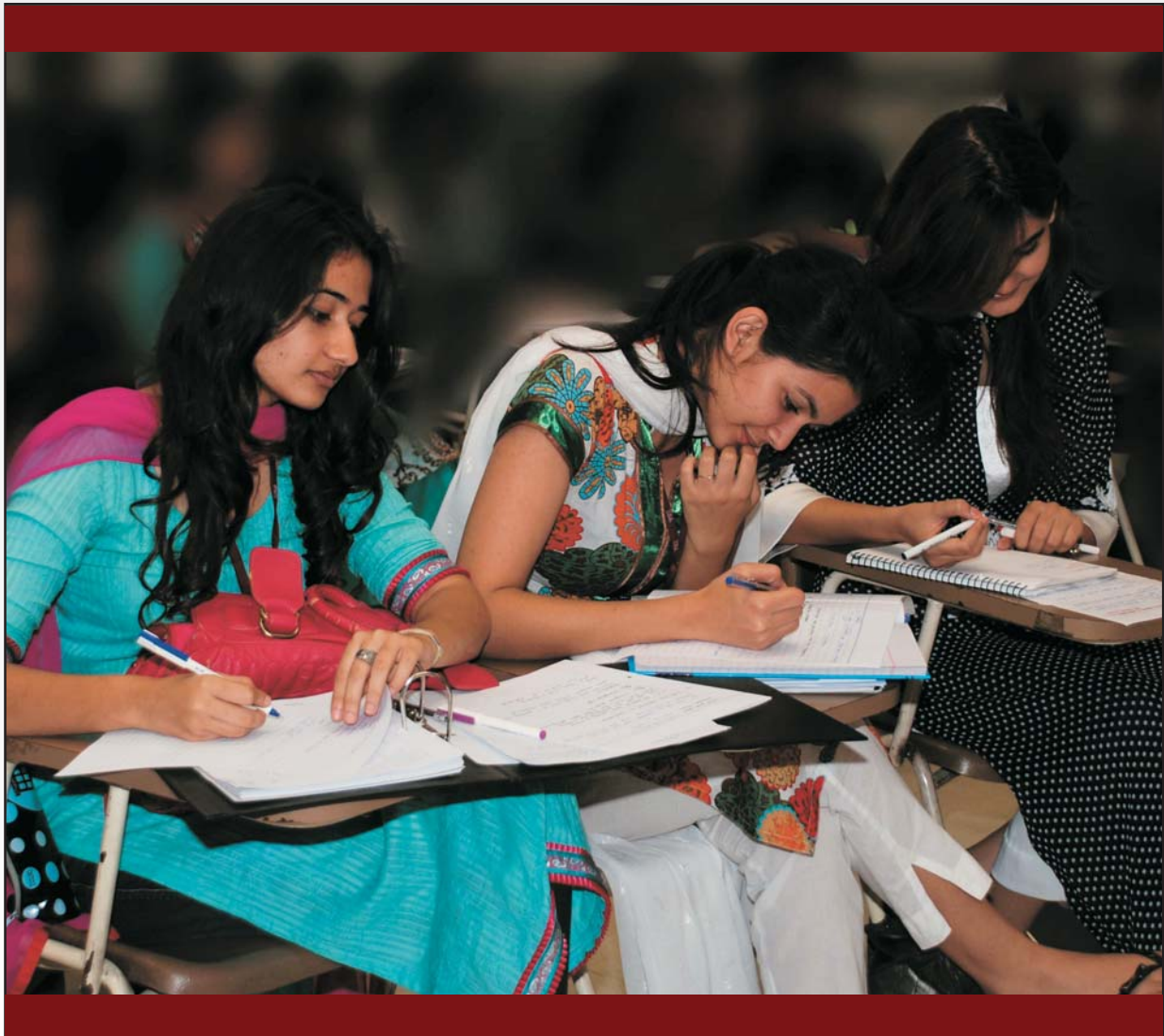
struggle for Pakistan and history of the country since independence.

SSC152 General History

The objectives of this course are to stimulate interest and enthusiasm for study of the past, an understanding of the nature, use of historical evidence and an understanding of the nature of cause and consequence, continuity and change. The course content includes political history, cultural history and intellectual history.

SSC112 English Literature

The course encompasses the study of the history of English literature and introduces major writers of different ages. Noteworthy works of some of these writers are studied to sharpen insight and develop analytical skills of students. The course content also includes literary work of some contemporary authors.



Elective Courses (BBA & BS Programs)

ACCOUNTING

Principles of Accounting-I	ACC111
Accounting Information System with SAP	ACC507
Activity Based Costing & Management	ACC551
Auditing Theory & Practice	ACC557
IFRS & Financial Reporting in Pakistan	ACC559
Analysis of Financial Statements	ACC561

LAW

Globalization & International Law	LAW551
Banking Law	LAW552

COMPUTER SCIENCE & ENGINEERING

Object Oriented Design & Implementation	CSE311
Compiler Design	CSE344
Principles of Programming Languages	CSE406
Modeling & Simulation	CSE443
Microprocessor Interfacing	CSE448
Network Security	CSE455
Introduction to Game Programming & Robotics	CSE460
Image Analysis & Computer Vision	CSE553
Pattern Recognition	CSE554
Robotics	CSE555
Advance Topics on Computer Networking	CSE557
Mobile Computing	CSE558

MARKETING

Advertising	MKT451
Consumer Behavior	MKT452
Sales Management	MKT453
Personal Selling	MKT454
Retail Management	MKT455
Export Marketing	MKT456
Dynamics of Distribution and Logistics	MKT457
Public Relations	MKT458
Direct Marketing	MKT460
Brand Management	MKT461

FINANCE

Investment Banking	FIN451
International Finance	FIN452
Security Analysis	FIN453
Corporate Finance	FIN454
Portfolio Management	FIN455
Financial Risk Management	FIN456

Derivatives	FIN457
Fundamental of Treasury and Fund Management	FIN458
Elements of Islamic Finance	FIN459

MATHEMATICS AND STATISTICS

Operations Research	MTS451
Mathematical Modeling and its Application in Finance	MTS502

MANAGEMENT

Principles of Management	MGT201
Management of Business-Government Relationship and Managerial Ethics	MGT551
Operations and Supply Chain Management	MGT553
Change and Innovation Management	MGT554
Project Management	MGT555
Evolution of Technology and Organizations	MGT556
Seminar in Management	MGT571

HUMAN RESOURCE MANAGEMENT

Performance Management: Leading for Greater Results	HRM410
Employee Staffing and Training	HRM414
Personnel Research Techniques and Human Resources Information Systems	HRM425
Recruitment and Selection Techniques	HRM430
Training Techniques and Practices	HRM435
Design and Administration of Compensation Plans	HRM440
Occupational Health and Safety	HRM445
The Legal Environment	HRM450
Executive Leadership	HRM455
Foundations of Human Resource Development	HRM550
Industrial Relations Management	HRM551
Organizational Development	HRM552
Human Resource Development	HRM553
Compensation and Benefits Management	HRM554
Succession Planning	HRM555
Conflict Management	HRM556
Team Management	HRM557
Leading the Change Process	HRM558
Operational HRM	HRM559
Managerial Decision-Making	HRM560

Elective Courses

(BBA & BS Programs)....(Contd)

MANAGEMENT INFORMATION SYSTEMS

Software Project & Quality Management	MIS305
Data Warehousing	MIS343
Change Management and BPR	MIS402
Social Computing	MIS406
Audit, Ethics & IS Issues	MIS454
E - Commerce	MIS456
Enterprise Resource Planning	MIS458
Customer Relationship Management	MIS459
Operations and Technology Management	MIS502
Enterprise Integration	MIS503
Information Industry Structure and Competitive Strategy	MIS513
Multidisciplinary Project - I	MIS521
Multidisciplinary Project - II	MIS522
SAP ABAP Programming - I	MIS541
SAP ABAP Programming - II	MIS542
Logistic & Supply Chain Management	MIS550

SOCIAL SCIENCES

Social Psychology & Self Development	SSC103
Pakistan's History	SSC151
General History	SSC152
Media Studies	SSC153
Sociology	HUM211
Creative Writing	SC1251
Political Science	SSC252
Corporate Social Responsibility	SSC253
Anthropology	SSC254
Foreign Languages (Chinese, Arabic, French, etc.)	SSC__



Course Descriptions

Elective Courses

Accounting

ACC111 Principles of Accounting-I

The objective of this course is to familiarize and develop in the students a thorough understanding of the accounting concepts, principles and procedures involved in the analysis and recording of business transactions and the preparation of financial statements for service and trading concerns. Accounting concepts and techniques underlying income determination and valuation of current and long-term assets, together with their related internal control measures and their presentation in the financial statements are emphasized.

ACC507 Accounting Information System with SAP

This course is a fully SAP integrated course which covers fundamentals of SAP Financial Accounting FI, Managerial Accounting CO, Materials Management MM and Sales & Distribution SD. The AIS course is different from other basic accounting courses in that it focuses on the processes and the working and interaction of various organization elements rather than the accounting information itself. As against the traditional AIS curriculum, this course is more focused on business processes in SAP with minimum discussion of the technical aspects of systems development. The course is delivered with hands-on experience on SAP made available through IDES. More than 50% of the course is therefore given through interactive lab sessions.

ACC551 Activity Based Costing and Management

This specialized course equips students with the tools to measure organizational productivity. The focus is on management of costs-driven organizational activities. It includes contemporary cost concepts, such as value chain analysis, cost management, theory of constraints, life cycle cost management and strategic accounting responsibilities. Developing students' understanding of productivity and efficiency enhancement is the special feature of this course.

Prerequisite: ACC401

ACC557 Auditing Theory and Practice

The objective of the course is to develop a framework for determining the nature and requirement of the auditing process applicable in different environments. The course focuses on techniques for investigation, verification, interpretation and appraisal of accounting records and financial statements. Concepts of accountability and ethical issues pertaining to the auditing profession with reference to the International Standards of Auditing, wherever applicable are also discussed.

Prerequisite: ACC501 / ACC201



ACC559 IFRS & Financial Reporting in Pakistan

This course starts with the appreciation of the Framework for Preparation and Presentation of Financial Statements as approved by International Accounting Standards Board. The course goes on to cover major provisions of some of the major International Financial Reporting Standards as applicable in Pakistan and major SECP pronouncements affecting financial reporting of publicly listed companies.

ACC561 Analysis of Financial Statements

During the present era of business acquisitions, mergers, leveraged buyouts and restructuring and in view of constantly evolving financial reporting refinements and large scale manipulation of financial reporting to control perceptions of investors and lenders, the need for vigorous and meaningful analysis of financial statements cannot be overemphasized. This course aims at developing a deeper understanding of accounting principles and standards underlying the data being analyzed and the analytical tools and techniques used for meaningful decision-making. The topics covered include discussion of adversarial nature of financial reporting, balance sheet limitations, revenue exaggeration and expense manipulation, nature and types of reserves, deferred taxes, performance measures and ratios, financial flexibility and leveraged buyouts and growth rates and valuation via restructuring potential. The course is taught largely through case studies and real life business problems thereby stimulating effective participation of students in the learning process.

Prerequisite: ACC501/ACC201

Law

LAW551 Globalization and International Law

This advanced elective course discusses the phenomenon of globalization and international law with reference to MNCs, foreign direct investment and other contemporary issues involved. The course objectives include initiating a debate and dialogue amongst the students to relate to macroeconomic, legal and political issues in context of globalization.

Prerequisites: ECO103, ECO113 & MGT201

LAW552 Banking Law

The subject of this course is government regulation of banks, with a particular focus on government regulation of banking activities and the financial service activities of banks. The legal structure of the financial services industry, and the formation and expansion of banks and financial holding companies are focused. This course will cover basic banking law the structure of banking regulation, bank charters, bank holding companies, and lending and deposit issues.

Prerequisite: LAW205

Computer Science & Engineering

CSE311 Object Oriented Design and Implementation (3,0,3)

This course is an advancement of the techniques learnt in Object Oriented Programming. Topics include Conceptual and Object Modeling, Functional Requirements for a system and produces implementation specifications. Unified Modeling Language is used for representing various phases of analysis and design.

Prerequisites: CSE142, CSE246

CSE344 Compiler Design (3,1,4)

This course examines the design consideration, constraints and implementation techniques for developing compilers and interpreters. Programming language code translation issues are explored with reference to problem domains,

resource requirements and runtime requirements. Topics include Compiler Backend Operations like Scanning, Parsing (top-down and bottom-up parsing), BNF/EBNF and Syntax Trees, Semantic Analysis and Annotated Grammars, and Compiler Frontend Operations like Runtime Environments, Code Generation and Introduction to Code Optimization.

Prerequisites: CSE310, CSE309

CSE406 Principles of Programming Languages

This course develops understanding of programming language design and implementation issues with respect to computational models their domains and ease of use. It covers topics like data types, declarations, static and dynamic binding, evaluation order, scopes and lifetimes, evaluation order and interpretation and compilation as well as just in time compilation. A comparison of fundamental characteristics of structured, scripting, logical and functional languages is also drawn.

Prerequisite: CSE142

CSE443 Modeling & Simulation (3,1,4)

This course looks at simulation, which is one of the most widely adopted techniques in problem solving. It includes an overview of system modeling and simulation, manual example on simulation of discrete event individual life and health insurance, regulation, and insurer operations and functions.

CSE448 Microprocessor Interfacing (3,1,4)

This course covers the fundamentals of Intel x86 assembly language and the basic architecture of the Intel microprocessor. Topics include assembly language, microcomputer system hardware, input / output devices, and bus discipline. In addition, 8051 Microcontroller Programming and Interfacing will also be covered. This course consists mostly of hardware labs in which students develop projects on electronics, leading to a final semester project.

Prerequisite: CSE310



CSE455 Network Security (3,0,3)

Students are introduced to the security issues in computing, communications, and electronic commerce. The course covers security requirements and vulnerabilities, legal and ethical issues, basic cryptology, private and authenticated communication, electronic commerce security, software security, viruses and other malicious codes, operating system protection, trusted systems design, network security, firewalls, auditing, physical security and disaster recovery.

Prerequisite: CSE243

CSE553 Image Analysis & Computer Vision (3,0,3)

This course is an introduction to the field of Computer Vision and focuses on the underlying algorithmic, geometric and optic issues. The course starts with a brief overview of basic image processing topics (convolution, smoothing, edge detection). It then proceeds on to various image analysis topics such as binary images, moments-based shape analysis, Hough transform, image formation, depth and shape recovery, photometry, motion, classification, and special topics.

Prerequisite: CSE205

CSE554 Pattern Recognition (3,0,3)

This course provides an introduction to classical pattern recognition. The course includes sections on neural networks and provides links to the classical statistical pattern recognition techniques. Topics discussed are Bayesian decision theory, parametric estimation and supervised learning, linear discriminate functions, nonparametric methods, feature extraction for representation and classification, and neural networks for pattern recognition. Some of the applications of this topic are automated speech recognition, fingerprint identification and optical character recognition.

Prerequisite: MTS102

CSE555 Robotics (3,0,3)

The course examines computer control aspects of robots with special emphasis on some applicable artificial intelligence techniques. Topics included are manipulator kinematics and dynamics, sensors and perception, object location, mobile robot investigation, task planning, control architectures, multiple robot systems and robot programming.

Prerequisite: MTS203

CSE557 Advanced Topics in Networking (3,0,3)

This course is intended to provide senior level students with a thorough understanding of modern networking concepts and technologies. It discusses in detail various networking technologies in particular for Metropolitan Area and Wide Area Networking, introducing them to tradeoffs between various protocols, and services. Topics covered include: VSATs, ATM, Sonet, Optical Networks, Voice over IP, MPLS, Wireless LAN, 3G Mobile Services, Bluetooth, & Mobile/Cellular Networks.

Prerequisite: CSE243

CSE558 Mobile Computing (3,0,3)

The objective of this course is the overview of history, evolution, compatibility of wireless standards, special problems of wireless and mobile computing, wireless LAN and satellite- based networks, wireless local loops, mobile internet protocol, mobile aware adaptation, extending the client-server model to accommodate mobility and mobile data access. Furthermore, software packages to support mobile and wireless computing, the role of middleware and support tools, performance issues and emerging technologies are also discussed.

Prerequisite: CSE243



Marketing

MKT451 Advertising

The purpose of this course is to provide students with an understanding of how the practice of advertising is applied in a marketing environment. There is a need to equip students with knowledge of the importance of the role of advertising in the economy, and its place in the media of mass communications. This course emphasizes the preparation and execution of a media strategy. The students will have an in-depth understanding and study of advertising appeals, product and market research, selection of media, testing of advertising effectiveness and organization of the advertising profession. Students will also develop skills in scientific media planning and management. The course will place a heavy emphasis on the underlying marketing disciplines of customer-focus and branding. Understanding high value customer segments and delivering branded satisfaction to those segments through innovative communication techniques is an imperative for all marketers today. This imperative will be examined in an advertising context across multiple business sectors including consumer packaged goods, financial services, information technology, retail, and the marketing of people. An investigation of the nature and scope of advertising and its place within marketing strategy decisions and society falls within the gambit of this course.

MKT452 Consumer Behavior

Consumer Behavior begins with an overview of importance of understanding consumers as buyers and users of products and services, and the course delves into deeper issues revolving around consumer decision making. Multiple factors forming the foundations of consumer behavior such as economic, social, psychological and cultural factors are discussed in the light of individual behavior variables such as needs, motives, perceptions, attitudes, personalities and learning. Lectures, interactive sessions, and real life cases are all included in the pedagogical design to enable students to understand how the communication mix can be developed to satisfy demanding consumers. A field project is incorporated to allow students to extend their learning to designing an effective communication plan for a product or service.

MKT453 Sales Management

Sales Management is critical for the success of any business enterprise, as it focuses on the development of sound sales and distribution strategy, the management of marketing channels, and sales force management in a business organization.

The objective of this course is to familiarize BBA level students with the concepts and practices of sales management. The course focuses on setting up sales objectives, planning and implementation of sales programs, supervising the sales effort and measuring sales performance. The areas of sales forecasting, budgeting, hiring, sales force motivation, compensation and performance evaluation are also covered.

MKT454 Personal Selling

In the highly competitive and complex environment of the business world personal selling has an even more important and critical role to play.

Personal Selling has evolved into a different activity than it was just a decade ago. At BBA level, this course provides an overview of personal selling, providing insight into the operating paradigm of today's personal selling endeavors. This course encompasses all new concepts, technologies, and techniques that have contributed to this evolution. It also describes approaches to personal selling and presents the sales process as a series of interrelated steps.

MKT455 Retail Management

This course will help the students to see how retailing fits within the broader disciplines of business and marketing and will introduce them to the basic concepts and strategies in retailing. It will help them grasp the role of retailing in society and, conversely, society's impact on retailing. This course is meant for the students who ultimately envisage fulfilling a managerial function in any area of retailing. It will help them to analyze the importance of store location, merchandising, products and pricing.

MKT456 Export marketing

The course is designed to familiarize students with the procedures, policies and management problems faced by

Pakistani exporters. It includes a study of the Pakistani exporters, types of export channels, sources of export market information, locating sales channels through international publications, export yardsticks, advertising and sales promotion and packaging for exports, export terms and documents, banking services and transportation for exports.

MKT457 Dynamics of Distribution and Logistics

The course reviews all pertinent concepts making the subject a timely issue. The course also serves as a training tool to someone who wants to broaden his/her knowledge about the difference between logistics and distribution from that of supply chain management. It will enable them to learn about tools as to how to be a cost-effective market leader. The first objective of this course is to learn about the strategic importance of logistics and distribution management, planning and operations and it brings about a competitive edge to the overall business. The second objective is to differentiate between logistics and other related disciplines such as Supply Chain Management, material handling and also to differentiate between distribution management and inventory management, warehousing, and transportation. The basic aim is to develop understanding of the four key areas and their interrelationships, namely strategic role of logistics and distribution management, difference between logistics and distribution and related disciplines, key activity centers of logistics and distribution, analytical tools and techniques for logistics and distribution management. The strategic concepts discussed in the course are tied together through a variety of examples that show that a combination of concepts is needed to achieve significant increase in performance.

MKT458 Public Relations

Public Relations (PR) has gained prominence in the marketing communications mix, especially today, since media proliferation and high costs are forcing marketers to find more targeted approaches to achieve their objectives. Public Relations will provide students with the basic framework for creating and managing a PR Campaign. Through practical exercises students will also learn how to create, edit and evaluate PR texts for various publics and different situations. They will also be able to conduct basic research for PR purposes, create a PR plan, budget and implement it and finally evaluate the results. Topics which will be taught will include the publics in PR, PR tools, research methods in PR, planning, budgeting and implementing a PR campaign, and creating and managing relationships. Effective targeted writing skills and event management are also part of this course.

MKT460 Direct Marketing

Direct marketing has become a powerful tool as part of an overall integrated marketing strategy. It is the study of the ability to reach a specific audience, create or enhance customer bonding, create dialogue or combine various media and disciplines. Here the student will learn the interactive use of advertising and other promotional media to stimulate consumer behavior predominantly through

database and targeted marketing in order to obtain a measurable response. Tools include direct mail, telemarketing, TV and press advertising, web banner ads, door drops and inserts. The course will include the study of one-to-one and customer relationship marketing in which measuring customer value and building customer loyalty are major concepts which will relate to the concept of mass customization.

MKT461 Brand Management

The study of brand management is a crucial area in marketing and business curriculum as brands are amongst the most valuable assets a company can have in today's highly competitive marketplace. The course includes an understanding of the psychological aspects of consumers' awareness, preference, and loyalty to brands which is vital in developing long-term company growth, what brands are, how they are created and managed, and how they add value to consumers and the firm. Topics include the importance of product, service and corporate brands, how awareness, loyalty, perceived quality, strategies and tactics for maintaining and reviving brands, multi-brand portfolios, extensions, brands as a driving force for standardization and globalization with explicit examples of branding drawn from local industry in Pakistan.

Finance

FIN451 Investment Banking

The aim of the course is to introduce the students to the various facets of the Investment Banking Industry. The course begins on a broad conceptual level with an examination of the philosophy and the scope of Investment Banking, and then narrows down to focus on the different facets of Investment Banking. This includes Secondary Markets (trading in the stock markets), Primary Markets (listing regulations, pricing of Equity and Term Finance Certificates for the Initial Public Offers), Financial Innovation, the concept and the basic building blocks of Financial Engineering, Eurobonds, Funds Management, and the Regulatory Framework interfacing the Investment Banking Industry.

Prerequisites: ECO113/ECO114 & FIN401

FIN452 International Finance

This course concentrates on the role of external finance and foreign exchange in a macroeconomic context. The topics

covered include a study of the major institutions of international finance, the balance of payments analysis, theories of foreign exchange rate determination, international risk exposures and risk management.

Prerequisites: ECO113/ECO114 and FIN401

FIN453 Security Analysis

This course covers in detail various types of investment securities, application of tests of income risk and marketability in the selection of securities, diversification and management of funds, methods of security analysis and the use of technical aids in the appraisal of investment values. This course gives students practical investment experience and introduces them to various styles of investing and security analysis. It exposes them to the operations of money management-related processes and investment culture of the Karachi Stock Exchange.

Prerequisite: FIN401

FIN454 Corporate Finance

This course is aimed at building an analytical understanding of corporate financial decision-making. It examines the fundamental question in finance i.e., the ability of companies to make profitable financial decisions using financial theories put forward by different scholars. The course also deals with controversies regarding what businesses do in order to maximize firm value.

Prerequisite: FIN401

FIN455 Portfolio Management

This course introduces the theory and practice of investment analysis and portfolio management. The course surveys various quantitative applications and assets valuation models and their use in constructing a profitable investment portfolio. Topics include designing portfolios, risk diversifications, conceptual framework for making risk management and insurance decisions to increase business value and individual welfare, institutional aspects of the managed funds sector in Pakistan market structure and market efficiency. Security valuation models, setting investment goals and policies, equity and fixed income portfolio strategies and portfolio performance, transaction costs, turnover and trading are also covered.

Prerequisite: FIN401



FIN456 Financial Risk Management

The course provides students with a quantitative perspective of risk management and the conceptual framework for making risk management and insurance decisions to increase business value and individual welfare. The effects of, and rationale behind public policies that affect risk and allocation of risk among businesses and individuals are also discussed.

Prerequisite: FIN401

FIN457 Derivatives

The course deals with applications of derivatives, investigating the risks involved in derivative instruments, and examining how investors adjust the payoff pattern of their portfolios. The course also deals with various topics, like types of option contracts, taxation of option contracts, binomial option pricing model, Black Sholes model for call options, portfolio insurance, future versus call options and synthetic futures.

Prerequisite: FIN401

FIN458 Fundamentals of Treasury and Fund Management

It deals with an in-depth analysis of the various methods of treasury and fund management, incorporating asset pricing, expectation theory, interest rate risk and the term structure of interest rates. The differences among asset and liability management, managing interest rate risk, and selling interest rate risk products are also covered.

Prerequisite: FIN401

FIN459 Elements of Islamic Finance

This course introduces the Islamic financial and banking system and how the present institutions can be progressively transformed. The course discusses prohibition of riba and other finance related issues in the light of the teachings of the Holy Quran and Hadith. It also exposes students to the operational aspect of Islamic Financial Institution including risk management in IFIs and how the new institutions can fulfill the financing requirements of their customers. The concepts and applications of asset side and liability side products such as Murabaha, Musharaka, Mudarabah, Salam, Istisna, Istijrar, Trust/Investment deposits as well as Takaful and Islamic insurance, and the marketing of new products and services are adequately covered.

Prerequisite: FIN401

Mathematics & Statistics

MTS451 Operations Research

This course aims to develop modeling and analysis skills for solving deterministic optimization problems. It provides an introduction to linear programming, and will also cover integer and non-linear programming if time permits. The course will include a study of the Simplex method as well as some other algorithms. Topics to be covered include sensitivity analysis, duality, forecasting, game theory, integer programming, Markov processes, networks, queuing theory, simulation, transportation, and transshipment. The course

will also introduce students to the use of computer software to solve linear and nonlinear problems.

MTS502 Mathematical Modeling and Its Application in Finance

Quantitative methods have become fundamental tools in the analysis and planning of financial operations. There are many reasons for this development: the emergence of a whole range of new complex financial instruments, innovations in securitization, the volatility of fixed-income markets since interest rate deregulation, the increased globalization of the financial markets, the proliferation of information technology, and so on. In this course models for hedging, asset allocation and multi-period portfolio planning are developed, implemented, and tested. In addition, pricing models for options, bonds, mortgage-backed securities, and swaps are discussed. The models typically require the tools of statistics, optimization, and/or simulation, and they are implemented in spreadsheets or a high-level modeling environment, MATLAB. This course is quantitative and will require extensive computer use. The course is intended for students who have a strong interest in finance. Prospective students of this course should be comfortable with quantitative methods, such as basic statistics and mathematical programming and simulation methodologies, Decision Models and Uncertainty.

Management

MGT201 Principles of Management

This course focuses on basic managerial functions of planning, organizing, staffing, leading and controlling. It is specially designed to orient students to modern management practices essential for successful management of large organizations having a diverse workforce and operating in the changing global, political, economic, social and technological scenarios.

MGT551 Management of Business-Government Relationship and Managerial Ethics

Government involvement in business activity takes many forms and can be seen as an attempt by the government to tackle the problems caused by the operation of the free market. This course provides an overview of business-government relationship in Pakistan and addresses issues related to ethics and managerial decision-making.

Prerequisites: MGT201, MGT221, MGT301, FIN400

MGT553 Operations and Supply Chain Management

The course familiarizes students with the fundamental operational problems in the areas of manufacturing and service sectors. It covers strategies for production and layout, as well as inventory procurement, health, safety and environmental management. Value chain and extended supply chain concepts and models for developing competitive advantage are also discussed in the context of local business and industry.

Prerequisites: MGT201/MGT400, MGT311

MGT554 Change and Innovation Management

Challenges of globalization, new technologies, industry restructuring, increased public scrutiny and other external pressures on today's businesses require constant updating of skills throughout the organization. This course equips the students with practical skills and hands-on tools for planning and guiding large scale systematic changes (major strategic shifts, business turnarounds and organizational transformations), managing specific change (innovations, new ventures, pilot projects) and scaling up of specific projects for company growth.

Prerequisites: MGT201/MGT400, FIN400

MGT555 Project Management

This course introduces a structured approach to managing projects. It helps students gain managerial practice through the development of project execution manual for a real life project selected by a group of students. The project focuses more on technology rather than financial management. The course includes topics such as Management Process, Utilization of Project Management, and Strategic Context of the Project, Project Planning & Scheduling, Project Information Management System, Project Communication, Project Control, Project Change Management, Project Teams and Successful Completion of Projects. These topics are taught with reference to the Project Management Institute PMBOK standard.

Prerequisite: MGT 201/MGT 400

MGT556 Evolution of Technology and Organizations

This course explores the issue of human progress in relation to the evolution of organizations, particularly in connection

with technological and economic development. Factors that cause, enhance and/or retard development are explored. The overall objective is to understand the role of management in the process of societal evolution.

Prerequisite: MGT201/MGT400/MKT201/MKT400

MGT571 Seminar in Management

This course intends to give the students in-depth knowledge & awareness about the latest trends in management. The course will let students participate in interactive & applied sessions in order to acquire skills & concepts related to modern management techniques. Topics covered include contemporary management issues, challenges & strategic responses of well-rounded managers.

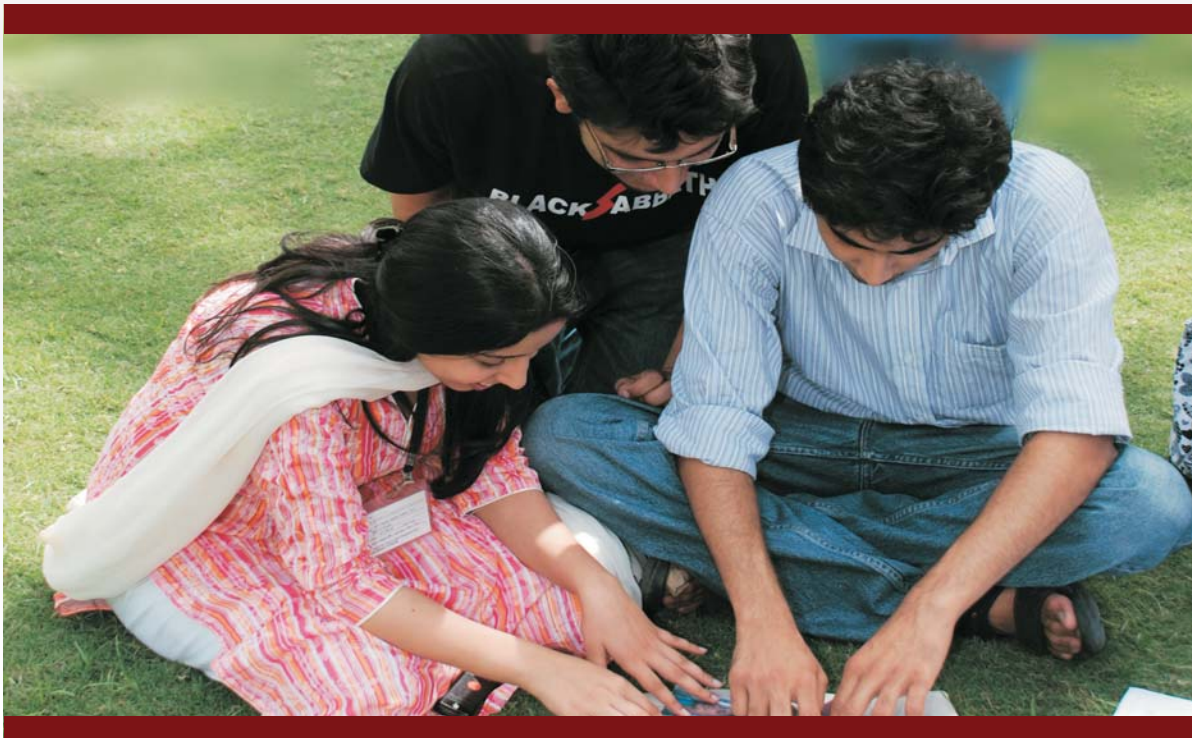
Prerequisite: MGT201/MGT400

Human Resource Management

HRM410 Performance Management: Leading for Greater Results

Students will establish a systematic process for planning work, setting expectations, monitoring performance, developing a capacity for performance rating and rewarding performance. Through dialogue, assessment, hands-on and team problem solving, and feedback, they will resolve issues in defining the job and aligning performance measurements for individuals, teams, business units and the entire organization.

Prerequisite: MGT201/MGT400



HRM414 Employee Staffing and Training

Students will explore theory and best practices of staffing and training processes that lead to positive individual and organizational outcomes and will learn current trends in selection and training, measurement of individual differences for decision-making in hiring, promoting, training, and dismissal, evaluation of HRM processes and systems, formal and informal training program design, evaluation of training effectiveness, interviewing of applicants and professional interaction with an audience.

Prerequisites: MGT200, MGT400

HRM425 Personnel Research Techniques and Human Resources Information Systems

This subject involves the study of quantitative and qualitative analysis techniques and research as they pertain to the planning, collection and interpretation of data relating to the management of human resources. Both manual and computer information systems methodologies are used. The course teaches the techniques involved in researching, analyzing, and interpreting data relating to human resource activities.

Prerequisites: MGT201/MGT400, MTS205/MTS501

HRM430 Recruitment and Selection Techniques

A basic study is undertaken of the principles, issues, trends and legislative requirements affecting recruitment and selection. Students will acquire the knowledge and skills needed to successfully identify human resource requirements and to attract and retain an effective workforce for an organization. The changing legal environment and the impact of laws on recruitment and selection are an important component of this course.

Prerequisite: MGT201/MGT400

HRM435 Training Techniques and Practices

Students will gain experience in needs assessment, program design and implementation and evaluation techniques. They will also learn the use of appropriate training methodology and techniques by presenting in-class facilitation sessions. Identifying principles which facilitate adult learning and applying these practically, developing observable and measurable learning objectives to be used in designing program content and evaluation methods are a part of this course. In addition to this, it involves applying basic needs assessment, development, implementation and evaluation techniques to produce effective instructional designs.

Prerequisite: MGT201/MGT400

HRM440 Design & Administration of Compensation Plans

The students will explore the nature of compensation plans, their relationship to performance in the workplace as well as the legislative framework affecting them. The course outlines strategic compensation issues, the pay model, consistency, the impact of internal pay structures on efficiency, equity and compliance in the pay system, the importance of job analysis and its relationship to internal consistency, the difference between job-based and knowledge-based pay structures, the design of a basic pay structure, performance evaluation and merit pay systems, alternatives to traditional reward systems, benefits determination process and the regulatory aspects of compensation management.

Prerequisite: MGT201/MGT400

HRM445 Occupational Health and Safety

The course discusses key technical, political, management and personal issues relating to health and safety in the workplace, the role and importance of effective



health and safety management to business, government, organized labor, individual employees and society, key legal rights and responsibilities of employees and employers with respect to health and safety issues in the workplace. In addition, positive health and safety initiatives made by proactive employers are also examined.

Prerequisite: MGT201/MGT400

HRM450 The Legal Environment

The students will be exposed to such diverse areas as employment standards, workers' compensation, pay equity, human rights and unionization. The corresponding rights and responsibilities of employers and employees will be examined. The contractual nature of the modern employment relationship, the elements of the contract, and remedies for the breach of the contract will be studied. Differences between the independent contractor, the contract employee, the individual employee and the unionized employee will be discussed. The employer's rights and how to respond to employee action are also discussed.

Prerequisite: MGT201/MGT400

HRM455 Executive Leadership

The course is designed to provide students with a better understanding of the realities of executive leadership and the impact of leadership in large, complex organizations. Besides in-depth lectures, there is dialogue with a broad range of senior executives who have significant experience in large organizations. Students are asked to use the readings and lectures as an opportunity to formulate a personal leadership philosophy that they believe fits them and their career objectives best.

Prerequisite: MGT201/MGT400

HRM550 Foundations of Human Resource Development

The course will investigate the theory, practice, and issues associated with human resource development in organizations. Human resource development is the expansion of employees' work-related abilities for the attainment of organizational and personal goals. The course discusses the major roles of the HRD professional, learning specialist, administrator, consultant and researcher/evaluator.

Prerequisite: MGT201/MGT400

HRM551 Industrial Relations Management

The course is centered on management of labor relations. Socio-political factors affecting labor relations, principles and strategies of negotiation, trade unionism, its benefits and drawbacks, as well as means of evaluating union demands are some of the topics discussed in this course.

Prerequisite: MGT201/MGT400

HRM552 Organizational Development

The course is about the study of behavioural science techniques to improve organizational health and effectiveness, internal relationships and problem-solving capabilities. Organizational learning, transition processes, changing values, diversity of labor forces and other

challenges put forward by globalization are some of the topics discussed.

Prerequisite: MGT201/MGT400

HRM553 Human Resource Development

The course emphasizes the need for training and development for all levels of employees ranging from frontline workers to senior managers in order to bring about the development of the entire organization. Training exercises, management development programs and continuous professional development activities are discussed, along with their costs and benefits, evaluative criteria, and impact on individual and organizational growth.

Prerequisite: MGT201/MGT400

HRM554 Compensation and Benefit Management

New trends in designing compensation packages, their costs and benefits for the organization, and their utility as motivational tools are some topics of discussion in this course. Case studies and class discussions are used to give students a flavour of real life remuneration strategies.

Prerequisite: MGT201/MGT400

HRM555 Succession Planning

The growing uncertainty in the business world places extra demands on management to chalk out succession plans. This requires senior managers to have a vision and play the role of leaders and mentors in the development of managers, who have the potential to lead. Discussion on well-known leaders, their characteristics and strategies and struggles to reach the top, as well as their abilities to influence and mobilize others are dealt with.

Prerequisite: MGT201/MGT400

HRM556 Conflict Management

The course presents negotiation theories, strategies and styles. Conflict management skills such as mediation, investigation and arbitration are an important part of the course, as are issues like racism, gender discrimination, whistle blowing and ethics.

Prerequisite: MGT201/MGT400

HRM557 Team Management

The course is about forming, leading and managing teams and group work. It encourages discussion on how to deal with difficult group members, encourage creativity, improve group decision-making and liaise with other functions within and outside the organization. Students are assigned to teams at the very beginning, where they analyze cases of outstanding and poor team dynamics, complete group assignments and evaluate their own team dynamics and outcomes.

Prerequisite: MGT201/MGT400

HRM558 Leading the Change Process

The course is concerned with the tasks of leading the change process in organizations. Creating a shared changed vision, fostering an understanding of the change process, and

leading the change transition are important ingredients of the course. Other topics of discussion include encouraging an innovative organizational culture, managing growth and decline and corporate restructuring.

Prerequisite: MGT201/MGT400

HRM559 Operational HRM

The course addresses the key tasks of Operational Human Resource Management. Recruitment and selection, training and development, and performance appraisal and feedback are the main topics of discussion in this course. Other areas covered include assessment tests, theories of motivation and evaluative criteria.

Prerequisite: MGT201/MGT400

HRM560 Managerial Decision-Making

The course begins with the assumption that managers are constantly making decisions that involve risk. This course investigates how managers confront risk, deal with difficult decisions and prepare for contingencies. Various models of decision-making are studied as part of the course.

Prerequisite: MGT201/MGT400

Management Information Systems

MIS305 Software Project & Quality Management (3,0,3)

This course addresses process considerations in software systems development. It discusses advanced material in software planning, mechanisms for monitoring and controlling projects, and leadership and team building. Furthermore, it provides knowledge and understanding of the concepts, principles, techniques, and tools that are used in the management of software projects. Some of the topics included are size and cost estimation, schedule plan, risk management, quality management and configuration management. Students work in a team to develop a project plan for a small project according to the established standards based on best practices of the global IT industry.

Prerequisite: CSE312 or MIS241

MIS343 Data Warehousing (3,1,4)

The course provides an opportunity to capture the concepts, principles, methods and evaluation techniques that are common throughout Data Warehousing. Topics included are planning & requirements gathering, conceptual modeling of Data Warehouses (DWs) and logical data models (Star Schema, Snow Flake etc.), ETL, DW loading (refreshing), assuring efficient execution of OLAP queries, materialized views, data analysis techniques, metadata management, implementation and managing the evolution of DWs real-time, and active data warehouses, and warehousing complex data. Case studies are also used to analyze the implementation of successful DWs.

Prerequisite: CSE341

MIS402 Change Management and BPR (3,0,3)

The aim of this course is to teach students the preconditions for success and failure of BPR, process innovation, BPR

implementation, tools, role of IT, TQM, management of organizational changes that occur as a result of BPR and the use of information technologies that support BPR. The course includes the study of models such as the value process framework for strategic alignment of business forces for organizational transformation.

Prerequisite: Instructor's consent

MIS454 Audit, Ethics & IS Issues (3,0,3)

The course analyzes the impact of computers on society. Topics included are privacy issues, changing patterns of interaction, security, control of information systems, breakdowns, vulnerability, hazards, computer crime, fraud, defenses, access controls, audit planning and execution, disaster recovery and risk management.

Prerequisite: Instructor's consent

MIS456 E-Commerce (3,0,3)

The course introduces the e-commerce concept, objectives, market drivers, requirements, underpinning techniques and technologies. Topics include: intelligent agents, client/server model, commitment, concurrency, recovery, network service, and application management, quality of service management, service level agreement management, application service providers and security management. Policy and regulatory issues in e-commerce will also be discussed. Finally, various e-commerce applications in the areas of finance, securities, trading, auctions, and travel will be described.

Prerequisite: MIS102

MIS458 Enterprise Resource Planning (2,1,3)

The course focuses on the basic and fundamental concepts in Enterprise Resource Planning. The students will gain an insight into the ERP systems capabilities and why organizations implement ERP solution despite heavy cost of implementation. The course topics include the following: ERP Introduction, Virtual Organization Game, Business Function Processes and Data Requirement, ERP Selection Process, ERP Major Vendors, ERP Business Requirement, ERP RFP Development, overview Sales & Marketing (SAP), Overview Production & Supply Chain (SAP), Overview Material Management (SAP), Overview Financial (SAP), ERP Implementation Success & Failure and ERP & E-Commerce.

Prerequisites: MIS102 and Instructor's Consent

MIS459 Customer Relationship Management (3,0,3)

The course incorporates group interaction, real life case study scenarios and dynamic facilitation of course materials to understand customer relationship management. Topics included are: successful CRM strategy, organizational issues of developing and implementing CRM strategy, phases of CRM framework, CRM project management, and CRM information system.

Prerequisites: MIS102 and Instructor's Consent

MIS502 Operations and Technology Management

This course offers students a foundation for dealing with technology and operating issues as a general manager. The course is based on the premise that operations can be a significant source of competitive advantage for a firm, and prepares students to identify and implement operating improvements that directly affect firm performance. The course objective is to help students understand the concepts, frameworks, tools, and techniques that enable an operating manager to diagnose an existing situation, identify its challenges and opportunities, and create a plan of action that will result in a dynamic, distinctive advantage in the market place. Topics encompass process analysis, cross-functional and cross-firm integration, product development, and technology and operations strategy.

MIS503 Enterprise Integration

The objective of this course is to teach students the different technologies that are currently being used to meet the integration needs of organizations. Topics covered in the course include fundamental concepts of Enterprise Integration, an overview of critical technologies, integration methodology, B2B integration, and web services for enabling integration, along with a design/programming assignment. The course begins with Enabling and middleware technologies for Enterprise Integration. It includes Application-centric view of Enterprise Integration as well as Data-centric view of Enterprise Integration. Another important area is Workflow Management Systems.

MIS513 Information Industry Structure and Competitive Strategy

The nearly instantaneous transmission and processing of information is changing the structure of entire industries, and is altering the profitable opportunities available to many firms. The ability to target profitable market segments and to identify individual customers is reducing the value of scale-based operations and the strategic advantage of large firms with existing market share. The ability to monitor the performance of units abroad, without regard to distance or time zones, is increasing the value of cooperative partnerships. This is leading to greater reliance upon outsourcing, benefiting many service industries and once again reducing the advantage of many large firms. At the same time, the impact of information technology on the transparency and efficiency of securities markets is destroying the profits of entire segments of financial services. All aspects of the firm-production, service, sales, marketing, strategy will be affected. Clearly, some firms will win and other will lose; nearly all will have to change. And yet, fundamental laws of economics have not been repealed. How can previous economic theory, and previous experience with rapid technological change, provide insights for the development of strategy in an increasingly digital age? This course draws upon the most recent experience in the impact of information technology upon diverse industries, ranging from trading of securities to retailing consumer packaged

goods. It integrates that experience with relevant theory to develop an outline of competitive strategy for electronic commerce, and, more generally, for information-based strategies. It is not a tools and techniques course or a quantitative analysis course; likewise it is not a technology or an implementation course. Rather, it provides a focused and modern complement to strategic planning.

MIS520, 521 Multidisciplinary Projects I,II

The multidisciplinary projects I & II are 3 credit-hours projects, both of which are required to be taken by MBA MIS students in their final two semesters. These projects are recommended to be done with the industry involving CCS and at least one other academic department at IBA. The emphasis should be on innovative and/or effective use of MIS/IT in traditional business domains. It should involve solving practical business related problems. The projects should preferably be linked to each other with clear cut deliverables in each semester.

MIS550 Logistic and Supply Chain Management

This course provides basic definitions and concepts for planning and controlling the flow of materials into, through, and out of an organization. Topics include: elements of the supply chain, customer, operating environments, financial fundamentals, manufacturing resource planning, total quality management, marketplace-driven customer expectations and definition of value, customer relationships, demand management, transformation of demand into supply, design, capacity management, planning, execution and control, performance measurements, supply, inventory, purchasing, and physical distribution system.

Prerequisite: Instructor's consent.



Social Sciences

SSC103 Social Psychology and Self Development

This is an elective course (Group-II) for the students of BBA-II. It gives an insight to socio-psychological skills in interpersonal relationship management. It teaches students to organize their personal lives better and reduce physical and mental stress in a corporate setting. In this course, students will learn about how people think, behave, and interact in different social environments. It will enable them to learn more about human behavior, which, in time will aid them in making informed managerial and human resource decisions.

SSC151 Pakistan's History

This is a comprehensive course on the history of Pakistan from earliest times to the present day. Emphasis is laid on highlighting the historical and cultural aspects of Pakistan through various phases of history. The objective is to expose students to the record of human existence and struggle in this land and to develop in them an appreciation for their culture and world. The course content includes the freedom struggle for Pakistan and history of the country since independence.

SSC152 General History

The objectives of this course are to stimulate interest and enthusiasm for the study of the past, an understanding of the nature and use of historical evidence and an understanding of the nature of cause and consequence, continuity and change. The course content includes political history, cultural history and intellectual history.

SSC153 Media Studies

Media Studies is being introduced in order to acquaint students with the history and fields of media culture, the methods of media analysis and their methodological foundation. The course also focuses on different parts of media culture along with the historical, aesthetic and technological and social development of media. The course aims at enabling students to relate themselves to the present media-saturated environment and understand its significance in the contemporary world.

HUM211 Sociology

This course introduces the basic concepts of sociology, methods of sociological research, relationship between individual, culture and society, and the influence of social and cultural forces on personal experience and social behaviour. Issues of social change, collective behaviour, urbanization, and environment are addressed. Particular emphasis is laid on making analytical connections between social theory and policy.

SSC252 Political Science

Political Science is an elective course (Group-II) offered in BBA-III. It introduces students to the basic concepts of

political science, political theories, comparative politics and public administration. The course will deal with issues of democracy, dictatorship, and the role of political values & culture in the context of Pakistan in particular and South Asia in general.

SSC253 Corporate Social Responsibility

Business schools, the media, the corporate sector, governments, and non-governmental organizations have all begun to pay more attention to issues of Corporate Social Responsibility (CSR) in recent years. These issues encompass broad questions about the changing relationship between business, society and government, environmental issues, corporate governance, the social and ethical dimensions of management, globalization, stakeholder debates, shareholder and consumer activism, changing political systems and values, and the ways in which corporations can respond to new social imperatives. (Oxford Handbook on CSR)

SSC254 Anthropology

This introductory course in anthropology presents basic concepts, nature, scope and application of anthropology in today's world. It traces the biological and cultural evolution of mankind. Particular emphasis is laid on the concept of culture, transportation, subsistence patterns, environmental interaction, religion, language and arts and human diversity and commonality.

SC1251 Creative Writing

This course aims at tingling and stretching the imagination and creativity of students by making them experiment with different kinds of writing. The course will enable students to improve their talents and writing skills. It will also give them the opportunity to explore different channels of expressing themselves.

Introductory Language Courses

Chinese, Arabic, French, etc.



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