



Catalog 2020-2021

**Institute of Business Management** 

**Catalog 2020-2021** 

# **VISION / MISSION STATEMENT**

### Vision

The Institute of Business Management aims to be one of the leading institutes nationally and internationally for imparting knowledge, skills, confidence, and values to its students, thereby, enabling them to become successful professionals globally.

### Mission

The mission of the Institute of Business Management is to foster a learning environment where students are motivated to make learning an on-going life-long process. We see ourselves as a multi-dimensional educational institution. Our aim is to:

- Use the best teaching and training methodologies
- Prepare students to excel academically as well as in management skills to function ethically and take effective rational decisions in all endeavors of life
- Pursue leading-edge research
- Engage in the development of innovative ideas and analytical, interpersonal and leadership skills
- Allow freedom of thought and expression
- Encourage both faculty and students to be independent and creative thinkers
- Commit to our students and other stakeholders to create responsible future global leaders

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# AN INTRODUCTION TO THE INSTITUTE OF BUSINESS MANAGEMENT

This catalog will provide you with valuable, up-to-date information about the programs of study and courses offered by the Institute, as well as information about the fee structure, facilities and student services available to students.

The catalog gives an introduction to life at IoBM as well as detailed information on all undergraduate and graduate level programs along with core courses, electives and specialized courses. Every effort is made to update information on courses in the catalog. However, changes in curricula may be necessary as part of a process of continuous improvement and the need to keep each program fully aligned with academic and professional developments. For this reason, the Institute reserves the right to make necessary alterations in courses and/ or course structures, after clearing them with the concerned Boards of Studies. Teaching methodology, academic and research programs, assessment procedures and course descriptions also form part of the catalog.

The catalog also lists the facilities at computer labs, library resources, student support services besides providing information relating to and course registration procedures. Information regarding opportunities for financial assistance and stipends for students is also included. The latter part of the catalog contains brief profiles of academic and administrative personnel.

### IoBM: 1994 - 2020

The Foundation for Higher Education was established as a non-profit institution in 1994 by a group of dedicated citizens of Karachi, and was registered under the Societies Registration Act of 1860. The Foundation promotes the dissemination of quality education. Its first project was the setting up of a management university designed to serve trade, industry and commerce by producing highly competent and talented business executives. Teaching began at the College of Business Management (CBM), IoBM's first constituent college, in September, 1995.

In January 1998, a bill was unanimously approved by the Sindh Provincial Assembly for establishing a university known as the Institute of Business Management in the private sector. At present, the Institute has four constituent colleges, the College of Business Management (CBM), the College of Computer Science & Information Systems (CCSIS), the College of Economics & Social Development (CESD) and the College of Engineering and Sciences (CES). Since 2006, the Institute has been ranked as one of the top universities in the private sector, both by the Higher Education Commission of the Federal Government and the Sindh Provincial Government. From 2010 to 2015, we have been honored with prestigious awards of EDUNIVERSAL Palms given for meritorious evaluation and certification of educational institutions around the world. The Institute is a member of the International Association of Universities (IAU), Association to Advance Collegiate Schools of Business (AACSB) and other international and national organizations.



The Governor of Sindh is an ex-officio Patron and the Chancellor, Mr. M. Bashir Janmohammad is also the Chairman of the Board of Governors and Chancellor of the Institute. The other members of the Board are:

- Mr. Talib Syed Karim, President, IoBM
- Chairman, Higher Educatioin Commission
- Secretary, Universities & Boards Department
- Mr. Jahangir Siddiqui
- Mr. S. M. Muneer
- President, Pakistan Stock Exchange
- President, Federation of Pakistan Chambers of Commerce & Industry
- President, Karachi Chambers of Commerce & Industry
- Mr. Muhammad Ali Tabba
- Mr. Masood Hashmi
- Mr. Muhammad Shareef
- Dr. Zafar Saied Saifee
- Ms. Ameena Saiyid
- Dr. Wagar Masood Khan
- Mr. Justice ® Ataur Rehman
- Mr. Sinakdar Sultan
- Prof. Dr. Syed Irfan Hyder
- Prof. Dr. Mehtab Syed Karim
- Mr. M. W. Jahangir, Secretary Board of Governors

The Institute offers, through its College of Business Management (CBM), a four year BBA (Honors) and a two/three year MBA degree program with specialization in Marketing, Finance, Human Resource Management and Management Information Systems, Health & Hospital Management, Pharmaceutical Administration, Media Management, Industrial Management and Telecommunication Management. BS (Honors) Economic & Finance, Accounting & Finance and BS Social Entrepreneurship and Social Leadership are also offered. A research degree, an MPhil leading to PhD, is offered in Finance, Human Resource Management, Marketing, Education, Psychology and Management Information Systems. A four year Bachelor of Computer Science (Honors), followed by a two years Master of Computer Science and MBA in Finance & Risk Management, BS in Mathematics & Economics and BS Data Science are offered through the College of Computer Science & Information Systems (CCSIS). The College also offers programs in Industrial Engineering & Management, Actuarial Science & Risk Management, Telecommunication Engineering & Management and Financial Mathematics & Statistics. The College of Economics and Social Development offers a BS program in Commerce, Media Studies, B.Ed, MBA in Educational Management and MSc leading to MPhil in Economics. College of Engineering and Sciences (CES) offers a program in Electrical Engineering.



The emphasis of IoBM is on research. It publishes the country's first business policy and research journal, Pakistan Business Review, which is recognized by the HEC as well as internationally recognized as Pakistan's first business policy and research journal, Pakistan Business Review. Pakistan's Journal of Engineering Technology and Science is accordingly brought out by the College of Computer Science & Information Systems whereas the CESD is responsible for yet another publication: the Journal of Education and Educational Development. Students and faculty contribute regularly to its pages. A research seminar is organized on a weekly basis. IoBM is the first business school where foreign language courses, Arabic, French, Spanish, Italian or Chinese were made compulsory in the BBA and BCS programs. The Institute has competent and dedicated faculty with the majority holding foreign degrees. An international seminar funded by the HEC is organized on an annual basis. IoBM Academic programs are up to date and comprehensive in concept and structure, resembling honors programs offered in the UK and graduate programs of US Universities. IoBM has extensive links with a number of global universities. Professors from these universities have served as Chief Academic Officers of IoBM.

Since 1998, more than 8,000 students have graduated from IoBM. Most of them occupy key positions in leading national and multinational firms including Habib Bank, Faysal Bank, Standard Chartered, PIA, Engro, Berger Paints, Geo TV, National Bank of Pakistan, Unilever, IBM, ICI, SmithKline & Beecham, Aga Khan University Hospital, Karachi Stock Exchange and different provincial and federal government departments. Many graduates have proceeded for their post-graduate program to reputable universities in the UK and USA. More than 400 students go for compulsory internships every year to national and multinational organizations.

Office of Research Innovation & Commercialization - Entrepreneurship & Management Excellence Center (ORIC) / (EMEC) of the Institute organizes professional education, training and research programs with a view to serving the corporate sector to enhance both its profitability and contribution to society. Support is provided in the areas of banking and finance, marketing, human resource development and information systems management.

The Institute has come a long way since its inception. There are over 4500 students on our campus which is large, purpose-built and located at Korangi Creek on an 11 acre site and comprises the Business College building, the Administration and Entrepreneurship & Management Excellence Center building, CCSIS building, a Convocation Center, the Student Activity Center, a five-storeyed library building, Industrial Engineering and Management building, a mosque and CESD building. Another nine acre site has been acquired at a distance of 1 km from the present campus. Shahjehan S. Karim Center of Excellence, a basement, ground plus five storeyed building was completed in June 2017.

At the Institute's fourth convocation in December, 2001, an honorary degree of Doctorate of Philosophy was conferred upon Dr. Nafees Sadik, former Executive Director, United Nations Population Program. At the fifth convocation held in December, 2002, an honorary degree was conferred on our keynote speaker, Mr. Babar Ali, Pro-Chancellor, Lahore University of Management Sciences (LUMS), and at the ninth convocation an honorary degree was conferred on Dr. Goolam Mohamedbhai, President, International Association of Universities (IAU). The sixth convocation was held in December 20, 2003 with Dr. Atta-ur-Rahman, Chairman, Higher Education Commission and Minister for Science & Technology as the Chief Guest and Ms. Musharaf Hai, Chairperson, Unilever Pakistan Limited as the keynote speaker. The seventh convocation was held on December 18, 2004 with the Governor of Sindh as the Chief Guest and Mr. Hameed Haroon, Chief Executive Dawn Group of Newspapers as the keynote speaker. Over 300 students were awarded BBA (Hons), BCS (Hons), BS (Accounts), MBA and MCS degrees at this convocation.



The eighth convocation was held on December 17, 2005 with the Minister for Education, Sindh, as the chief guest and Syed Ali Raza, President, National Bank of Pakistan, as the keynote speaker. Over 400 students were awarded degrees on the occasion. The ninth convocation of the Institute was held on December 16, 2006 with the Education Minister as the Chief guest and Dr. Goolam Mohamedbhai President, IAU, as the keynote speaker. Over 450 students were awarded degrees. The tenth convocation was held on December 8, 2007, where Mr. Jose Manuel Salazar-Xirinachs, Executive Director of the International Labour Organization, Geneva was the keynote speaker and over 500 students were awarded degrees.

The eleventh convocation was held on December 6, 2008 where the Governor, State Bank of Pakistan was the keynote speaker and Governor Sindh, Dr. Ishrat ul Ebad was the Chief guest. Over 700 degrees were awarded on the occasion. Syed Qaim Ali Shah, Chief Minister of Sindh and Mr. Nisar Ahmed Khuhro, Speaker Sindh Assembly attended the twelfth convocation of the Institute, held on December 05, 2009. The keynote speaker was Mr. Shaharyar Muhammad Khan, former Foreign Secretary and former Chairman of the Pakistan Cricket Board. As many as 927 graduates were awarded degrees. The thirteenth convocation was held on December 4, 2010. The Chief guest on the occasion was Dr. Abdul Hafeez Shaikh, Minister for Finance, Revenue, Economic Affairs & Statistics and the keynote speaker was Dr. Javaid R. Laghari, Federal Minister / Chairperson of the Higher Education Commission of Pakistan.

The fourteenth convocation was held on December 10, 2011. Over 983 degrees were awarded to students. The Chief guest on the occasion was Dr. Shamsh Kassim-Lakha, Founding President and Trustee of AKU and the keynote speaker was Mr. Javed Jabbar, Chairman and Chief Executive, JJ Media (Pvt.) Ltd. The fifteenth convocation was held on December 08, 2012. Over 825 degrees were awarded to students. The keynote speaker was Mr. Shahid Aziz Siddiqui, Chairman and CEO, State Life Insurance Corporation of Pakistan. The sixteenth convocation was held on December 07, 2013. Over 850 degrees were awarded to students on the occasion. The Chief guest was Mr. Nisar Ahmed Khuhro, Senior Minister for Education, Govt. of Sindh, the keynote speaker was Dr. Kakha Shengelia, President, Caucasus University Republic of Georgia and Mr. Munir Kamal, Chairman National Bank of Pakistan was the guest of honor.

The seventeenth convocation was held on December 07, 2014. Over 850 degrees were awarded to students on the occasion. The Chief guest was Mr. Nisar Ahmed Khuhro, Senior Minister for Education, Govt. of Sindh, the keynote speaker was Mr. Muhammad Aliuddin Ansari, President & Chief Executive Officer of Engro Corporation. The eighteenth convocation was held on December 12, 2015. Over 900 degrees were awarded to students. The Chief guest was Mr. Muhammad Mian Soomro, Former President of Pakistan and the keynote speaker was Mr. Kamal A. Chinoy, Chief Executive of Pakistan Cables Limited at the event. The nineteenth convocation was held on December 10, 2016. Over 950 degrees were awarded to students. The guest of honor was Mr. Jam Mehtab Hussain Dahar, Minister for Education & Literacy, Government of Sindh, and the keynote speaker was Mr. Sirajuddin Aziz, President Habib Metropolitan Bank Ltd. Dr. Mukhtar Ahmed, Chairman Higher Education Commission (HEC) also attended the convocation. The twentieth convocation was held on December 09, 2017. Over 1000 degrees were awarded to students. The Chief guest was Mr. Muhammad Zubair, Governor of Sindh and keynote speaker was Mr. Khalid Nawaz Awan, Chairman of TCS at this Convocation.

The twenty-first Convocation was held on December 08, 2018. Over 1000 degrees were awarded to students. The keynote speaker was Mr. Kimihide Ando, Senior Vice President and CEO, Mitsubishi Corporation. The twenty-second Convocation was held on December 07, 2019. Over 1000 degrees were awarded to students. The keynote speaker was Mr. Shazad Dada, CEO/Executive Director, Standard Chartered Bank, Pakistan.

### Shahjehan S. Karim Center of Excellence

A six storeyed (basement, ground plus five floors) centrally air-conditioned building with a covered area of 152,000 sq.ft and an open area of 15,000 sq.ft. houses 22 classrooms, 68 faculty offices, examination department with two examination halls of 11000 sq.ft, laboratories, media studio of 2,576 sq.ft, seminar rooms, training halls, gymnasium, 8 (food) kiosks with 180 seating capacity and 22 hostel rooms for students and faculty.



### WHY CHOOSE IOBM?

IoBM is one of the premier universities of the country. Not only does it offer academic excellence but its peaceful location - part city, part countryside - is ideal for reflection as well as camaraderie. The lay-out of the campus, where the buildings are connected by a leafy and partially winding driveway, has a charm of its own. The buildings themselves, a rich terracotta pink, are spacious and attractively designed. The breezy interior of the CBM building, with its twists and turns and its 'all-handson-deck' sense, is especially appealing. Tastefully landscaped with the help of nature - and sculpture - the loBM campus is both homely and gracious. To the many students who form part of its fraternity, it is a home away from home.

The academic laurels IoBM has won are equally impressive. IoBM was rated one of the country's top universities by the Higher Education Commission of the Federal Government as well as the Government of Sindh. IoBM has also been the proud recipient of two Edunversal Palms, awarded to it at the international convention of Deans of Business Colleges in recognition of its being one of the two best Business Schools since 2010.

"The essence of IoBM's academic programs pertains to career focused education towards Individual fulfillment, professional excellence, institutional credibility, family welfare and social responsibility. The net result is reflected in the net product. IoBM's credibility speaks for itself."

Shahjehan S. Karim Founder President Institute of Business Management

loBM is also an active member of the International Association of Universities (IAU), the International Association of University Presidents (IAUP), the Association to Advance Collegiate Schools of Business (AACSB), the Association of Commonwealth Universities (ACU), besides being associated with other international academic organizations. IoBM has also established links and made a name for itself among reputed foreign business schools in relation to the sharing and contributing of ideas on and insights into business education and research.

The programs we offer include MBA and MBA (Evening) programs in diverse fields. These are held at weekends and lay a special emphasis on the requirements of busy executives and those who, having come to the end of one career, wish to move to a new one. IoBM also offers programs in Health and Hospital Management, Finance and Risk Management, Industrial Management, Telecommunication Management, Environment and Energy Management, Organizational Psychology, Economics and many other disciplines. IoBM faculty excel in their different fields. They transmit their expertise in scholarship and research to students, providing them with a developed understanding of their respective disciplines.

Students have access to excellent facilities and learning resources as IoBM continually invests in its library, gym, sports facilities, computer equipment, Wi-Fi facility, video conferencing, state-of-the-art campus buildings and subsidized transport facilities.

loBM has earned its reputation through an excellent internship and graduate employment record. Rigorous degree courses enable graduates to acquire depth in their chosen subjects and open up wide career choices. A large number of IoBM graduates join top business schools in Europe, USA and Canada.

Research is a core competence at IoBM and is carried out in diverse fields. IoBM publishes the research quarterly, Pakistan Business Review (PBR) which is recognized by the Higher Education Commission (HEC) as category 'X' and ECONLIT, the Journal of Economic Literature, USA.

Annually held, HEC- financed international conferences provide a platform for the presentation of research undertaken at IoBM. The Pakistan Journal of Engineering Technology & Science and the Journal of Education & Educational Development recognized by HEC as Category 'X' are also brought out by IoBM. IoBM is connected with PERN2, a high -speed dedicated National Research & Education Network (NREN) for universities and other academic institutions of Pakistan.



# **IoBM's Academic Strategies**

21st century has seen explosion of knowledge and has forced integration of disparate fields: Social interactions connect with digital networks; philosophy connects with computer science, psychology with clicks and likes, education with virtualization, robotics with medicine, banking with mobile companies, and so on. Environmental future is now linked with social sustainability, which in turn is linked with economic and financial sustainability. These linkages have been created with the exponential growth of IT and communication technologies, that have stimulated multi-dimensional interactions among businesses, industry, social-life and governance. To study these interactions, IoBM as a multi-dimensional educational institution offers cross-disciplinary programs and specializations. These include Business Psychology, Education Management, Finance and Economics, Islamic Finance and Banking, Engineering Management, Accounting and Law, Health and Hospital Management, Environment and Energy Management, Economics and International Relations etc. These and other discipline-based programs in business, computer science, engineering, economics, education and media are offered by the four colleges or faculties of IoBM.

Convergence of previously separate fields is also causing massive disruption and displacement of jobs accompanied by obsolescence of skills and knowledge requirements. Disruption of 20th century life-long career jobs in brick and mortar companies are also creating massive entrepreneurial opportunities for innovative business ventures, social enterprises and rethinking and reorganization of government, industry and society. This is reflected in IoBM's strategic focus on creativity and innovation through business entrepreneurship, social entrepreneurship and leadership, technology entrepreneurship and entrepreneurial engineering through EMEC.

Knowledge is doubling every 12 months and soon would be doubling every 12 hours. Hence, regurgitation of the knowledge obtained from a traditional classroom lecture is fast becoming obsolete before it is absorbed. Hence, IoBM's mission focuses on the development of graduates who are life-long self learners, who can quickly learn new knowledge and customize it to meet the fast changing requirements of their careers. Hence, IoBM has a strategic focus on blended, experiential, project based, and case based and other learning technologies.

loBM's vision is to be among the leading educational institution locally and internationally. To achieve this vision, loBM strives to contribute to the development of economy and society through innovative research, faculty development, and impactful engagement with industry and society; nationally and globally. Hence, it is actively pursuing international accreditations such as AACSB and QS Ranking, and its programs are accredited by national accreditation councils such as PEC, NBEAC, NCEAC, NACTE and regulatory bodies such as HEC and CIEC.





# COLLEGE OF BUSINESS MANAGEMENT

CBM Vision: To be among the leading business school, recognized for producing ethical, transformational and change leaders and managers, nationally and internationally

CBM Mission: To provide transformative and change leadership and management for the development of economy and society through excellence in character, professionalism, education and research

Motivation for CBM Mission: Most of the SMEs and large enterprises are family owned enterprises which constitute over 80% of businesses in Pakistan (and have "seth" family culture). Hence, CBM focuses on developing graduates who are street smart and go-getters who can take on the challenge to create startups and move, change and transform a startup into a small enterprise, a small enterprise to medium enterprise and a medium enterprise to large enterprise. We strive to provide "leadership" skills to affect the "change and transformation" of current culture of existing organizations to a professional growth-oriented organizational culture.

Strategic focus of CBM includes major accreditations such as AACSB, making entrepreneurship as major career choice of our graduates, adoption of experiential and blended learning, mentoring by well reputed industry executives, impactful intellectual contributions and industry and societal engagements as determinants of faculty qualifications, and development of critical skills and innovation through specially designed courses and a lively and thriving culture of student activities.

# **BBA (HONORS)**

The Bachelor of Business Administration (Honors) is a professional and comprehensive management degree program that provides conceptual knowledge and in-depth exposure to functional areas in business management including accounting, marketing, finance, management, entrepreneurship and MIS along with special emphasis on leadership, social awareness, creativity and innovation. The program employs the latest approaches in experiential learning to develop skills for interpersonal communication, team work, foreign languages and managing diversity. Students learn to think critically and to apply conceptual knowledge to real world challenges and design solutions. Graduates of the BBA program distinguish themselves with their personal and professional excellence as managers and entrepreneurs in their areas of specialization. They are well rounded professionals known as "doers" and "go-getters" and are in great demand in the industry. BBA is a four-year program which requires completion of 144 credit hours of course work along with 2 credit hours of social internship (at the end of first year of the degree) and 2 credit hours of internship in a firm approved by the Institute. A student is required to complete 48 courses of 3 credit hours each in order to meet the degree requirements. Six credit hours are structured into the program for a foreign language course. Students must maintain a CGPA of 2.5 for the conferment of the degree. Graduates from this program are usually recruited in brokerages houses, MNCs, banks, financial institutions, advertising agencies and other reputable companies of the country where they pursue careers in research, supply chain, human resource, brand, sales, banking, audit, capital markets, business consultancy etc.

The key knowledge outcomes of BBA Program are:

- KO1: Conceptual knowledge and in-depth exposure to functional areas in business management
- KO2: Entrepreneurial mindset
- KO3: Conceptual knowledge leading to innovative industry driven projects

Skill and Attitude outcomes of BBA Program are:

- SO1: Leadership and Social Skills
- SO2: Creative skills
- SO3: Critical thinking and application of conceptual knowledge

To promote lifelong learning at IoBM, the program emphasizes Experiential Learning (EL) and developing readers and writers. The College's mission is reflected through courses designated with a suffix R, W or E in the program structure:

- An experiential learning course (E) requires an intensive experiential learning project focusing on a real life problem in a real life setting
- A writing-intensive course (W) has a substantial writing component and requires multiple writing assignments to be submitted at designated times during a semester
- A reading-intensive course (R) has a substantial reading component and requires multiple reading assignments that are evaluated at designated times during a semester

Students are provided with general business courses as part of their studies and are required to select five electives and a capstone project from the following specializations:

- Accounting\*
- Entrepreneurship
- Finance and Banking
- Human Resource Management
- Industrial Management
- Management Information Systems
- Marketing
- Management
- Logistics and Supply Chain Management

Courses are divided into Foundation, Core and Electives

\*BBA program is recognized by ACCA which offers minimum 4 and maximum 7 course exemptions for BBA students of IoBM.



### **Foundation Courses**

### Communication

COM100 Foundation English\*\*

COM107 Academic English (W, R)

COM202 Business and Professional Speech (E)

COM205 Persuasive & Analytical Writing for Bus. Comm. (E, W)

### Language

LAN 10\* Foreign Language I LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

### **Economics**

ECO101 Principles of Microeconomics ECO102 Principles of Macroeconomics ECO402 Pakistan Economic Policy OR ECO405 Seminar in Economic Policy

### Law

LAW409 Corporate and Business Law

### Mathematics

MTH100 Basic Mathematics\*\*

MTH101 College Algebra

MTH103 Calculus for Business Decisions

### **Political Sciences**

PSC301 Pakistan Studies (W)

### **Social Science**

SSC101 Introduction to Psychology

SSC301 History of Ideas (W)

SSC401 Business Ethics

### **Religious Studies**

REL101 Islamic Studies (R)

### **Statistics**

STA201 Quantitative Business Analysis

STA202 Quantitative Skills and Managerial Statistics

\*\* Remedial non-credit course to be taken by those students who have not been able to reach the desired level of competence in the admission test.

### **Core Business Courses**

### Accounting

ACC101 Introduction to Financial Accounting ACC201 Intermediate Financial Accounting ACC350 Cost and Management Accounting

### **Finance**

FIN201 Introduction to Business Finance (R)

FIN202 Financial Management FIN301 Financial Institutions (E)

### Entrepreneurship

ENT307 Entrepreneurial Leadership and Motivation ENT308 Social Advocacy and Community Service ENT403 Small Business and Entrepreneurship

### **Human Resource Management**

HRM301 Human Resource Management (E)

### Management

MAN101 Principles of Management

MAN302 Organizational Behavior (E)

MAN303 Production and Operations Management

MAN405 Strategic Management (R) MAN408 Analysis of Pakistani Industries

### **Management Information Systems**

MIS303 IS Audit and Management (E)
MIS305 CRM Systems and Applications (E)

### Marketing

MKT301 Principles of Marketing

MKT302 Marketing Management

MKT403 Sales Management (E)

MKT404 Methods in Business Research (E)

MKT509 Consumer Behavior

MKT511 Brand Management (R)

### **Logistics and Supply Chain Management**

SCM400 Introduction to ERP Systems

### **Elective Business Courses**

### Accounting

ACC302 Accounting and Financial Information Systems

ACC405 Internal Auditing & EDP Accounting

ACC501 Advanced Financial Accounting

ACC503 Taxation

ACC505 Auditing

ACC520 Managerial Analysis and Decision Making

ACC521 International Finance Reporting Standards

ACC522 Strategic Management Accounting

ACC523 Financial Regulatory Requirements for Business

ACC524 Corporate Governance and Reporting



Finance	and Banking*	Islamic B	anking and Finance
FIN503	Corporate Finance	ISF601	Economics for Islamic Finance
FIN504	International Finance	ISF602	Islamic Banking Practices
FIN505	Treasury and Fund Management	ISF603	Accounting fo Islamic Finance
FIN506	Investment Banking and Security Analysis	ISF604	Islamic Financial Services Marketing
FIN507	Portfolio Management	ISF605	Islamic Capital Markets
FIN509	Financial Derivatives	ISF606	International Islamic Finance Standards
FIN511	Analysis of Financial Statements	ISF607	Small and Medium Enterprise Islamic Financing
FIN514	Asset Liability Management	ISF608	Risk Management in Islamic Financial Institutions
FIN520	Financial Risk Management	FRM514	Takaful and Risk Management in Islamic Products
FIN530	Commercial and Corporate Banking		
FIN531	Real Estate and Alternative Investments	Manager	ment
FIN534	Retail and Consumer Banking	MAN305	International Relations
FIN536	FINTECH	MAN410	Introduction to Industrial Management
FIN613	Financial Modeling for Investment Decisions	MAN501	Total Quality Management
		MAN502	Business Process Re-engineering
Human I	Resource Management	MAN614	Comparative Management
HRM501	Recruitment and Selection		
HRM503	B Employee Training and Development	Marketir	ng
HRM504	Negotiation Skills	MKT405	Marketing Research
HRM508	3 Salary and Compensation	MKT506	International Marketing
HRM511	Performance Appraisal	MKT507	Services Marketing
HRM512	2 HR Analytics	MKT508	Personal Selling
		MKT510	Direct and Digital Marketing
Manage	ment Information Systems	MKT513	Media Planning
MIS509	Software Project Management	MKT520	Merchandising and Sales Promotion
MIS522	Business Information Systems	MKT521	Distribution and Channel Management
MIS524	Decision Support Systems	MKT526	Public Relations and Event Management
MIS525	Enterprise Systems	MKT530	New Product Management
MIS526	Enterprise Resource Planning Systems	MKT531	Retail Management
MIS527	Information Security	MKT532	Principles of Advertising
MIS528	Advanced Information Security	MKT608	Small Business Marketing
MIS530	Information Systems Research		
MIS532	New Perspectives on Organizations & Info. Systems	Logistics	and Supply Chain Management
		SCM501	Supply Chain Management
Entrepre	eneurship eneurship		Procurement and Inventory Management
ENT503	Competitive Strategies for Startup	SCM505	Storage and warehousing Techniques
ENT504	Technology Support for Small Business	SCM506	Transportation Techniques and Management
ENT505	Innovative Internet Based Business Models	SCM523	Import Export management
ENT506	Guerrilla Strategies in Business	SCM550	Negotiation strategies in Supply chain Management
ENT507	Affordable Design and Frugal Innovation	SCM551	Quantitative Methods in Production and Logistics
ENT508	Commercializing and Monetizing Ideas	SCM552	IT Applications in Logistics
ENT509	Building and Managing Start-Up Teams	SCM553	Packaging Design and Environmental Aspects
ENT510	New Venture Finance	SCM554	e-business Strategies in SCM
ENT511	Managing Family Business	SCM555	Supply Chain Project Management
ENT512	Growth Hacking Strategies	SCM556	Simulation in Supply Chain Management
ENT513	Design Thinking and Strategy	SCM557	Business Process Mgmt. in Supply Chain & Logistics
		CCMCCC	Toutile and Fashian Cumply Chain

SCM623 Textile and Fashion Supply Chain



Students must take a minimum load of twelve credit hours (four courses) or a maximum load of eighteen credit hours (six courses) in a semester. In order to obtain the BBA (Honors) degree in four years, they need to complete twelve courses in a year. A full load of six courses can be taken each in Fall and Spring semesters with an option for fewer courses in the latter and making up for the shortfall in the summer session.

### **Course Structure**

Semester One Pakistan Studies (W) Principles of Microeconomics Principles of Management Introduction to Psychology	Semester Two Academic English (3+0) [Pre req NA] Introduction to Financial Accounting Principles of Macroeconomics Principles of Marketing
College Algebra Islamic Studies (R)	Calculus for Business Decisions Entrepreneurial Leadership and Motivation (R)
Semester Three Intermediate Financial Accounting Persuasive and Analytical Writing for Business Comm. (3+0) [Pre Req. COM107] IS Audit and Management (E) History of Ideas (W) Quantitative Business Analysis Social Advocacy and Community Service (E)	Semester Four Business and Professional Speech (3+0) [Pre req COM202] Introduction to Business Finance (R) Business Ethics Marketing Management (R) Quantitative Skills & Managerial Statistics Organizational Behavior (E)
Semester Five Introduction to ERP Systems Financial Institutions (E) Foreign Language I* Methods in Business Research (E) Human Resource Management (E) Cost and Management Accounting	Semester Six Financial Management Foreign Language II Production & Operations Management Consumer Behavior Corporate and Business Law CRM System and Applications (E)
Semester Seven Sales Management (E) Entrepreneurship and Small Business Management Analysis of Pakistani Industries (R) Elective I Elective II Elective III	Semester Eight Pakistan Economic Policy OR Seminar in Economic Policy (R) Strategic Management (R) Brand Management (R) Elective IV Elective V Capstone Project Internship (2 credit hours)

<sup>\*</sup> Six units of a foreign language course complete the language sequence.



# **BS (JOINT) HONORS IN ECONOMICS & FINANCE**

BS (Joint) Honors in Economics and Finance is a joint program of CBM and CESD, prepares graduates for professional careers in economics and finance in the corporate sector, financial sector and public sector regulatory and planning organizations. It requires completion of 144 credit hours of course work along with 2 credit hours of social internship (at the end of first year of the degree) and 2 credit hours of relevant internship of at least six weeks in an approved firm. The program offers 75 credit hours of business and social sciences courses with an intensive coverage of 69 credit hours of Economics and Finance related courses designed to develop well rounded professionals regarded as "go-getters" in industry. There are 25 business and social science courses with 9 Economics core courses and 6 Finance core courses. Students then select 4 economics electives and 4 Finance elective courses to complete the degree requirements. Graduates of this program are usually recruited as Economic Consultant, Assistant Fund Managers, Financial Research Analysts, Financial Advisor, Equity and Security Traders, Project and Portfolio Managers and Baking executives in reputable financial institutions across the country.

### **Learning Outcomes**

- Appraise compound qualitative and quantitative data to facilitate strategic and operational decisions
- Assess business processes relative to organizational goals
- Manage relationships between an organization and its stakeholders and their influence on corporate growth
- Use best practices in risk management to protect organization's financial position

To promote lifelong learning at IoBM, the program emphasizes Experiential Learning (EL) and developing readers and writers. The college's mission is reflected in courses designated with a suffix R, W or E in the program structure:

- An experiential learning course (E) requires an intensive experiential learning project focusing on a real life problem in a real life setting
- A writing-intensive course (W) has a substantial writing component and requires multiple writing assignments to be submitted at designated times during a semester
- A reading-intensive course (R) has a substantial reading component and requires multiple reading assignments that are evaluated at designated times during a semester

### **Foundation**

COM100 Foundation English\*\*

COM107 Academic English (W,R)

PSC301 Pakistan Studies (W)

REL101 Islamic studies (R)

MTH101 College Algebra

\*\* This non-credit course will be taken by those students who have not been able to reach the desired level of competence in the admission test.

### **Business Core**

### Accounting

ACC101 Introduction to Financial Accounting ACC201 Intermediate Financial Accounting ACC350 Cost & Management Accounting

### Communication

COM202 Business & Professional Speech (E)

COM205 Persuasive & Analytical Writing for Bus. Comm.

### **Economics**

ECO101 Principles of Microeconomics ECO102 Principles of Macroeconomics ECO208 Development Economics ECO301 Managerial Economics ECO303 Financial Economics ECO304 Introduction to Econometrics ECO311 General Equilibrium and Welfare Economics ECO314 Contemporary Issues in Macroeconomics

ECO402 Pakistan Economic Policy



### **Finance**

FIN201 Introduction to Business Finance (R)

FIN202 Financial Management

FIN301 Financial Institutions (E)

FIN503 Corporate Finance

FIN511 Analysis of Financial Statements

FIN613 Financial Modeling

### **Human Resource Management**

HRM301 Human Resource Management (E)

### Language

LAN 10\* Foreign Language I

LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

### Law

LAW409 Corporate & Business Law

### Entrepreneurship

ENT403 Small Business and Entrepreneurship

### Management

MAN101 Principles of Management

MAN302 Organizational Behavior (E)

### **Management Information Systems**

MIS303 IS Audit & Management (E)

### Marketing

MKT301 Principles of Marketing

MKT302 Marketing Management

MKT404 Methods in Business Research (E)

### Mathematics

MTH100 Basic Mathemaics\*\*

MTH103 Calculus for Business Decisions

### Statistics

STA203 Probability Theory & Statistics

STA301 Model & Inferences

STA302 Methods of Data Analysis

### **Social Sciences**

SSC101 Introduction to Psychology

\*\* Remedial non-credit course to be taken by those students who have not been able to reach the desired level of competence in the admission test.



# **Major Electives**

Economics Electives (4 courses)		Finance	Finance Electives (4 courses)	
ECO312	Applied Econometrics	FIN403	Islamic Banking and Finance	
ECO307	Monetary Theory and Policy	FIN504	International Finance	
ECO407	Analysis of Pakistani Industries	FIN505	Treasury and Fund Management	
ECO206	Mathematical Economics	FIN506	Investment Banking and Security Analysis	
ECO310	History of Economic Thought	FIN507	Portfolio Management	
ECO411	Islamic Economics	FIN509	Financial Derivatives	
ECO207	Game Theory	FIN513	Project Appraisal	
ECO410	Issues in Political Economics	FIN514	Asset Liability Management	
ECO412	Public Economics	FIN520	Financial Risk Management	
ECO418	Resource and Environmental Economics	FIN530	Commercial & Corporate Banking	
ECO419	Agriculture & Food Security	FIN531	Real Estate and Alternative Investments	
ECO415	WTO, Disputes & Settlements	FIN534	Retail & Consumer Banking	
		FIN536	FINTECH	
		FIN613	Financial Modeling for Decision Making	

Students must take a minimum load of twelve credit hours (four courses) or a maximum load of eighteen credit hours (six courses) in a semester. In order to obtain the BBA (Honors) degree in four years, they need to complete twelve courses in a year. Full load of six courses can be taken each in Fall and Spring semesters with an option for fewer courses in the latter and making up for the shortfall in the summer session.

### **Course Structure**

Semester One	Semester Two
Principles of Management	Pakistan Studies (W)
Introduction to Psychology	Principles of Marketing
Islamic Studies (R)	Introduction to Financial Accounting
College Algebra	Calculus for Business Decisions
Principles of Microeconomics	Principles of Macroeconomics
Academic English (3+0) [Pre req NA]	Persuasive & Analytical Writing for Business Communication (3+0) [Pre Req. COM107]
Semester Three	Semester Four
Business & Corporate Law	Organizational Behavior (E)
IS Audit & Management (E)	Introduction to Business Finance (R)
Intermediate Financial Accounting	Taxation
Probability Theory & Statistics	Model & Inferences
Development Economics	Managerial Economics
Business & Professional Speech (3+0) [Pre req COM202]	Marketing Management
Semester Five	Semester Six
Financial Economics	General Equilibrium and Welfare Economics
Human Resource Management (E)	Foreign Language II
Methods in Business Research (E)	Analysis of Financial Statements
Financial Management	Small Business and Entrepreneurship
Methods of Data Analysis	Introduction to Econometrics
Foreign Language I	Financial Institutions (E)
Semester Seven	Semester Eight
Pakistan & Economic Policy	Economics Elective II
Corporate Finance	Finance Elective II
Contemporary Issues in Macroeconomics	Economics Elective III
Financial Modeling	Finance Elective III
Economics Elective I	Economics Elective IV
Finance Elective I	Finance Elective IV



# **BS (JOINT) HONORS IN ACCOUNTING & FINANCE**

BS (Joint) Honors in Accounting and Finance prepares graduates for professional careers in finance and accounting in the corporate and financial sectors. It requires completion of 144 credit hours of course work along with 2 credit hours of social internship (at the end of first year of the degree) and 2 credit hours of audit and finance internship of at least six weeks in an approved firm. The program offers 84 credit hours of business and social sciences courses with an intensive coverage of 60 credit hours of Finance and Accounting related courses designed to develop well rounded professionals who are regarded as go-getters in industry. There are 28 business and social science courses with 5 Accounting core courses and 5 Finance core courses. Students then select 5 economics electives and 5 Finance elective courses to complete the degree requirements. Graduates of this program are usually recruited as Auditors, Assistant Fund Managers. Banking Executives, Financial Consultants, Tax Analysts, Equity and Security Traders and Financial Analysts in reputable companies and leading financial institutions across the country.

BS Joint Hons – Accounting & Finance is recognized by ACCA which offers minimum 8 course exemptions for student's of this program.

### **Learning Outcomes**

- Learn about the components of the financial system and how it impacts upon financial decisions in an organization
- Identify and analyze business problems and opportunities and formulate recommendations for courses of action
- Interpret and analyze accounting information for internal control, planning, performance evaluation, and coordination to continuously improve business processes
- Recognize the social, legal and economic contexts within a business domain to complete tasks pertaining to accounting and finance

To promote lifelong learning at IoBM, the program emphasizes Experiential Learning (EL) and the developing of readers and writers. The college's mission is reflected in courses designated with a suffix R, W or E in the program structure:

- An experiential learning course (E) requires an intensive experiential learning project focusing on a real-life problem in a real-life setting
- A writing-intensive course (W) has a substantial writing component and requires multiple writing assignments to be submitted at designated times during a semester
- A reading-intensive course (R) has a substantial reading component and requires multiple reading assignments that are
  evaluated at designated times during a semester

### **Foundation**

COM100 Foundation English\*\*

COM107 Academic English (W,R)

PSC301 Pakistan Studies (W)

REL101 Islamic studies (R)

MTH101 College Algebra

\*\* This non-credit course will be taken by those students who have not been able to reach the desired level of competence in the admission test.

### **Business Core**

### Accounting

ACC101 Introduction to Financial Accounting

ACC201 Intermediate Financial Accounting

ACC350 Cost & Management Accounting

ACC503 Taxation

ACC506 Analysis of Financial Statements



### **Human Resource Management**

HRM301 Human Resource Management (E)

### Language

LAN 10\* Foreign Language I LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

### Entrepreneurship

ENT403 Small Business and Entrepreneurship

### Law

LAW401 Business Law LAW402 Corporate Law

### Management

MAN101 Principles of Management MAN302 Organizational Behavior (E)

### **Management Information Systems**

MIS303 IS Audit & Management (E)

### Marketing

MKT301 Principles of Marketing MKT302 Marketing Management

MKT404 Methods in Business Research (E)

### Communication

COM202 Business & Professional Speech (E)

COM205 Persuasive & Analytical Writing for Bus. Comm.

### **Economics**

ECO101 Principles of Microeconomics
ECO102 Principles of Macroeconomics
ECO301 Managerial Economics
ECO303 Financial Economics
ECO402 Pakistan Economic Policy

### **Finance**

FIN201 Introduction to Business Finance (R)
FIN202 Financial Management
FIN301 Financial Institutions (E)
FIN503 Corporate Finance
FIN613 Financial Modeling

### Mathematics

MTH100 Basic Mathematics\*\*
MTH103 Calculus for Business Decisions

### Statistics

STA203 Probability Theory & Statistics STA301 Model & Inferences STA302 Methods of Data Analysis

### **Social Sciences**

SSC101 Introduction to Psychology



<sup>\*\*</sup> Remedial non-credit course to be taken by those students who have not been able to reach the desired level of competence in the admission test.

# **Major Electives**

Accounti	ing Electives (5 courses)	Finance	Electives (5 courses)
ACC302	Accounting & Financial Information Systems	FIN403	Islamic Banking and Finance
ACC505	Auditing	FIN504	International Finance
ACC405	Internal Auditing and EDP Accounting	FIN505	Treasury and Fund Management
ACC501	Advanced Financial Accounting	FIN506	Investment Banking and Security Analysis
ACC520	Managerial Analysis and Decision Making	FIN507	Portfolio Management
ACC524	Corporate Governance & Reporting	FIN509	Financial Derivatives
ACC521	International Financial Reporting Standards	FIN513	Project Appraisal
ACC522	Strategic Management Accounting & Control	FIN514	Asset Liability Management
ACC523	Financial Regulatory Requirements for Business	FIN520	Financial Risk Management
LAW202	Banking Laws in Pakistan	FIN530	Commercial & Corporate Banking
LAW203	Insurance Laws in Pakistan	FIN531	Real Estate and Alternative Investments
		FIN534	Retail & Consumer Banking
		FIN536	FINTECH
		FIN613	Financial Modeling for Decision Making

Students must take a minimum load of twelve credit hours (four courses) or a maximum load of eighteen credit hours (six courses) in a semester. In order to obtain the BBA (Honors) degree in four years, they need to complete twelve courses in a year. Full load of six courses can be taken each in Fall and Spring semesters with an option for fewer courses in the latter and making up for the shortfall in the summer session.

### **Course Structure**

Semester One	Semester Two
Principles of Management	Pakistan Studies (W)
Introduction to Psychology	Principles of Marketing
Islamic Studies (R)	Introduction to Financial Accounting
College Algebra	Calculus for Business Decisions
Principles of Microeconomics	Principles of Macroeconomics
Academic English (3+0) [Pre req NA]	Persuasive & Analytical Writing for Business Communication
	(3+0) [Pre Req. COM107]
Semester Three	Semester Four
Business Law	Organizational Behavior (E)
IS Audit & Management (E)	Introduction to Business Finance (R)
Intermediate Financial Accounting	Cost & Management Accounting
Probability Theory & Statistics	Model & Inferences
Financial Economics	Managerial Economics
Business & Professional Speech (3+0) [Pre req COM202]	Foreign Language I
Semester Five	Semester Six
Marketing Management	Financial Institutions (E)
Human Resource Management (E)	Methods in Business Research (E)
Analysis of Financial Statements	Financial Modeling
Financial Management	Corporate Finance
Foreign Language II	Taxation
Methods of Data Analysis	Corporate Law
Semester Seven	Semester Eight
Pakistan & Economic Policy	Accounting Elective III
Small Business and Entrepreneurship	Finance Elective III
Accounting Elective I	Accounting Elective IV
Finance Elective I	Finance Elective IV
Accounting Elective II	Accounting Elective V
Finance Elective II	Finance Elective V



### **BS ENTREPRENEURSHIP**

The BS Entrepreneurship program is designed to take the students through various stages of the entrepreneurial and intrapreneurial process, the end-product of which would be a functioning enterprise. The program is designed to develop thought leaders with entrepreneurial spirit that can lead to the creation of new ventures within and outside existing enterprises. After completing the program, students would have designed, launched and managed their entrepreneurial ventures through the stages of ideation, networking, experimentation, execution, breakeven, growth, and investment.

Students explore each of these stages through multiple courses using the project-based learning approach. Graduates of this program will be job creators and not job-seekers, and would have the experience of coming out of the comfort zone, and to practice creativity, innovation and design with real projects, real entrepreneurs, and in real-life environments.

### **Distinctive Feature of Program:**

Experiential Learning: Learning by doing via PBL; Project Based Learning and Problem Based Learning. There are eight thematic projects on real life entrepreneurial process. Projects are exploratory and descriptive during the earlier part of the program and prescriptive and implementation oriented during the later semesters.

**Course Design:** Courses designed around PBL sub-projects with deliverables requiring application, analysis/evaluation and creation levels of Bloom's Taxonomy to complete entrepreneurial process

Pedagogy: Faculty members are project supervisors, facilitators, mentors rather than lecturers.

Field Work: The program consists of extensive research based field work, visits, surveys and experiential projects.

Design of the Program: It requires completion of 144 credit hours of course work in a total of 8 semesters or 4 years.

The program is based on a stage-wise transition of thematic semesters containing courses and projects that facilitate the entire entrepreneurial process. Each semester represents a stepping-stone, having embedded with courses from various business domains that revolve around an underlying project.

### **Entrepreneurial Ideation Stage:**

At this stage the students will do problem-solution fitting by identifying on-ground problems leading to idea and hypothesis generation which will ultimately lead to the development of plausible business models.

### **Entrepreneurial Networking Stage:**

At this stage, the students will do idea-solution fitting by testing their hypothesized business models in real-time which will be further modified through industrial networking and affordable designs methods.

### **Entrepreneurial Experimentation Stage:**

At this stage, the students will do value-customer fitting for the selected business models via real time hypothesis adjustment by using design strategy, effectuation method and idea prototyping.

### **Entrepreneurial Execution Stage:**

At this stage, the student will be doing product-market fitting after launching their startups while using entrepreneurial team development as well as lean and gig strategies.



### **Entrepreneurial Breakeven Stage:**

At this stage, the students will be generating output to reach the breakeven point in their businesses through customer acquisition, process optimization and mitigating risks.

### **Entrepreneurial Growth Stage:**

At this stage, the students will be fitting their product-service models by balancing the input and output. The students will also develop their legal business structures and identify growth strategies for scaling up their startups.

### **Entrepreneurial Funding and Investment Stage:**

At this stage, students will develop strategies for sustaining their businesses. This will be done through finding investors, co-developers and growth partners by using negotiation and bargaining skills.

### Global Entrepreneurship Stage:

At this stage, the students will continue to scale up their businesses by using advanced entrepreneurial strategies. They will be preparing to go global and will also focus on international valuation and auditing standards.

### **Entrepreneurial Ideation Stage:**

ENI101	Business Idea Generation
ENI102	Quantitative Analysis for Small Business
ENI103	Systems, disruptive and Exponential Thinking
ENI104	Islamic Conception of Business & Entrepreneurship
ENI105	Startup Centered Design Thinking
ENI106	Startup Garage I: Business Model and Business Research Methods

### **Entrepreneurial Networking Stage:**

ENN107	Low Cost Startup Marketing
ENN108	Effective Communication: Survey of Investors
ENN109	Psychology and Behavior of Entrepreneurship
ENN110	History and Survey of Pakistani Business and Entrepreneurship
ENN111	Design Methods for Startups
ENN112	Startup Garage II: Affordable Startup Design

### **Entrepreneurial Experimentation Stage:**

ENX201	Business Idea Prototyping
ENX202	New Venture Finance
ENX203	Effectuation Method
ENX204	Small Business Economics
ENX205	Design Strategy for Startups
ENX206	Startup Garage III: Testing Business Model

### **Entrepreneurial Execution Stage:**

•	
ENX207	Lean Marketing for Startups
ENX208	Lean Accounting and Finance
ENX209	Entrepreneurial Team Development
ENX210	Gig Economy and Strategy
ENX211	Digital Development for Startups
ENX212	Lean LaunchPad I: Startup Launch



### **Entrepreneurial Breakeven Stage:**

- **ENB301** Customer Acquisition for Startups
- ENB302 Break Even Analysis
- ENB303 Entrepreneurial Team Management
- ENB304 Sustainable Family Business
- **ENB305** Process Optimization for Startups
- ENB306 Lean LaunchPad II: Startup Risk Mitigation

### **Entrepreneurial Growth Stage:**

- ENB307 Growth Hacking Strategies for Startups
- ENB308 Legal Business Structures for Startups
- ENB309 Microenterprise Value Chain Management
- ENB310 Family Business Growth Strategies
- ENB311 Lean Analytics for Startups
- ENB312 Lean LaunchPad III: Startup Expansion

### **Entrepreneurial Funding and Investment Stage:**

- ENF401 Investment Strategies for Startups
- ENF402 Co-development and Growth Partnerships
- ENF403 Bargaining and Negotiation Skills
- ENF404 Language I
- ENF405 Information Technology Investment
- ENF406 Capstone I: Pitch and Win Investors

### **Global Entrepreneurship Stage:**

- ENF407 Advanced Entrepreneurial Strategies
- ENF408 International Valuation and Auditing Standards for Startups
- ENF409 Startup Acceleration and Co-Creation
- ENF410 Future of Global Entrepreneurship
- ENF411 Capstone II: Going Global
- ENF412 Language II



## **Course Structure**

Entrepreneurial Ideation Stage - Semester 1:	Entrepreneurial Networking Stage - Semester 2:
Startup Garage I: Business Model and Business Research	Startup Garage II: Affordable Startup Design
Methods	Low Cost Startup Marketing
Business Idea Generation	Effective Communication: Survey of Investors
Quantitative Analysis for Small Business	Psychology and Behavior of Entrepreneurship
Systems, disruptive and Exponential Thinking	History and Survey of Pakistani Business & Entrepreneurship
Islamic Conception of Business & Entrepreneurship	Design Methods for Startups
Startup Centered Design Thinking	
Entrepreneurial Experimentation Stage - Semester 3:	Entrepreneurial Execution Stage - Semester 4:
Startup Garage III: Testing Business Model	Lean LaunchPad I: Startup Launch
Business Idea Prototyping	Adaptive Marketing for Startups
New Venture Finance	Lean Accounting and Finance
Effectuation Method	Entrepreneurial Team Development
Small Business Economics	Gig Economy and Strategy
Agile Processes for Startups	Digital Development for Startups
Entrepreneurial Breakeven Stage - Semester 5:	Entrepreneurial Growth Stage - Semester 6:
Lean Launchpad II: Startup Risk Mitigation	Lean Launchpad III: Startup Expansion
Customer Acquisition for Startups	Growth Hacking Strategies for startups
Break Even Analysis	Legal Business Structures for startups
Entrepreneurial Team Management	Microenterprise Value Chain Management
Sustainable Family Business	Family Business Growth Strategies
Process Optimization for Startups	Lean Analytics for Startups
Entrepreneurial Investment Stage - Semester 7:	Global Entrepreneurship Stage - Semester 8:
Capstone I: Pitch and Win Investors	Capstone II: Going Global
Investment Strategies for Startups	Advanced Entrepreneurial Strategies
Co-development and Growth Partnerships	International Valuation and Auditing standards for Startups
Bargaining and Negotiation Skills	Startup Acceleration and Co-Creation
Language I	Future of Global Entrepreneurship
Information Technology Investment	Language II



### BS SOCIAL ENTREPRENEURSHIP AND SOCIAL LEADERSHIP

### Objective:

To develop social leaders and social entrepreneurs who are able to create sustainable and impactful solutions to local and global problems.

### Motivation:

Focus of existing graduates is often to serve the corporate sector preferably multinational corporations, and the measure of their career success typically does not include developing solutions to societal problems. This program provides a curriculum and methodology that will connect the graduates to the realities of the problems confronting a developing nation like Pakistan. The graduates so produced will be mentally prepared to confront the problems relevant to the local environment, and create sustainable solutions. Unlike other graduates who want to run away from the problems in Pakistan, these graduates would consider these as important challenges to overcome before scaling their solutions to international levels.

### Program:

BS Social Entrepreneurship and Social Leadership, a joint program of CBM and CESD, inspires and equips graduates to demonstrate leadership through creation of sustainable social advocacy enterprises focused on solving real-life problems. This is an innovative and fully experiential learning program focusing on PBL; Project Based Learning and Problem-Based Learning. It provides an interdisciplinary understanding of real life problems from humanities and liberal arts perspectives, and additionally enables students to envision and create enterprise solutions through managerial and leadership skills imparted in the program. The projects involve field work to explore real life social enterprises advocating solutions in areas such as education, health, violence, poverty, women empowerment and environment. These projects integrate course work of leadership and enterprise management studies with perspectives from several inter-linked subject areas such as philosophy, psychology, history, sociology, economy, power, culture, religion, ethics, arts, literature and aesthetics. This integration enables students to design sustainable solutions to local challenges that reflect their internal desires to benefit themselves and the community and that can give them confidence to take on the global challenges.

The program requires completion of 144 credit hours of course work in a total of 8 semesters or 4 years. Students must complete an internship and comprehensive exam as part of their degree requirements.

### Distinctive Feature of the Program:

**Experiential Learning**: Learning by doing via PBL; Project Based Learning and Problem-Based Learning: Eight thematic projects on real-life problems. Projects are exploratory and descriptive during the earlier part of the program and are prescriptive and implementation oriented during the later semesters. These projects include fieldwork and internships as a mandatory part of the semester work as described below.

### **Focus on Social Problems:**

During each semester, students work on a major experiential learning project dealing with a real life problem. Each thematic project consists of multiple sub-projects corresponding to the six threads linking the courses across the semesters:

Semester-1 & 2: Foundational Projects

Semester-3: Projects related to social enterprises in education
Semester-4: Projects related to social enterprises in health

Semester-5: Projects related to social enterprises dealing with poverty issues
Semester-6: Projects related to social enterprises in environment sector

Semester-7: Projects related to violence and business incubation Semester-8: Projects related to violence and business incubation



### Course design:

Courses designed around PBL sub-projects with deliverables requiring application, analysis/evaluation and creation levels of Bloom's taxonomy.

### **Integrated Curriculum:**

Courses in each thread integrate perspectives from multiple subject areas. Every semester has a course from each one of the following threads:

- Thread-1: Social Enterprise Design (SED) from philosophical and psychological perspectives
- Thread-2: Social Enterprise Challenges (SEC): Social advocacy challenges from socio-economic, political, governmental and other power structures across civilizations and history
- Thread-3: Social Change Management (CMS) from ethical, cultural and religious perspectives
- Thread-4: Social Advocacy Communication (SAC) through aesthetics, artistic and literary expression
- Thread-5 Social Enterprise Management (SEM) thread covers management, HR, finance, marketing negotiations, and strategies.
- Thread-6: Social Leadership thread covers from personal mastery to the development of change and ethical leadership

### Portfolio based assessment:

Self assessment, peer assessment, teacher assessment and external assessment of the assignments and projects executed by students.

### Pedagogy:

Faculty members are project supervisors, facilitators and mentors rather than lecturers.

### Internship/Field Work:

The program consists of extensive field work, visits, surveys, interviews, and internships with social work organizations as an integral and mandatory part of the semester work. During the initial semesters, this internship/field work spans 2 days per semester that will increase to 3 days per week. During the last year, the fieldwork/internship may constitute 4 days per week. Social Entrepreneurship Center facilitates the organization and enablement of these internship placements. In addition, the student would also do a full-time internship of 6-8 weeks during the final year.

### **Required Courses**

### Social Enterprise Design: Philosophical and Psychological Foundations

- SED101 Research Methodology for Social Projects
- SED102 Philosophy of Education and its Psychological Roots
- SED201 Philosophy and Psychology of Human Nature and Wellbeing
- SED202 Philosophy of Development and Psychology of Poverty
- SED301 Anthropocentricity and Environment
- SED302 Violence, Will and Human Psyche
- SED401 Principles of Management and Organizational Dynamics

### Social Enterprise Challenges: Socio-Economic, Political and Power Structures in History

- SEC101 Quantitative Analysis for Social Data
- SEC102 Social, Political and Economic Dynamics of Education in History
- SEC201 Historical Foundations of Health Care Institutions
- SEC202 Socioeconomic, Political Institutions and History of Development
- SEC301 Socioeconomic Transformation and Threat to Environment
- SEC302 History and Kinds of Violence and their respective social impact
- SEC401 Fundamental Economics

### Social Advocacy Communication; Aesthetics, Arts and Literature - Studio Based Workshops

- SAC101 Visual Storytelling: Photography and Documentary in Advocacy
- SAC102 Computer Arts and Graphics Designing for Advocacy
- SAC201 Recitations/Readings Related to Health and Well Being
- SAC202 Poverty/Development: Advocacy through Performing Arts
- SAC301 Literary Writings and Expression of Environmental Impact
- SAC302 Street Art/Art Activism as Antidote to Violence
- SAC401 Entrepreneurial Marketing



### Social Change Management; Ethical, Cultural & Religious Context

CMS101 History of Social Advocacy: Pakistan and Subcontinent

CMS102 Creativity, Novelty and Beauty via Education

CMS201 Health Issues across Cultures and Ideologies/Language-1

CMS202 Poverty and Women Empowerment/Language-2

CMS301 Artificial vs Natural/Self Sustainable Design

CMS302 Law and Ethics of Social Enterprise

CMS401 Fundamentals of Business Communication

### Social Entrepreneurship; Study of Social Enterprises and Management

SEM101 Results Based Project Management

SEM201 Study of Social Enterprises in Health Care: Operations and Processes

SEM202 Principles of Accounting

SEM301 Domestication of Agriculture and self-sustainable living

SEM302 Conflict Management and Negotiation Skills

SEM401 Entrepreneurial Finance

SEM402 Sustainability

### Social Entrepreneurship; Challenge of Leadership

SEM102 Social Enterprise in Education: HRM

SEM103 Ethical Leadership: Islamic Perspective

SEM104 Leadership

SEM203 Role Models in Healthcare

SEM204 Leadership in Social Transformation

SEM303 Leadership in Environmental Project

SEM304 Leadership in Violent Areas

### **Course Structure:**

Semester One: Foundational Projects	Semester Two: Foundational Projects
Research Methodology for Social Projects	Principles of Management and Organizational Dynamics
Quantitative Analysis for Social Data	Fundamental Economics
Entrepreneurial Marketing	Visual storytelling: Photography and Documentary in Advocacy
History of Social Advocacy: Pakistan and Subcontinent	Fundamentals of Business Communication
Principles of Accounting	Entrepreneurial Finance
Ethical Leadership: Islamic Perspective	Leadership
Semester Three: Projects on Education	Semester Four: Projects on Health Issues
Philosophy of Education and its Psychological Roots	Philosophy and Psychology of Human Nature and Wellbeing
Social, Political & Economic Dynamics of Education in History	Historical Foundations of Health Care Institutions
Computer Arts and Graphics Designing	Recitations/Readings Related to Health and Well Being
Creativity, Novelty and Beauty Via Education	Health Issues Across Cultures and Ideologies/Language I
Results Based Project Management	Study of Social Enterp. in Health Care: Operations & Processes
Social Enterprise in Education: HRM	Role models in Health Care
Semester Five: Projects on Poverty / Development Issues	Semester Six: Projects on Environment Issue
Philosophy of Development and Psychology of Poverty	Anthropocentricity and Environment
Socioeconomic, Political Institutions & History of Development	Socioeconomic Transformation and Threat to Environment
Poverty/Development Advocacy through Performing Arts	Literary Writing and Expression of Environmental Impact
Poverty and Women Empowerment/Language-II	Artificial vs Natural/Self Sustainable Design
Sustainability	Domestication of Agriculture and self-sustainable living
Leadership in Social Transformation	Leadership in Environmental Projects



### Semester Seven: Projects on Violence and Social enterprise Semester Eight: Projects on Violence and Social enterprise Incubation Incubation Violence, Will and Human Psyche Law and Ethics of Social Enterprise History and Kinds of Violence and their respective social impact Conflict Management and Negotiation Skills Street Art/Art Activism as Antidote to Violence Leadership in Violent Areas **Business Incubation Business Incubation Business Incubation Business Incubation Business Incubation Business Incubation**

### Services for Designing Successful Careers of Graduates:

The Entrepreneurship Center of IoBM offers several services to enable the graduates of BS Social Entrepreneurship and Social Leadership to design a successful career in the social sector, public sector and CSR initiatives of the corporate sector. The Center include:

**Linkages with Industry Organizations**: PBL design of the curriculum ensures that students start connecting with the social sector organizations and social leaders from the first semester. Connection is through projects requiring field work, observation, interviews, case studies and internships which would help them identify a cause for which they are passionate. Students will be connected to public and social sector organizations working in the areas of education, health, poverty alleviation, peace, environment, globalization, etc.

**Projects in Collaboration with Social Networks**: Student projects are designed in collaboration with the wide network of industry contacts of IoBM and the advisory committee members of this program belonging to organizations such as Aman Foundation, OPEN, Acumen Fund, TCF, Indus Hospital, SEF etc.

**Social Enterprise Start-up Incubation**: 18 credit hours of incubation spread over 7th and 8th semester, requiring establishment of a functioning social enterprise. Students will be linked to leading social entrepreneurs who will assist them in developing their idea, train them on how to launch a business which will also fulfill social needs. Constant support will be provided for a few months after the launch. The Center will facilitate this field work.

Career in Public Service, Social Sector and Corporate Sector: In addition to the Internship and Placement department of IoBM, the entrepreneurship centre guides the students in preparing for the CSS exams and for placement in social sector, public sector and CSR initiatives of the corporate sector organizations to enable the graduates to pursue their strategic visions.

**Establishing Collaborations of Student Start-ups**: The Center further provides guidance and enabling of the startup of the student enterprises through strategic collaborations with existing social organizations.



### BS INDUSTRIAL MANAGEMENT

BS Industrial Management is a professional management degree program, which enables graduates to join manufacturing and process industries and contribute to efficiency and streamlining of industrial processes. They learn about MRP, supply chain management, project management, industrial health, inventory management, quality, safety, and environmental concerns.

The Bachelor of Science (BS) in Industrial Management offered by IoBM is a professional management degree program. After completion of this program, our graduates will contribute to the growth of industry through various skills such as management, computer applications, supply chain management, project management, industrial health and safety, etc. Also, special emphasis is given on developing entrepreneurial skills of students. Another outstanding feature of this program is the provision of hands-on training facilities in industrial units on a continuous basis, which blends theory with practical experience. Each final year student is required to undergo 2 credit hours of internship of 6 weeks with a reputable industrial organization. This collaboration increases job opportunities and accessibility to managerial positions and also enhances students' professional competence and grooms them for acquiring managerial-track employment. Above all, the program serves to establish a strong linkage between academia and industry.

Students can also proceed further for postgraduate work in Industrial Management at leading international schools.

### **Required Courses**

Industrial	Human Resource Management	
INM101 Production Processes	HRM301 Human Resource Management	
INM102 Industrial Safety & Health INM103 Industrial Economics INM201 Methods Analysis and Time Study INM202 Energy Management INM203 Introduction to Production & Operation Management	Language  LAN 10* Foreign Language I  LAN 20** Foreign Language II  *1 = Introduction to Arabic	
INM204 Ergonomics INM301 Introduction to Facility Planning & Layout	*8 = Introduction to Chinese	
INM302 Lean Six Sigma and Production	**1 = Intermediate Arabic	
INM303 Introduction to Planning and Scheduling	**4 = Intermediate German	
INM304 Introduction to Project Management	**8 = Intermediate Chinese	
INM305 Inventory Management INM401 Introduction to Supply Chain management	Entrepreneurship	
INVITAGE Introduction to Supply Chair management	ENT403 Small Business and Entrepreneurship	

### Accounting

	· ·
ACC101	Introduction to Financial Accounting
ACC201	Intermediate Financial Accounting
ACC350	Cost & Management Accounting

INM402 Introduction to Quality Management

INM403 Business Process Methodology

Communication		
COM107 Academic English		
COM202 Business and Professional Speech		
COM205 Persuasive & Analytical Writing for Business Communication		

### **Finance and Banking**

FIN201	Introduction to Business Finance
FIN202	Financial Management

### MIS104 Computer Programing & Graphics

Management MAN101 Principles of Management MAN302 Organizational Behavior

**Management Information Systems** 

### Marketing

MKT301 Principles of Marketing MKT302 Marketing Management

### Mathematics

MTH101 College Algebra MTH103 Calculus for Business decisions

### Political Studies

PSC301 Pakistan Studies



**Psychology** 

PSY300 Introduction to Psychology

**Religious Studies** 

**REL101** Islamic Studies

**Statistics** 

STA204 Industrial Applications of Statistics

**Social Sciences** 

SSC202 Environmental Studies

**Supply Chain Management** 

SCM400 Introduction to ERP Systems

### **Elective Courses**

**Industrial Management** 

INM404 Introduction to Enterprise Life Cycle Management

INM405 Technology Management

INM406 Operation Research

INM407 Enterprise Risk Management
 INM408 Procurement Management
 INM409 Production Planning & Control
 INM412 Integrated Manufacturing Systems

INM413 Manufacturing Processes

INM414 E-Commerce for Manufacturing Industries

**Economics** 

ECO402 Pakistan Economic Policy

LAW

LAW409 Corporate and Business Law

Marketing

MKT404 Methods in Business Research

### **Course Structure**

Semester One Academic English (3+0) [Pre req NA] Principles of Management Production Processes Pakistan Studies College Algebra Islamic Studies	Semester Two Introduction to Financial Accounting Managerial Economics Principles of Marketing Calculus for Business Decisions Industrial Safety & Health Introduction to Psychology
Semester Three Organizational Behavior Persuasive & Analytical Writing for Business Communication (3+0) [Pre Req. COM107] Industrial Applications of Statistics Intermediate Financial Accounting Methods Analysis and Time Study Computer Programming & Graphics	Semester Four Business and Professional Speech (3+0) [Pre req COM202] Introduction to Business Finance (R) Marketing Management Energy Management Introduction to Production & Operation Management Ergonomics
Semester Five Foreign Language I Cost Management Accounting Human Resource Management Environmental Studies Introduction to ERP Systems Introduction to Facility Planning and Layout	Semester Six Foreign Language II Financial Management Introduction to Planning and Scheduling Introduction to Project Management Inventory Management Lean Six Sigma and Production
Semester Seven Small Business and Entrepreneurship Introduction to SCM Project I Elective I Elective II	Semester Eight Introduction to Quality Management Business Process Methodology Project II Elective III Elective IV Internship (2 credit hours)



### **BS LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

The Bachelor of Supply Chain Management is a professional and comprehensive management degree providing conceptual knowledge and in-depth exposure to functional areas in business management including accounting and finance, marketing, management, and MIS along with special emphasis on Supply Chain Management and all modules like Logistics and warehousing and Risk management. In a 4-year Bachelor of BS in Supply Chain Management program, students explore the business aspects of the transportation, distribution and warehousing activities of various corporations. The program employs the latest approaches in experiential learning to develop skills for interpersonal, team work, foreign languages and managing diversity.

### **Program Objectives**

- To develop world class supply chain professionals using best teaching and training methodologies
- To encourage the research contributions of new students in the field of supply chain and logistics management
- To impart research based knowledge and skills in supply chain and logistics management
- To foster supply chain leadership to provide solutions to supply chain problems
- To engage the students and faculty with supply chain industries

### **Program Outcomes**

- Enhancing the expertise to control the supply chain costs and maximize the worth of the products or services
- Seeking aspiring organizations and institutions where our research ideas and innovations can be tested and best applied to generate good economic performance
- 3. Understanding, analyzing and solving the supply chain and logistics management issues in various firms
- 4. Overseeing all aspects of business of the organization from internal capabilities to external supply chain operations- and understanding how these serve evolving business models
- Engaging directly with supply chain industrialists adopting a problem centered approach and bringing academic rigor to the resolution of complex business and organizational problems

### **Required Courses:**

### Accounting

ACC206 Fundamentals of Accounting

### Communication

COM107 Academic English

COM202 Business and Professional Speech

COM205 Persuasive & Analytical Writing for Bus. Comm.

### **Economics**

ECO104 Micro and Macroeconomics ECO402 Pakistan Economic Policy ECO405 Seminar in Economics Policy

### **Finance**

FIN201 Introduction to Business Finance

### Entrepreneurship

ENT403 Small Business and Entrepreneurship

### Management

MAN101 Principles of Management MAN302 Organizational Behavior

MAN303 Production and Operations Management

### Language

LAN 10\* Foreign Language I LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

### Marketing

MKT301 Principles of Marketing MKT404 Methods in Business Research

### Mathematics

MTH101 College Algebra

MTH103 Calculus for Business Decisions

### **Political Sciences**

PSC301 Pakistan Studies

### **Religious Studies**

REL101 Islamic Studies



### **Human Resource Management**

HRM301 Human Resource Management

### **Statistics**

STA201 Quantitative Business Analysis

STA202 Quantitative Skills and Managerial Statistics

### **Management Information Systems**

MIS405 Computer Applications - E-Business

### **Social Science**

SSC202 Environmental Studies

SSC401 Business Ethics

### Law

LAW409 Corporate and Business Law

### **Elective Courses:**

SCM550 Negotiation Strategies in Supply Chain Management

SCM551 Quantitative Methods in Production and Logistics

SCM552 IT Applications in Logistics

SCM553 Packaging Design and Environmental Aspects

SCM554 e-business Strategies in SCM

SCM555 Supply Chain Project Management

SCM556 Simulation in Supply Chain Management

SCM557 Business Process Mgmt. in Supply Chain & Logistics

SCM623 Textile and Fashion Supply Chain

### **Logistics and Supply Chain Management**

SCM101 Essentials of Supply Chain Management SCM102 Logistics and Operations Management

SCM201 Shipping, Ocean Freights and Port Operations

SCM202 Supply Chain Finance

SCM303 Logistical Projects in ERP

SCM304 Food Security and Sustainability

SCM305 Lean Six Sigma and Lean Manufacturing

SCM306 Innovation Management in Supply Chain & Logistics

SCM307 Globalization and Outsourcing Strategies

SCM308 Mobile Commerce and Mobile Logistics

SCM311 Import Export Management

SCM400 Introduction to ERP Systems

SCM401 Storage and Warehouse Techniques SCM402 Transportation Techniques and Management

SCM403 Procurement and Inventory Management

### **Course Structue**

Semester One	Semester Two	Semester Three
Academic English (3+0) [Pre req NA]	Fundamentals of Accounting	Foreign Language I
Principles of Management	Micro and Macroeconomics	Persuasive & Analytical Writing for Bus. Com.
Essentials of Supply Chain Management	Principles of Marketing	(3+0) [Pre Req. COM107]
Pakistan Studies	Calculus for Business Decisions	Introduction to ERP systems
College Algebra	Logistics and operations management	Quantitative Business Analysis
Islamic Studies	Import-Export Management	Shipping, Ocean Freights & Port Operations Environmental Studies
Semester Four	Semester Five	Semester Six
Business and Professional Speech (3+0)	Logistical projects in ERP	Lean Six Sigma & Lean Manufacturing
[Pre req COM202]	Food Security and Sustainability	Foreign Language II
Introduction to Business Finance	Methods in Business Research	Innovation Mgmt. in Supply Chain & Logistics
Business Ethics	Human Resource Management	Corporate and Business Law
Supply Chain Finance	Mobile Commerce and Mobile Logistics	Globalization and Outsourcing Strategies
Quantitative Skills & Managerial Statistics	Computer Applications-E-Business	Pakistan Economic Policy
Organizational Behavior		
Semester Seven	Semester Eight	
Storage and Warehouse techniques	Seminar in Economic Policy	
Small Business and Entrepreneurship	Production and Operations Management	
Procurement and Inventory Management	Transportation Techniques & Mgmt.	
Elective I	Elective IV	
Elective II	Elective V	
Elective III	Elective VI	
	Internship (2 credit hours)	



### **MBA PROGRAM**

MBA program is designed to produce transformational, ethical and change leadership for businesses and industry through an integrated curriculum and experiential learning and prepares graduates for business challenges emerging from globalization, connectivity and technology driven innovations. The program is designed to produce a skilled pool of business leaders possessing multidisciplinary expertise.

A distinguishing feature of the program is the academic ecosystem of experiential learning which immerses the student in a cycle of "learning by doing" through reflection. Case studies and project work are among the pedagogies used for delivery of the curriculum content. A significant value adding feature is the 6 credit hours of a Graduate Capstone Project divided into two 3 credit hour components. Students undertake, individually or in small groups, a real life project with a company that addresses a real life issue which, through the application of multidisciplinary knowledge and skills acquired during MBA studies, helps in more profitable and competitive decision making and implementation in the organization. This project is jointly supervised and evaluated by a faculty member with aligned skills and interest and an industry mentor and is evaluated in an open exhibition by executives and faculty. A Capstone Project report has to be converted into a publishable case study as a part of the degree requirement.

### Structure of MBA program

CBM's MBA program is a 72 credit-hour program that most students can complete in two years. It is designed for students with a minimum of 16 years of education with degrees in a wide range of disciplines such as business, commerce, engineering, law, science, medicine, the arts and pharmacy. CBM MBA programs share a unified structure consisting of a foundation stage followed by the specialization stage. The foundation stage of the MBA program fulfills the minimum eligibility requirements of HEC to switch from a non-business major at the bachelor stage to a master level program in business as per PQF, Pakistan Qualification Framework. It consists of 30 credit hours.

The foundation stage consists of 30 credit hours of coursework from areas such as Communication, Economics, Quantitative Analysis, Behavior/ Psychology, Accounting, Finance, Law/Ethics, Management, HRM, Entrepreneurship, Marketing, and Research.

The specialization stage consists of 42 credit hours of coursework covering strategic and operational areas of functional and domain-based specializations. The courses are in areas related to Marketing Strategy, Strategic Finance, Strategic Management, Leadership, Technology/Operations, Entrepreneurship, Organizational Processes, Analytics for Decision Making, etc. Students select two real life Capstone Projects in their area of specialization during their final year. MBA students must select, at the time of admission, from one of the following shifts for their entire program; morning week-days, evening week-days and week-ends. Functional area specializations are available in all three shifts. Domain based specializations are only available during weekends.

- MBA students who have completed their business relevant Bachelor program from IoBM are exempted from the 30 credit hours of the Foundation Stage of the standardized 72 credit hours MBA Program. Applicants with 4 year bachelor degree from IoBM in a non-business discipline can claim up to 6 course exemption from the foundation stage for the equivalent courses completed in the bachelor program.
- MBA Program for applicants with 14 years education is of 108 credit hours. It consists of a foundational stage of a minimum
  of 2 years and consists of 72 credit hours followed by 36 credit hours of rigorous MBA level courses.

### **Foundation Stage**

The foundation stage covers areas such as accounting, finance, marketing, economics and management in addition to other preparatory course work necessary for applicants coming from background unrelated to business studies. The foundation stage prepares the students for the higher level MBA courses. The program is divided into a foundation stage of 30 credit hours followed by the 42-credit hours of rigorous MBA level courses and the capstone project dealing with strategy and business transformation.

Students joining CBM for the first time are expected to have qualified the MBA Boot Camp (Details on Page No. 55).



#### **Foundation Courses**

Accounting

ACC419 Financial Accounting

**Economics** 

ECO409 Business Economics<sup>2</sup>

Statistics

STA411 Quantitative Analysis for Decision Making<sup>3</sup>

Law

LAW409 Corporate and Business Law4

Marketing

MKT402 Marketing Management

MKT404 Methods in Business Research<sup>5</sup>

Communication

COM402 Business Communication<sup>1</sup>

Finance

FIN408 Theory and Practice of Financial Management

**Human Resource Management** 

HRM410 Managing Human Capital

Management

MAN418 Management and Organizational Dynamics

- 1. Digital Business Communication (MMM) / Academic Writing, Seminar Skills (EdM)
- 2. Economics of Energy and Environment (EEM) /Business and Health Economics (MHM) / Micro and Macroeconomics / (FRM)
- 3. Statistics and Mathematics (EdM) / Model and Inferences, (FRM)
- 4. Health Ethic, Law and Jurisprudence (MHM) / Environmental Rules, Laws and Regulations (EEM) / Business Law (IM) / Educational Philosophy and Ethics (EdM) / Business and Insurance Law / (FRM)
- 5. Research and Survey Methodology (EEM) / (MHM), Research Methods I & II (EdM)

# **Specializations Overview**

CBM MBA Program offers students several options for specialization spread over 42 credit hours. Depending upon the specialization, students complete a minimum of 15 credit hours of strategy level courses, 12 credit hours of operational levels courses focusing on innovation, creativity and efficiency. They also conduct two final year Capstone Projects focused on real-life issues of the industry.

Specializations include (i) functional-area specializations and (ii) domain-based specializations:

- Functional-area specializations include majors in Marketing, Finance, Human Resource Management and Entrepreneurship.
  It also includes majors in Logistics and Supply Chain Management, and Development Studies. Functional area specializations
  offer the flexibility to the MBA students to choose from at least one major before the final year. Students considering
  functional-area specializations must select, at the time of admission, from one of the following shifts for their entire program;
  morning week-days, evening week-days and week-ends.
- Domain-based specializations include aggressive tracks in the following domains. Students are expected to opt for them at the time of admission. Students selecting any of these specializations have to complete their entire MBA program during the weekends.

<ul> <li>Specialization in Health and Hospital Management</li> </ul>	(Page No. 42)
<ul> <li>Specialization in Media Management and Marketing</li> </ul>	(Page No. 44)
<ul> <li>Specialization in Finance and Risk Management</li> </ul>	(Page No. 46)
<ul> <li>Specialization in Environment and Energy Management</li> </ul>	(Page No. 48)
<ul> <li>Specialization in Logistics and Supply Chain Management</li> </ul>	(Page No. 50)
Specialization in Industrial Management	(Page No. 52)
<ul> <li>Specialization in Entrepreneurship and SME Banking and Financing</li> </ul>	(Page No. 54)
<ul> <li>Specialization in Educational Management</li> </ul>	(Page No. 117)



# **FUNCTIONAL AREA SPECIALIZATIONS**

Students selecting a functional area specialization major given below are expected to have completed the 30 credit hours of foundation stage (page No. 37) of the MBA program. The specialization stage consists of 42 credit hours of course work covering strategic and operational areas. They specialize in one of the following functional areas to complete their degree requirements:

- Marketing: Aims to empower students to use critical thinking, experiential and active learning to become leaders in a challenging and demanding environment
- Management: Aims to instill in each student a desire to learn, accept challenges, and develop an enquiring mind essential for
  making a difference in the dynamic global business scenario; in fact in all facets of their lives and communities they become
  part of
- **Finance**: Offers courses in finance, incorporating the latest concepts and theories in the related fields and their practical applications to the business world. The program aims to develop fully equipped professionals to face challenges of the industry. Students may also elect courses from Islamic Banking and Finance major.
- Human Resource Management: The Human Resource Management concentration will provide you with a comprehensive
  overview of the strategic HR management techniques that will help you take on senior management responsibility in the
  field. The program covers the whole spectrum of HR-related issues, from workforce leadership and performance evaluation to
  organizational behavior and change management.
- Logistics and Supply Chain Management: The program aims to develop supply chain professionals and innovative leaders with research capabilities & entrepreneurial skills who can improve the world and advance management practices.
- Development Studies: Development Studies is a vibrant field concerned with processes of change such as social and economic,
  political and cultural and the major policy challenges that present the efforts to overcome poverty and insecurity. The program
  provides a stable interdisciplinary social science formation and develops students' capacities for independent and critical inquiry.
- Islamic Banking and Finance: Covers the operations and role of Islamic and Financial banking institutions in an economy. The different types of financial institutions, local as well as multilateral, and their distinct functions are reviewed. The program also covers the concepts of Islamic banking and similarities and conflicts between Islamic and conventional banking. Students may also elect courses from Islamic Banking and Finance Major.
- **Entrepreneurship**: Entrepreneurship electives will provide a broad intraprenuerial and entrepreneurial skill set for managing businesses in addition to providing highly customized paths for a variety of business contents, including new vendors, franchises, corporate ventures, socially responsible companies and family controlled enterprise.

During the specialization stage, students take 12 credit hours of strategy courses, 9 credit hours of operational level courses, and 12 credit hours of elective courses. In addition, students select two real life Capstone Projects (6 credit hours) in their area of specialization during their final year.

The functional area specialization track is available in three mutually exclusive shifts: weekends, weekday mornings, or weekday evenings. The candidate must select a shift at the time of filing the application. Students are expected to complete all the courses of their program in their designated shift.



#### **Required Courses**

# Accounting

ACC419 Financial Accounting

#### Communication

COM107+Academic English COM402 Business Communication +Less Proficient Students

#### **Economics**

ECO409 Business Economics

#### Entrepreneurship

ENT403 Small Business and Entrepreneurship

#### **Finance**

FIN408 Theory and Practice of Financial Management FIN601 Strategic Financial Analysis and Design\*

#### **Human Resource Management**

HRM410 Managing Human Capital HRM606 Leadership, Ethics and Change\*

#### Law

LAW409 Corporate and Business Law

#### Management

MAN418 Management and Organizational Dynamics MAN606 Business Analytics for Decision Making\* MAN608 Technology, Operations and Innovation\* MAN612 Strategic Management\*<sup>1</sup>

#### Marketing

MKT402 Marketing Management
MKT404 Methods in Business Research
MKT509 Consumer Behavior
MKT610 Marketing Strategies and Value Innovation\*

#### Statistics and Mathematics

STA411 Quantitative Analysis for Decision Making

4 Elective to be chosen from the Elective Courses

# Capstone Project

XXX691<sup>2</sup> Capstone Project I\* XXX692<sup>2</sup> Capstone Project II\*

# **Specialized Elective Courses**

Students may choose 4 elective courses from the following specializations. They can also select from BBA (Hons) electives (maximum two courses) of 500 level or above:



<sup>\*</sup> Indicates MBA level courses

<sup>&</sup>lt;sup>1</sup> MBA Students with business relevant bachelor program from IoBM will instead take MAN604 Emerging Organizational Models for Dynamic Change.

<sup>&</sup>lt;sup>2</sup> Students will be selecting their functional area specialization Capstone Projects: MKT691/692 for Marketing Specialization students, MAN691/692 for Management Specialization students, FIN691/692 for Finance Specialization students, HRM691/692 for HRM Specialization students, SCM691/692 for Logistics & Supply Chain Management Specialization students and IBF691/692 for Islamic Banking & Finance Specialization students.

# Required Courses for Students with 14 Years of Education

#### Accounting

ACC401 Introduction to Managerial and Cost Accounting ACC419 Financial Accounting

#### Communication

COM107 Academic English\*
COM402 Business Communication
\*Less Proficient Students

#### Finance

FIN408 Theory and Practice of Financial Management FIN601\* Strategic Financial Analysis and Design

#### **Economics**

ECO405 Seminar in Economic Policy ECO409 Business Economics

#### Management

MAN418 Management and Organizational Dynamics
MAN604 Emerging Organizational Models for Dynamic Change
MAN606 Business Analytics for Decision Making\*
MAN608 Technology, Operations and Innovation\*
MAN612 Strategic Management\*

#### Law

LAW409 Corporate and Business Law

#### **Human Resource Management**

HRM606\*Leadership, Ethics and Change HRM410 Managing Human Capital

#### Marketing

MKT402 Marketing Management
MKT403 Sales Management

MKT404 Methods in Business Research

MKT509 Consumer Behavior

MKT610\* Marketing Strategies and Value Innovation

#### **Management Information Systems**

MIS526 Introduction to Enterprise Resource Planning Systems

#### **Statistics and Mathematics**

STA403 Statistics and Mathematics STA404 Statistical Inference

#### **Social Sciences**

SSC401 Business Ethics SSC402 Organizational Psychology SSC408 Political Sociology

#### Entrepreneurship

ENT307 Entrepreneurial Leadership and Motivation ENT308 Social Advocacy and Community Service ENT403 Small Business and Entrepreneurship



<sup>\*</sup>Indicates MBA level courses

**Majors in Management Elective Courses** MAN501 Total Quality Management Majors MAN611 Project Management **Majors in Accounting** MAN613 Corporate Governance ACC302 Accounting and Financial Information Systems MAN618 Negotiation and Conflict Resolution Skills ACC405 Internal Auditing & EDP Accounting **Majors in Logistics and Supply Chain Management** ACC501 Advanced Financial Accounting SCM601 Quantitative Methods in Production and Logistics ACC503 Taxation SCM602 Business Process Mgmt. in Supply Chain & Logistics ACC505 Auditing SCM603 IT Applications in Logistics ACC520 Managerial Analysis and Decision Making SCM604 Packaging Design and Environmental Aspects ACC521 International Finance Reporting Standards SCM605 Supply Chain Management ACC522 Strategic Management Accounting SCM606 ERP Systems Design and Implementation ACC523 Financial Regulatory Requirements for Business SCM607 Strategic Supply Chain Management ACC524 Corporate Governance and Reporting SCM608 Procurement and Inventory Management **Majors in Marketing** SCM609 Storage and Warehouse Techniques MKT501 Strategic Marketing and Planning SCM610 Transportation Techniques and Management MKT602 Marketing Analytics SCM611 Sustainability & Env. Aspects in Managing Supply Chains MKT605 Pricing Models and Strategies SCM612 Risk Management in Supply Networks MKT611 Integrated Marketing Communications SCM613 Innovation Management in Supply Chain and Logistics MKT613 Marketing of Financial Services SCM614 Corporate Consultancy Project in Logistics MKT615 Brand Management SCM615 Contract Management for Supply Chain & Negotiations MKT618 Advertising Management and Strategy SCM616 Life Cycle Enterprise Asset Management MKT621 Marketing Strategies for Emerging Economies SCM617 Mobile Commerce and Mobile Logistics MKT622 Marketing Strategies for Bottom of the Pyramid (BOP) SCM618 Aviation Logistics Supply Chain Management MKT623 Pharmaceutical Marketing & Quality Assurance SCM619 Humanitarian Logistics Supply Chain Management MKT625 Business to Business Marketing SCM620 Supply Chain Project Management MKT626 Marketing for Social Impact SCM621 Lean Construction Supplychain Management MKT627 Future Marketing Technologies **Majors in Development Studies** MKT628 Competitive Strategies SSC601 Dimensions of Development MKT629 B2B Sales by Simulation/Gamification SSC602 Development Sociology MKT630 Growth Marketing PDE703 Development Economics Majors in Finance and Banking STA601 Development Statistics and Research Methodology FIN602 Behavioral Finance Majors in Islamic Banking and Finance FIN603 Entrepreneurial Finance ISF601 **Economics for Islamic Finance** FIN608 Project Appraisal ISF602 **Islamic Banking Practices** FIN610 Debt and Equity Markets ISF603 Accounting for Islamic Finance FIN612 SME and Micro-Financing ISF604 Islamic Financial Services Marketing FIN613 Financial Modeling for Investment Decisions ISF605 Islamic Capital Markets FIN630 Options, Swaps and Futures FIN631 Applied Corporate Finance ISF606 International Islamic Finance Standards FRM514 Takaful and Risk Management in Islamic Products FIN632 **Fixed Income Securities** Mergers, Acquisitions and Restructuring FIN633 Majors in Entrepreneurship FIN634 **Enterprise Risk Management ENT503** Competitive Strategies for Startup FIN635 Risk Management with Derivatives ENT504 Technology Support for Small Business **Majors in Human Resource Management** ENT505 Innovative Internet Based Business Models **HRM607** Talent Acquisition ENT506 Guerrilla Strategies in Business HRM608 Labour Studies and Employee Relations ENT507 Affordable Design and Frugal Innovation HRM609 Learning and Organizational Development ENT508 Commercializing and Monetizing Ideas HRM610 Negotiations and Conflict Resolution Skills ENT509 Building and Managing Start-Up Teams HRM611 Managing Organizational Change ENT510 New Venture Finance HRM612 Strategic Human Resource Management ENT511 Managing Family Business HRM615 Leadership Studies **ENT512** Growth Hacking Strategies HRM616 Talent Management and Performance Development ENT513 Design Thinking and Strategy



HRM617 HR Analytics

# DOMAIN BASED SPECIALIZATIONS

# SPECIALIZATION IN HEALTH AND HOSPITAL MANAGEMENT

CBM MBA's Domain Specialization in Health and Hospital Management is designed for building careers as healthcare leaders, managers and decision makers in hospitals, pharmaceutical industry, NGOs, and other allied healthcare institutions. The specialization of Health and Hospital Management provides an environment of continual learning for its faculty and students, and focusses on development of the leadership skills like creative and critical thinking, decision making, team building and entrepreneurial expertise among the students so that they can generate market driven results. It continuously refines and caters to the needs, demands and expectations of the healthcare industry. The department uses state of the art teaching methodologies for capacity-building of the future healthcare leaders who are trained to be sensitive to the needs of society, and to promote ethical practices in the healthcare businesses with the objectives of serving the community and the nation.

Students selecting the domain-based specialization in Health and Hospital Management are expected to complete the 30 credit hours of foundation stage (page No. 37) of the MBA program. Specialization stage consists of 42 credit hours of course work covering strategic and operational areas. These include courses in Marketing Strategy, Strategic Finance, Strategic Management, Leadership, Technology/Operations, Entrepreneurship, Organizational Processes, Analytics of Decision Making, etc. These courses are specifically designed by the department with a focus on Health and Hospital Management. During the specialization stage, students take 12 credit hours of strategy courses, 9 credit hours of operational level courses, and 12 credit hours of elective courses. The strategy, operational and elective courses help prepare graduates for the provision of necessary expertise to manage health services effectively and develop technically competent and socially sensitive managers for leadership roles in global health systems, hospitals, NGO sector, pharmaceutical industries and population programs. In addition, students select two real life Capstone Projects (6 credit hours) in their areas of specialization during their final year.

MBA track for specialization in Health and Hospital Management as well as the foundation stage is only available during the weekends. Candidates must select the specialization at the time of filing the application. The required and elective courses for the entire track are given below:

#### **Required Courses:**

## Accounting

ACC419 Financial Accounting

# **Human Resource Management**

HRM410 Managing Human Capital

#### Communication

COM402 Business Communication

#### Management

MAN418 Management and Organizational Dynamics

#### **Finance**

FIN408 Theory and Practice of Financial Management

FIN411 Finance for Entrepreneurial Ventures

Elective Business Courses\*

# **Core Health Courses**

MHM529 Health Policy and Analytics for Decision Making

MHM530 Quantitative Analysis

MHM531 Health Management Information Systems

MHM532 Research and Survey Methodology

MHM533 Business and Health Economics

MHM534 Health Psychology

MHM601 Strategic Management of Health Services

MHM602 Health Service Delivery and Operation Management

MHM603 Health Ethics, Law and Jurisprudence

MHM604 Healthcare Leadership

#### Marketing

MKT402 Marketing Management

MKT610 Marketing Strategies and Value Innovation

3 Health Elective and 2 Business Elective

#### **Capstone Project**

MHM691 Capstone Project I MHM692 Capstone Project II



#### **Elective Health Courses**

MHM605 Financial Management of Health Services

MHM606 Concepts of Primary Healthcare

MHM607 Introduction to Epidemiology

MHM608 Pharmaceutical Marketing and Quality Assurance

MHM609 Marketing of Health Services

MHM610 Population and Health

MHM611 Environmental Health Assessment & Management

MHM612 Hospital Administration

MHM613 Regulatory Affairs at Healthcare Industries

MHM614 Product Management

MHM615 Pharmaceutical Sales Management

MHM616 Project Management of Health Services

MHM617 Seminar in Health Policy Management

MHM618 Health Communications

MHM619 Healthcare Human Resource Management

MHM621 Supply Chain & Prod. Mgmt. in Pharma. Inds.

MHM622 Quality Management in Healthcare

MHM623 Pharmaceutical Branding

MHM624 Occupational Health and Safety

MHM625 Knowledge Management for Health Managers

MHM626 Workplace Well-being for Healthcare Managers

MHM627 Global and local Public Health Challenges and Practices

MHM628 Pharmacovigilance

#### **Business Elective Courses:**

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#### **Course Structure**

Semester One	Semester Two
Health Policy and Analytics for Decision Making	Research and Survey Methodology
Quantitative Analysis (QA / Bio statistics)	Health Management Information Systems
Management and Organizational Dynamics	Health Psychology
Business Communication	Financial Accounting
Semester Three	Semester Four
Theory and Practice of Financial Management	Strategic Management of Health Services
Managing Human Capital	Health Service Delivery and Operation Management
Marketing Management	Health Ethics, Law and Jurisprudence
Business and Health Economics	Finance for Entrepreneurial Ventures
Semester Five	Semester Six
Marketing Strategies and Value Innovation	Business Elective I
Healthcare Leadership	Business Elective II
Health Elective I	Health Elective II
Capstone Project I	Health Elective III
	Capstone Project II



# SPECIALIZATION IN MEDIA MANAGEMENT AND MARKETING

The MBA - Media Management and Marketing (MMM) program is a specialized MBA program that seeks to develop quality human resource, capable of playing strategic leadership roles across a variety of mainstream and new media organizations, as well as top-level, contemporary, consumer marketing companies.

It is a 72 credit hours program which is divided into a foundation stage of 36 credit hours covering the traditional business management disciplines, followed by 36 credit hours of rigorous advanced level courses focusing on leadership strategies, strategic management, business analytics, digital marketing, and strategic media marketing. The program is rounded off with a media-focused Capstone Project.

# **Required Courses**

#### Accounting

ACC419 Financial Accounting

#### Communication

COM410 Digital Business Communication

#### **Economics**

ECO409 Business Economics

#### **Finance**

FIN408 Theory and Practice of Financial Management

#### **Human Resource Management**

HRM410 Managing Human Capital HRM606 Leadership, Ethics and Change\*

#### Law

LAW409 Corporate and Business Law

#### Marketing

MKT402 Marketing Management MKT404 Methods in Business Research MKT509 Consumer Behavior MKT527 Integrated Marketing Communication MKT620 Digital Marketing\*



# Management

MAN418 Management and Organizational Dynamics MAN606 Business Analytics for Decision Making\* MAN612 Strategic Management\* MAN616 Entrepreneurship and Ecommerce\*

# Media

MMM401 Media & Social Change MMM603 Seminar in Strategic Media Marketing\* MMM604 Screenwriting for TV & Cinema\* MMM605 Documentary Filmmaking\* MMM606 Media Psychology\*

#### **Statistics**

STA411 Quantitative Analysis for Decision Making

# **Capstone Projects**

MMM691 Capstone Project I\*
MMM692 Capstone Project II\*

# **Course Structure**

Foundation Stage Semester One Quantitative Analysis for Decision Making Financial Accounting Consumer Behavior Digital Business Communication	Semester Two Theory and Practice of Management Marketing Management Methods in Business Research Business Economics
Semester Three Financial Management Business and Corporate Law Managing Human Capital Media and Social Change	MBA Stage Semester Four Leadership, Ethics and Change Strategic Management Digital Marketing Screen Writing for Film and TV
Semester Five Business Analytics and Decision-Making Integrated Marketing Communication Media Psychology Capstone Project 1	Semester Six Entrepreneurship and Ecommerce Seminar in Media Marketing Documentary Filmmaking Capstone Project 2



<sup>\*</sup>Indicates MBA level course

# SPECIALIZATION IN FINANCE AND RISK MANAGEMENT

Specialization in Finance and Risk Management is designed to cover financial decision making with special emphasis on Risk Management including recent development in Corporate Risk Management, Sustainable Risk Management and Risk Financing techniques.

Students selecting the domain based specialization in Finance and Risk Management are expected to have completed the 30 credit hours of foundation stage (page No. 37) of the MBA program. Specialization stage consists of 42 credit hours of course work covering strategic and operational areas. These include courses in the area of Marketing Strategy, Strategic Finance, Strategic Management, Leadership, Technology/Operations, Entrepreneurship, Organizational Processes, Analytics of Decision Making, etc. During the specialization stage, students take 12 credit hours of strategy courses, 9 credit hours of operational level courses, and 12 credit hours of elective courses. These courses are specifically designed to understand the financial risk management. In addition to strategic, operational and elective courses students select two real life Capstone Projects (6 credit hours) in their area of specialization during their final year.

MBA track for specialization in Finance and Risk Management as well as the foundation stage is only available during the weekends. Candidates must select the specialization at the time of filing the application. The required and elective courses for the entire track are given below:

#### **Required Courses**

#### Accounting

ACC401 Introduction to Managerial and Cost Accounting

ACC419 Financial Accounting

#### Communication

COM402 Business Communication

#### **Economics**

ECO401 Micro and Macroeconomics ECO408 Applied Financial Economics

#### Finance

FIN408 Theory and Practice of Financial Management

FIN501 Advanced Financial Management FIN511 Analysis of Financial Statements

# **Finance and Risk Management**

FRM401 Principles of Risk Management

FRM402 Computational Methods in Risk

FRM403 Introduction to Financial Risk Management

FRM404 Risk Financing Techniques

FRM405 Advanced Financial Risk Management



## **Human Resource Management**

HRM410 Managing Human Capital

#### Law

LAW403 Business and Insurance Law

#### Management

MAN418 Management and Organizational Dynamics MAN405 Strategic Management

#### Marketing

MKT401 Principles of Marketing

#### Mathematics

MTH409 Financial Mathematics I MTH410 Financial Mathematics II

#### **Social Sciences**

SSC405 Business Ethics and Financial Responsibility

#### **Statistics**

STA402 Model and Inferences

#### 2 Elective

#### **Elective Courses**

## **Finance and Banking**

FIN403 Islamic Banking and Finance

# **Finance and Risk Management**

FRM503 Corporate Risk Management

FRM504 Theory of Risk and Insurance

FRM505 Corporate Treasury and Risk Management

FRM506 Financial Regulation for Risk Management

FRM508 Financial Market Issues and Crisis

FRM510 Energy Risk Management

FRM512 International Risk and Financial Reporting

FRM513 Project Risk Management

FRM514 Takaful and Risk Management in Islamic Products

FRM516 International Financial Reporting and Standards

FRM517 Property Risk Management

FRM518 Management of Insurance Institutions



# SPECIALIZATION IN FNVIRONMENT AND ENERGY MANAGEMENT

Specialization in Environment and Energy Management aims to prepare future decision-makers in companies, government and non-governmental organizations for analyzing and acting in an environmentally proactive and energy efficient way when making decisions about policy, production and resource utilization in energy generation, transmission and load management.

Students selecting the domain based specialization in Environment and Energy Management are expected to have completed the 30 credit hours of foundation stage (page No. 37) of the MBA program. Specialization stage consists of 42 credit hours of course work covering strategic and operational areas. These include courses in the area of Marketing Strategy, Strategic Finance, Strategic Management, Leadership, Technology/Operations, Entrepreneurship, Organizational Processes, Analytics of Decision Making, etc. During the specialization stage, students take 12 credit hours of strategy courses, 9 credit hours of operational level courses, and 12 credit hours of elective courses. The department of Environment and Energy Management has developed the strategy, operational and elective courses to help students understand the environment and be decision makers in the future. In addition, students select two real life Capstone Projects (6 credit hours) in their area of specialization during their final year.

MBA track for specialization in Environment and Energy Management as well as the foundation stage is only available during the weekends. Candidates must select the specialization at the time of filing the application. The required and elective courses for the entire track are given below:

# **Required Courses**

#### Accounting

ACC419 Financial Accounting

#### Communication

COM402 Business Communication

#### **Finance**

FIN408 Theory and Practice of Financial Management

FIN601 Strategic Financial Analysis & Design\*

#### **Human Resource Management**

HRM410 Managing Human Capital

HRM606 Leadership, Ethics and Change\*

#### Management

MAN418 Management and Organizational Dynamics

MAN608 Technology, Operations and Innovation\*

MAN612 Strategic Management\*

#### Marketing

MKT402 Marketing Management

MKT610 Marketing Strategies and Value Innovation\*

#### Statistics

STA411 Quantitative Analysis for Decision Making



## **Environmental and Energy Management**

- EEM401 Environmental Issues and Management
- EEM403 Energy Sources and Management
- EEM404 Industrial and Municipal Waste Management
- EEM405 Renewable Energy and Energy Conservation
- EEM410 Environmental Impact Assessment
- EEM411 Environmental Rules, Laws and Regulations
- EEM412 Research and Survey Methodology
- EEM510 Economics of Energy Management
- EEM614 Safety, Health and Environmental Management

#### 1 Elective

# **Capstone Project**

- EEM691 Capstone Project I\*
- EEM692 Capstone Project II\*

#### **Elective Courses**

# **Environmental and Energy Management**

- EEM603 Air and Noise Pollution Management
- EEM604 Coastal Environment and Management
- EEM605 Climatic Changes and its Impact
- EEM606 Natural Resources Management
- EEM607 Hospital Waste Management
- EEM608 Solid and Hazardous Waste Management
- EEM609 Energy Audit
- EEM610 Energy Conservation
- EEM611 Energy Planning
- EEM612 Environmental Ethics
- EEM613 Public Awareness for Environment and Energy Sector
- EEM615 Risk and Disaster Management



<sup>\*</sup>Indicates MBA level courses

# SPECIALIZATION IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Logistics and Supply Chain Management specialization addresses strategic economic and process-oriented technical problems in logistics, supply chain management across industries and across countries. It covers complexities of moving goods across regions with diverse compliance requirements.

Students selecting the domain based specialization in Logistics and Supply Chain Management are expected to have completed the 30 credit hours of foundation stage (page No. 37) of the MBA program. Specialization stage consists of 42 credit hours of course work covering strategic and operational areas. These include courses in the area of Marketing Strategy, Strategic Finance, Strategic Management, Leadership, Technology/Operations, Entrepreneurship, Organizational Processes, Analytics of Decision Making, etc. During the specialization stage, students take 12 credit hours of strategy courses, 9 credit hours of operational level courses, and 12 credit hours of elective courses. The department of Supply Chain and Logistics Management has developed the strategy, operational and elective courses keeping in view the requirement of the industry. In addition, students select two real life Capstone Projects (6 credit hours) in their area of specialization during their final year.

MBA track for specialization in Logistics and Supply Chain Management as well as the foundation stage is only available during the weekends. Candidates must select the specialization at the time of filing the application. The required and elective courses for the entire track are given below:

# **Required Courses**

#### Accounting

ACC419 Financial Accounting

#### Communication

COM402 Business Communication

#### Entrepreneurship

ENT403 Small Business and Entrepreneurship

#### **Finance**

FIN408 Theory and Practice of Financial Management

#### **Economics**

ECO409 Business Economics

#### **Human Resource Management**

HRM410 Managing Human Capital HRM606 Leadership, Ethics and Change\*



#### Management

MAN406 Production and Operations Management

MAN418 Management and Organizational Dynamics

MAN606 Business Analytics for Decision Making\*

MAN612 Strategic Management\*

#### Marketing

MKT402 Marketing Management

MKT404 Methods in Business Research

MKT610 Marketing Strategies and Value Innovation\*

#### Law

LAW409 Corporate and Business Law

#### **Supply Chain and Logistics Management**

SCM400 Introduction to ERP Systems

SCM508 Design of Business Processes - Workflow Management

SCM601 Quantitative Methods for Logistics & Supply Chain Management

SCM605 Supply Chain Management

SCM612 Risk Management in Supply Networks

SCM613 Innovation Management in Supply Chain and Logistics

#### **Capstone Project**

SCM691 Capstone Project I\* (Logistical Projects in ERP- Case Study Development)

SCM692 Capstone Project II\*(Corporate Consultancy Projects in Logistics)

#### 1 Elective

#### **Elective Courses**

#### Management

MAN501 Total Quality Management MAN611 Project Management

# **Supply Chain and Logistics Management**

SCM604 Packaging Design- Environment Aspects

SCM606 ERP System Design and Implementation

SCM608 Procurement and Inventory Management

SCM609 Storage and Warehouse Techniques

SCM610 Transportation Techniques and Management

SCM611 Sustainability & Env. Aspects in Managing Supply Chains

SCM623 Textile and Fashion Supply Chain



<sup>\*</sup>Indicates MBA level courses

# SPECIALIZATION IN INDUSTRIAL MANAGEMENT

Specialization in Industrial Management focuses on real life problems relating to industrial processes and discrete manufacturing. It focuses on project management, quality management, manufacturing effectiveness, logistics, warehousing and supply chain management.

Students selecting the domain based specialization in Industrial Management are expected to have completed the 30 credit hours of foundation stage (page No. 37) of the MBA program. Specialization stage consists of 42 credit hours of course work covering strategic and operational areas. These include courses in the area of Marketing Strategy, Strategic Finance, Strategic Management, Leadership, Technology, Operations, Entrepreneurship, Organizational Processes, Analytics of Decision Making, etc. During the specialization stage, students take 12 credit hours of strategy courses, 9 credit hours of operational level courses, and 12 credit hours of elective courses. The department of Industrial Management has developed the strategy, operational and elective courses to help the students understand the requirement of the industry. In addition, students select two real life Capstone Projects (6 credit hours) in their area of specialization during their final year.

MBA track for specialization in Industrial Management as well as the foundation stage is only available during the weekends. Candidates must select the specialization at the time of filing the application. The required and elective courses for the entire track are given below:

# **Required Courses**

#### Accounting

ACC401 Introduction to Managerial and Cost Accounting ACC419 Financial Accounting

# Communication

COM402 Business Communication

# **Economics**

ECO409 Business Economics

#### **Engineering**

ENG405 Environmental Impact Assessment and Management ENG604 Enterprise Asset Management and Financial Analysis

# Entrepreneurship

ENT403 Small Business and Entrepreneurship

#### Finance

FIN408 Theory and Practice of Financial Management

\*Indicates MBA level courses

## **Human Resource Management**

HRM410 Managing Human Capital

#### Law

LAW401 Business Law

# **Supply Chain and Logistics Management**

SCM605 Supply Chain Management\*

#### Marketing

MKT402 Marketing Management
MKT404 Methods in Business Research
MKT610 Marketing Strategies and Value Innovation\*

#### **Statistics**

STA411 Quantitative Analysis for Decision Making



#### Management

MAN406 Production and Operations Management

MAN418 Management and Organizational Dynamics

MAN502 Business Process Re-engineering

MAN611 Project Management\*

MAN612 Strategic Management\*

# **Capstone Project**

INM691 Capstone Project I\*

INM692 Capstone Project II\*

\*Indicates MBA level courses

#### 2 Elective

#### **Elective Courses**

#### **Engineering**

INM601 Facilities Planning

INM602 Maintenance Management

INM603 Industrial Safety, Health, and environment

INM604 Enterprise Life Cycle Management

INM605 Industrial Technology Management

INM606 Operation Research

INM607 Enterprise Risk Management

INM608 Logistic and Inventory control

INM609 Advance Production Planning & Control

INM610 Integrated Manufacturing Systems

INM611 Advance Manufacturing Processes

INM612 Industrial Supply Chain Management

#### **Human Resource Management**

HRM606 Leadership, Ethics, and Change

## Management

MAN501 Total Quality Management



# SPECIALIZATION IN ENTREPRENEURSHIP AND SME BANKING AND FINANCE

Specialization in Entrepreneurship and SME Banking and Finance is aligned with SBP policy of encouraging SME Banking and Finance for entrepreneurs and small businesses. The program caters to individuals who want to build their careers in SME sector.

# **Required courses:**

#### Accounting

ACC419 Financial Accounting

#### Communication

COM402 Business Communication

#### **Economics**

ECO409 Business Economics

#### **Finance**

FIN408 Theory and Practice of Financial Management

FIN535 Strategic Finance for SMEs

#### **Human Resource Management**

HRM410 Managing Human Capital

HRM606 Leadership Ethics and Change

# Law

LAW501 Governance, Regulations and Taxation for SMEs

#### Entrepreneurship

ENT403 Small Business and Entrepreneurship

#### Management

MAN418 Management and Organizational Dynamics

MAN511 SME Technology, Innovation & Operations

MAN512 Strategic Management for SMEs

MAN606 Business Analytics for Decision Making

#### Marketing

MKT402 Marketing Management

MKT404 Methods in Business Research

MKT509 Consumer Behavior

MKT539 Entrepreneurial Marketing

#### Statistics and Mathematics

STA411 Qualitative Analysis for Decision Making

#### **Capstone Projects**

ENT691 Capstone Project I ENT692 Capstone Project II

# **Specialized Elective Courses**

Students may choose 4 elective courses from the following electives.

FIN603 Entrepreneurial Finance

FIN613 Financial Modeling for Decision Making FIN615 Advanced Financing Practices for SMEs

ISF606 Islamic Finance for SMEs

MKT629 Marketing of SME Banking Products

MAN611 SMEs in Global Context



# MBA BOOT CAMP: ORIENTATION PROGRAM FOR NEW MBA STUDENTS

CBM challenges its incoming MBA students by offering a rigorous boot camp of orientation courses which fulfill the pre-requisite requirement to undertake first year foundation stage courses of the MBA program. Students with a four-year bachelor in commerce or business management are exempted from attending the camp. The exemption includes students with 2 years of B.Com plus 2 years of M.Com. The camp helps students from disparate backgrounds to bond quickly and prepare them for the intellectual challenge that they are going to encounter in the MBA program. They get a head-start with pre-requisite knowledge which acclimatizes them with the rigor and culture of CBM. This is an intensive 126-hour program which is spread over five weeks and conducted during evenings and weekends. Its objectives are:

- 1. To develop technical skills in statistical and IT tools
- 2. To develop a shared knowledge base in core areas of business
- 3. To bring their communication and presentation skills to the desired level
- 4. To provide orientation for personal organization and effectiveness
- 5. To familiarize them with pedagogies of case study, and experiential learning

	Modules	Number of Hours
1	Business English	12 hrs
2	Economics	12 hrs
3	Personal Effective and Leadership	12 hrs
4	Introduction to Management and Case Method	12 hrs
5	Introduction to Marketing and Case method	12 hrs
6	Business Finance	12 hrs
7	Business Accounting	12 hrs
8	Excel for Business Decision Making	18 hrs
9	Research Tools and Techniques	12 hrs
10	Business Mathematics and Statistics	12 hrs



# MS IN BUSINESS MANAGEMENT

MS program in Business Management is a research route for a PhD in Business Management and is designed for students with a 4-year BBA qualification or those meeting the HEC criteria for MS in management science i.e. 16 years of education with degree in relevant business field with 1st division/CGPA 3.0.

#### **Program Structure**

MS in Business Management is a 36 credit-hour program with 10 courses and one thesis of 6 credit hours. Each of the 10 courses is of 3 credit hours.

After successful completion of course work, students are required to carry out research study for the thesis under the guidance of a research supervisor assigned by IoBM. In lieu of a thesis, students can also opt for two additional courses for the completion of the degree.

#### **Course Structure**

MPM601 Advanced Qualitative Research

MPM603 Advanced Quantitative Research

MPM605 Survey of Current Research Literature in Management

MPM607 Corporate Governance and Strategy

MPM609 Seminar in Human Resource Management

MPM611 Advanced Corporate Finance

MPM614 Advanced Marketing Strategy

MPM616 Econometrics

# **Elective**

Elective I

Elective II

(Electives may be selected from the specialization areas of Business Management of 700 Series)

Thesis (06 credit hours)

It is mandatory for research students of MS and PhD programs to attend at least five sessions of the Multi-disciplinary Research Seminar Series in each semester. Students must dedicate Saturdays (12:00 to 2:00 PM) to attend the same.



# MS IN ENGLISH - APPLIED LINGUISTICS

The MS in English-Applied Linguistics program envisages enhancing students' understanding of issues in the field of Applied Linguistics. The program has been designed to meet the needs of emerging professionals for a) reading research critically; b) doing research; and c) sharing ideas/findings with peers and the wider academic community.

## Eligibility

- · As per HEC policy, 16 years of education in the relevant field of study with 2.5 CGPA or C-Grade
- Candidates must have a Master in Applied Linguistics, ELT, TESL, or Literature and Linguistics.
- Candidates must clear IoBM Admission test or present NTS test result at the time of admission
- An interview conducted by the Institute
- · All other HEC stipulated requirements

#### **Learning Outcomes**

- Understand approaches and methods in Applied Linguistics research
- Exhibit suitable language pedagogical knowledge
- Critically analyze existing research and craft arguments for ones' own research
- Compose a thesis that evidences original research and high proficiency in the interpretation, analysis, and explanation of Applied Linguistics phenomena

#### **Career Path**

- School/College Teacher/Professor
- Testing/Assessment Specialist
- · Copy Editor/Proofreader

- Curriculum Developer
- Teacher Trainer
- · Technical Writer

#### **Required Courses**

#### **Core Courses**

- MPL601 Qualitative Research Methods in Social Science
- MPL602 Contemporary Issues in Applied Linguistics Research
- MPL603 Quantitative Research Methods in Social Science
- MPL604 Research Communication Skills

# **Elective Courses (Any Four Courses)**

- MPL701 Language Assessment and Feedback
- MPL702 Research Perspectives on Second Language Acquisition
- MPL703 Language in Education and Development
- MPL704 Second Language Teacher Education
- MPL705 Teaching English in Difficult Circumstances
- MPL706 Psychology of Language Learning and Teaching
- MPL707 Directed Research Study
- MPL708 Research Colloquium
- MPL709 Teaching-Learning of World Englishes: Policy and practice
- MPL710 Methods and Approaches of Critical Discourse Analysis

#### MPL715 Research Thesis

It is mandatory for research students of MS program to attend at least 5 sessions of the Multi-disciplinary Research Seminar Series in each semester. Students must dedicate Saturdays (12:00 to 2:00 PM) to attend the same.



# MPhil IN BUSINESS MANAGEMENT

The MPhil program in Business Management is designed to meet the challenges of the business world and the growing demand for well-qualified and research-oriented scholars in Pakistan. This program has been carefully designed in response to traditional and emerging trends to meet the growing market demand for various specialist areas in business management.

# Eligibility

Students with a 4-year BBA qualification or those meeting the HEC criteria for MS/MPhil in management science i.e. 16 years of education with degree in relevant business field with 1st division/CGPA 3.0. The candidate have to pass GAT-General /IoBM entrance test and interview as per IoBM rules.

## **Program Structure**

The MPhil is a 30 credit hours program with 8 courses and Thesis. All the courses are of 3-credit Hours each.

After successful completion of course work, students are required to carry out research for thesis under the guidance of a research supervisor assigned by the Institute. Students must convert their research thesis into a publishable paper as part of a degree requirement. Continuous enrollment in supervised research courses is necessary during research stage.

#### **Course Structure**

MPM601 Advanced Qualitative Research
MPM603 Advanced Quantitative Research
MPM605 Survey of Current Research Literature in Management
MPM607 Corporate Governance and Strategy
MPM609 Seminar in Human Resource Management
MPM611 Advanced Corporate Finance
MPM614 Advanced Marketing Strategy
MPM616 Econometrics

For health professionals, electives may be selected from the specialization areas of Business Management of MPM700 Series in lieu of any four of the above mentioned courses.

Thesis (06 Credit hours)

It is mandatory for research students of MPhil and PhD programs to attend research proposal / thesis defense / multi-disciplinary research seminars in each semester. Students must dedicate Saturdays (12:00 to 2:00 PM) to attend the same.



# PhD IN BUSINESS MANAGEMENT

The mission of the PhD research program in business management is to pursue leading-edge research, engage in the development of innovative ideas and analytical skills, and encourage both faculty and students to be independent and creative in their thinking. The outcome of this research program is the creation of a real and measurable impact on society and industry through quality research published in impact factor journals and recognized by industry.

# Eligibility

# MS or equivalent graduates from HEC recognized institutions meeting the following criteria:

- A minimum CGPA of 3.00 on a scale of 4.00 (or overall 60% marks) or equivalent
- HEC equivalency required for 18 years of Schooling
- A minimum of 18 years of schooling that corresponds to MS / MPhil or. Equivalent degree from HEC recognized institutions in a relevant discipline. Students with HEC recognized MBA have to do a number of pre-requisite courses
- GAT subject test conducted by the NTS is required with a minimum of 60% (percentage) marks and Minimum of 70% marks in IoBM test for Provisional Admission
- An interview conducted by the Institute
- All other HEC stipulated requirements

#### **Program Requirements**

#### PhD requires completion of course work and dissertation/thesis. Minimum duration is three years and maximum is seven years:

- PhD course work requirements consist of six graduate level courses (18 credit hours)
- On completion of dissertation/thesis the student is awarded 30 credits

#### A PhD student must additionally complete the following requirements:

- Comprehensive Exam
- PhD Proposal/Synopsis Development
- PhD Proposal/Synopsis Defense
- BASR Approval of PhD Proposal/Synopsis
- Continuous enrollment in supervised research courses is necessary during the research thesis stage
- Completion of PhD Dissertation/Thesis
- Selection of External Evaluators by BASR
- Publication of at least one paper in an ISI indexed or an HEC recognized journal or an official acceptance of the paper
- Students must convert their research thesis into a publishable paper as part of a degree requirement
- Evaluation of PhD Dissertation by two foreign faculty members from developed countries as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of PhD dissertation
- Any other HEC requirement
- Final Dissertation/Thesis submission to BASR



#### **Course Structure**

#### Pre-requisites:

MPM601 Advanced Qualitative Research MPM604 Philosophy of Business Management MPM612 Advanced Research Methodology MPM610 Directed study of Business Research I

MPM603 Advanced Quantitative Research MPM605 Survey of Current Research Literature in Mgmt.

MPM616 Econometrics

MPM622 Directed study of Business Research II

Note: Pre-requisites may be assigned according to the level of previous work. if Directed Research Study (I/II or both) is assigned then it has to be taken, only after completion of above mentioned Courses 1 to 6.

## **Courses of PhD Business Management (48-Credit Hours)**

- PBM703 Multivariate Analysis
- 2. PBM705 Readings in Business Research
- 3. PBM707 Replication of Business Research Design and Results
- 4. PBM710 Advanced Philosophy of Business Management
- 5. PBM708 Directed Study of a Business Research Problem
- 6. Elective
- 7. Dissertation

Note: Apart from Dissertation which is of 30-Credit Hours, all other courses in PhD Business Management are of 3-Credit Hours each

PBM921 Research Thesis (3 units) PBM922 Research Thesis (6 units) PBM923 Research Thesis (9 units)

# Research Electives in the Area of Specialization

## **Finance Electives**

- 1. Business Finance and Decision Making
- 3. Derivatives and Financial Risk
- 5. Empirical Asset Pricing
- 7. Operations and Mathematical Modelling
- 9. Corporate Finance Planning and Decision
- 11. Advanced Topics in Finance

# **Marketing Electives**

- 1. Strategic Marketing Decisions
- Marketing Theory
- 5. Contemporary Seminars in Marketing
- 7. Distribution and Channel Management
- 9. Contemporary Issues in Marketing Management

- 2. Financial Times Series
- 4. Capital Asset Pricing
- 6. Contemporary Issues in Finance
- 8. Modern Financial Applications
- 10. Corporate Financial Governance and Strategy
- Marketing Models
   Advanced tonics in
- 4. Advanced topics in Marketing Management
- 6. Advanced Marketing Strategies
- 8. Strategic Brand Management

#### **HR/Management Electives**

- 1. Strategic Human Resource Development
- 3. Organizational Development
- 5. Global Corporate Strategy
- 7. International Business Management
- 9. Contemporary Issues in Human Resource Management
- 11. Contemporary Issues in Strategic Management
- 13. Advanced Topics in Human Resources Management

- 2. Change Management
- 4. Leadership and Motivational techniques
- 6. Creative leadership
- 8. Global Governance and Development
- 10. Negotiation and Conflict Resolution
- 12. Critical thinking and Organizational Learning

It is mandatory for research students of MPhil and PhD programs to attend research proposal / thesis defense / multi-disciplinary research seminars in each semester. Students must dedicate Saturdays (12:00 to 2:00 PM) for this attendance.



# PhD IN ENVIRONMENT AND ENERGY MANAGEMENT

CBM's PhD program in Environment and Energy Management is a rigorous, interdisciplinary research program focusing on building theoretical models in the area of energy and/or environment. The research develops models relating to areas such as energy supply, sufficiency, and security for meeting future energy requirements. The models may also focus on environmental sustainability, impact models and trends relating to water supply, air quality, waste, etc.

# Eligibility

#### MS or equivalent graduates from HEC recognized institutions meeting the following criteria:

- A minimum CGPA of 3.00 on a scale of 4.00 (or overall 60% marks) or equivalent
- A minimum of 18 years of schooling that corresponds to MS / MPhil or equivalent degree from HEC recognized institutions in a relevant discipline
- GRE subject specific or GAT subject test conducted by the NTS, HAT subject test of HEC or equivalent in the relevant discipline. A minimum of 60% (percentage) marks are required or a minimum of 70% marks in IoBM test
- An interview conducted by the Institute
- All other HEC stipulated requirements
- Complete deficiency courses

# **Program Requirements**

#### PhD requires completion of course work and dissertation/thesis. Minimum duration is 3 years and maximum is 5 years:

- PhD course work requirements consist of six graduate level courses (18 credit hours)
- Student are awarded 30 credits on completion of dissertation/thesis

#### A PhD student must additionally complete the following requirements:

- Comprehensive Exam
- PhD Proposal/Synopsis Development
- PhD Proposal/Synopsis Defense
- BASR Approval of PhD Proposal/Synopsis
- Continuous enrollment in supervised research courses is necessary during the research thesis stage
- Completion of PhD Dissertation/Thesis
- Selection of External Evaluators by BASR
- Publication of at least one paper in an ISI indexed or an HEC recognized journal or an official acceptance of the paper
- Evaluation of PhD Dissertation by two foreign faculty members from developed countries as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of PhD dissertation
- Any other HEC requirement
- Final Dissertation/Thesis Submission to BASR

#### **Pre-Requisite Courses**

The interview committee may prescribe certain pre-requisite courses.



#### **Course Structure**

#### Semester One

EEM701 Methods and Issues in Advanced Qualitative Research EEM702 Methods and Issues in Advanced Quantitative Research

#### Semester Two

EEM703 Current Advancement and Trends in Environment and Energy Management EEM704 Independent Study in Environment and Renewable Energy Management

#### **Semester Three**

Elective Courses (any two)

EEM801 Advanced Environment Toxicology & Epidemiology

EEM802 Advanced Pollution Control Technologies and Mitigation Options

EEM803 Advances in Green Technology Mechanism

EEM804 Disaster Risk Management and Mitigation Strategies

EEM805 Trade and Environment

EEM806 Sustainability and Conservation of Major Ecosystems

#### **Semester Four to Nine**

EEM921 Research Thesis

EEM922 Research Thesis

EEM923 Research Thesis

It is mandatory for research students of MPhil and PhD programs to attend research proposal / thesis defense / multi-disciplinary research seminars in each semester. Students must dedicate Saturdays (12:00 to 2:00 PM) for this attendance.





# COLLEGE OF COMPUTER SCIENCE AND INFORMATION SYSTEMS

#### **Vision Statement**

The College of Computer Science and Information System (CCSIS) is committed to emerge as one of the leading college, nationally and internationally, in computing and analytics by focusing on learning, research, technological innovation and enhancing value to society.

#### **Mission Statement**

The mission of Computer Science and Information System (CCSIS) is to empower learners and aspirants with technological and analytical tools & techniques following the local and global teaching paradigms so that they could explore new spectrums within a competitive world of technology by innovating in research activities, which will enable their personal, professional, social and intellectual capabilities for economic wellbeing.

# **BS COMPUTER SCIENCE (BS CS)**

The graduates of this program would have the confidence and skills to design ICT solutions and become technology entrepreneurs. The graduates may also join careers as software engineers and may move on to become analysts, designers, and architects in software houses or be freelance solution providers. They may also go into management careers that require strong analytical skills.

The program emphasizes the need for overall development including exposure to an integrated series of courses in technology, methodology, social sciences, liberal arts, and management. Project-based software development along with research assignments are also emphasized. These courses seek to impart a broad and deep knowledge of the theory, design, and application of digital computers and information processing techniques. The curriculum has been designed to prepare students to serve the productive needs of Pakistan's software industry. It requires completion of 138 credit hours of course work. Students are required to take 43 courses (including Final Year Project and relevant labs) & internship, approved by the Institute, in order to complete their degree requirements. Students must maintain a CGPA of 2.5 for the conferment of the degree.

#### **BS Computer Science students learn:**

- · To apply knowledge gained during the program effectively and efficiently in software industry
- To contribute, manage, and lead, computer science and software development teams
- To actively pursue lifelong learning and innovation skills
- To equip themselves with latest software tools and techniques
- To groom so as to occupy senior technical and managerial positions
- To successfully bring innovation in IT technology as a whole

## **Learning Outcomes for BS Computer Science Students include:**

- 1. Successfully bring innovation in IT technology
- 2. To analyze, identify computing requirements appropriate to solution
- 3. Appreciate the challenges of IT industry with global changes
- 4. An ability to apply knowledge of computing and mathematics in IT
- 5. To design, implement, and evaluate a computer-based system

#### Career Path:

- 1. Software Engineer
- 3. Computer Scientist
- 5. Network Security Expert
- 7. Computer Systems Analyst
- 9. Information Security Analyst.
- Prospective Employers:
  - 1. Cyber Internet Services
  - 3. Real Estate Sector
  - 5. Hospital Sector
  - 7. Software Houses
  - 9. Government & Private Sector

- 2. Web/Software Developer
- 4. Computer Programmer
- 6. Database Administrator
- 8. Computer Network Architect
- 10. Computer and Information Research Scientists
- 2. Internet Service Providers
- 4. Banking Sectors
- 6. Industrial Sector
- 8. Communication & Transportation Sector

# **Eligibility Criteria**

The BS (Computer Science) is a four-year program. Applicants who have successfully completed H.Sc with minimum 50% marks in Pre-Engineering or in General Group (with Mathematics/Statistics/Computer Science) or A-Levels with a maximum 2 'C's in three principal subjects (with Mathematics/Statistics/Computer Science) are eligible to apply for admission.



#### **Foundation Courses**

#### Accounting

ACC101 Introduction to Financial Accounting

#### **Economics**

ECO104 Micro and Macroeconomics

#### Communication

COM107 Academic English

COM202 Business and Professional Speech

COM205 Persuasive & Analytical Writing for Bus. Com.

#### Language

LAN 10\* Foreign Language I

LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

# **Computing (Core Courses)**

CSC113 Programming Fundamentals CSC113 Programming Fundamentals LAB CSC213 Object Oriented Programming CSC213 Object Oriented Programming LAB CSC215 Data Structures & Algorithm CSC215 Data Structures & Algorithm LAB CSC217 Intro to Database Systems CSC217 Intro to Database Systems LAB CSC231 Discrete Structures CSC313 Operating Systems CSC313 Operating Systems LAB CSC317 Intro to Software Engineering CSC319 Computer Networks CSC319 Computer Networks LAB CSC419 Information Security CSC491 Final Year Project (FYP) I

CSC492 Final Year Project (FYP) II

#### Management

MAN101 Principles of Management MAN411 Project Management

#### **Information Technology**

CSC111 Information & Communication Technology
CSC111 Information & Communication Technology LAB

CSC219 Professional Practices

#### **Political Sciences**

PSC301 Pakistan Studies

#### **Physics**

PHY111 Applied Physics

#### **Mathematics**

MTH107 Calculus and Analytical Geometry

MTH204 Linear Algebra

#### Statistics

STA203 Probability Theory and Statistics

#### **Religious Studies**

**REL101** Islamic Studies

# **Computer Science (Compulsory Courses)**

CSC115 Digital Logic & Design CSC115 Digital Logic & Design LAB

CSC211 Computer Organization and Assembly Language

CSC211 Computer Organization and Assembly Language LAB

CSC311 Theory of Automata & Formal Language

CSC315 Design & Analysis of Algorithm

CSC411 Compiler Construction

CSC413 Artificial Intelligence

CSC413 Artificial Intelligence LAB

CSC418 Parallel & Distributed Computing

# **Computer Science (Supporting Courses)**

CSC233 Multivariable Calculus

CSC331 Differential Equation

CSC333 Numerical Computing



# **Computer Science (Elective Courses)**

CSC371 Computer Graphics

CSC372 Human Computer Interaction

CSC373 Web Engineering

CSC374 Mobile Application Development

CSC471 Database Administration and Management

CSC472 Visual Programming

CSC473 Enterprise Systems

CSC474 Data Warehousing

CSC475 Big Data Analytics

CSC476 E-Commerce

CSC477 IT Infrastructure

CSC478 Digital Image Processing

CSC479 Digital Signal Processing

CSC481 Software Quality Assurance

CSC482 Formal Methods in Software Engineering

CSC483 Information Security Audit

CSC484 Network Security

CSC485 Cyber Security

CSC486 Wireless Network

CSC487 Neural Network

CSC488 Fuzzy Logic

# **Course Structure**

Semester One Intro to Information & Comm. Technology (2+0) [Pre Req. NA] Intro to Information & Comm. Technology LAB (0+1) [Pre Req. NA] Programming Fundamentals (3+0) [Pre Req. NA] Programming Fundamentals LAB (0+1) [Pre Req. NA] Calculus and Analytical Geometry (3+0) [Pre Req. NA] Academic English (3+0) [Pre Req. NA] Applied Physics (3+0) [Pre Req. NA]	Semester Two Digital Logic & Design (3+0) [Pre Req. PHY111] Digital Logic & Design LAB (0+1) [Pre Req. PHY111] Object Oriented Programming (3+0) [Pre Req. CSC113] Object Oriented Programming LAB (0+1) [Pre Req. CSC113] Probability Theory and Statistics (3+0) [Pre Req.NA] Persuasive & Analytical Writing for Bus. Comm. (3+0) [Pre Req. COM107] Micro and Macroeconomics (3+0) [Pre Req. NA]
Semester Three Computer Organization & Assembly Language (3+0) [Pre Req. NA] Computer Org. & Assembly Language LAB (0+1) [Pre Req. NA] Data Structures and Algorithms (3+0) [Pre Req. CSC213] Data Structures and Algorithms LAB (0+1) [Pre Req. CSC213] Discrete Structures (3+0) [Pre Req. NA] Professional Practices (3+0) [Pre Req. NA] Multivariable Calculus (3+0) [Pre Req. MTH107]	Semester Four Theory of Automata & Formal Language (3+0) [Pre. Req. CSC231] Introduction to Database Systems (3+0) [Pre. Req. CSC215] Introduction to Database Systems LAB (0+1) [Pre. Req. CSC215] Linear Algebra (3+0) [Pre. Req. MTH107] Principles of Management (3+0) [Pre. Req. NA] Operating Systems (3+0) [Pre. Req. CSC215] Operating Systems LAB (0+1) [Pre. Req. CSC215]
Semester Five Design & Analysis of Algorithms (3+0) [Pre Req. CSC215] Complier Construction (3+0) [Pre Req. CSC311] Differential Equations (3+0) [Pre Req. CSC233] Foreign Language I (3+0) [Pre Req. NA] Introduction to Software Engineering (3+0) [Pre Req. NA] Numerical Computing (3+0) [Pre Req. MTH204	Semester Six Artificial Intelligence (3+0) [Pre Req. CSC231] Artificial Intelligence LAB (0+1) [Pre Req. CSC231] Computer Networks (3+0) [Pre Req. NA] Computer Networks LAB (0+1) [Pre Req. NA] CS Elective I (3+0) [Pre Req. NA] CS Elective II (3+0) [Pre Req. NA] Business & Professional Speech (3+0) [Pre Req. COM107]
Semester Seven CS Elective III (3+0) [Pre Req. NA] CS Elective IV (3+0) [Pre Req. NA] FYP I (0+3) [Pre Req. CSC317] Foreign Language II (3+0) [Pre Req. LAN10x] Parallel & Distributed Computing (3+0) [Pre Req. CSC313]	Semester Eight CS Elective V (3+0) [Pre Req. NA] Project Management (3+0) [Pre Req. NA] FYP II (0+3) [Pre Req. CSC491] Information Security (3+0) [Pre Req. NA] Islamic Studies (3+0) [Pre Req. NA]

Introduction to Financial Accounting (3+0) [Pre Req. NA]



Pakistan Studies (3+0) [Pre Req. NA]

# **BS ACTUARIAL SCIENCE AND RISK MANAGEMENT**

BS in the Actuarial Science and Risk Management equips graduates with mathematical and statistical skills and expertise of tools that help in assessing risk in insurance, finance and other relevant industries and professions.

A BS in the Actuarial Science and Risk Management program is intended to provide students with the tools of risk analysis, transfer and financing that are critical to the operation of private and public institutions, and to prepare them for careers in risk management and insurance. As a risk management major, a student will gain a broad business background with an emphasis on accounting, finance and law, as well as a thorough knowledge of all types of insurance. BS in Actuarial Science and Risk Management is a four-year degree program. It requires completion of 144 credit hours of course work and 2 credit hours of internship of at least six weeks in an organization approved by the Institute. Students graduating with a CGPA of 2.5 on the scale of 4 are eligible to apply for MBA program offered by the Institute.

## **Required Courses**

#### Accounting

ACC101 Introduction to Financial Accounting

#### Communication

COM107 Academic English

COM205 Persuasive & Analytical Writing for Bus. Com.

#### **Economics**

ECO101 Principles of Microeconomics ECO102 Principles of Macroeconomics ECO304 Introduction to Econometrics

# **Finance and Risk Management**

FRM201 Principles of Risk Management
FRM202 Life and Other Contingencies
FRM204 Enterprise Risk Management
FRM206 Institutional Investments
FRM302 Computational Methods in Risk
FRM304 Risk Financing Techniques
FRM310 Project

# Management

MAN101 Principles of Management

#### Marketing

MKT301 Principles of Marketing
MKT404 Methods in Business Research

#### **Actuarial Science**

ARM201 Introduction to Actuarial Science ARM501 Stochastic Process/Modeling ARM601 Models of Financial Economics-I ARM602 Models of Financial Economics - II

#### **Finance**

FIN201 Introduction to Business Finance
 FIN406 Financial Econometrics
 FIN503 Corporate Finance
 FIN507 Portfolio Management
 FIN509 Financial Derivatives

#### Language

LAN 10\* Foreign Language I

LAN 20\*\* Foreign Language II

\*1 = Introduction to Arabic \*2 = Introduction to French

\*4 = Introduction to German

\*6 = Introduction to Italian

\*8 = Introduction to Chinese

\*\*1 = Intermediate Arabic

\*\*4 = Intermediate German

\*\*2 = Intermediate French \*\*6 = Intermediate Italian

\*\*8 = Intermediate Chinese

#### LAW

LAW401 Business Law



MathematicsPolitical SciencesMTH104 Calculus IPSC301 Pakistan Studies

MTH105 Calculus II

MTH204 Linear Algebra Religious Studies
MTH209 Financial Mathematics I REL101 Islamic Studies
MTH210 Financial Mathematics II

MTH211 Actuarial Mathematics MTH405 Numerical Analysis

Statistics

STA203Probability Theory and StatisticsSTA205Probability Theory and Statistics IISTA210Sampling TheorySTA301Model and InferencesSTA302Methods of Data AnalysisSTA303Time Series Analysis and ForecastingSTA305Applied Regression AnalysisSTA307Decision Theory

STA305 Applied Regression Analysis STA307 Decision Theory
STA309 Loss Models I STA310 Loss Models II

**Elective Courses** 

**Finance and Risk Management** 

FRM503 Corporate Risk Management FRM504 Theory of Risk and Insurance
FRM505 Corporate Treasury and Risk Management FRM506 Financial Regulation for Risk Management
FRM508 Financial Market Issues and Crisis FRM508 Financial Management

FRM508 Financial Market Issues and Crisis FRM510 Energy Risk Management FRM512 International Risk and Financial Reporting FRM513 Project Risk Management

FRM514 Takaful and Risk Management in Islamic Products FRM516 International Financial Reporting and Standards

FRM517 Property Risk Management FRM518 Management of Insurance Institutions

**Computer Sciences** 

CSC103 Structured Programming Language

#### **Course Structure**

Semester One Academic English (3+0) [Pre req NA] Principles of Microeconomics Foreign Language I Probability Theory and Statistics Calculus I Islamic Studies	Semester Two Introduction to Financial Accounting Probability Theory and Statistics II Calculus II Principles of Macroeconomics Financial Mathematics I Introduction to Actuarial Science	Semester Three Principles of Marketing Linear Algebra Model and Inferences Introduction to Business Finance Persuasive & Analytical Writing for Bus. Com. (3+0) [Pre Req. COM107] Financial Mathematics II
Semester Four Numerical Computing Business Law Introduction to Econometrics Principles of Management Pakistan Studies Method of Data Analysis	Semester Five Financial Derivatives Actuarial Mathematics Principles of Risk Management Stochastic Processes Financial Econometrics Corporate Finance	Semester Six Portfolio Management Life and Other Contingencies Enterprise Risk Management Sampling Theory Models in Financial Economics I Methods in Business Research
Semester Seven Institutional Investments Models in Financial Economics II Applied Regression Analysis Computational Methods in Risk Mgmt. Loss Models I Elective I	Semester Eight Decision Theory Loss Models II Risk Financing Techniques Time Series Analysis & Forecasting Project Elective II	



# **BS MATHEMATICS AND ECONOMICS**

BS (Mathematics & Economics) is an interdisciplinary undergraduate program for students with robust mathematical skills and a keen interest in economics. This program is a perfect blend of pure and applied mathematics which does not only ensure a solid quantitative foundation for both disciplines but also provides phenomenal coverage of Statistics, Actuarial Sciences, and Finance.

Graduates with this degree are increasingly valued by employers because of their critical reasoning and sound knowledge as much of the economic theory is currently presented in terms of mathematical models. This opens more career options than the ones traditionally available to either mathematics or economics majors. This degree is also a paragon for those who aim for Master's/Doctoral degree in Economics, Finance, Mathematics, Statistics, Actuarial Sciences or other related fields.

The BS (Mathematics & Economics) is a four-year program. Applicants who have successfully completed H.Sc with minimum 50% marks in Pre-Engineering or in General Group (with Mathematics) or A-Levels with a maximum 2 'C's in three principal subjects (with Mathematics) are eligible to apply for admission. The graduation requirement is the completion of 138 credit hours of course work and 6 credit hours of a project approved by the college. Students must take a minimum load of 12 credit hours (four courses) or a maximum load of 18 credit hours (six courses) in a semester. In order to obtain a BS degree in four years, a student is required to cover twelve courses in a year. Full load of six courses can be taken each in the Fall and Spring semesters with an option of four courses in the latter and making up the shortfall in the summer session. Students must maintain a CGPA of 2.5 for the conferment of the degree.

#### BS Mathematics and Economics students learn to:

- Develop mathematical thinking, evolving from a computational / procedural understanding of mathematics to a broad understanding that involves logical reasoning, generalization, inference and formal proof
- Learn the fundamental aspects of economics, formulation and use of quantitative models arising in social science, business and other contexts
- · Acquire an understanding of basic pure mathematics, and of the role of logical argument in mathematics
- Learn to use basic econometric methods to quantify uncertainty with confidence intervals; use regression to infer causal relationships; and use regressions for prediction

# **Learning Outcomes for Business Analytics Students include:**

- 1. An ability to communicate effectively with the educational and business community and with society at large about mathematical and economical principles, concepts, and solution to problems with precision and adherence in written, oral and graphical form about concrete questions and to prepare well-organized written arguments that clearly state assumptions/ hypotheses supported by evidence
- 2. An ability to optimally apply economic analysis to everyday economic problems in the real world. This shall allow them to understand current events and evaluate potential policy proposals. Moreover, an appreciation shall be developed to evaluate the role played by assumptions in situations that reach various conclusions to a specific economic or policy problem.
- 3. Be equipped with skills to apply optimization models to consumer, producer, and market theories and to use game theory to analyze the strategic behavior of individuals and firms
- 4. Be equipped with the investigative skills necessary for conducting original economic research and participating effectively in project teams



# **Eligibility Criteria**

The BS (Mathematics and Economics) is a four-year program. Applicants who have successfully completed H.Sc with minimum 50% marks in Pre-Engineering or in General Group (with Mathematics/Statistics/Computer Science) or A-Levels with a maximum 2 'C's in three principal subjects (with Mathematics/Statistics/Computer Science) are eligible to apply for admission.

# **Required Courses**

Communication

COM107	Academic English	MTH104	Calculus I
COM202	Business and Professional Speech	MTH105	Calculus II
COM205	Persuasive & Analytical Writing for Bus. Communication	MTH203	Introduction to Formal Mathematics
		MTH204	Linear Algebra
Economi	cs	MTH213	Introduction to Computing
ECO101	Principles of Microeconomics	MTH214	Game Theory
ECO102	Principles of Macroeconomics	MTH224	Multivariable Calculus
ECO103	Microeconomics Analysis	MTH251	Number theory
ECO105	Macroeconomics Analysis	MTH303	Analysis I
ECO301	Managerial Economics	MTH304	Analysis II
ECO302	International Trade	MTH344	Introduction to Differential Equations
ECO303	Financial Economics	MTH346	Partial Differential Equations
ECO307	Monetary theory and Policy	MTH350	Topics in Mathematical Economics
ECO402	Pakistan Economic Policy	MTH403	Numerical Analysis
ECO410	Econometrics I	MTH427	Topology
ECO412	Econometrics II	MTH401	Complex Analysis

#### Language

Language	
LAN 10* Foreign Language I	
LAN 20** Foreign Language II	
*1 = Introduction to Arabic	*2 = Introduction to French
*4 = Introduction to German	*6 = Introduction to Italian
*8 = Introduction to Chinese	
**1 = Intermediate Arabic	**2 = Intermediate French
**4 = Intermediate German	**6 = Intermediate Italian
**8 = Intermediate Chinese	

#### **Political Sciences**

PSC301 Pakistan Studies

ECO507 Development Economics

# **Programming**

Mathematics

CSC113	Programming Fundamentals
CSC213	Object Oriented Programming
CSC215	Data Structure and Algorithms

MTH433 Optimization Techniques MTH437 Functional Analysis

# **Religious Studies**

**REL101** Islamic Studies

#### Statistics

STA203	<b>Probability Theory and Statistics</b>
STA301	Model and Inference
STA302	Methods of Data Analysis
STA303	Time Series Analysis
STA305	Applied Regression Analysis



#### **Elective Courses**

Mathematics	Economics
MTH406 Finite Element Analysis	ECO314 Contemporary Issues in Macroeconomics
MTH411 Modelling and Simulation	ECO321 General Equilibrium and Welfare Economics
MTH421 Abstract Algebra	ECO407 Analysis of Pakistani Industries
MTH430 Operational Research	ECO414 Islamic Economics
MTH439 Introduction to Dynamical Systems	ECO415 WTO, Disputes and Settlements
MTH451 Number Theory	ECO416 Growth Theories
MTH456 Statistical Machine Learning	ECO419 Agriculture and Food Security
MTH457 Deep Learning	ECO418 Resource & Environmental Economics
	ECO442 Public Finance
	ECO444 Economics of Logistics
	ECO526 Energy Economics
	ECO527 History of Economics Idea
Course Structure	ECO528 Economics and Social Equilibrium

#### Semester One (19 Credit Hours) Semester Two (19 Credit Hours) Topics in Mathematical Economics (3+0) [Pre req ECO101 & Islamic studies (3+0) [Pre req NA] Academic English (3+0) [Pre req NA] MTH104] Principles of Microeconomics (3+0) [Pre req NA] Persuasive. & Analytical Writing for Business Communication Calculus I (3+0) [Pre req NA] (3+0) [COM107] Foreign Language (3+0) I [Pre req NA] Principles of Macroeconomics (3+0) [Pre req NA] Programming Fundamentals (3+1)[Pre req NA] Calculus II (3+0) [Pre reg MTH104] Probability theory & Statistics (3+0) [Pre req MTH104] Object Oriented Programming (3+1) [Pre req CSS113] Semester Three (19 Credit Hours) Semester Four (18 Credit Hours) Microeconomic Analysis (3+0) [Pre req ECO101] Macroeconomics Analysis (3+0) [Pre req ECO102] Multivariable Calculus (3+0) [Pre req MTH105] Analysis I (3+0) [Pre req MTH203] Model and inference (3+0) [Pre req STA203] Methods of Data Analysis (3+0) [Prereq STA301] Introduction to Formal Mathematics (3+0) [Pre req NA] Linear Algebra (3+0) ([Pre req NA] Business and Professional Speech (3+0) [Pre req COM202] Development Economics (3+0) [Pre req ECO103 & ECO105] Data Structure and Algorithms (3+1) [Pre Req. CSC213] Game Theory (3+0) [Pre req ECO103] Semester Five (18 Credit Hours) Semester Six (18 Credit Hours) Numerical Analysis (3+0) [Pre req MTH105, MTH204 & MTH344] Pakistan Studies (3+0) [Pre req NA] International Trade (3+0) [Pre req ECO103 & ECO105] Complex Analysis (3+0) [Pre req MTH303 & MTH304] Analysis II (3+0) [Pre req MTH301] Econometrics I (3+0) [Pre req STA301] Applied Regression Analysis (3+0) [Pre req STA302] Financial Economics (3+0) [Pre req ECO102] Managerial Economics (3+0) [Pre req ECO101 & ECO102] Partial Differential Equations (3+0) [Pre req MTH 344] Introduction to Differential Equations (3+0) [Pre req NA] Monetary theory & Policy (3+0) [Pre req ECO105] Semester Seven (18 Credit Hours) Semester Eight (15 Credit Hours) Econometrics II (3+0) [Pre reg ECO410] Time Series Analysis (3+0) [Pre reg STA305] Pakistan Economic Policy (3+0) Optimization Techniques (3+0) Functional Analysis (3+0) Topology (3+0) Economics Elective I (3+0) Economics / Mathematics Elective II (3+0) Mathematics Elective I (3+0) Final Year Project II (0+3)



Final Year Project I (0+3)

# **BS DATA SCIENCE**

BS (Data Science) focuses on statistical analysis and theoretical computer science to develop solutions that employ robust mathematical models. These models help AI (Artificial Intelligence) and other predictive tools for data mining and reaching closer to the solution.

This program has a dual emphasis on the basic principles of statistics and computer science, with foundational training in statistical and mathematical aspects of data analysis. This program is, additionally, based on broad computer science principles, including algorithms, data structures, data management, and machine learning. The program is suitable for students interested either in a career in industry or more specialized graduate study. This program will prepare students for a career in data analysis, combining foundational statistical concepts with computational principles from computer science. A major component of this degree is the final year two-semester project that teaches students how to apply statistical and computational principles for solving large-scale, real-world data analysis problems. BS (Data Science) is a four-year degree program. It requires completion of 144 credit hours of course work and compulsory internship of at least six weeks at an organization approved by the Institute.

#### Data Science students learn to:

- Define information needs of individuals and organizations;
- Select and transform data to increase usefulness for solving particular problems;
- Analyze and synthesize unstructured data to create actionable information;
- Create information visualizations for data exploration and presentation;
- Manage very large volume data sources from acquisition through disposal;
- Secure and preserve data in ways consistent with legal and organizational considerations.

#### **Learning Outcomes for Data Science students include:**

- 1. Knowledge of how to apply analytic techniques and algorithms (including statistical and data mining approaches) to large data sets to extract meaningful insights.
- Acquisition of hands-on experience with relevant software tools, languages, data models, and environments for data processing and visualization.
- 3. Ability to communicate results of analysis effectively (visually and verbally) to a broad audience.

#### **Career Path**

- 1. Data Architect
- 3. Data Scientist
- 5. Data Engineer
- **Prospective Firms/Companies** 
  - 1. Real Estate Industry
- 3. Social Media Data Analytics Firms
- 5. Banking Sector
- 7. Communication & Transportation Industry

- 2. Infrastructure Architect
- 4. Data Analyst
- 6. Machine Learning Engineer
- 2. Hospital Industry
- 4. Food and Supply Industry
- 6. Airline Industry
- Government & Private Sector

## **Eligibility Criteria**

The BS (Data Science) is a four-year program. Applicants who have successfully completed H.Sc with minimum 50% marks in Pre-Engineering or in General Group (with Mathematics/Statistics/Computer Science) or A-Levels with a maximum 2 'C's in three principal subjects (with Mathematics/Statistics/Computer Science) are eligible to apply for admission.



#### **General Education Courses**

#### Communication

COM107 Academic English

COM202 Business and Professional Speech

COM205 Persuasive & Analytical Writing for Bus. Comm

#### Information Technology

CSC111 Information and Communication Technology

CSC111 Information and Communication Technology LAB

CSC219 Professional Practices

#### **Religious Studies**

**REL101** Islamic Studies

#### **Political Sciences**

PSC301 Pakistan Studies

# **University Elective Courses**

#### Accounting

ACC101 Introduction to Financial Accounting

#### **Economics**

ECO104 Micro and Macroeconomics ECO304 Introduction to Econonometrics

#### Management

MAN101 Principles of Management MAN411 Project Management

#### Language

LAN 10\* Foreign Language I

\*8 = Introduction to Chinese

#### **Foundation Courses**

# **Mathematics & Statistics**

MTH107 Calculus & Analytical Geometry

MTH204 Linear Algebra

STA203 Probability Theory and Statistics I STA205 Probability Theory & Statistics II

#### **Computing (Core Courses)**

CSC113 Programming Fundamentals

CSC113 Programming Fundamentals LAB

CSC213 Object Oriented Programming

CSC213 Object Oriented Programming LAB

CSC215 Data Structures & Algorithms

CSC215 Data Structures & Algorithms LAB

CSC217 Intro to Database Systems

CSC217 Intro to Database Systems LAB

CSC231 Discrete Structures

CSC313 Operating Systems

CSC313 Operating Systems LAB

CSC317 Intro to Software Engineering

CSC319 Computer Networks

CSC319 Computer Networks LAB

CSC419 Information Security

BDS491 Final Year Project I

BDS492 Final Year Project II

#### **Data Science Supporting Courses**

MTH215 Differential Equations

MTH224 Multivariable Calculus

MTH405 Numerical Computing

STA301 Model and Inferences

STA302 Methods of Data Analysis

#### **Data Science (Core Courses)**

BDS101 Introduction to Data Science

BDS201 Business Process Analysis

BDS301 Data Mining-I

BDS302 Data Mining-II

BDS401 Data Visualization

BDS402 Big Data Concepts & Techniques

BDS403 Big Data & Analytics

BDS404 Machine Learning

#### **Elective Courses**

# **Data Science**

**BDS410** Stochastic Processes

BDS411 Time Series Analysis & Forecasting

**BDS412** Business Analytics

**BDS413** Bioinformatics

BDS414 Game Theory

BDS415 Financial Data Analytics

BDS416 Introduction to Data Warehousing

BDS417 Artificial Intelligence

**BDS418** Health Informatics

BDS419 Design & Analysis of Algorithms



Semester One (19 Credit Hours) Programming Fundamentals (3+0) [Pre Req. NA] Programming Fundamentals LAB (0+1) [Pre Req. NA] Probability Theory & Statistics I (3+0) [Pre Req. NA] Information and Comm. Tech. (2+0) [Pre Req. NA] Information and Comm. Tech. LAB (0+1) [Pre Req. NA] Calculus & Analytical Geometry (3+0) [Pre Req. NA] Islamic Studies (3+0) [Pre Req. NA] Academic English (3+0) [Pre Req. NA]	Semester Two (19 Credit Hours)  Multivariable Calculus (3+0) [Pre Req. MTH107]  Object Oriented Programming (3+0) [Pre Req. CSC113]  Object Oriented Programming LAB (0+1) [Pre Req. CSC113]  Probability Theory & Statistics II (3+0) [Pre Req. STA203]  Discrete Structures (3+0) [Pre Req. NA]  Pakistan Studies (3+0) [Pre Req. NA]  Persuasive & Analytical Writing for Bus. Comm. (3+0) [Pre Req. COM107]
Semester Three (19 Credit Hours) Linear Algebra (3+0) [Pre Req. MTH107] Introduction to Data Science (2+1) [Pre Req. NA] Model & Inferences (3+0) [Pre Req. STA205] Introduction to Software Engineering (3+0) [Pre Req. NA] Data Structures & Algorithms (3+0) [Pre Req. CSC213] Data Structures & Algorithms LAB (0+1) [Pre Req. CSC213] Micro & Macroeconomics (3+0) [Pre Req. NA]	Semester Four (19 Credit Hours)  Differential Equations (3+0) [Pre Req. MTH224]  Introduction to Database Systems (3+0) [Pre Req. CSC215]  Introduction to Database Systems LAB (0+1) [Pre Req. CSC215]  Methods of Data Analysis (3+0) [Pre Req. STA301]  Business Process Analysis (3+0) [Pre Req. STA301]  Professional Practices (3+0) [Pre Req. NA]  Foreign Language I (3+0) [Pre Req. NA]
Semester Five (19 Credit Hours) Numerical Computing (3+0) [Pre Req. MTH204] Data Mining I (3+0) [Pre Req. BDS101] Introduction to Econometrics (3+0) [Pre Req. STA302] Principles of Management (3+0) [Pre Req. NA] Operating Systems (3+0) [Pre Req. CSC215] Operating Systems (0+1) [Pre Req. CSC215] Business & Professional Speech (3+0) [Pre Req. COM107]	Semester Six (19 Credit Hours) Computer Networks (3+0) [Pre Req. NA] Computer Networks LAB (0+1) [Pre Req. NA] Data Mining II (3+0) [Pre Req. BDS301] Data Visualization (3+0) [Pre Req. BDS301] Project Management (3+0) [Pre Req. NA] Elective I (3+0) [Pre Req. NA] Elective II (3+0) [Pre Req. NA]
Semester Seven (15 Credit Hours) Big Data Concepts & Techniques (3+0) [Pre Req. BDS101] Introduction to Financial Accounting (3+0) [Pre Req. NA] Elective III (3+0) [Pre Req. NA] Elective IV (3+0) [Pre Req. NA] Final Year Project I (0+3) [Pre Req. CSC317]	Semester Eight (15 Credit Hours) Big Data & Analytics (2+1) [Pre Req. CSC113 & STA205] Information Security (3+0) [Pre Req. NA] Machine Learning (3+0) [Pre Req. NA] Elective V (3+0) [Pre Req. NA] Final Year Project II (0+3) [Pre Req. BDS491]



# **BS MATHEMATICS AND COMPUTATIONAL FINANCE**

The BS in Mathematical and Computational Finance is an applied Mathematics program with a well-developed application in Finance structured for the students who might be interested in Mathematics and desire for a career in Business. BS Financial Mathematics course offers a comprehensive variety of modules across mathematics, statistics, finance, and programming. The course will empower the student to cultivate expertise in creative problem-solving and logical reasoning, to analyze market forces, minimize risk and maximize profitability, which are in great demand in a wide range of career sectors.

BS in Mathematical and Computational Finance will be a 4-year degree program with two semesters in each year. It will require the completion of 138 credit hours of course work, 6 credit hours of the project approved by the college and compulsory computational finance internship of at least 6 weeks in an approved firm. Students must take a minimum load of 12 credit hours (four courses) or a maximum load of 18 credit hours (six courses) in a semester. In order to obtain a BS degree in four years, a student is required to cover twelve courses in a year. Full load of six courses can be taken each in the Fall and Spring semesters with an option of four courses in the latter and making up the shortfall in the summer session. Students must maintain a CGPA of 2.5 for the conferment of the degree.

#### BS Mathematics and Computational Finance students learn to:

- Develop the computational and modelling techniques used to price tradable assets such as bonds, securities, loans, energy and associated derivatives
- Generate, model, value, hedge and trade ingenious financial products
- Acquire an analytical and strategic judgement for controlling the risk connected with complex financial transactions
- Be equipped with the engineering-driven approaches widely used to construct and deploy the financial transactions and processes that, in their context, function as the international financial system and capital markets
- Be provided with the educational background to pursue increasingly responsible management roles in industry
- Be prepared to enter leadership positions in the financial industry and government where they will use their quantitative skills and creativity to provide innovative solutions and develop new or improved products and services

#### Learning Outcomes for BS Mathematics and Computational Finance Students include:

- 1. Ability to apply knowledge of mathematics and mathematical methods to the pricing and hedging of financial derivative securities
- 2. An ability to use empirical evidence to assess the validity of mathematical and financial argument. This shall involve the use of financial data and mathematical methodology, ability to interpret results and conduct appropriate mathematical analysis.
- 3. Ability to work effectively, both independently and as part of an interdisciplinary group
- 4. A recognition of the need for and an ability to engage in lifelong learning

#### **Eligibility Criteria**

The BS (Mathematical and Computational Finance) is a four-year program. Applicants who have successfully completed H.Sc with minimum 50% marks in Pre-Engineering or in General Group (with Mathematics) or A-Levels with a maximum 2 'C's in three principal subjects (with Mathematics) are eligible to apply for admission.

#### **Required Courses**

#### Accounting

ACC101 Introduction to Financial Accounting ACC201 Intermediate Financial Accounting

#### Communication

COM107 Academic English
COM202 Business and Professional Speech
COM205 Persuasive & Analytical Writing for Bus. Comm.



#### **Finance**

FIN201 Introduction to Business Finance

FIN202 Financial Management FIN503 Corporate Finance FIN509 Financial Derivatives FIN613 Financial Modeling

#### Language

LAN 10\* Foreign Language I LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

#### **Religious Studies**

**REL101** Islamic Studies

#### **Political Sciences**

PSC301 Pakistan Studies

#### **Statistics**

STA203 Probability Theory and Statistics STA207 Qualitative Data Analysis STA301 Model and Inference

STA304 Quantitative Data Analysis STA306 Applied Econometrics

#### Internship

Internship related to Financial Mathematics

#### **Elective Courses**

#### **Mathematics**

MTH439 Introduction to Dynamical Systems

MTH437 Functional Analysis

MTH406 Finite Element Methods

MTH456 Statistical Machine Learning

MTH457 Deep Learning

MTH440 Advanced Methods for Data Analysis

MTH452 Convex and Non-Linear Analysis

MTH451 Number Theory

#### Mathematics

MTH102 Financial Calculus I

MTH106 Financial Calculus II

MTH204 Linear Algebra

MTH224 Multivariable Calculus

MTH203 Introduction to Formal Mathematics

MTH303 Analysis I

MTH304 Analysis II

MTH344 Introduction to Differential Equations

MTH346 Partial Differential Equations

MTH403 Numerical Analysis

MTH310 Discrete Time Finance

MTH410 Continuous Time Finance

MTH430 Operations Research

MTH501 Probability and Measure Theory

MTH309 Stochastic Processes

MTH\*\*\* Mathematics Elective I

MTH\*\*\* Mathematics Elective II

#### Finance and Risk Management

FRM201 Principles of Risk Management

FRM401 Advance Financial Risk Management

#### **Programming**

CSC113 Programming Fundamentals

CSC213 Object Oriented Programming

CSC215 Data Structure and Algorithms

#### Project

Computational Finance Project 1
Computational Finance Project 1

#### **Finance**

FIN403 Islamic Banking and Finance

FIN506 Investment Banking and Security Analysis

FIN507 Portfolio Management

FIN511 Analysis of Financial Statement

FIN512 Money and Capital Market

FIN515 Foreign Trade and Banking



Semester One (19 Credit Hours)	Semester Two (19 Credit Hours)	
Islamic Studies (3+0)	Probability Theory and Statistics (3+0)	
Academic English (3+0)	Persuasive & Analytical Writing for Business Comm. (3+0)	
Principles of Microeconomics (3+0)	Principles of Macroeconomics (3+0)	
Financial Calculus I (3+0)	Financial Calculus II (3+0)	
Introduction to Financial Accounting (3+0)	Intermediate Financial Accounting (3+0)	
Programming Fundamentals (3+1)	Object Oriented Programming (3+1)	
Semester Three (19 Credit Hours)	Semester Four (18 Credit Hours)	
Introduction to Business Finance (3+0)	Financial Management (3+0)	
Introduction to Formal Mathematics (3+0)	Analysis I (3+0)	
Model and Inference (3+0)	Qualitative Data Analysis (3+0)	
Multivariable Calculus (3+0)	Linear Algebra (3+0)	
Business and Professional Speech (3+0)	Foreign Language (3+0)	
Data Structure and Algorithms (3+1)	Pakistan Studies (3+0)	
Semester Five (18 Credit Hours)	Semester Six (18 Credit Hours)	
Principal of Risk Management (3+0)	Numerical Analysis (3+0)	
Analysis II (3+0)	Measure Theory (3+0)	
Quantitative Data Analysis (1+2)	Stochastic Process (3+0)	
Applied Econometrics (2+1)	Corporate Finance (3+0)	
Introduction to Differential Equations (3+0)	Partial Differential Equations (3+0)	
Financial Modeling (0+3)	Financial Derivatives (3+0)	
Semester Seven (18 Credit Hours)	Semester Eight (15 Credit Hours)	
Advance Financial Risk Management (3+0)	Fintech (3+0)	
Discrete Time Finance (3+0)	Continuous Time Finance (3+0)	
Operations Research (3+0)	Finance Elective II (3+0)	
Finance Elective I (3+0)	Mathematics Elective II (3+0)	
Mathematics Elective I (3+0)	Computational Finance Project II (0+3)	
Computational Finance Project I (0+3)		



# **BS SOFTWARE ENGINEERING (BS SE)**

This program is devised to gear students in acquiring skills to undertake the issues of designing and developing reliable software with a clear understanding of problem-solving techniques, software quality and testing, and management practices.

The graduates of this program would have the confidence and skills to become technology entrepreneurs. They may also join careers as software engineers and may move on to become analysts, designers, and architects in software houses or freelance solution providers. The program is designed to satisfy general requirements and meets the criteria adopted by the Higher Education Commission (HEC) of Pakistan. The aim is to prepare students to serve the productive needs of Pakistan's software industry. It requires completion of 138 credit hours of course work. Students are required to take 43 courses (including Final Year Project and relevant labs) & internship, approved by the institute, in order to complete their degree requirements. Students must maintain a CGPA of 2.5 for the conferment of the degree.

#### BS Software Engineering students learn:

- To enable the graduates to apply knowledge gained during the program effectively and efficiently in software industry
- To contribute, manage, and lead, computer science and software development teams
- To actively pursue lifelong learning and innovation skills
- To equip graduates with latest software tools and techniques
- To groom graduates to occupy senior technical and managerial positions
- To successfully bring innovation in IT technology as a whole

#### **Learning Outcomes for BS Software Engineering Students include:**

- 1. Equip themselves with latest software tools
- 2. Successfully bring innovation in it technology
- 3. An ability to function effectively on teams to accomplish a common goal
- 4. An understanding of professional, legal, security and social issues of it
- 5. An ability to communicate effectively with a range of audiences
- 6. An ability to develop software systems of varying complexity
- 7. Will develop logical thinking process

#### **Career Path:**

- 1. Web Developer
- 3. Software Developer
- 5. Entry Level Software Developer
- 7. SQL Developer
- 9. Data Engineer

#### **Prospective Employers:**

- 1. Cyber Internet Services
- 3. Banking Sector
- 5. Hospital Industry
- 7. Communication Industry
- 9. Governemnt & Private Sector

- 2. Software Engineer
- 4. Front End Developer
- 6. Entry Level Software Engineer
- 8. Entry Level Web Developer
- 10. Unity Developer
- 2. Internet Service Providers
- 4. Real Estate Industry
- 6. Software Houses
- 8. Transportation Sector

# **Eligibility Criteria**

The BS (Software Engineering) is a four-year program. Applicants who have successfully completed H.Sc with minimum 50% marks in Pre-Engineering or in General Group (with Mathematics/Computer Science) or A-Levels with a maximum 2 'C's in three principal subjects (with Mathematics/Computer Science) are eligible to apply for admission.



#### **Required Courses**

#### Accounting

ACC101 Introduction to Financial Accounting

#### **Economics**

ECO104 Micro and Macroeconomics

#### Communication

COM107 Academic English

COM202 Business and Professional Speech

COM205 Persuasive & Analytical Writing for Business Comm.

#### Management

MAN101 Principles of Management MAN411 Project Management

#### **Political Sciences**

PSC301 Pakistan Studies

#### Language

LAN 10\* Foreign Language I

LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

# **Computing (Core Courses)**

CSC113 Programming Fundamentals
CSC113 Programming Fundamentals LAB
CSC213 Object Oriented Programming
CSC213 Object Oriented Programming LAB
CSC215 Data Structures & Algorithm
CSC215 Data Structures & Algorithm LAB
CSC217 Intro to Database Systems
CSC217 Intro to Database Systems LAB
CSC231 Discrete Structures
CSC313 Operating Systems
CSC313 Operating Systems LAB
CSC317 Intro to Software Engineering
CSC319 Computer Networks

CSC317 Intro to Software Engineer
CSC319 Computer Networks
CSC319 Computer Networks LAB
CSC419 Information Security
CSC491 Final Year Project (FYP) I
CSC492 Final Year Project (FYP) II

#### **Information Technology**

CSC111 Information & Communication Technology
CSC111 Information & Communication Technology LAB

CSC219 Professional Practices

#### **Physics**

PHY111 Applied Physics

#### **Mathematics**

MTH107 Calculus and Analytical Geometry

MTH204 Linear Algebra

#### Statistics

STA203 Probability Theory and Statistics

#### **Religious Studies**

**REL101** Islamic Studies

#### **Software Engineering Core (Compulsory Courses)**

SEC212 Human Computer Interaction

SEC111 Software Requirements Engineering

SEC211 Software Design & Architecture

SEC311 Software Construction and Development

SEC411 Software Re-Engineering

SEC321 Software Quality Engineering

SEC322 Web Engineering

SEC323 Software Project Management

#### **Software Engineering (Supporting Courses)**

SEC351 Business Process Engineering

SEC352 Formal Methods in Software Engineering

SEC353 Stochastic Processes

# **Software Engineering (Elective Courses)**

SEC461 Computer Graphics

SEC462 Visual Programming

SEC463 E-Commerce

SEC464 Systems Programming

SEC465 Game Application Development

SEC466 Mobile Application Development

SEC471 Agent Based Software Engineering

SEC472 Semantic Web

SEC473 Natural Language Processing

SEC474 Real-Time Systems

SEC481 Cloud Computing

SEC482 Big Data Analytics

SEC483 Multimedia Communication

SEC491 Management Information Systems

SEC492 Data Encryption and Security

SEC493 Information Systems Audit

5EC433 Illioilliation Systems Addit

SEC494 Global Software Development

SEC495 Software Engineering Economics

SEC496 Software Metrics

SEC499 Topics in Software Engineering



Semester One Intro to Info. & Comm. Technology (2+1) [Pre Req. NA] Programming Fundamentals (3+0) [Pre Req. NA] Programming Fundamentals LAB (0+1) [Pre Req. NA] Calculus and Analytical Geometry (3+0) [Pre Req. NA] Academic English (3+0) [Pre Req. NA] Pakistan Studies (3+0) [Pre Req. NA] Applied Physics (3+0) [Pre Req. NA]	Semester Two Object Oriented Programming (3+0) [Pre Req. CSC113] Object Oriented Programming LAB (0+1) [Pre Req. CSC113] Discrete Structures (3+0) [Pre Req. NA] Intro to Software Engineering (3+0) [Pre Req. NA] Islamic Studies (3+0) [Pre Req. NA] Micro and Macroeconomics (3+0) [Pre Req. NA Persuasive & Analytical Writing for Bus. Comm. (3+0) [Pre Req. COM107]	
Semester Three Data Structures and Algorithms (3+0) [Pre Req. CSC213] Data Structures and Algorithms LAB (0+1) [Pre Req. CSC213] Software Requirements Engineering (3+0) [Pre Req. CSC317] Human Computer Interaction (3+0) [Pre Req. CSC317] Linear Algebra (3+0) [Pre. Req. MTH107]	Semester Four Intro. to Database Systems (3+0) [Pre. Req. CSC215] Intro. to Database Systems LAB (0+1) [Pre. Req. CSC215] Operating Systems (3+0) [Pre. Req. CSC215] Operating Systems LAB (0+1) [Pre. Req. CSC215] Software Design & Architecture (2+1) [Pre. Req. SEC111] Probability Theory and Statistics (3+0) [Pre Req.NA] Principles of Management (3+0) [Pre. Req. NA]	
Semester Five Software Construction and Dev. (2+1) [Pre. Req. SEC211] Computer Networks (3+0) [Pre Req. NA] Computer Networks LAB (0+1) [Pre Req. NA] SE Supporting I (3+0) [Pre Req. NA] SE Supporting II (3+0) [Pre Req. NA] Business & Professional Speech (3+0) [Pre Req. COM107]	Semester Six Software Quality Engineering(3+0) [Pre Req. CSC317] Information Security(3+0) [Pre Req.NA] Professional Practices (3+0) [Pre Req. NA] Web Engineering(3+0) [Pre Req. NA] SE Elective I (3+0) [Pre Req. NA] SE Supporting III (3+0) [Pre Req. NA]	
Semester Seven Software Project Management(3+0) [Pre Req. CSC317] Software Re-Engineering (3+0) [Pre Req. SEC311] SE Elective II (3+0) [Pre Req. NA] SE Elective III (3+0) [Pre Req. NA] FYP I (0+3) [Pre Req. CSC317]	Semester Eight SE Elective IV (3+0) [Pre Req. NA] SE Elective V (3+0) [Pre Req. NA] FYP II (0+3) [Pre Req. CSC491] Project Management (3+0) [Pre Req. NA]	



# **BS STATISTICS & BUSINESS ANALYTICS**

BS (Statistics & Business Analytics) is designed to give you substantial hands-on digital skills, teaching you statistical theory and data analysis techniques with the perspective of business analytics. You will learn how to use these skills to solve business problems, applying them to specific areas in marketing, finance, and economics. In addition, you will learn international and sustainable business management from both theoretical and experiential viewpoints. The latest developments in Business Analytics' technology are playing a crucial role in automating the analysis process. It is also enabling both data analysis experts and business users to interpret data more easily and quickly. Business analytics are key differentiators, which provide a competitive edge to companies across industries.

BS (Statistics & Business Analytics) is a four-year degree program. It requires completion of 144 credit hours of course work and compulsory internship of at least six weeks at an organization approved by the Institute. A major component of this degree is the final year two-semester project that teaches students how to apply statistical and computational principles to solve large-scale, real-world data analysis problems.

#### Statistics & Business Analytics students learn to:

- Apply knowledge of Computing, Mathematics, and Statistics and integrate it with the business that is appropriate for the program
- · Get a thorough understanding of tools and methods and enhance their ability to do in-depth research
- Analyze the data pertinent to business problems to explore solutions
- Acquire the knowledge and skills to get a greater insight regarding the day-to-day challenges that businesses face
- Use knowledge of data analytics to apply in the important branches of business management such as Marketing, Human Resource Management, Finance and Risk Management, Supply Chain Management
- Change the world for the better in areas like healthcare, transportation, and education, etc.

# Learning Outcomes for Statistics & Business Analytics Students include:

- Design, implement and evaluate a computer-based system, process, component or program to meet desired needs
- 2. Communicate effectively with different audiences
- 3. Improve business-related decision-making skills by exploring and mining data from various aspects

#### **Career Path**

- 1. Marketing Analyst
- 3. CRM Analyst
- 5. Funds & Security Analyst

- 2. Financial Analyst
- 4. Supply Chain Analyst
- 6. Research Scientist

#### **Prospective Firms/Companies**

- 1. Banking Sector
- 3. Business Industry
- Transportation and Supply Chain Sector

- 2. Real Estate Sector
- 4. Communication Industry
- Governemnet & Private Sector

#### **Eligibility Criteria**

The BS (Statistics & Business Analytics) is a four-year program. Applicants who have successfully completed H.Sc with minimum 50% marks in Pre-Engineering or in General Group (with Mathematics/Statistics/Computer Science) or A-Levels with a maximum 2 'C's in three principal subjects (with Mathematics/Statistics/Computer Science) are eligible to apply for admission.



#### **Required Courses**

#### Accounting

ACC101 Introduction to Financial Accounting ACC201 Intermediate Financial Accounting

ACC401 Introduction to Managerial and Cost Accounting

#### Communication

COM107 Academic English

COM202 Business and Professional Speech

COM205 Persuasive & Analytical Writing for Business Comm.

#### **Economics**

ECO101 Principles of Microeconomics
ECO102 Principles of Macroeconomics

ECO103 Intermediate Micro and Macroeconomics

ECO301 Managerial Economics
ECO304 Introduction to Econometrics

ECO402 Pakistan Economic Policy

#### Language

LAN 10\* Foreign Language I LAN 20\*\* Foreign Language II

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

#### **Elective Courses**

#### **Statistics**

STA315 Design of Experiment II STA316 Operations Research I STA317 Operations Research II

STA309 Loss Models I STA310 Loss Models II

STA319 Statistical Quality Control FRM201 Principles of Risk Management

# **Final Year Project**

STA491 Final Year Project I STA492 Final Year Project II

#### Finance & Risk Management

FIN201 Introduction to Business Finance

FIN202 Financial Management

FRM201 Principles of Risk Management

#### Management

MAN101 Principles of Management

MAN302 Organizational Behavior

MAN303 Production and Operations Management

#### **Management Information Systems**

MIS401 Computer Applications

#### **Human Resource Management**

HRM301 Human Resource Management

#### **Religious Studies**

**REL101** Islamic Studies

#### **Political Sciences**

PSC301 Pakistan Studies

#### **Mathematics**

MTH100 Mathematics for Business

MTH104 Calculus I

MTH105 Calculus II

MTH204 Linear Algebra

MTH403 Numerical Analysis

#### Marketing

MKT301 Principles of Marketing

MKT302 Marketing Management

MKT404 Methods in Business Research

#### **Statistics**

STA203 Probability Theory and Statistics I

STA205 Probability Theory & Statistics II

STA210 Sampling Theory

STA301 Model and Inferences

STA302 Methods of Data Analysis

STA303 Time Series Analysis and Forecasting

STA305 Applied Regression Analysis

STA307 Decision Theory

STA311 Design of Experiment I

STA313 Applied Multivariate Analysis



Semester One (18 Credit Hours) Islamic Studies (3+0) [Pre Req. NA] Mathematics for Business (3+0) [Pre Req. NA] Principles of Management (3+0) [Pre Req. NA] Principles of Microeconomics (3+0) [Pre Req. NA] Probability Theory & Statistics I (3+0) [Pre Req. NA] Academic English (3+0) [Pre Req. NA]	Semester (18 Credit Hours) Persuasive & Analytical Writing for Bus. Comm. (3+0) [Pre Req. COM107] Pakistan Studies (3+0) [Pre Req. NA] Principles of Macroeconomics (3+0) [Pre Req. ECO101] Calculus I (3+0) [Pre Req. NA] Probability Theory & Statistics II (3+0) [Pre Req. STA203] Principles of Marketing (3+0)[Pre Req. NA]
Semester Three (18 Credit Hours) Computer Applications (2+1) [Pre Req. NA] Inter. Micro & Macroeconomics (3+0) [Pre Req. ECO102] Calculus II (3+0) [Pre Req. MTH104] Introduction to Financial Accounting (3+0) [Pre Req. NA] Model & Inferences (3+0) [Pre Req. STA205] Business & Professional Speech (3+0) [Pre Req. COM107]	Semester Four (18 Credit Hours)  Managerial Economics (3+0) [Pre Req. ECO103]  Linear Algebra (3+0) [Pre Req. MTH107]  Organizational Behavior (3+0) [Pre Req. MAN101]  Intermediate Financial Accounting (3+0) [Pre Req. ACC101]  Marketing Management (3+0) [Pre Req. MKT301]  Methods of Data Analysis (2+1) [Pre Req. STA301]
Semester Five (18 Credit Hours) Foreign Language I [Pre Req. NA] Human Resource Management (3+0) [Pre Req. MAN302] Introduction to Econometrics (2+1) [Pre Req. ECO102] Introduction to Business Finance (3+0) [Pre Req. NA] Methods in Business Research (3+0) [Pre Req. MKT302] Applied Regression Analysis (2+1) [Pre Req. STA302]	Semester Six (18 Credit Hours) Foreign Language II [Pre Req. LAN10*] Intro. to Managerial & Cost Accounting (3+0) [Pre Req. ACC201] Financial Management (3+0) [Pre Req. FIN201] Sampling Theory (2+1) [Pre Req. STA302] Numerical Analysis (3+0)[Pre Req. MTH204] Elective I (3+0) [Pre Req. NA]
Semester Seven (18 Credit Hours) Design of Experiment (2+1) [Pre Req. STA305] Production & Operations Management (3+0) [Pre Req. NA] Pakistan Economic Policy (3+0) [Pre Req. ECO103] Elective II (3+0) [Pre Req. NA] Elective III (3+0) [Pre Req. NA] Final Year Project I (0+3) [Pre Req. FRM201,STA305]	Semester Eight (18 Credit Hours) Decision Theory (3+0) [Pre Req. STA301] Applied Multivariate Analysis (2+1) Time Series Analysis & Forecasting (2+1) [Pre Req. STA305] Elective IV (3+0) [Pre Req. NA] Elective V (3+0) [Pre Req. NA] Final Year Project II (0+3) [Pre Req. STA491]



# MS COMPUTER SCIENCE

The Master of Science program in Computer Science provides intensive preparation in the concepts and techniques related to the design, programming, and application of computing systems. The program requires students to take a broad spectrum of courses and simultaneously allows for emphasis on the desired areas of specialization. The program is based on HEC guidelines. The program comprises two years of study over at least 4 semesters. It requires completion of 33 credit hours of course work. Students are required to complete 9 courses and a thesis of an equivalent of 6 credit hour equivalent of 2 courses in order to fulfill degree requirements. Students must maintain a CGPA of 3.0 for the conferment of the degree.

#### MS Computer Science students learn to:

- Impart a breadth of knowledge in core areas of Computer Science which include theoretical foundations and fundamentals
- Instill opportunities for a research-oriented program, in preparation for the Ph.D. program in computer science
- Link theory with practice and demonstrate analytical and proper decision-making abilities while developing computer systems
- Use their knowledge and critical independent thinking skills while working independently and/or in team environments

#### **Learning Outcomes for MS Computer Science students include:**

- Acquisition of hands-on experience with relevant software tools, languages, data models, and environments for data processing
- 2. Ability to communicate results of analysis effectively (visually and verbally) to a broad audience in the fields of biology, environment, finance and risk management, data science, business management, and other disciplines
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs
- 5. Be well-prepared for research and development in Computer Science in industry or academia
- Deal with the challenges of IT industry with global changes
- 7. Develop logical thinking process

#### Career Path:

1	Application Analyst	
Ι.	Application Analyst	

4. **UX** Designer

7. Information Systems Manager

10. Games Developer

#### 2. Applications Developer

5. IT Consultant

8. Multimedia Programmer

# 3. Data Analyst

6. Cybersecurity Consultant

9. Systems Analyst

#### **Prospective Employers:**

1. Cyber Internet Services

Industrial Sectors

7. Communication & Transportaion Sector 8. Colleges & Universities

2. Internet Service Providers

5. Software Houses

3. Banking Sectors

6. Real Estate Sector

9. Government & Private Sector

# Eligibility

BS(CS) / MCS / BE in Computer Engineering candidates are required to fulfill the requirement as proposed by the Department Board of Studies. Minimum CGPA of 2.5 (on a scale of 4.0). MS (Computer Science) program consists of two groups of courses, core and elective. The following core courses are recommended to be completed before entering the MS (CS) program.

- 1. Analysis of Algorithms
- 3. Computer Networks
- 5. Data Structures
- 7. Operating Systems
- 9. Theory of Automata

- 2. Assembly Lang. / Computer Architecture
- 4. Computer Programming
- 6. Database Systems
- 8. Software Engineering



A student selected for admission having a deficiency in the above-stated courses may be required to study a maximum of FOUR courses, which must be passed in the first two semesters. A student cannot register in MS courses unless all specified deficiency courses have been passed

#### **Program Requirements**

MS requires completion of course work and dissertation/thesis. Minimum duration is 2 years and the maximum is 4 years:

- MS course work requirements consist of nine graduate-level courses (27 credit hours)
- On completion of the dissertation/thesis, the student is awarded 6 credits

A MS student must additionally complete the following requirements:

- MS Proposal/Synopsis Development
- MS Proposal/Synopsis Defense
- BASR Approval of MS Proposal/Synopsis
- Continuous enrollment in supervised research courses for meeting the full-time residency requirements
- Completion of MS Dissertation/Thesis
- Selection of External Evaluators by BASR
- Evaluation of MS Dissertation by two external faculty members as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of MS dissertation
- Any other HEC requirement
- Final Dissertation/Thesis Submission to BASR

#### **Core Courses**

CSC540	Research Methodology
CSC543	Advanced Computer Architecture
CSC548	Advanced Analysis of Algorithm
CSC547	Advanced Operating Systems
CSC549	Theory of Programming Languages
CSC591	MS Thesis-I
CSC592	MS Thesis-II

#### **Elective Courses**

CSC561	Advanced Software Engineering	CSC562	Object Oriented Software Engineering
CSC563	Software Quality Assurance	CSC564	Software Requirement Engineering
CSC565	Software Testing Strategies	CSC571	Advanced Database Management Systems
CSC572	Data Warehousing	CSC573	Data Mining
CSC574	Distributed Systems	CSC575	Parallel and Distributed Algorithms
CSC578	Communication and Information Policy	CSC581	Neural Networks
CSC582	Pattern Recognition	CSC583	Fuzzy Systems
CSC584	Artificial Intelligence	CSC585	Machine Learning
CSC586	Deep Learning		

Semester One	Semester Two
Research Methodology	Advanced Operating Systems
Advanced Computer Architecture	Theory of Programming Languages
Advanced Analysis of Algorithm	Elective I
Semester Three	Semester Four
Elective II	Elective IV
Elective III	MS Thesis-II
MS Thesis-I	



# MS MATHEMATICS AND SCIENTIFIC COMPUTING

The MS program in Mathematics & Scientific Computing develops rigorous foundational mathematical tools that help in careers as researchers and solution providers.

The MS program in Mathematics & Scientific Computing prepares students for careers in research, applications, and teaching. Students choose courses from two areas of concentration for their course work: Mathematics and Computations. Students are required to qualify successfully for nine courses (5 compulsories and 4 electives) each of 3 credit hours' duration. On successful completion of MS, course work students will be allowed to work on a 6 credit hour thesis on a subject of their interest depending on the availability of the faculty. The program comprises two years of study over at least 4 semesters. It requires completion of 33 credit hours of course work. Students must maintain a CGPA of 3.0 for the conferment of the degree.

#### MS Mathematics & Scientific Computing students learn to:

- Develop a thorough understanding of mathematical methods before going to apply analytical skills to solve real-life problems
- Apply rigorous mathematical and computational skills used to handle problems to get meaningful results
- Establish and understand a connection between the techniques of mathematical analysis and scientific computing and their link with the real-life problems

#### Learning Outcomes for MS Mathematics & Scientific Computing students include:

- 1. Use knowledge to apply mathematical and scientific computing techniques and algorithms to real-life problems to extract meaningful insights
- 2. Acquisition of hands-on experience with relevant software tools, languages, data models, and environments for data processing
- 3. Ability to communicate results of analysis effectively (visually and verbally) to a broad audience in the fields of biology, environment, finance and risk management, data science, business management, and other disciplines

# Eligibility

16 Years of education in Computer Science, Engineering, Mathematics, Statistics or any other relevant field. Minimum CGPA of 2.5 (on a scale of 4.0).

#### **Program Requirements**

MS requires completion of course work and dissertation/thesis. Minimum duration is 2 years and the maximum is 4 years:

- MS course work requirements consist of nine graduate-level courses (27 credit hours)
- On completion of the dissertation/thesis, the student is awarded 6 credits

#### A MS student must additionally complete the following requirements:

- MS Proposal/Synopsis Development
- MS Proposal/Synopsis Defense
- BASR Approval of MS Proposal/Synopsis
- Continuous enrollment in supervised research courses for meeting the full-time residency requirements
- Completion of MS Dissertation/Thesis
- Selection of External Evaluators by BASR
- Evaluation of MS Dissertation by two external faculty members as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of MS dissertation
- Any other HEC requirement
- Final Dissertation/Thesis Submission to BASR



# **Required Courses**

#### **Compulsory Courses (15 credit hours)**

MTS609 Research Methodology MTS613 Advanced Topics in Algebra

MTS616 Advanced Real Analysis

MTS617 Advanced Numerical Analysis

MTS618 Statistical Modeling and Computing

#### **Elective Courses**

#### Mathematics Concentration (6 credit hours)

MTS612 Numerical Methods for ODEs and PDEs

MTS615 Dynamical System

MTS619 Special Topics in Mathematics

MTH621 Financial Mathematics

MTS627 Computational Fluid Dynamics

MTS629 Numerical Computing and Optimization

MTS631 Advance Functional Analysis

#### Computer Concentration (6 credit hours)

MTS622 Fundamental of Algorithms

MTS635 Information Retrieval and Data Mining

MTS657 Machine Learning

MTS623 Special Topics in Computing

MTS625 Advance design analysis and Algorithm

#### **Thesis**

MTS691 Thesis I

MTS692 Thesis II

Semester One	Semester Two
Research Methodology	Statistical Modeling & Computing
Advanced Numerical Analysis	Advanced Topics in Algebra
Advance Real analysis	Mathematics Concentration I
Semester Three	Semester Four
Mathematics Concentration II	Computation Concentration II
Computation Concentration I	Thesis II
Thesis I	



# MS STATISTICS & SCIENTIFIC COMPUTING

The MS programs in Statistics & Scientific Computing develop rigorous foundational mathematical and statistical tools that help in careers as researchers, and solution providers. It prepares students for careers in research, applications, and teaching. Students choose courses from two areas of concentration for their course work: Statistics and Computations. Students are required to qualify successfully for 9 courses (5 compulsory and 4 electives) each of 3 credit hours duration. On successful completion of MS course work students will be allowed to work on a 6 credit hour thesis on a subject of their interest depending on the availability of the faculty. The program comprises two years of study over at least 4 semesters. It requires completion of 33 credit hours of course work. Students must maintain a CGPA of 3.0 for the conferement of the degree.

#### MS Statistics & Scientific Computing students learn to:

- Develop a thorough understanding of statistical methodology before going to apply statistical skills to solve real-life problems
- Apply rigorous statistical techniques used to handle data to get meaningful results
- Select and transform data to increase usefulness for solving particular problems
- Create information visualizations for data exploration and presentation
- Establish and understand a connection between the techniques of data analysis and scientific computing and their link with the real-life data

#### **Learning Outcomes for Data Science students include:**

- 1. Knowledge of how to apply statistical and scientific computing techniques and algorithms to real-life data sets to extract meaningful insights.
- 2. Acquisition of hands-on experience with relevant software tools, languages, data models, and environments for data processing.
- 3. Ability to communicate results of analysis effectively (visually and verbally) to a broad audience in the fields of biology, environment, finance and risk management, data science, business management, and other disciplines.

#### Eligibility

16 Years of education in Computer Science, Engineering, Mathematics, Statistics or any other relevant field. Minimum CGPA of 2.5 (on a scale of 4.0).

#### **Program Requirements**

MS requires completion of course work and dissertation/thesis. Minimum duration is 2 years and the maximum is 4 years:

- MS course work requirements consist of nine graduate-level courses (27 credit hours)
- On completion of the dissertation/thesis, the student is awarded 6 credits

#### A MS student must additionally complete the following requirements:

- MS Proposal/Synopsis Development
- MS Proposal/Synopsis Defense
- BASR Approval of MS Proposal/Synopsis
- Continuous enrollment in supervised research courses for meeting the full-time residency requirements
- Completion of MS Dissertation/Thesis
- Selection of External Evaluators by BASR
- Evaluation of MS Dissertation by two external faculty members as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of MS dissertation
- Any other HEC requirement
- Final Dissertation/Thesis Submission to BASR



#### **Required Courses**

#### Compulsory Courses (15 credit hours)

MSS609 Research Methodology

MSS611 Advanced Statistical Inference

MSS614 Mathematical Statistics

MSS617 Advanced Numerical Computing

MSS618 Statistical Modeling & Computing

#### **Elective Courses**

#### Statistics Concentration (6 credit hours)

MSS619 Special Topics in Statistics

MSS647 Advanced Design of Experiments

MSS648 Time Series Analysis

MSS649 Stochastic Processes

MSS650 Applied Regression Models

MSS651 Theory & Practice of Forecasting

MSS652 Statistical Quality Control

#### Computer Concentration (6 credit hours)

MSS622 Fundamental of Algorithms

MSS635 Information Retrieval & Data Mining

MSS645 Decision Theory

MSS657 Machine Learning

MSS658 Pattern Recognition

MSS661 Simulation & Modeling

#### Thesis

MSS691 Thesis I

MSS692 Thesis II

Semester One	Semester Two
Advanced Research Methodology	Statistical Modeling & Computing
Mathematical Statistics	Advanced Statistical Inference
Advanced Numerical Computing	Statistics Concentration I
Semester Three	Semester Four
Statistics Concentration II	Computation Concentration II
Computation Concentration I	Thesis II
Thesis I	



# PhD (COMPUTER SCIENCE) PhD (STATISTICS & SCIENTIFIC COMPUTING)

The PhD programs connect knowledge of three disciplines - mathematics, statistics, and computer science to train and equip researchers to contribute to theory, to develop useful models and methods, and/or to conduct applied scientific investigations.

PhD programs will connect knowledge of three disciplines mathematics, statistics and computer science to policy-relevant decision-making in business and government. The program aims to train researchers to contribute to theory, develop inventive and useful models and methods, and conduct applied scientific investigations. Although individual researchers will vary in their emphases, the field includes all these aspects. This program emphasizes rigorous course work and high-quality research that should be published in international conferences and HEC recognized journals. Course and research work are arranged as per HEC criteria.

#### **Learning Outcomes:**

- 1. In-depth understanding of academic theory and the preparation of high-quality research
- 2. Lead and manage research projects
- 3. Support and participate in academic, government, and industrial projects
- 4. Apply theories and models to solve real problems

#### **Career Path:**

- 1. IT Consultant
- 3. Cyber-security Consultant
- 5. Machine Learning Expert
- 7. Data Modeler
- 9. Software Development Manager

#### **Prospective Employers:**

- 1. Cyber Internet Services
- 3. Real Estate Sector
- 5. Hospital Sector
- 7. Colleges & Universities

- 2. Data Scientists
- 4. Information Systems Manager
- 6. Technical Writer
- 8. Security Architect
- 10. College/University Prof. of Computer Science/Statistics
- 2. Internet Service Providers
- 4. Banking Sectors
- 6. Communication & Transportation Sector
- 8. Government & Private Sector

#### Eligibility

MPhil /MS / in Computer Science, related field or equivalent graduates from HEC recognized institutions meeting the following criteria:

- A minimum CGPA of 3.00 on a scale of 4.00 (or overall 60% marks) or equivalent
- A minimum of 18 years of schooling that corresponds to MS / MPhil or equivalent degree from HEC recognized institutions in a relevant discipline
- GRE subject-specific or GAT subject test conducted by the NTS, or equivalent in the relevant discipline. A minimum of 60% (percentage) marks is required
- An interview conducted by the Institute
- All other HEC stipulated requirements

#### **Program Requirements**

PhD requires completion of course work and dissertation/thesis. Minimum duration is 3 years and the maximum is 5 years:

- PhD course work requirements consist of six graduate-level courses (18 credit hours).
- On completion of the dissertation/thesis, the student is awarded 30 credits.



#### A PhD student must additionally complete the following requirements:

- Comprehensive Exam
- PhD Proposal/Synopsis Development
- PhD Proposal/Synopsis Defense
- BASR Approval of PhD Proposal/Synopsis
- Continuous enrollment in supervised research courses for meeting the full-time residency requirements
- Completion of PhD Dissertation/Thesis
- Selection of External Evaluators by BASR
- Publication of at least one paper in an ISI indexed or an HEC recognized journal or an official acceptance of the paper
- Evaluation of PhD Dissertation by two foreign faculty members from developed countries as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of PhD dissertation
- Any other HEC requirement
- Final Dissertation/Thesis Submission to BASR

#### **Course Structure**

Select Six courses

#### PhD (Computer Science)

- PCS701 Big Data Analytics and Knowledge Discovery
- PCS703 Natural Language Processing Information Retrieval
- PCS705 Advance Theory of Computation
- PCS707 Advances in Machine Learning
- PCS709 Computational Intelligence
- PCS711 Heuristic Search Theory & Methods
- PCS713 Advanced Neural Network
- PCS715 Intelligent Web Technologies
- PCS717 Parallel and Distributed Systems
- PCS719 Formal Research Methods
- PCS723 Computer Vision and Robotics
- PCS725 Temporal and Spatial Database Management System
- PCS731 Advanced Digital Signal Processing
- PCS733 Advanced Decision Support System
- PCS739 Advances in Simulation and Modeling
- PCS743 Fuzzy Topologies with Human Centric Computing
- PCS745 Advanced Algorithm Analysis
- PCS749 Seminar on Logic and Scientific Computing
- PCS751 Seminar on Emerging Computing Technologies
- PCS753 Advances in Artificial Intelligence
- PCS755 Advances in Deep Learning
- PCS850 Research Thesis

#### PhD (Statistics & Scientific Computing)

- PST701 Advanced Statistical Computing and Graphics
- PST703 Regression Modeling and Computing
- PST705 Advanced Mathematical Statistics
- PST707 Advanced Bayesian Inference and Stochastic Modeling
- PST713 Nonlinear and Integer Programming
- PST715 Advanced Design and Analysis of Experiments
- PST717 Advances in Time Series Analysis
- PST719 Advances in Bioinformatics & Biostatistics
- PST721 Statistical Quality Control
- PST723 Stochastic Modeling in Finance
- PST725 Special topics in Statistics
- PST850 Research Thesis





# COLLEGE OF ENGINEERING AND SCIENCES

"Entrepreneurial Engineering with Excellence"

College of Engineering and Sciences (CES) was established to realize IoBM's mission of creating an impact as a multidimensional institution of higher learning. The college strives to develop entrepreneurial engineers who have the technical skills and confidence to create new engineering technologies and design innovative engineering products and processes.

# BE ELECTRICAL ENGINEERING IN ELECTRONICS AND TELECOMMUNICATION

Electrical Engineering graduates are empowered to enable the growth of electrical, electronics and telecommunication industry through their technical expertise, confidence and entrepreneurial spirit.

#### **Specializations**

• Electronic Engineering

• Telecommunication Engineering

#### Careers

Engineering careers in firms providing solutions for building automation, industrial control for processes and machinery, IOT based control and monitoring of environment, water supply and quality, pollution, road congestion, agriculture yield, energy supply, borders, logistics, safety, security, natural disasters etc.

The program is Pakistan Engineering Council (PEC) approved (see http://www.pec.org.pk/schedule\_first.aspx) and designed in close consultation with leading engineering firms and scholars from reputable academic Institutions. The electrical engineering curriculum is a four-year degree program comprising 8 semesters. The emphasis is on laboratory work, experimental knowledge and innovative teaching methods. One of its special features is an Internship of 6 to 8 weeks in a reputable engineering organization. During the first four semesters, the same courses are offered to all students. At the end of the fourth semester, students are allowed to select either of two of the above-mentioned areas of specialization. The course work offered in the last four semesters is especially designed to enhance students' knowledge of a given area of interest and provide them with a thorough understanding of the advanced subjects.

Completion of course work with 2.5 CGPA and 136 credit hours with internship automatically qualify students for the Master's programs offered by IoBM. They can also proceed further for postgraduate studies or work in the fields of Telecommunication and Electronics at leading universities and organizations throughout the world. IoBM course credits are easily transferable to a number of international universities. BE (EE) program is spread over 18 sessions per semester.

#### **Program Educational Objectives (PEOs)**

- To equip students with fundamental and advance concepts in electrical engineering, to become analytical problems solvers, to be creative in design and development of solutions and to lead solutions of complex engineering problems in a structured way making best of modern tools
- To develop successful engineering professionals who have confidence, skills in communication, project management and ethical values applicable to varying team working environments and society
- 3. To foster a learning environment where entrepreneurial engineers are developed and students are motivated to make learning an on-going life-long process leading to sustainable development in societal and environmental context

#### **Program Learning Outcomes (PLOs)**

- PLO-1: Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems
- PLO-2: Problem Analysis: An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences
- PLO-3: Design/Development of Solutions: An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations



- PLO-4: Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions
- PLO-5: Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations
- PLO-6: The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems
- PLO-7: Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development
- PLO-8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice
- PLO-9: Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings
- PLO-10: Communication: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions
- PLO-11: Project Management: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment
- PLO-12: Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

# Mapping of PEOs to PLOs/Graduate Attributes (GAs)

S. No.	lo. PLOs/GAs	Program Educational Objectives (PEOs)		
		1	2	3
1	Engineering Knowlege	*		
2	Problem Analysis	*		
3	Design/Development of Solutions	*		
4	Investigation	*		
5	Modern Tool Usage	*		
6	The Engineer and Society			*
7	Environment and Sustainability			*
8	Ethics		*	
9	Individual and Team Work		*	
10	Communication		*	
11	Project Management		*	
12	Lifelong Learning			*



# **Required Courses**

#### Communication

COM100 Foundation English\*\*

COM117 Functional English

COM119 Communication Skills

COM208 Technical Report Writing

\*\*Students with low marks in English at the time of admission, will do Foundation English Course with Credit Hours:0

#### **Computer Engineering**

CME102 Fundamentals of Computing

CME104 Computer Programing and Problem Solving

CME203 Data Structures and Algorithms

CME205 Microcontroller and Microprocessor Systems

CME301 Computer Communication and Networks

#### **Electronic Engineering**

**ELE200** Electronic Devices and Circuits

ELE201 Digital Logic Design

**ELE202** Electronic Workshop Practices

ELE370 Instrumentation and Measurements

ELE419 Linear Control Systems

ELE420 Power Electronics

ELE450 Senior Design Project I

ELE451 Senior Design Project II

#### **Electrical Power Engineering**

EPE101 Linear Circuit Analysis

**EPE200** Electrical Network Analysis

EPE201 Computer Aided Engineering Design

**EPE302** Electrical Machines

#### **Telecommunication Engineering**

TCE201 Communication System

TCE204 Electromagnetic Field Theory

TCE205 Signal and Systems

TCE301 Probability Methods in Engineering

TCE321 Wave Propagation and Antennas

TCE404 Digital Signal Processing

TCE450 Senior Design Project I

TCE451 Senior Design Project II

#### **Engineering Management**

**ENG203** Engineering Economics

#### Mathematics

MTH107 Calculus and Analytical Geometry

MTH204 Linear Algebra

MTH215 Differential Equation

MTH216 Complex Variable and Transforms

MTH405 Numerical Analysis

#### **Religious Studies / Ethics**

REL101 Islamic Studies OR SSC203 Ethical Behavior



#### **General Sciences**

GSC103 Applied Physics

#### Entrepreneurship

ENT403 Small Business and Entrepreneurship

#### Management

MAN418 Management and Organizational Dynamics

#### **Political Sciences**

PSC301 Pakistan Studies

#### **Community Service**

ENT308 Social Advocacy and Community Service OR

SSC100 Community Service

#### **Inter-Disciplinary Engineering**

IDE400 Introduction to ERP

IDE401 Principles of Applied Mechatronics

IDE402 Renewable Energy Methods

IDE403 Project Management

#### **Course Structure**

First two years are common to both Electrical Engineering streamlines (Electronic and Telecommunications)

Semester One	Semester Two
Applied Physics (3+1)	Linear Algebra (3+0)
Functional English (3+0)	Islamic Studies (2+0)
Linear Circuit Analysis (3+1)	Communication Skills (2+0)
Fundamentals of Computing (2+1)	Basic Electronics (3+1)
Calculus & Analytical Geometry (3+0)	Computer Programming & Problem Solving (2+1)
Electronic Workshop Practices (0+1)	Electrical Network Analysis (3+1)
Semester Three	Semester Four
Pakistan Studies (2+0)	Signals & Systems (3+1)
Digital Logic Design (3+1)	Differential Equations (3+0)
Data Structure & Algorithms (3+1)	Technical Report Writing (3+0)
Complex Variables & Transforms (3+0)	Electromagnetic Field Theory (3+0)
Computer Aided Engineering Designs (0+1)	Microcontroller & Microprocessor Systems (3+1)
Electronic Devices and Circuits (3+1)	

Note: Students will be allowed to register in SDP 1 only after successfully completing the course work of first six semesters



# **Course Structure**

# **Stream 1: Electronic Engineering**

Semester Five	Semester Six
Electrical Machines (3+1)	Elective I (3+0)
Numerical Analysis (3+0)	Engineering Economics (2+0)
Linear Control Systems (3+1)	Communication System (3+1)
Instrumentation and Measurements (3+1)	Digital Signal Processing (3+1)
Probability Methods in Engineering (3+0)	Power Electronics (3+1)
Semester Seven	Semester Eight
Elective II (3+0)	Elective IV (3+1)
Elective III (3+1)	Community Service (0 ch)
Management and Organizational Dynamics (3+0)	Senior Design Project II (0+3)
Senior Design Project I (0+3)	Small Business and Entrepreneurship (3+0)
Renewable Energy Methods (3+0)	Principles of Applied Mechatronics (3+1)

# **Elective Courses**

ELE415	Opto-Electronics	ELE417	Industrial Electronics
ELE423	Digital Control Systems	ELE422	VLSI Design
ELE429	Introduction to Nano Technology	ELE428	Digital Electronics
ELE433	Artificial Neural Networks	ELE430	Solid State Devices
ELE434	Introduction to Smart Grid Technology	ELE432	Wireless Power Transmission
CME414	Digital Image Processing	CME301	Computer Communication Networks
TCE416	Digital Communication	EPE432 I	oT Based Wireless Power Transfer
EPE433 F	Power Quality Analysis	EPE434 I	ntroduction to Smart Grid

#### **Course Structure**

# Stream 2: Telecommunication Engineering

Semester Five	Semester Six
Numerical Analysis (3+0)	Elective I (3+0)
Linear Control Systems (3+1)	Engineering Economics (2+0)
Electrical Machine (3+1)	Digital Signal Processing (3+1)
Computer Communication Networks (3+1)	Communication System (3+1)
Probability Methods in Engineering (3+0)	Wave Propagation and Antennas (3+1)
Semester Seven	Semester Eight
Elective II (3+0)	Elective IV (3+0)
Elective III (3+1)	Social Advocacy and Community Service (1+0)
Management & Organizational Dynamics (3+0)	Senior Design Project II (0+3)
Senior Design Project I (0+3)	Small Business and Entrepreneurship (3+0)
Renewable Energy Methods (3+0)	Principles of Applied Mechatronics (3+1) OR
	Project Management

# **Elective Courses**

e courses		
Transmission and Switching Systems	TCE416	Digital Communications
Information Theory and Coding	TCE423	RF and Microwave Engineering
Radar Systems	TCE425	Telecom Management
Electromagnetic Compatibility	TCE427	Antenna Theory and Design
Mobile and Pervasive Computing	TCE429	Teletraffic Engineering
Satellite Communication	TCE431	Digital Filter Design
Multimedia and Optical Fiber	TCE434	Wireless Sensor Networks
Wireless and Mobile Communications	TCE471	Optical Fiber Communication
Digital Image Processing	ELE415	Opto-Electronics
IoT Based Wireless Power Transfer	EPE433 F	Power Quality Analysis
Introduction to Smart Grid		
	Transmission and Switching Systems Information Theory and Coding Radar Systems Electromagnetic Compatibility Mobile and Pervasive Computing Satellite Communication Multimedia and Optical Fiber Wireless and Mobile Communications Digital Image Processing IoT Based Wireless Power Transfer	Transmission and Switching Systems Information Theory and Coding Radar Systems Electromagnetic Compatibility TCE425 Mobile and Pervasive Computing Satellite Communication Multimedia and Optical Fiber Wireless and Mobile Communications Digital Image Processing TCE415 TOT Based Wireless Power Transfer TCE438



# MS ENGINEERING MANAGEMENT

The MS in Engineering Management degree bridges the gap between engineering potential and its gainful exploitation for business and economic advantage by focusing on efficiency, productivity and effectiveness.

The need for engineering management is felt at all managerial levels, particularly in the professional management work environment. Also, management is applicable to every aspect of an organization's functions and at all levels of top management, middle and lower management. Basic and specialized knowledge in the field of engineering management is a crucial need for every engineer and a profitable business.

Engineering management entails planning, organizing, allocating resources, and directing and controlling activities that have a technological component. The course has been designed by engineers and business experts with experience at the International level, keeping in view the requirements of the country.

This is a weekend program with a minimum load of 6 credit hours (2 courses) and a maximum of 9 credit hours (3 courses) in each of the 3 sessions(Fall, Spring and Summer).

#### **Program Objectives**

- To exemplify excellence in engineering management through in depth knowledge and skills in the field of engineering management and applied sciences
- To engage in continuous professional development and exhibit quest for lifelong learning
- To demonstrate professional integrity and commitment to social and ethical responsibilities required of them as leaders and entrepreneurs.

#### **Course Contents**

Duration: Minimum 1.5 - Maximum 04 years

Total credit hours: 30
- Teaching: 24
- Thesis: 6

A minimum of eight courses (500 Level) of 3 credit hours each with individual research project / thesis of 6 credit hours in a relevant area shall be required for the completion of the MS degree in the discipline of Engineering Management. A minimum of four courses from core subjects and four courses from optional subjects are selected.

#### **Entry Test Policy**

The admission for MS Program would be based on any one of the following:

#### Eligibility for entrance to MS-Engineering Management Program:

It is based on any one of the following:

Sixteen years of education in any engineering discipline with minimum 55% marks in overall academic career in annual system
and CGPA 2.5 in a semester system or equivalent from HEC recognized Institutes/Universities having PEC registration status.



#### In addition:

- Success in aptitude test and interview conducted by IoBM
- Candidates must score minimum 60% marks in exam conducted by IoBM

# **Compulsory Core Courses (Four Courses)**

MEM501 Project Management (3+0)

MEM502 Designs, Patents, Contract and Legal Engineering (3+0)

MEM503 Quality Processes for Design and Production (3+0)

MEM504 Research Methodology (3+0)

MEM600 Independent Study (3+0)

MS Projects (Compulsory)

MEM601 Thesis I (3+0)

MEM602 Thesis II (3+0)

# **Elective Courses (Any Three Courses)**

MEM505 Applied Engineering Analysis (3+0)

MEM507 Operations Analysis & Resource Allocation(3+0)

MEM509 Simulation Modeling (3+0)

MEM511 Advanced Practices in Engineering Management (3+0)

MEM513 Industrial Costing Management (3+0)

MEM515 Lean Six Sigma & Lean Manufacturing(3+0)

MEM517 Global Business Strategy (3+0)

MEM519 Financial Statement Analysis (3+0)

MEM521 Problem Solving & Decision Making (3+0)

MEM524 Management of Organizations (3+0)

MEM506 Production System Design and Analysis (3+0)

MEM508 Operation Management (3+0)

MEM510 Production Planning and Control (3+0)

MEM512 Environmental and Safety Management (3+0)

MEM514 Technology Management (3+0)

MEM516 Marketing Management (3+0)

MEM518 Leadership, Innovation & Entrepreneurship (3+0)

MEM520 Engineering Economics (3+0)

MEM523 Supply Chain Management (3+0)

MEM525 Advanced Topics in Project Management (3+0)

#### **Course Structure**

Semester One	Semester Two
Project Management (3+0)	Design, Patents, Contract & Legal Engineering (3+0)
Quality Processes for Design & Production (3+0)	Independent Study (3+0)
Research Methodology (3+0)	Elective I (3+0)
Semester Three	Semester Four
Elective II (3+0)	Thesis-II (3+0)
Elective III (3+0)	
Thesis-I (3+0)	

Note: Students will be allowed to register in Thesis I only after successfully completing the course work of first two semesters. Attendance in three research seminars per semester is mandatory.



# MS IN ELECTRICAL ENGINEERING

The MS Electrical Engineering program (MS EE) enables the graduates to be research-based designers of devices and systems that provide innovative solutions for entrepreneurial engineering.

The profession of electrical engineering demands a strong foundation in physical science and mathematics, a broad knowledge of engineering techniques, and an understanding of the relation between technology and society. Curricula at IoBM are planned to offer the breadth of education and depth of training necessary for leadership in industry as well as a precursor to further education.

There is a need for an ability to investigate electrical engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis using first principles of mathematics, natural science and engineering sciences, and interpretation of experimental data, and synthesis of information to derive valid conclusions.

# Scope of Program

In Pakistan, we are seeing a shift towards rapid growth of data networks, as well as a shift towards electronically facilitated services particularly in the public sector. Electrical engineers design develop test and supervise deployment of electrical systems and electric devices. They are expected to work on the design of sub-micron Digital and Analogue Integrated Circuits, Digital Signal Processors, Control System Design and Testing services. The Master of Science (MS) program in Electrical Engineering is designed to prepare students for technically demanding careers in industry as well as for research career in Electrical Engineering or related fields. More specifically:

- It requires students to build depth in an Electrical Engineering specialization, selected from areas such as signal processing and communication, systems and control, electromagnetics and photonics, and material circuits and devices.
- It affords students the opportunity to flexibly choose graduate electives to explore technical or professional interests within engineering.

The MS in Electrical Engineering (MS EE) can be either an academic or professional master's degree that bridges the gap between the field of engineering, technology and the field of business by equipping students with the technical expertise and leadership skills required to advance their career in the fast-paced world of technology.

#### **Program Objectives**

The program has been orchestrated to meet the market demand and encompasses a broad area covering advanced digital and analogue electronics, power systems, communication, signal processing and multimedia, computer vision and advanced controls for robotics. The stream based approach aims to include hands on training, case studies and research thesis. The specific objectives of the program are:

- To produce graduates who are highly skilled professionals having domain knowledge of research and development of electrical and electronics engineering profession
- To engage in continuous professional development and exhibit quest for lifelong learning
- To demonstrate professional integrity and commitment to social and ethical responsibilities required of them as leaders and entrepreneurs.
- To understand impact of power, communications and control systems on engineering solutions in a global, economic and cultural aspect.



#### **Courses:**

Master's program in electrical engineering provides students with latest and in depth knowledge in electrical engineering. Students enrolled have the option of designing MS studies in a way that facilitates PhD and technologically advanced careers. As per HEC guidelines the program is divided into the following streams

Stream 1: Power Systems Engineering

Stream 2: Control Automation Engineering

Stream 3: Communication Systems and Networks

#### **Stream based Courses Module**

MEM509 Simulation and Modeling 2+1 MEM601 Research Methodology 3+0 MEM603 Indepedent Study 3+0

Stream 1 Power Systems Engineering	Stream 2 Control Automation Engineering	Stream 3 Communication Systems and Networks	Credit Hours
EPE602 (Core) Power Electronics	ELE602 (Core) Linear Control Theory	ECE602 (Core) Wireless Communication	3+0
	Elective Courses		
EPE611 Power System Analysis	CME Advanced Digital	<del></del>	3+0
EPE612 Computer Methods in Power System Analysis	ELE612 Detection and Estimation	ECE612 Information & Coding Theory	3+0
EPE613 Power System Reliability	ELE613 Adaptive Control Systems	MTH601 Stochastic System Process	3+0
•	E602 and Machine Learning	ECE614 Advanced Communication Systems	3+0
EPE615 Renewable Energy Systems	ELE615 Optimal Control Systems	ECE615 Advanced Computer Networks	3+0
EPE616 Embedded Power Generation	GSC601 Semiconductor Device Physics		3+0
Special topics on Smart Grid (upon the discretion of course instructor)	Special topics on Automation (upon the discretion of course instructor)	Special topics on Communications (upon the discretion of course instructor)	3+0



#### **Course Structure:**

Semester One	Semester Two
Research Methodology (3+0)	Independent study(3+0)
Simulation Modeling (2+1)	Elective-I
Required Stream based Course (3+0)	Elective-II
	Initial Seminar / Symposium
Semester Three	Semester Four
Elective-III	Thesis (3+0)
Elective-IV	Final Seminar/ Symposium
Thesis (3+0)	

Stream 1	Stream 2	Stream 3
EPE617 / ECE624	ELE617	ECE617
Internet of Things	Guidance Navigation & Control	RF Circuits Design
EPE618	ELE618	ECE618
Flexible AC Transmission System	Stochastic Control Systems	Radar Signal Processing
EPE619	ELE619 / EPE624	ECE619
High voltage DC Transmission System	Control of Power Electronics Convertors	Mobile and Sensor Networks
EPE620	ELE620	ECE620
Power Quality	Control of Electric Machine Drives	Cellular and Mobile Communications
EPE621 / ECE623	ELE621	ECE621
Smart Grids	Distributed Control Systems	Medical Image Processing
EPE622	ELE622	ECE622
Energy Audit	Multivariable Feedback Control	Telecommunication Economics
EPE623	ELE623	ECE623 / EPE621
Energy Management	Probabilistic Robots	Smart Grid
EPE624 / ELE619	ELE624 / EPE626	ECE624 / EPE617
Control of Power Electronics Convertors	Filtering and Tracking	Internet of Things
EPE625	ELE625 / ECE626	ECE625
Special Purpose Electrical Machines	Image and Video Processing	Smart Antennas
EPE626 / ELE624	ELE626	ECE626 / ELE625
Control of Electric Machine Drives	Control Systems with Embedded Implementations	Image and Video Processing

# **Program Summary:**

Duration Minimum 1.5 - Maximum 04 years

**Total Credit hours** 30 credit hours Course work 24 credit hours Thesis 06 credit hours

Note: Student will be allowed to register in Thesis only after completing the course work of first two semesters. Attendance in three research seminars per semester is mandatory.





# COLLEGE OF ECONOMICS AND SOCIAL DEVELOPMENT

The College of Economics and Social Development (CESD) is a social science and liberal arts college with graduate and undergraduate programs in areas such as economics, psychology, education, media, law and international relations. Mission of the College is to contribute to the social and economic development by focusing on creative, professional and research-based interventions.

# **BS (HONORS) ACCOUNTANCY, MANAGEMENT AND LAW**

The BS (Hons) Accountancy, Management and Law program is designed to enable graduates to obtain professional certifications from accountancy bodies having international and national charters. The program is accredited by two world renowned accountancy bodies, namely, the Institute of Chartered Accountants of Pakistan (ICAP) and the Association of Chartered Certified Accountants (ACCA), United Kingdom. Students opting for the ICAP qualification may get exemption from all four papers of Assessment of Fundamental Competencies (AFC) and the first four papers of Certificate in Accounting and Finance (CAF). Students opting for the ACCA qualification may get exemption in nine subjects.

#### **Career Options**

- Auditors
- Tax Consultants
- Compliance Managers
- Financial Analysts

It requires completion of 144 credit hours of course work and 2 credit hours of internship of at least six weeks in a firm approved by the College. Students may take a maximum of six courses per semester with summer as an optional semester. This program will lead to an MBA or a professional accountancy qualification. The BS (Hons.) Accountancy, Management and Law degree has been accredited by two world renowned accountancy bodies, namely, the Institute of Chartered Accountants of Pakistan (ICAP) and the Association of Chartered Certified Accountants (ACCA), United Kingdom. Students opting for the ICAP qualification may get exemption from all four papers of Assessment of Fundamental Competencies (AFC) and the first four papers of Certificate in Accounting and Finance (CAF). Students opting for the ACCA qualification may get exemption from the following nine subjects:

- 1. F1-Accountant in Business
- 4. F4-Corporate and Business Law
- 7. F7-Financial Reporting
- 2. F2-Management Accounting
- 5. F5-Performance Management
- 8. F9-Financial Management
- 3. F3-Financial Accounting
- 6. F6-Taxation
- 9. F8-Audit and Assurance

# **Required Courses**

#### Accounting

ACC102	Introduction	າ to Accoun <sup>.</sup>	ting I (	(ICAP-CAF-1)	
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ACC103 Introduction to Accounting II (ICAP – CAF-1)

ACC202 Taxation I (ICAP – CAF-6)

ACC203 Financial Accounting I (ICAP - CAF-5)

ACC204 Taxation II (ICAP - CAF-6)

ACC303 Financial Reporting I (ICAP - CAF-7)

ACC304 Financial Accounting II (ICAP – CAF-5)

ACC306 Financial Reporting II (ICAP – CAF-7)

ACC307 Cost and Management Accounting I (ICAP – CAF-8)

ACC308 Cost and Management Accounting II (ICAP - CAF-8)

ACC405 Internal Auditing

ACC414 Auditing I (ICAP - CAF-9)

ACC416 Auditing II (ICAP - CAF-9)

ACC418 Performance Measurement and Decision Making

ACC501 Advanced Financial Accounting

ACC520 Managerial Analysis and Decision Making

#### Communication

COM103 Functional English I (ICAP - AFC-1)

COM104 Functional English II (ICAP - AFC-1)

COM105 Business Communication - AML (ICAP - AFC-2)

#### **Economics**

ECO202 Introduction to Economics & Finance I (ICAP-CAF-2)

ECO203 Introduction to Economics & Finance II (ICAP-CAF-2)

#### **Finance**

FIN201 Introduction to Business Finance

FIN202 Financial Management

FIN511 Analysis of Financial Statements

FIN501 Strategic Financial Management

#### Entrepreneurship

ENT403 Small Business and Entrepreneurship

#### **Human Resource Management**

HRM301 Human Resource Management

HRM502 Industrial Relations and Labour Laws

#### **Management Information Systems**

MIS413 Information Technology I (ICAP-AFC-4)

MIS416 Information Technology II (ICAP-AFC-4)

#### Management

MAN101 Principles of Management (ICAP- CAF-4)

MAN411 Project Management

MAN416 Corporate Governance



LAW105 Mercantile Law (ICAP-CAF-3)
LAW106 Company Law (ICAP-CAF-3)
LAW202 Banking Laws in Pakistan
LAW203 Insurance Laws in Pakistan

LAW301 Intellectural Property, Patents, Copyrights

LAW400 Company Secretarial Practices

LAW404 Arbitration

LAW407 Statutory Compliance

Language

LAN 10\* Foreign Language I

\*8 = Introduction to Chinese

Marketing

MKT301 Principles of Marketing MKT404 Methods in Business Research

**Statistics** 

STA101 Quantitative Methods-I (ICAP -AFC-3) STA102 Quantitative Methods-II (ICAP -AFC-3)

**Logistics and Supply Chain Management** 

SCM400 Introduction to ERP Systems

**Religious Studies** 

**REL101** Islamic Studies

**Social Sciences** 

SSC103 Behavioral Studies (ICAP -CAF-4)

SSC202 Environmental Studies

SSC401 Business Ethics (ICAP -AFC-2)

Semester One Functional English I Quantitative Methods I Information Technology I Introduction to Economics and Finance I	Semester Two Introduction to Economics and Finance II Introduction to Accounting II Quantitative Methods II Functional English II
Introduction to Accounting I Mercantile Law	Behavioral Studies Company Law
Semester Three Financial Accounting I Taxation I Financial Reporting I Cost and Management Accounting I Auditing I Business Communication - AML	Semester Four Cost and Management Accounting II Financial Accounting II Financial Reporting II Auditing II Information Technology II Taxation II
Semester Five Introduction to Business Finance Banking Laws in Pakistan Principles of Marketing Islamic Studies Intellectual Property, Patents, Copyrights Principles of Management	Semester Six Human Resource Management Financial Management Introduction to ERP Systems* Business Ethics Internal Auditing Advanced Financial Accounting *Includes Introduction to concepts of Supply Chain Management
Semester Seven Company Secretarial Practices Project Management Methods in Business Research Managerial Analysis and Decision Making Insurance Laws in Pakistan Analysis of Financial Statements	Semester Eight Any six of the following: Strategic Financial Analysis and Design Statutory Compliance Arbitration Performance Measurement and Decision Making Industrial Relations and Labor Laws Small Business and Entrepreneurship Introduction to a Foreign Language Corporate Governance Environmental Studies



# **BS (HONORS) MEDIA STUDIES**

The BS (Honors) Media Studies program is designed to provide students with strong grounding in and a broad academic base for pursuing a professional career - institutional or entrepreneurial - in the wider field of media and film arts.

The curriculum that has been regularly updated by refining content and methodology, as well as offering new courses to endow students with deeper insight into the emergent world of media and visual communication through an array of courses in journalism, communication and social sciences, and enhance their creativity through practical hands-on exposure to the art and craft of filmmaking for television and new media. The ultimate objective of the program is to strengthen their prospects in a world where multi-platform communication and multi-format journalism are becoming the norm.

The program owes its success to the support it has received over the years from media experts and practitioners, specialists from the field of journalism and filmmaking, who still make up the bulk of our department's teaching faculty. We have also benefited from the collaboration received from other institutions, and media organizations. The four-year program requires completion of 144 credit hours of course work, and a compulsory 6-week internship.

#### **Foundation Courses**

#### Communication

COM111 Critical Reading & Creative Writing COM112 Appreciation of Literary Text

#### **Economics**

ECO106 Basic Economics

#### **Islamic Studies**

**REL101** Islamic Studies

#### Language

LAN112 Urdu I LAN113 Urdu II

#### Management

MAN305 International Relations

#### Pakistan Studies

PSC301 Pakistan Studies

#### **Social Sciences**

SSC101 Introduction to Psychology SSC104 Principles of Sociology

SSC302 Important Concepts in Philosophy

#### **Statistics**

STA100 Basic Statistical Methods

# **Required Course Options (All Students):**

#### Law

LAW405 Media Law & Business Ethics

#### **Media Studies**

MMM302 Logic & Critical Thinking

MMM304 Media Literacy

MMM307 World Civilization & Culture

MMM308 Contemporary World Media

MMM312 Introduction to Advertising & PR

MMM315 Feature, Article & Column Writing

MMM316 Sub Editing & Page Design

MMM318 Economic Journalism

MMM320 Editing & Post Production

MMM321 Development Communication

MMM322 Current Affairs

MMM324 Media Marketing

MMM327 Studio Production

MMM328 Methods in Media Research

MMM329 Creative Writing Workshop

MMM330 Appreciation of Vernacular Literature

MMM332 News Production/ News Anchoring

MMM338 Cinematography I

MMM344 Screenplay I

MMM354 Introduction to Sound Design

MMM360 Introduction to Photography

MMM362 History of Filmmaking

MMM363 Introduction to Design Tools

MMM364 Introduction to Mass Communication

MMM370 Introduction to Documentary

MMM374 Introduction to Journalism

MMM373 Content Creation

MMM376 Introduction to Performing Arts

MMM379 Advanced Documentary Production



# **Required Courses (Journalism Thesis):**

#### **Media Studies**

MMM310 News Writing & Reporting

MMM333 Sports Journalism

MMM336 Human Rights & Gender Reporting

MMM321 Development Communication

MMM361 Fashion Journalism

MMM367 Digital Journalism MMM372 Environmental Journalism

MMM378 Investigative Journalism I (Thesis)

MMM380 Investigative Journalism II (Thesis)

# **Special Summer Courses (for all IoBM students)**

MMM373 Content Creation MMM555 Discovering Film

# MMM335 Magazine Production

MMM342 Filmmaking - The Art & Craft I

MMM345 Screenplay II

**Media Studies** 

MMM351 Production Management

MMM356 Ad-Film Production

MMM339 Cinematography II

MMM357 Advanced Editing & Sound Design II MMM366 Filmmaking - The Art & Craft II (Thesis)

**Required Courses (Production Thesis):** 

MMM368 Director's Toolkit MMM369 Production Design

MMM371 Creative Portfolio Management

MMM377 Direction

MMM381 Editing & Post Production II

MMM382 Editing & Post Production III (6C)

Semester One	Semester Two
Critical Reading & Creative Writing (3+0) [Pre req NA]	Appreciation of Literary Text (3+0) [Pre Req. COM111]
Urdu I	Urdu II
Introduction to Mass Communication	Islamic Studies
Introduction to Psychology	Media Literacy
Principles of Sociology	Introduction to Design Tools
Introduction to Photography	History of Filmmaking
Semester Three	Semester Four
Pakistan Studies	International Relations
Basic Economics	World Civilization & Culture
Important Concepts in Philosophy	Writing Workshop
Basic Statistical Methods	Appreciation of Vernacular Literature
News Writing & Reporting	Studio Production
Creative Portfolio Management (P)	Editing & Post-production
Screenplay I	Screenplay II <sup>(P)</sup>



Semester Six
Business Journalism
Contemporary World Media
Methods in Media Research
Sub-Editing & Page-Design
Introduction to Sound Design
Cinematography II (P)
Introduction to Documentary
Semester Eight
Magazine Production
Production Design (P)
Filmmaking – The Art & Craft II (Thesis) (6C) (P) **
Advanced Documentary Production
Media Marketing
Digital Journalism
Photojournalism
Investigative Journalism (Thesis)



## BS ECONOMICS, LAW & INTERNATIONAL RELATIONS (ELI)

This program focuses on international negotiations for trade and commerce for business and economic advantage. Graduates of this program can evaluate comparative advantage of trading with business and countries. They can evaluate economic implications of policies related to GMOs, geo-political dynamics, trade routes and economic corridors such as CPEC. The graduates can help large importers, exporters and logistic organizations in designing their business strategies. They can also help government bodies in evaluating and designing bilateral and multi-lateral agreements

The BS Economics, Law and International Relations (ELI) program will require students to complete 48 courses i.e. 144 credit hours of coursework. Internship of six weeks duration in a firm approved by the Institute is also obligatory.

#### **Foundation Courses**

COM107 Academic English

COM202 Business and Professional Speech

COM205 Persuasive & Analytical Writing for Bus. Com.

PSC301 Pakistan Studies

LAN 10\* Foreign Language I LAN 20\*\* Foreign Language II

\*1 = Introduction to Arabic \*2 = Introduction to French

\*4 = Introduction to German \*6 = Introduction to Italian

\*8 = Introduction to Chinese

\*\*8 = Intermediate Chinese

#### Law

LAW105 Mercantile Law LAW106 Company Law

LAW202 Banking Laws in Pakistan LAW203 Insurance Law in Pakistan

LAW301 Intellectural Property, Patents, Copyrights

LAW400 Company Secretarial Practices

LAW404 Arbitration

LAW407 Statutory Compliance

#### **Islamic Studies**

REL101 Islamic Studies

#### **Core Business Courses**

#### **Economics**

ECO101 Principles of Microeconomics
ECO102 Principles of Macroeconomics
ECO206 Mathematical Economics
ECO207 Game Theory

ECO301 Managerial Economics
ECO304 Introduction to Econometrics
ECO307 Monetary Theory and Policy

ECO310 History of Economic Thought

ECO314 Contemporary Issues in Macroeconomics

ECO315 Microeconomic Analysis ECO316 Macroeconomic Analysis

ECO321 General Equilibrium and Welfare Economics

ECO322 Applied Econometrics
ECO323 Development Economics
ECO402 Pakistan Economic Policy
ECO407 Analysis of Pakistani Industries

#### Mathematics

MTH103 Calculus for Business Decisions

#### **Statistics**

STA203 Probability Theory & Statistics STA402 Model and Inferences



#### **International Relations**

BIR301 Introduction to IR BIR302 Political Geography BIR303 World Politics

BIR305 Religion, Culture and International Relations

BIR306 Borders in a Globalized World

BIR307 Energy Politics

BIR308 Peace Building and Conflict Zones BIR309 Trade Routes and Economic Corridors

BIR311 Strategic Studies BIR312 Globalization

BIR313 History and Practices of Diplomacy BIR314 Confidence Building Measures

#### **Elective Courses**

ECO406 Money and Banking

ECO415 WTO, Disputes & Settlement

ECO418 Resources and Environmental Economics

ECO419 Agriculture and Food Security ECO508 Issues and Political Economy

ECO509 Islamic Economics

ECO518 Governance and Public Policy BIR501 Science and Technology in IR

#### **Course Structure**

Semester One Academic English (3+0) [Pre req NA] Calculus for Business Decisions Foreign Language I Principles of Microeconomics Introduction to IR Principles of Macroeconomics	Semester Two Persuasive & Analytical Writing for Business Communication (3+0) [Pre Req. COM107] Foreign Language II Pakistan Studies Microeconomic Analysis Probability Theory & Statistics Political Geography
Semester Three Business and Professional Speech (3+0) [Pre req COM202] Macroeconomic Analysis Globalization World Politics Mercantile Law Model & Inferences	Semester Four Development Economics Mathematical Economics Introduction to Econometrics History and Practices of Diplomacy Confidence Building Measures Company Law
Semester Five Managerial Economics Game Theory History of Economic Thought Strategic Studies Islamic Studies Banking Laws in Pakistan	Semester Six Applied Econometrics General Equilibrium and Welfare Economics Contemporary Issues in Macroeconomics Religion, Culture and International Relations Borders in a Globalized World Intellectual Property, Patents and Copyrights
Semester Seven Pakistan Economic Policy Monetary Theory and Policy Energy Politics Peace Building and Conflict Zones Insurance Law in Pakistan Company Secretarial Practices	Semester Eight Analysis of Pakistani Industries Trade Routes and Economic Corridors Statutory Compliance Arbitration Elective I Elective II



## BS ECONOMICS, MEDIA & INTERNATIONAL RELATIONS (EMI)

This multidisciplinary undergraduate program combines two key social science disciplines - Economics and International Relations - with Media, adding a third dimension that has increasingly become a powerful force for disseminating messages and conducting international diplomacy. Media is determining economic sentiments and is being used for hot and cold war, and for applying international pressure, sanctions and retributions.

The program includes core courses in the respective disciplines as well as current issues and hotly debated topics such as food security, Genetically Modified Organism (GMOs) versus organic farming, Political Economy Issues, Trade Routes and Economic Corridors, CPEC, etc. This will not only make the courses interesting but increase the marketability of the students.

The BS Economics, Media and International Relations (EMI) program will require students to complete 48 courses i.e. 144 credit hours of coursework. Internship of six weeks duration in a firm approved by the Institute is also obligatory.

#### **Foundation Courses**

COM107 Academic English

COM202 Business and Professional Speech

COM205 Persuasive & Analytical Writing for Bus. Com.

PSC301 Pakistan Studies

LAN 10\* Foreign Language I LAN 20\*\* Foreign Language II

\*4 = Introduction to German \*6 = Introduction to Italian

\*8 = Introduction to Chinese

\*\*1 = Intermediate Arabic

\*\*2 = Intermediate French

\*\*8 = Intermediate Chinese

#### Media

MMM304 Media Literacy

MMM310 News Writing and Reporting

MMM316 Sub-Editing and Page Design

MMM318 Business Journalism

MMM328 Methods in Media Research

MMM329 Creative Writing Workshop

MMM360 Introduction to Photography

MMM367 Digital Journalism

#### **Islamic Studies**

**REL101** Islamic Studies

#### **Core Business Courses**

#### **Economics**

**ECO101** Principles of Microeconomics

ECO102 Principles of Macroeconomics

ECO206 Mathematical Economics

ECO207 Game Theory

ECO301 Managerial Economics

ECO304 Introduction to Econometrics ECO307 Monetary Theory and Policy

ECO310 History of Economic Thought

ECO314 Contemporary Issues in Macroeconomics

ECO315 Microeconomic Analysis

ECO316 Macroeconomic Analysis

ECO321 General Equilibrium and Welfare Economics

ECO322 Applied Econometrics

ECO323 Development Economics

ECO402 Pakistan Economic Policy

ECO407 Analysis of Pakistani Industries

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#### **Mathematics**

MTH103 Calculus for Business Decisions

#### **Statistics**

STA203 Probability Theory & Statistics

STA402 Model and Inferences



#### **International Relations**

BIR301	Introduction to IR
BIR302	Political Geography
BIR303	World Politics
BIR305	Religion, Culture and International Relations
BIR306	Borders in a Globalized World
BIR307	Energy Politics
BIR308	Peace Building and Conflict Zones
BIR309	Trade Routes and Economic Corridors
BIR311	Strategic Studies
BIR312	Globalization
BIR313	History and Practices of Diplomacy
BIR314	Confidence Building Measures

#### **Elective Courses**

ECO406	Money and Banking
ECO415	WTO, Disputes & Settlement
ECO418	<b>Resources and Environmental Economics</b>
ECO419	Agriculture and Food Security
ECO508	Issues and Political Economy
ECO509	Islamic Economics
ECO518	Governance and Public Policy
BIR501	Science and Technology in IR

#### **Course Structure**

Semester One	Semester Two
Academic English (3+0) [Pre req NA]	Persuasive & Analytical Writing for Business Communication
Calculus for Business Decisions	(3+0) [Pre Req. COM107]
Introduction to Photography	Pak Studies
Principles of Microeconomics	Microeconomic Analysis
Introduction to IR	Probability Theory & Statistics
Principles of Macroeconomics	Political Geography
	Foreign Language I
Semester Three	Semester Four
Business and Professional Speech (3+0) [Pre req COM202]	Development Economics
Macroeconomic Analysis	Mathematical Economics
Globalization	History and Practices of Diplomacy
Foreign Language II	Confidence Building Measures
World Politics	Model & Inferences
Media Literacy	Creative Writing Workshop
Semester Five	Semester Six
Managerial Economics	General Equilibrium and Welfare Economics
Game Theory	Religion, Culture and International Relations
Strategic Studies	Borders in a Globalized World
News Writing and Reporting	History of Economic Thought
Introduction to Econometrics	Contemporary Issues in Macroeconomics
Islamic Studies	Sub-Editing and Page Design
Semester Seven	Semester Eight
Pakistan Economic Policy	Analysis of Pakistani Industries
Monetary Theory and Policy	Trade Routes and Economic Corridors
Energy Politics	Methods in Media Research
Peace Building and Conflict Zones	Digital Journalism
Applied Econometrics	Elective I
Business Journalism	Elective II



#### **BS JOINT (HONORS) IN BUSINESS & PSYCHOLOGY**

The BS Joint (Hons) in Business and Psychology program is designed to provide strong foundation in business and to integrate core psychological principles. The main goal of this program is to produce graduates who have the ability to apply science of human behavior to practical business problems. Students learn to apply theories in psychology to business challenges. They learn to analyze business problems through psychological approach, utilizing research skills and developing effective solutions.

The four-year program requires completion of 144 credit hours of coursework, and 2 credit hours of compulsory internship. Students can take minimum load of 12 credit hours (4 courses per semester) or maximum load of 18 credit hours (6 courses per semester).

Entry Requirement: HSSC/F.Sc/FA/A' level

#### **Compulsory Courses**

#### Communication

COM100 Foundation English\*\*

COM107 Academic English (W, R)

COM202 Business & Professional Speech

COM205 Persuasive and Analytical Writing for Business Communication (E, W)

\*\* This non-credit course will be taken by those students who have not been able to reach the desired level of competence in the admission test

#### Language

#### LAN 10\* Foreign Language I

\*8 = Introduction to Chinese

#### LAN 20\*\*Foreign Language II

**Religious Studies** 

**Statistics** 

\*\*8 = Intermediate Chinese

#### **Political Sciences**

PSC301 Pakistan Studies REL101 Islamic Studies

#### **Social Sciences**

SSC104 Principles of Sociology STA201 Quantitative Business Analysis SSC301 History of Ideas STA202 Quantitative Skills and Managerial Statistics

#### **Psychology Core Courses**

SSC401 Business Ethics

PSY300	Introduction to Psychology	PSY301	Research Methods in Organizational Psychology
PSY302	Writing Business Psychology Research	PSY303	Introduction to Psychological Testing
PSY304	Experimental Psychology	PSY305	Contemporary Social Psychology
PSY306	Understanding Individual: Personal Construct	PSY307	Psychology of Organizational Change
PSY308	Psychological Aspects of Advertising	PSY309	Developmental Psychology
PSY310	Positive Psychology	PSY311	Consumer Psychology
PSY312	Psychology Capstone Project		



#### **Business Core Courses**

#### Accounting

ACC101 Introduction to Financial Accounting ACC201 Intermediate Financial Accounting

#### **Economics**

ECO101 Principles of Microeconomics ECO102 Principles of Macroeconomics

#### Entrepreneurship

ENT307 Entrepreneurial Leadership and Motivation ENT308 Social Advocacy and Community Service

#### **Finance**

FIN201 Introduction to Business Finance FIN202 Financial Management

#### Management

MAN101 Principles of Management MAN302 Organizational Behavior

#### Marketing

MKT301 Principles of Marketing MKT302 Marketing Management

#### Law

LAW409 Corporate and Business Law

#### **Elective Courses**

Any FIVE courses from each may be opted from the following in the last two semesters.

#### **Elective Psychology**

#### **Psychology**

PSY501 Motivation and Attitude
PSY515 Projective Methods
PSY506 Quality of Work Life
PSY507 Cyber Psychology, Behavior and Social Networking
PSY508 Health Promotion in Corporate Setting
PSY509 Psychology of Judgment and Decision

#### **Elective Business**

HRM505 Organizational Change & Development

MAN405 Strategic Management MKT403 Sales Management MKT511 Brand Management

FIN511 Analysis of Financial Statements

FIN602 Behavioral Finance

#### **Course Structure**

Semester One	Semester Two	Semester Three
Foundation English	Introduction to Financial Accounting	Intermediate Financial Accounting
Academic English (3+0) [Pre req NA]	Principles of Macroeconomics	Persuasive Analytical Writing for B.C (E,W)
Principles of Microeconomics	Principles of Marketing	(3+0) [Pre Req. COM107]
Principles of Management	Research Methods in Org. Psychology	Writing Business Psychological Research
Introduction to Psychology	Pakistan Studies	Contemporary Social Psychology
Principles of Sociology	Entrepreneurial Leadership & Motivation	History of Ideas
Islamic Studies		Social Advocacy And Community Service
Semester Four	Semester Five	Semester Six
Business and Professional Speech	Language I	Understanding Indiv.: Personal Construct
(3+0) [Pre req COM202]	Psychological Aspects of Advertising	Language II
Introduction to Business Finance	Experimental Psychology	Psychology of Organizational Change
Introduction to Psychological Testing	Quantitative Business Analysis	Consumer Psychology
Developmental Psychology	Positive Psychology	Corporate & Business Law
Business Ethics	Quantitative Skills & Managerial Statistics	Financial Management
Organizational Behavior		
Semester Seven	Semester Eight	
Elective I	Elective VI	
Elective II	Elective VII	
Elective III	Elective VIII	
Elective IIV	Elective IX	
Elective V	Elective X	
Capstone (Psychology)	Internship (2 credit hours)	



#### **BS EDUCATION**

Lack of trained teachers has surfaced as one of the main causes of Pakistan lagging behind in the human capital index. Keeping in view the dire need of dynamic and enterprising teachers in schools, IoBM offers BS (Education) program. This 4-year program has been particularly developed to fill in the niche in Pakistan's educational scenario. The program will provide a strong foundation in the field of education and integrate the core principles of effective teaching through innovative practices. The main goal of this program is to produce graduates, who have the ability to apply the science of learning to practical educational problems, helping them to add value to the society. This program will not only help to meet the basic criteria to become effective teachers in public or private schools, but it will also provide a clear path to pursue higher studies in Education (M.Phil/Ph.D). This is a 144 hours credit program, which will be offered during the weekdays.

#### **Learning Outcomes**

- Identify needs of the individual learner
- Develop skills to conduct research in classroom
- Develop a culture of tolerance and understanding
- Critical thinking by evaluating and analyzing information

#### **Career Path**

- 1. Guidance Counselor
- 3. Career Counselor
- 5. Admission Counselor/Recruiter
- 7. School Teacher

- 2. School Psychologist
- 4. Education Consultant
- 6. Education Administrator

Eligibility: Intermediate (any group)/A-levels with at least 55% marks

**Duration**: 4 years (8 semesters)

#### **Foundation Courses**

#### Communication

COM101 General English
COM107 Academic English
COM119 Communication Skills

#### **Computer Science**

CSC111 Intro. to Info. & Communication Technology (ICT)

#### Language

LAN112 Urdu I

#### **Political Science**

PSC301 Pakistan Studies

#### **Psychology**

SSC101 Introduction to Psychology

#### **Religious Studies**

**REL101** Islamic Studies

#### Required Courses

#### Social Enterprise Design

SED102 Philosophy of Education and its Psychological Roots

SEM102 Social Enterprise in Education: HRM

SEM103 Ethical Leadership

#### **Educational Management**

EDM402 Applied Linguistics

EDM403 Critical Thinking and Reading

EDM406 Educational Policy and Economics

EDIVI400 Educational Policy and Econom

EDM414 Creativity in Education

EDM416 Comparative Education System

EDM417 Educational Counseling

EDM419 Managing Teaching and Learning

EDM421 Sociology of Education

EDM422 Learners and Learning Styles

EDM423 Reflective Inquiry in Education

EDM427 Research Methods in Education II (Qualitative)

EDM429 Research Methods in Education I (Quantitative)



#### **Core Education Courses**

BSE10	L General Science	BSE103	General Methods and Principles of Teaching
BSE10	5 Classroom Management	BSE107	General Mathematics
BSE20	Teaching of General Science	BSE203	Foundation of Education
BSE20	Early Childhood Education	BSE207	Classroom Assessment
BSE209	9 Teaching of English	BSE211	Teaching of Mathematics
BSE213	B School, Community and Teacher	BSE250	Teaching Practicum - I
BSE25	5 Teaching Practicum II	BSE301	Curriculum Development
BSE303	B Contemporary Issues and Trends in Education	BSE350	Teaching Practicum III
BSE40	School Management	BSE403	Gender Studies
BSE40	5 Inclusive Education	BSE407	Innovations and Technology in Education
BSE420	Piece Education	BSE422	Lifelong Learning in Changing Context
BSE450	) Teaching Practicum – IV	BSE501	Thesis Writing-Capstone Project I
BSE50	B Thesis Writing-Capstone Project II		

#### **Elective Courses**

BSE420 Peace Education

BSE422 Lifelong Learning in Changing Context

EDM402 Applied Linguistics

EDM518 Evaluation and Assessment in Education

#### **Course Structure**

Semester One	Semester Two
General English (3+0) [Pre req NA]	Academic English (3+0) [Pre Req. COM101]
Islamic Studies	Intro. to Information and Communication Technology (ICT)
Introduction to Psychology	Classroom Management
Urdu I	General Mathematics
General Science	Pakistan Studies
General Methods and Principles of Teaching	Philosophy of Education and its Psychological Roots
Semester Three	Semester Four
Teaching of General Science	Classroom Assessment
Foundation of Education	Teaching of English
Social Enterprise in Education: HRM	Teaching of Mathematics
Ethical Leadership: Islamic Perspective	School, Community and Teacher
Early Childhood Education	Critical Thinking and Reading
Teaching Practicum – I	Teaching Practicum II
_	
Semester Five	Semester Six
Semester Five Communication Skills (3+0) [Pre Req. COM107]	Semester Six Contemporary Issues and Trends in Education
Communication Skills (3+0) [Pre Req. COM107]	Contemporary Issues and Trends in Education
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles	Contemporary Issues and Trends in Education Sociology of Education
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education Creativity in Education	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III Managing Teaching and Learning
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education Creativity in Education Curriculum Development	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III Managing Teaching and Learning Educational Policy and Economics
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education Creativity in Education Curriculum Development Educational Counseling	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III Managing Teaching and Learning Educational Policy and Economics Research Methods in Education I (Quantitative)
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education Creativity in Education Curriculum Development Educational Counseling  Semester Seven	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III Managing Teaching and Learning Educational Policy and Economics Research Methods in Education I (Quantitative)  Semester Eight
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education Creativity in Education Curriculum Development Educational Counseling  Semester Seven School Management	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III Managing Teaching and Learning Educational Policy and Economics Research Methods in Education I (Quantitative)  Semester Eight Gender Studies
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education Creativity in Education Curriculum Development Educational Counseling  Semester Seven School Management Elective I	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III Managing Teaching and Learning Educational Policy and Economics Research Methods in Education I (Quantitative)  Semester Eight Gender Studies Innovations and Technology in Education
Communication Skills (3+0) [Pre Req. COM107] Learners and Learning Styles Reflective Inquiry in Education Creativity in Education Curriculum Development Educational Counseling  Semester Seven School Management Elective I Elective II	Contemporary Issues and Trends in Education Sociology of Education Teaching Practicum III Managing Teaching and Learning Educational Policy and Economics Research Methods in Education I (Quantitative)  Semester Eight Gender Studies Innovations and Technology in Education Inclusive Education

NB: It is mandatory for students to attend defense sessions given by MPhil and PhD candidates.



## MBA SPECIALIZATION IN EDUCATIONAL MANAGEMENT (2 YEAR) (WITH 16 YEARS OF EDUCATION)

Students selecting the domain-based specialization in Educational Management are expected to have completed 30 credit hours of foundation stage of the MBA program. Specialization stage consists of 42 credit hours of course work covering strategic and operational areas. These include courses in the area of Marketing Strategy, Strategic Finance, Strategic Management, Leadership, Technology/ Operations, Entrepreneurship, Organizational Processes, Analytics of Decision Making, etc. During the specialization stage, students take 33 credit hours of strategy courses, 24 credit hours of operational level courses, and 9 credit hours of elective courses. The department of Education has developed the strategy to include the core as well as elective courses to help students attain the knowledge and skills required in the leadership and management of educational institutions. In addition, students select two real life Capstone Projects (6 credit hours) in their area of specialization during their final year. Overall, the program will provide a strong foundation in the field of educational management by integrating the core principles of education and business management, backed by innovative practices in the field.

MBA track for specialization in Educational Management as well as the foundation stage is only available during the weekends. Candidates must select the specialization at the time of filling the application. The required and elective courses for the entire track are given below:

#### **Learning Outcomes**

- Develop knowledge of pedagogy and management
- Design and develop effective curriculum for educational institutes
- Develop effective educational policies
- Achieve organizational goals by streamlining financial and strategic objectives

#### Career Path

- 1. Principal
- 3. School Administrator
- 5. University Registrar
- 7. Curriculum designers
- 9. Teaching at public as well as private schools
- 11. Educational Consultants
- 13. Pursue higher studies (M.Phil. and PhD)

- 2. Assistant Principal
- 4. Proctor
- 6. Academics Coordinator
- 8. Entrepreneurs in education (private sector)
- 10. Development Sectors (NGOs)
- 12. Civil services (CSS, PCS etc).

Eligibility: 16 year education (BS-4year/M.A/M.Sc/M.Com etc.) in any discipline

#### **Required Courses**

#### Accounting

ACC419 Financial Accounting

#### Communication

COM402 Business Communication

#### **Economics**

ECO409 Business Economics

#### Law

LAW409 Corporate and Business Law

\*Indicates MBA level courses

#### **Statistics**

STA411 Quantitative Analysis and Decision Making

#### Management

MAN418 Management and Organizational Dynamics

MAN606 Business Analytics MAN612 Strategic Management\*

#### Marketing

MKT402 Marketing Management

MKT404 Methods in Business Research

MKT509 Consumer Behavior

MKT610 Marketing Strategies and Value Innovation\*



#### **Educational Management**

EDM419 Managing Teaching and Learning

EDM518 Evaluation and Assessment in Education

EDM526 Curriculum Management and Planned Change\*

EDM415 Educational Philosophy and Ethics

EDM689 Thesis Writing-Capstone Project I\*

EDM690 Thesis Writing-Capstone Project II\*

#### **Finance**

FIN408 Theory and Practice of Financial Management

#### **Human Resource Management**

HRM410 Managing Human Capital

HRM606 Leadership, Ethics and Change

#### **Elective Courses**

#### **Educational Management**

EDM624 Innovations and Technology in Education

EDM664 Early Childhood Development

EDM654 Lifelong Learning in Changing Contexts

EDM656 Teacher Education

EDM658 Gender Studies in Education

EDM662 Educational Policy and Economics

#### **Course Structure**

Foundation Level		
Semester One	Semester Two	
Consumer Behavior	Managing Teaching and Learning	
Financial Accounting	Management and Organizational Dynamics	
Corporate and Business Law	Marketing Management	
Business Communication	Quantitative Analysis and Decision Making	
Semester Three		
Methods in Business Research		
Business Economics		
Managing Human Capital		
Theory and Practice of Financial Management		
MBA Education Management Level		
Semester Four	Semester Five	
Early Childhood Development	Marketing Strategies and Value Innovations	
Leadership Ethics and Change	Curriculum Management and Planned Change	
Business Analytics	Thesis Writing (Capstone I)	
Evaluation and Assessment in Education	Elective I	
Semester Six		
Strategic Management		
Thesis Writing (Capstone II)		
Elective II		
Elective III		

NB: It is mandatory for students to attend defense sessions given by MPhil and PhD candidates.



## MSc ORGANIZATIONAL PSYCHOLOGY AND HUMAN RESOURCE MANAGEMENT FOR STUDENTS WITH 16 YEARS EDUCATION

The program is intended for professionals looking for a better understanding of the organization they work for. It is concerned with the social and psychological processes operating in organizations, and how these processes relate to organizational systems and structures.

This two-year weekend program requires successful completion of 72 credit hours of course work, including 23 courses plus a research project of 3 credit hours each spread over six semesters. Students are expected to maintain a CGPA of 3.0 and successfully complete research projects for conferment of the degree. This program combines study in psychology with courses in human resource management, workplace relations, leadership and team dynamics, and management strategy.

Students can take a minimum load of 6 credit hours (two courses) or maximum of 12 credit hours (four courses) in each of the semesters.

#### **Foundation Courses**

#### **Psychology**

PSY400 Introduction to Organizational Psychology

#### Management

MAN418 Management and Organizational Dynamics

#### **Human Resource Management**

HRM410 Managing Human Capital

#### **Statistics**

STA410 Introduction to Behavioral Statistics

#### **Core Courses**

#### **Psychology**

PSY402 Counseling Psychology

PSY405 Group Dynamics

PSY406 Research Methods in Organizational Psychology

PSY407 Personnel Psychology PSY408 Consumer Psychology

PSY430 Psychological Testing-I

PSY431 Psychological Testing-II

PSY432 Behavior Modification in Industry

PSY433 Leadership and Strategic Change



#### **Human Resource Management**

HRM408 Human Resource Issues in Pakistan

HRM409 Organizational Consulting Skills

HRM607 Talent Acquisition

HRM608 Labour Studies and Employee Relations

HRM609 Learning and Organizational Development

HRM610 Negotiations and Conflict Resolution Skills

HRM530 Research Practicum in HRM

#### **Elective Courses Courses**

#### **Psychology**

PSY501 Work Motivation Attitude

PSY506 Quality of Work Life

PSY515 Projective Methods

#### **Human Resource Management**

**HRM614** Rewards Management

HRM615 Leadership Studies

HRM616 Talent Management and Performance Development

HRM617 HR Analytics

### Course Structure (Career Option I Majors Psychology)

Semester One	Semester Two
Introduction to Organizational Psychology	Group Dynamics
Management and Organizational Dynamics	Organizational Consulting Skills
Managing Human Capital	Psychological Testing-I
Introduction to Behavioral Statistics	Human Resource Issues in Pakistan
Semester Three	Semester Four
Research Methods in Organizational Psychology	Counseling Psychology
Consumer Psychology	Personnel Psychology
Recruitment and Selection	Employee Training and Development
Industrial Relation and Labor Law	Negotiation Skills
Semester Five	Semester Six
Psychological Testing-II	Elective I
Behavior Modification in Industry	Elective II
Leadership and Strategic Change	Elective III
Research Practicum in HRM	Elective IV

<sup>\*</sup>Note: For the 6th Semester students are required to choose 2 Psychology electives and 2 HRM electives.



## MSc ORGANIZATIONAL PSYCHOLOGY AND HUMAN RESOURCE MANAGEMENT FOR STUDENTS WITH 14 YEARS EDUCATION

The program is geared towards professionals who wish for a better understanding of the organization they work for. It is concerned with the social and psychological processes operating in organizations, and how these processes relate to organizational systems and structures.

This three-year weekend program requires successful completion of 108 credit hours of course work, including 36 courses and 3 credit hours research project each spread over six semesters. Students are expected to maintain a CGPA of 3.0 and successfully complete research projects for conferment of the degree. This program combines study in psychology with courses in human resource management, workplace relations, leadership and team dynamics, and management strategy.

Students can take a minimum load of 6 credit hours (two courses) or maximum of 12 credit hours (four courses) in each of the semesters.

#### **Foundation Courses**

#### **Psychology**

PSY400 Introduction to Organizational Psychology

#### Management

MAN418 Management and Organizational Dynamics MAN612 Strategic Management

#### Entrepreneurship

ENT308 Social Advocacy and Community Service

#### **Human Resource Management**

HRM410 Managing Human Capital

#### Marketing

MKT401 Principles of Marketing

#### Statistics

STA410 Introduction to Behavioral Statistics

#### Communication

COM402 Business Communication COM403 Interpersonal Communication Skills

#### **Social Sciences**

SSC401 Business Ethics SSC407 Principles of Sociology

#### **Management Information System**

MIS401 Computer Applications



#### **Core Courses**

#### **Psychology**

PSY402 Counseling Psychology

PSY405 Group Dynamics

PSY406 Research Methods in Organizational Psychology

PSY407 Personnel Psychology

PSY408 Consumer Psychology

PSY430 Psychological Testing-I

PSY431 Psychological Testing-II

PSY432 Behavior Modification in Industry

PSY433 Leadership and Strategic Change

PSY434 Personality Theories

#### **Human Resource Management**

HRM408 Human Resource Issues in Pakistan

HRM409 Organizational Consulting Skills

HRM530 Research Practicum in HRM

HRM607 Talent Acquisition

HRM608 Labour Studies and Employee Relations

HRM609 Learning and Organizational Development

HRM610 Negotiations and Conflict Resolution Skills

HRM612 Strategic Human Resource Management

HRM611 Managing Organizational Change

#### **Elective Courses**

#### **Psychology**

PSY501 Work Motivation Attitude PSY506 Quality of Work Life PSY515 Projective Methods

#### **Human Resource Management**

HRM614 Rewards Management HRM615 Leadership Studies

HRM616 Talent Management and Performance Development

HRM617 HR Analytics

#### **Course Structure**

Semester One Intro. to Organizational Psychology Introduction to Behavioral Statistics Principles of Sociology Computer Applications	Semester Two Management & Organizational Dynamics Principles of Marketing Personality Theories Business Ethics	Semester Three Managing Human Capital Strategic Management Performance Appraisal Business Communication (3+0) [Pre req NA]
Semester Four Social Advocacy and Community Service Group Dynamics Industrial Relation and Labor Law Organizational Consulting Skills	Semester Five Human Resource Issues in Pakistan Psychological Testing-I Organizational Change & Development Interpersonal Communication Skills (3+0) [Pre Req. COM402]	Semester Six Research Methods in Org. Psychology Consumer Psychology Recruitment and Selection Strategic HRM
Semester Seven Counseling Psychology Personnel Psychology Employees Training and Development Negotiation Skills	Semester Eight Psychological Testing-II Behavior Modification in Industry Leadership & Strategic Change Research Practicum in HRM	Semester Nine Elective I Elective II Elective III Elective IV

<sup>\*</sup>Note: For the 9th Semester students are required to choose 2 Psychology electives and 2 HRM electives.



#### MSc IN ENERGY ECONOMICS, ENVIRONMENT AND POLICY

Master's of Sciences in Energy Economics, Environment and Policy program will be offered to two different groups.

#### **Group I: Full-Time Students**

The duration for Group I will be 2 years, comprising three semesters and 3 months of dissertation writing.

#### **Group II: Part-Time Students**

Students will be given between 2 to 3 years to complete the degree, allowing them to choose their own work load with a minimum of three courses in the first semester and two subsequently. They will also be allowed a period of 3-6 months for completion of their dissertations (though strict compliance with initial deadline submitted by them will be enforced).

#### **Requirements for the Program:**

An undergraduate degree in any of the following:

- Economics undergraduate degree in or minor in economics, finance or business
- Science (including environmental science) and/or engineering

Also, all applicants will be required to fulfil the requirements outlined by the Department of Economics.

#### **Program Objectives:**

The program aims to provide:

- A thorough understanding of the economics of energy supply, demand and policy (both in Pakistan and Internationally)
- · Technical as well as analytical understanding of the global energy economy and its sectors
- Ability to make complex decisions in the industry, given the environmental constraints and the know-how to resolve problems
- An understanding of different economic, political and policy dynamics of energy and related problems

The program is unique to Pakistan and will focus on the areas that have gained importance in the global energy economic agenda:

- 1- Environment and Climate
- 3- Modelling
- 5- Efficiency and Security
- 2- Energy Economics
- 4- Regulations and Policy

There is a need for specially qualified professionals who have the aptitude required to apply their knowledge and skills to a variety of issues and are able to relate the results to policy making and planning.



#### **Required Courses**

#### Accounting

ACC419 Financial Accounting

#### **Economics**

ECO410 Econometrics I

ECO412 Econometrics II

ECO511 Micro and Macro Analysis

ECO512 Quantitative Methods in Economics

ECO513 Research Methods and Dissertation

ECO514 Energy Economics and Technology

ECO515 Theory and Practice of Public Policy

**ECO516** Industry Economics

ECO517 Economics of International Energy and Its Issues

#### **Energy Management**

EEM403 Energy Sources and Management

EEM510 Economics of Energy Management

EEM511 Energy Regulation and Policy Analysis

EEM601 Environmental Management and Green Technology

#### **Course Structure**

Semester One	Semester Two	Semester Three
Micro and Macro Analysis	Econometrics II	Economics of Energy Management
Econometrics I	Theory and Practice of Public Policy	Energy Regulation and Policy Analysis
Quantitative Methods in Economics	Industry Economics	Environmental Mgmt. & Green Technology
Research Methods and Dissertation	Energy Sources and Management	Economics of Inter. Energy & Its Issues
Energy Economics and Technology	Financial Accounting	

#### Dissertation

#### Method of Assessment:

Courses related to Energy will consist of 75% written examination and 25% assignment. The rest will follow the same procedure as followed by the Department of Economics. The Research Methods course will consist of 25% assignment and 75% dissertation.



#### MPhil IN ORGANIZATIONAL PSYCHOLOGY

The MPhil program in Organizational Psychology is designed specifically for the training of professional industrial-organizational psychologists. Students will receive comprehensive training in utilizing psychological knowledge for improving organizational effectiveness and employee satisfaction.

#### Eligibility

Candidates with 16 years of education holding a master's degree in Psychology with 1st division/CGPA with at least 3 on a scale of 4 from an HEC recognized university are eligible for admission to the MPhil program at IoBM.

#### **Program Structure**

MPhil is a 30 credit hour program with 8 courses and one thesis of 6 credit hours. Each of the 8 courses will be of 3 credit hours. After successful completion of course work, students are required to undertake research for a thesis under the guidance of a research supervisor assigned by IoBM.

#### **Course Structure**

#### **Semester One**

MPP601 Qualitative Research Methods in Psychology MPP603 Quantitative Research Methods in Psychology

MPP605 Psychological Testing and Measurement

#### **Semester Two**

MPP607 Independent Study in Organizational Psychology

MPP609 Personnel Psychology at Workplace

MPP611 Human Factors in Work Environment

#### Semester Three

MPP613 Organizational Conflict & Management

MPP615 Project Practicum in Organizational Psychology

#### Semester Four

MPP620 MPhil Thesis (6 credit hours)

It is mandatory for research students of MPhil programs to attend at least five sessions of the Psychology Research Seminar Series in each semester.



#### **MS ECONOMICS**

This program is proposed for students with 16 years of education as well as for in-house BS Economics and Finance students of IoBM and those with equivalent qualifications. The students enrolled will complete one year of course work of 24 credit hours and six credit hours of thesis writing.

#### **Required Courses**

#### **Economics**

ECO601 Microeconomics
ECO602 Macroeconomics

ECO603 Econometrics and Research Methods

ECO607 Development Economics ECO606 Financial Econometrics

ECO608 Theory and Practice of Economic Policy

#### **Elective Courses**

#### **Economics**

ECO706 Monetary Economics
ECO708 Mathematical Economics
ECO709 Industrial Economics
ECO710 Mergers, Acquisitions and Restructuring
ECO711 Taxation and Business Strategy

ECO712 Trade and Globalization

Thesis writing (6 credit hours)

#### **Course Structure**

#### Semester One

Microeconomics
Macroeconomics
Econometrics and Research Methods

#### **Semester Two**

Theory and Practice of Economic Policy Development Economics Financial Econometrics

#### **Semester Three**

Elective I

Elective II

Thesis Writing (6 credit hours)

It is mandatory for research students of MPhil and PhD programs to attend at least five sessions of the Multi-disciplinary Research Seminar Series in each semester.



#### **MPhil EDUCATION**

MPhil in Education is specially designed for educators at all levels in private and public sector institutions as well as administrators who have an interest in research. The program will provide a strong foundation in the field of educational research and integrate the core principles of research and development backed by innovative practices. This is a two-year degree program completed by advanced course work and research. Candidates can enroll for a minimum of two years and a maximum of four years. Course work is offered in the first year while the second year of candidature is devoted to thesis writing. At the end of the first year, candidates are required to produce extended research proposals (approximately 3000-4000 words). Upon acceptance of a research proposal, candidates are guided in the conduct of research and are finally examined on the basis of defense of the thesis.

#### **Learning Outcomes**

- Apply thoughtful practices to enhance student's learning
- Design and develop a curriculum based on theory and practice
- Evaluate learning and development
- · Exhibit leadership skills to manage and evaluate staff
- Critique and validate relevant research
- Develop research projects

#### Career Path

- 1. Curriculum Developer
- 2. Corporate Trainer
- 3. Principal
- 4. Educational Consultant
- 5. Educational Policy Developer
- 6. Career Counselor
- 7. Curriculum Designers
- 8. Entrepreneurs in education (private sector)
- 9. Teaching at public as well as private higher education institutes
- 10. Development Sectors (NGOs)
- 11. Educational Consultants
- 12. Pursue higher studies (PhD)

#### Eligibility

- As per HEC policy 16 years of education in the relevant field of study with 2.5 CGPA or C-Grade
- Candidates should have BEd/MEd/Masters in Education/MBA in Education Management for admission in MPhil in Education
- Candidates must clear IoBM aptitude test or present NTS test result at the time of admission

#### **Program Requirements**

MPhil requires completion of course work and dissertation/thesis. Minimum duration is 1.5 years and maximum is 4 years:

- MPhil course work requirements consist of eight graduate level courses (24 credit hours)
- On completion of dissertation/thesis the student is awarded 6 credit hours



An MPhil student must additionally complete the following requirements while at IoBM:

- Identify Supervisor
- MPhil Proposal/Synopsis Development
- MPhil Proposal/Synopsis Defense
- BASR Approval of MPhil Proposal/Synopsis
- Continuous enrollment in supervised research
- Completion of MPhil Thesis
- Approval of External Evaluaters/Examiner by BASR
- Open defense of MPhil Thesis
- · Any other HEC requirement
- Final MPhil Thesis Submission to BASR

#### **Course Structure**

#### **Core Courses**

- MPE604 Developing a Research Project
- MPE607 Readings and Critical Analysis in Education
- MPE610 Philosophical Foundations in Education
- MPE615 Qualitative Research Methods in Education
- MPE617 Statistical Testing and Inferences in Education
- MPE620 Analysis of Educational Policies

#### **Electives**

- MPE702 Managing Higher Education Institutions
- MPE704 Strategic Management of Schools & Schools Systems
- MPE705 Economics of Education
- MPE706 Global Trends in Education

#### Thesis

MPE790 Research Thesis (6 credit hours)

NB: It is mandatory for students to attend defense sessions given by MPhil and PhD candidates.



#### PhD IN EDUCATION

The aim of PhD in Education program is to promote scholarship, research and service at an academic level. The doctoral program is the highest degree of excellence at the Institute of Business Management for faculty and candidates alike, allowing them to remain updated in research literature and to conduct socially relevant and intellectually competent research studies in specialized areas. This program will address research competencies with a range of courses in the contemporary topics of education, research and development, helping the scholars to compete for leadership positions in the field of education.

#### **Learning Outcomes**

- Integrate and communicate knowledge of higher education
- Evaluate and synthesize national and international challenges to education
- Critique and assess concepts and theories from education
- Demonstrate and measure competence in designing and communicating research
- Analyze, critique and validate education-related research

#### **Career Path**

- 1. Curriculum Developer
- 2. Corporate Trainer
- 3. Principal
- 4. Educational Consultant
- 5. Educational Policy Developer
- 6. Career Counselor
- 7. School Administrator
- 8. Professor
- 9. University Vice Chancellor
- 10. Entrepreneurs in education (private sector)
- 11. Development Sectors (NGOs)

#### Eligibility

MPhil or equivalent graduates from HEC recognized institutions meeting the following criteria:

- A minimum CGPA of 3.00 on a scale of 4.00 (or overall 60% marks) or equivalent
- A minimum of 18 years of schooling that corresponds to MS / MPhil or equivalent degree from HEC recognized institutions in a relevant discipline
- GRE subject specific or GAT subject test conducted by the NTS, or equivalent in the relevant discipline
- Interview conducted by the Institute
- All other HEC stipulated requirements

#### **Program Requirements**

PhD requires completion of course work and dissertation/thesis. Minimum duration is 3 years and maximum is 8 years:

- PhD course work requirements consist of six graduate level courses (18 credit hours)
- On completion of dissertation/thesis the student is awarded 30 credit hours



PhD students must additionally go through the following route for degree completion:

- Comprehensive Exam
- Identify Supervisor
- PhD Proposal/Synopsis Development
- PhD Proposal/Synopsis Defense
- BASR Approval of PhD Proposal/Synopsis
- Continuous enrollment in supervised research courses for meeting the full-time residency requirements
- Completion of PhD Dissertation/Thesis
- Approval of External Evaluaters/Examiner by BASR
- Publication of at least one paper in an ISI indexed or an HEC recognized journal on an official acceptance of the paper
- · Evaluation of PhD Dissertation by two foreign faculty members from developed countries as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of PhD dissertation
- Any other HEC requirement
- Final Dissertation/Thesis Submission to BASR

#### **Course Structure**

#### **Core Courses**

PED701 Methods and Issues in Advanced Qualitative Research

PED702 Advanced Educational Philosophy

PED703 Methods and Issues in Advanced Quantitative Research

PED706 Designing and Developing a Research Framework

#### **Elective Courses**

PED810 Planning Developing and Evaluating Curriculum

PED812 Educational Policies and Organizational Development

PED815 Development in Early Childhood

PED817 Edupreneurship in the Changing World

PED820 Innovations and Pedagogies in Teacher Education

#### **Thesis**

PED991 Research Thesis (3 credit-hour)

PED992 Research Thesis (6 credit-hour)

PED993 Research Thesis (9 credit-hour)

NB: It is mandatory for students to attend defense sessions given by MPhil and PhD candidates.



#### PhD IN ECONOMICS

The PhD in Economics focuses on providing state-of-the-art teaching and research skills within the broader economics discipline. Students registering for the program should have a thorough knowledge of economic theory, technical and quantitative skills and the ability to apply these to study economic problems. These goals are achieved through teaching, workshops, research seminars, term papers and thesis writing.

#### **Eligibility**

#### MS or equivalent graduates from HEC recognized institutions meeting the following criteria:

- A minimum CGPA of 3.00 on a scale of 4.00 (or overall 60% marks) or equivalent
- A minimum of 18 years of schooling that corresponds to MS / MPhil or equivalent degree from HEC recognized institutions in a relevant discipline
- GRE subject specific or GAT subject test conducted by the NTS, or equivalent in the relevant discipline. A minimum of 60% (percentage) marks is required
- Pass interview conducted by the Institute
- Meet all other HEC stipulated requirements

#### **Program Requirements**

#### PhD requires completion of course work and dissertation/thesis. Minimum duration is 3 years and maximum is 5 years:

- PhD course work requirements consist of six graduate level courses (18 credit hours)
- On completion of dissertation/thesis the student is awarded 30 credit hours

#### A PhD student must additionally complete the following requirements:

- Comprehensive Exam
- PhD Proposal/Synopsis Development
- PhD Proposal/Synopsis Defense
- BASR Approval of PhD Proposal/Synopsis
- Continuous enrollment in supervised research courses for meeting the full-time residency requirements
- Completion of PhD Dissertation/Thesis
- Selection of External Evaluators by BASR
- Publication of at least one paper in an ISI indexed or an HEC recognized journal or an official acceptance of the paper
- Evaluation of PhD Dissertation by two foreign faculty members from developed countries as per HEC criteria
- Dissertation/Thesis Finalization
- Open defense of PhD dissertation
- Any other HEC requirement
- Final Dissertation/Thesis Submission to BASR



#### **Required Courses**

PDE701	Advanced Research Methodology
PDE702	Advanced Applied Econometrics
PDE703	Development Economics
PDE704	New Dimensions in Economics and Public Policies

#### **Elective Courses**

PDE711	Industrial Economics	
PDE712	Public Finance	
PDE713	International Trade	
PDE714	Selected Topics in Monetary Economics	
PDE715	Selected Topics in Islamic Economics	

Political Economy and Economic Policy Analysis, and (ii) Discourses on Globalization

#### **Course Structure**

#### **Semester One**

Advanced Research Methodology **Advanced Applied Econometrics** 

#### **Semester Two**

**Development Economics** New Dimensions in Economics and Public Policies

#### **Semester Three**

Elective I Elective II

#### **Semesters Four to Nine**

PDE850 Research Thesis

It is mandatory for research students of MPhil and PhD programs to attend at least five sessions of the Multi-disciplinary Research Seminar Series in each semester.



# ADMINISTRATIVE AND ACADEMIC REQUIREMENTS

#### COMPREHENSIVE EXAMINATION

After completion of their MBA program, all students are required to pass a comprehensive examination conducted by the Institute. The comprehensive examination provides students an opportunity to integrate, synthesize and apply the various aspects of academic achievements and overall work done in their chosen majors and the core courses studied during their MBA. Preparation for the comprehensive examination would develop a broader understanding of the significance of the major chosen by the students within the framework of their overall educational experience.

#### Structure

The comprehensive examination is of a three hour duration divided equally into three segments and consisting of three case studies, each of a one hour duration.

The case studies/questions are related to all majors available to MBA students.

- To pass the comprehensive examination, a students must get satisfactory grades in one of their majors and in one non-major.
   The examination is to be conducted twice a year in the months of March and September. Students will be charged Rs. 5,000 as comprehensive examination fee. Passing the comprehensive examination is a mandatory requirement for obtaining the MBA degree.
- 2. Students are allowed a maximum of two attempts to qualify for the comprehensive examination. A third attempt may be availed only after the Dean's permission. The comprehensive examination is taken only after the students have completed all course requirements and attained a CGPA of at least 3.0 in their program.
- 3. A refresher course will be arranged by EMEC in the month of August for students who will appear in the comprehensive exam in September and will be conducted by faculty from within IoBM or hired from outside. Students will be charged a nominal fee for attending the refresher course.



#### PROCEDURE FOR SUBMITTING MS, MPhil & PhD THESIS

#### MS / MPhil Thesis

- Candidates must pass NTS (50% or more marks in General Exam) or equivalent test taken by IoBM / GRE
- Candidates must pass 08 courses (24 credit hours) with a minimum CGPA of 3.0. D grades will not be considered
- · Qualified candidates to inform MPhil program coordinator/ HoD to decide on a specialized area for research
- Candidates to suggest supervisor as per relevant area of interest
- BASR's decision to be shared with the candidate and supervisor in writing
- Candidates to submit thesis on a CD for plagiarism (19% acceptable) check to the program BASR Office
- (Reference section to be excluded from thesis)
- After Plagiarism check, candidates will submit four copies of final thesis to the BASR
- BASR to approve the examiners' names: 2 for Thesis Evaluation and 1 for Thesis Defense (equal number of alternative names
  will also be shared with the BASR) which will be provided by the supervisor
- Reports from the examiners to be directed to the respective Deans
- Dean to submit the report to BASR for recommendations (if any)
- Final copy of the thesis to be submitted to BASR for thesis defense
- Supervisor, coordinator, respective Dean, external examiner, relevant department faculty to form the thesis defense committee
- Candidates to defend the thesis through PowerPoint presentation
- Viva report to be submitted to the respective dean
- Dean to forward the examiners' report to BASR for the final approval of degree
- The Rector to confirm the award of the degree

#### PhD Thesis / Dissertation

For prescribed forms and details, refer to PhD mannual for students

- Candidates must pass NTS (60% or more marks in subject exam) or equivalent test i.e. GRE or by IoBM
- Candidates must pass 06 courses (18 credit hours) with a minimum CGPA of 3.0. D grades will not be considered
- Qualified candidates to inform PhD program coordinator/HoD to decide on a specialized area for research
- Candidate to suggest supervisor as per relevant area of interest
- BASR's decision to be shared with the candidate and supervisor in writing
- Candidates to submit thesis on a CD for plagiarism (19% acceptable) check to the BASR Office (Reference section to be excluded)
- After Plagiarism check, candidates submit four copies of final thesis to the BASR Office
- BASR to approve the examiners' names: Two international thesis evaluators and one national evaluator (equal number of
  alternative names will also be shared with the BASR committee members) which will be provided by the supervisor
- Reports from the examiners to be directed to the respective deans
- Dean to submit the report to BASR for recommendations (if any)
- Final copy of the thesis to be submitted to BASR for thesis defense.
- Supervisor, coordinator, respective dean, external examiners, relevant department faculty to form the thesis defense committee
- Candidates to defend the thesis through PowerPoint presentation
- Examiners' report to be submitted to the respective dean
- Dean to forward the examiners' report to BASR for final approval of degree
- The Rector to confirm the award of the degree



#### TEACHING AND LEARNING AT IOBM

loBM has been, and continues to aim at harnessing the best researched and the most widely implemented methods of dissemination of information to support excellence in teaching, learning and research. Multifaceted teaching strategies at IoBM include experiential learning, cooperative learning, directed class discussions and activities in critical thinking.

- Experiential learning methodology enables industry engagement through "learning by doing" approach. Adoption of
  experiential learning in all programs is a strategic initiative of IoBM.
- The case method of instruction continues to be a significant classroom teaching strategy at IoBM with a view to integrating the best practices with management theory.
- Field-based learning encourages students to complement their conceptual knowledge with off-campus learning experiences that deepen their understanding of business issues.
- Research-based assignments under the supervision of trained faculty aim to hone the research skills of students and maximize participant-centered learning experiences by exploring specific topics of interest related to real business situations.
- Specially-designed classrooms reinforce instruction through multimedia technology.
- Understanding being the purpose of instruction, the process of assessment at IoBM is more than just evaluation. It is a substantive contribution to learning that aims to identify gaps in student learning. IoBM's approach to learning is rooted deeply in assessment that fosters understanding and is more than an end-of-the-semester test. It informs students and faculty about what students currently understand and how to proceed with subsequent teaching and learning.

#### **Performance Evaluation and Standards**

The performance of students is constantly evaluated through surprise quizzes, hourly examinations, assignments throughout the semester, submission of term reports, presentations and final examinations at the end of the semester. The grades awarded are as follows:

Grade	Marks	Grade Points
A+	96-100	4.00
А	91-95	3.89
A-	87-90	3.78
B+	84-86	3.67
В	79-83	3.33
B-	74-78	3.00
C+	68-73	2.75
С	65-67	2.67
C-	62-64	2.50
D	60-61	1.75
F	<60	0.00

Grade points are assigned to the given grades for calculation of the cumulative Grade Point Average (CGPA).



#### 'I' Grade Policy

Eligibility criteria for approval of '1' grade: Student missing final examination of a course due to a genuine reason, for example, serious illness/death in immediate family or official assignment may apply for '1' grade with documentary evidence.

**Conditions for I grade**: Absences should not exceed the allowed limit; marks obtained in 1st & 2nd hourlies should be at least 60% and I grade processing fee of Rs.1000/= per course to be paid. Marks obtained should be at least 60% 'I' grade final exam otherwise 'I' grade will be changed to F grade.

#### **Weightage Policy**

Eligibility criteria for approval of Weightage: Student missing any of the two hourly examination of a course due to a genuine reason, for example, serious illness/death in immediate family or official assignment may apply for weightage with documentary evidence.

**Conditions for weightage**: Absences should not exceed the allowed limit; marks obtained in final examination should be at least 60% and weightage processing fee of Rs.2000/= per course to be paid.

#### **Rechecking Policy**

Eligibility criteria for Rechecking: After the final exam results have been posted, a student can apply for rechecking of final exam answer script/term project.

**Conditions for rechecking**: Absences should not exceed the allowed limit; marks obtained in 1st, 2nd hourlies & final examination should be at least 60% and rechecking processing fee of Rs.1000/= per course to be paid.

Note: Detailed policies are available on website in examination section.

#### Leave for Absences

A student shall apply for leave for his/her absence from class in advance, duly supported with concrete evidence, for approval of the Rector. Following tables shows the approved absences for a course during a semester.

Regular Semester: Approved Absences:

Weekdays 4 days Weekend 2 days

Summer Semester:

Weekdays (Crash) 3 days Weekend 2 days

The above absences are allowed on account of serious illness or emergencies and after approval by the Rector.

If a student accumulates more than the approved number of absences in a course, he/she will automatically be awarded an "F" grade in that particular course.

A student will not be eligible to apply for weightage or 'I' grade in case the absences exceed the allowed limit.

In case of a severe constraint, a student may apply for condoning of excess absences supported with concrete evidence to Academics Officer, who will forward the application along with evidence and attendance record duly verified by him, to the Rector for approval. After the Rector's approval, the student will have to sign an attendance undertaking.



#### DISCIPLINE

loBM stands out among other universities for its special emphasis on maintaining good order and discipline among its students. It reserves the right to prescribe such regulations from time to time as may be considered expedient for effectively maintaining the highest standards of conduct. The regulations set out below are IoBM's General Regulations for discipline.

### The General Regulations provide that: No student of IoBM shall

- 1. disrupt the activities and functions of the Institute;
- 2. damage any property of the Institute or of any faculty member, visitor or an employee of the Institute or knowingly misappropriate such property;
- 3. forge or falsify any certificate/degree issued by IoBM or knowingly make false statements concerning standing or results obtained in examinations;
- 4. engage in violent, indecent, disorderly, threatening, or offensive behavior or language;
- 5. engage in the harassment/disrespect of any faculty member, peer, visitor, employee of the Institute;
- 6. exhibit behavior that is inappropriate in terms of the norms and cultural values of the Institute and society in general;
- 7. engage in any political activity while enrolled at IoBM;
- 8. disrespect/disregard any guidelines/instructions prescribed by faculty and management of the Institute;
- 9. assist or encourage directly or indirectly any person to act in breach of the above-mentioned regulations.

#### No student of IoBM shall breach any regulation

- a) relating to the use of the libraries or the information and communication technology facilities at IoBM;
- b) relating to conduct in examinations;
- c) assist or encourage directly or indirectly any person or persons to act in breach of the above-mentioned regulations.



#### The Disciplinary Committee

The Disciplinary Committee, IoBM, comprises a Chairman, Executive Director Administration, Academic Heads of Departments, Controller of Examinations, and other members notified by IoBM. If the Disciplinary Committee is satisfied that a student is guilty of breach of conduct it may:

- 1. impose a fine of such amount as it thinks fit;
- 2. order the student to pay compensation to any person or body suffering injury, damage, or loss as a result of the student's conduct;
- 3. make an order banning the student from specified premises or facilities for a certain period or on such terms as it thinks fit;
- 4. rusticate the student for such period as it thinks fit;
- 5. expel the student;
- 6. ask the parents of the student to give an undertaking that henceforth their wards will not get involved in any activity warranting disciplinary action and should any such incident occur, the Disciplinary Committee reserves the right to expel him/her permanently from the Institute without even asking him/her to appear before the Committee for the consideration of his/her case.

If the Disciplinary Committee is satisfied that a student has committed a breach of the disciplinary regulations relating to plagiarism it may:

- (i) exclude any part of the work submitted from assessment;
- (ii) award no mark / reduce or disregard any piece of work;
- (iii) permit a student to re-sit an examination or resubmit a piece of work on such conditions as it thinks fit.

#### Appeal / Review of the decision:

The review of the decision taken by the committee shall rest with the President, IoBM.



#### ATTENDANCE POLICY

Ensure 100% attendance for each course. 20% absence is permissible, only in case of illness, or emergencies. Absences have to be approved by the Management. Approval is contingent upon the evidence provided. 20% means that a student is allowed a maximum of four approved absences in a course during a regular semester and two in a course offered on weekends. If a student accumulates more than the allowed number of absences, he/she will automatically be awarded an 'F' grade in that particular course.

In case of a severe condition, a student may apply for condoniation of excess absences supported with concrete evidence to the Academics Officer, who will forward the application along with evidence and attendance record duly verified by him, to the Rector for approval. After the Rector's approval, the student will have to sign an attendance undertaking. For detail visit the link: http://www.examination.iobm.edu.pk

#### DRESS CODE POLICY

#### A. For Female students:

- At least mid-thigh shirts should be worn with pants ,although knee-length shirts are desirable and preferred. Tucked in shirts with pants or jeans will be treated as a dress code violation.
- Ripped jeans are not allowed.
- Tights to be worn only with closed slit long shirts, otherwise to be avoided ,if worn in an exposed and indecent manner, as
  judged by the Proctor.
- All sort of revealing and indecent dress-up is not permitted.
- Trousers and shalwars above ankles are to be avoided.
- Clothes offensive in terms of cuts and style ,or by way of messages printed on them are to be avoided.
- Only light make-up, jewelry and perfume is permitted.

#### **B. For Male Students:**

- Only full-length trousers, jeans and shalwars are allowed. Track/sports lowers, Bermudas and shorts are strictly not allowed.
- Footwear: Slippers are strictly not allowed. Dress shoes and shoes with back-strap are allowed.
- Male students are advised to maintain a proper hair-cut and refrain from piercing their ears and faces.
- Offensive messages printed on shirts are not permitted.
- Ripped jeans are not allowed.



#### **EXAMINATION NORMS**

Each semester has two hourly exams (6th & 11th week) & one final exam in the 15th week. Mark distribution is explained to the students at the beginning of the semester. Tradionally, 15 marks are given for each hourly exam and 40 marks for the final exam.30 marks are assigned for quizzes and assignments. In some cases, there might be a slight variation if the concerned faculty so desires.

In its pursuit of excellence, IoBM believes in providing a congenial atmosphere to the students during exams in order to get them to perform at an optimum level. However, there are certain norms which the students are expected to be aware of and observe both in letter and spirit. These norms are as follows:

- Impersonation may lead to permanent expulsion from the Institute.
- Cell phones are strictly prohibited in the exam hall/room. Defying this rule may result in confiscation or a fine of Rs. 1000/=.
- Valid college ID card is mandatory for entry to the exam room/hall. There is absolutely no relaxation in this rule.
- Punctuality is most important at all times. Students are expected to reach their exam location and be seated at least 10 minutes prior to the exam time. Late comers will be made to wait for 5 minutes in case of hourlies and 15 minutes in the final exam before they are allowed entry. Students arriving late by more than 15 minutes will not be allowed to appear in the exam.
- As per Institute's policy, all question papers are to be returned along with answer scripts.
- Students are required to bring their own stationary and calculators as no lending or borrowing is permitted during examinations.
- · Programmable calculators or other kinds of electronic devices are strictly prohibited inside the exam area.
- Indiscipline in the exam hall/room will not be tolerated. Such cases are to be reported to the controller of examinations immediately for appropriate action.
- Possession of any written material related to the subject or communication with their fellow students will result in disciplinary action through the decision of the Disciplinary committee.

#### Mid-Term Policy

Students are required to take two mid-terms and one final examination. There would be no N-1 given to a student. All students must take both the mid-term exams, as the aggregate of these would be included in the final grade. The Institute does not exempt students from completing course requirements on medical grounds nor is leave granted for any personal reasons. This is to ensure the market credibility of the Institute's teaching programs and degrees.

#### **Policy for Course Repetition**

Student failing a course twice will not be allowed to register for a third attempt. If it is a compulsory course, a second failure will lead to failure in the degree and withdrawal from the Institute.



#### **Grade Improvement**

The Institute provides an opportunity to students for improvement of their CGPA if it is below 2.5 in the undergraduate and 3.0 in the Graduate program. A student wishing to improve his grade in any course is eligible to reappear in that course with exemption in attendance provided he has secured at least C- in that course in the undergraduate and C in the graduate program. Only courses for which grades C, D or F are received may be repeated for credit. Only one repetition is permitted, unless authorized in writing by the Dean. On repetition of a course, credit hours are applied towards a degree only once.

BBA (Honors) and BS students must maintain a minimum CGPA of 2.0 on a cumulative basis in order to maintain good standing. Any deficiency should be made up in the following semester. Otherwise, the concerned student may be dropped from the rolls of the College. A CGPA of 2.5 is required for conferment of the degree.

MBA and MPhil students are expected to maintain a CGPA of 2.5 to remain in good standing. Any deficiency should be made up in the following semester; otherwise the concerned student may be dropped from the rolls of the College. The cumulative GPA should be 3.0 in order for a student to receive the degree. MBA and MS students are required to repeat those courses in which they receive F and D grades.

#### **Umrah Leave**

Dates of hourly and final exams are announced in the catalog well in advance for subsequent semesters. Students should not plan their personal events including Umrah during these dates. Weightage requests will not be entertained for missing hourly or final exam on such pretex.

Umrah leave of two weeks (four absences) for weekdays and (two absences) for weekend are allowable for a course on production of sufficient evidence, and are subject to the approval by the Rector. Total absences, however, should not exceed the allowed absence.

#### Hajj Leave

Hajj leave of three weeks (six absences) for weekdays and (three absences) for weekend are allowable for a course on production of sufficient evidence, and are subject to the approval by the Rector.

#### **Below Good Standing Policy**

As per Institute of Business Management (IoBM) Policy, admission will be cancelled on the following grounds:

- Bachelor's students scoring a CGPA below 2.00 for two consecutive semesters and Summer Crash in an academic year
- Master's (Regular Program) students scoring a CGPA below 2.5 for two consecutive semesters and Summer Crash in an academic year
- Master's Weekend and Evening Program students scoring a CGPA below 2.5 for three consecutive semesters in an academic year (which includes three regular semesters)

Please note that if you have a below good standing CGPA, you cannot take semester gap/s unless approved by ED / Registrar.



#### **Academic Dishonesty**

To maintain credibility and uphold its reputation, the Institute has certain procedures to deal with academic dishonesty which are uniform and should be respected by all. Violations of academic integrity include:

- Unauthorized assistance during an examination
- Falsification or invention of data
- Unauthorized collaboration on an academic exercise
- Plagiarism

#### **Definition of Plagiarism**

Students are required to submit original work. Papers and/or projects submitted as part of a group effort must be clearly identified, with the team members specifically acknowledged. Ideas, data, direct quotations, paraphrasing, or any other indirect incorporation of the work of others must be clearly referenced to avoid plagiarism. Examples of plagiarism include:

- Direct quotation or paraphrasing from published sources that are not properly acknowledged;
- The use of other persons or services to prepare work that is submitted as one's own;
- The use of previously submitted papers or work, written by other students or individuals;
- Misappropriation of research materials;
- Any unauthorized access to an instructor's file or computer account;
- Any other serious violations of academic or moral integrity as established by the instructors of the Institute;
- Conduct during examinations.

Cheating is unacceptable. Examples of cheating are:

- Any written or oral communication among students during an examination
- Providing information about the content of an examination
- Impersonation by another student during an examination
- Using cell phones, programmable calculators or any other kind of electronic devices during an examination
- Using cheat sheet during an examination
- Material written on palm, hand or any other part of the body

IoBM is a no smoking campus. Any violation of this rule can lead to serious consequences. The penalty for this can amount to the extent of cancellation of registration. Use of drugs is a serious offense and any student found guilty will be rusticated permanently.



# ADMISSION AND FINANCE

# **ADMISSION POLICY**

Admission to IoBM is on a highly competitive basis, and only those who compete successfully on merit are selected for admission. They come from a variety of backgrounds. After joining IoBM, students continue to pursue their studies with a high level of competitiveness aimed at professional development. The admission criteria for the Institute's academic programs are described below:

# **Eligibility for entrance to Bachelor's Programs:**

The admission for Bachelor's Programs would be based on any one of the following:

- A Higher Secondary School (HSC) Certificate with at least \*55% marks awarded by a recognized Provincial Intermediate Board
- 3 A-Levels with a minimum of \*two Cs, preferably in business related subjects, excluding General Paper and Urdu or an American High School Diploma with CGPA 2.5 or equivalent
- Recognized Overseas Equivalence Diploma
- Any other qualification if an authority has issued an equivalence certificate
- IBCC equivalency will be required for foreign qualifications, the IBCC equivalency may also be required for A-Level

#### In addition:

- Atleast 5C's in O-Level exam (Eight subjects including Compulsory English, Mathematics, Urdu, Islamiyat, Pakistan Studies and three electives) or minimum 55% marks in SSC or equivalent
- Success in aptitude test and interview conducted by IoBM

# Eligibility for entrance to BS (Computer Science), BS (Data Science) and BS (Actuarial Science & Risk Management)

The admission in these Programs would be based on any one of the following:

- A Higher Secondary School (HSC) Pre-Engineering Certificate with at least 55% marks awarded by a recognized Provincial Intermediate Board OR A-Level with Mathematics subjects
- American High School Diploma with CGPA 2.5 or any other qualifications
- Any other qualification if an authority has issued an equivalence certificate
- 3 A-Levels with a minimum of two Cs, candidates must have Mathematics subjects in A-Level
- IBCC equivalency will be required for foreign qualifications, the IBCC equivalnecy may also be required for A-Levels

#### In addition:

- Atleast 5C's in O-Level exam (Eight subjects including Compulsory English, Mathematics, Urdu, Islamiyat, Pakistan Studies and three electives) or minimum 55% marks in SSC or equivalent
- Success in aptitude test and interview conducted by IoBM

#### **Eligibility for entrance to Engineering Programs:**

The admission for Engineering Programs would be based on any one of the following:

- A Higher Secondary School (HSC) Pre-Engineering Certificate with at least \*60% marks awarded by a recognized Provincial Intermediate Board
- American High School Diploma with CGPA 2.5 or any other qualifications
- Any other qualification if an authority has issued an equivalence certificate
- 3 A-Levels with a minimum of \*one C, in Mathematics, Chemistry and Physics
- IBCC equivalence certificate will be required for A-Levels and other foreign qualifications



<sup>\*</sup>Subject to revision by the IoBM Management

<sup>\*</sup>Subject to revision by the IoBM Management

#### In addition:

- Atleast 5C's in O-Level exam (Eight subjects including Compulsory English, Mathematics, Urdu, Islamiyat, Pakistan Studies and three electives) or minimum 55% marks in SSC or equivalent
- Success in aptitude test and interview conducted by IoBM

# Eligibility for entrance to two-year MBA Regular (Weekday) Programs:

The admission for Master's Programs would be based on any one of the following:

- Sixteen years of education in Arts, Science, Law, Commerce, Engineering, Medicine, Pharmacy or any other degree with high second division or equivalent from HEC/Provincial Government approved Institutes/Colleges/Universities in Pakistan.
- A final qualification examination of a professional body recognized by the Higher Education Commissions of Pakistan, for example, ACMA, CA, ACCA (HEC equivalence certificate required)
- Four years overseas bachelor's degree or equivalent recognized by HEC

#### In addition:

- Minimum 55% marks in overall academic career in annual examination system or 5C's in O-Level and 3 A-level with minimum 2C's excluding General Paper and Urdu or equivalent
- Minimum CGPA 2.5 on a scale of 4 in semester system (CGPA will be considered, if both CGPA & Percentage are mentioned in the Transcript)
- Success in aptitude test and interview conducted by IoBM

# Eligibility for entrance to two-year MBA Weekend / Evening Programs:

The admission for MBA (Regular) Weekend Program would be based on any one of the following:

- Sixteen years of education in Arts, Science, Law, Commerce, Engineering, Medicine, Pharmacy or any other degree with high second division or equivalent from HEC/Provincial Government approved Institutes/Colleges/Universities in Pakistan
- A final qualification examination of a professional body recognized by the Higher Education Commissions of Pakistan, for example, ACMA, CA, ACCA (HEC equivalence certificate required)
- Four years overseas bachelor's degree or equivalent recognized by the HEC

#### In addition:

- Minimum one-year post qualification work experience in multinational or domestic corporation is required (only for MBA Regular on Weekend). Candidate must be working while applying online for admission and also during the period of study. Experience in unknown or unregistered companies will not be considered.
- Minimum 55% marks in last qualification in annual examination system
- Minimum CGPA 2.5 on a scale of 4 in semester system (CGPA will be considered, if both CGPA & Percentage are mentioned
  in the Transcript)
- Success in aptitude test and interview conducted by IoBM

# Eligibility for entrance to MS/MPhil Programs:

It is based on any one of the following:

• Sixteen years of education in relevant field with high second division or equivalent from HEC recognized Institutes/ Universities in Pakistan

OR

Four years overseas bachelor's degree or equivalent recognized by HEC

#### In addition:

- Minimum 55% marks in overall academic career in annual examination system or 5C's in O-Level and 3 A-level with minimum 2C's excluding General Paper and Urdu or equivalent
- Minimum CGPA 2.5 on a scale of 4 in semester system (CGPA will be considered, if both CGPA & Percentage are mentioned
  in the Transcript)
- Success in aptitude test and interview conducted by IoBM
- Candidates must score atleast 50% marks in exam conducted by IoBM OR in NTS GAT



<sup>\*</sup>Subject to revision by the IoBM Management

<sup>\*</sup>Eligibility criteria is subject to revision by the IoBM Management.

<sup>\*</sup>Eligibility criteria is subject to revision by the IoBM Management

# **Admission Requirements for PhD Programs:**

- Candidate having 18 years of education from an HEC recognized university is eligible to apply. For admission into the PhD program, minimum CGPA 3.0 on scale of 4 or First Division in MPhil/MS/ degree is required
- Minimum CGPA 3.0 is required for candidates having MBA or equivalent degrees. Students with Master's degrees will have to
  do pre-requisiste courses recommended by the committee (HEC equivalence certificate required)
- Students with HEC recognized professional degrees i.e., ACMA, CA, ACCA may also apply subject to equivalence certificate issued by the HEC

#### In addition:

- Minimum 55% marks in overall academic career in annual examination system or 5C's in O-Level and 3 A-level with minimum
   2C's excluding General Paper and Urdu or equivalent
- Success in interview conducted by IoBM
- Candidates must pass NTS (60% or more marks in subject exam) or equivalent

# **Programs Duration:**

Program	Credit Hours	Minimum Years	Maximum Years		
All Undergraduate Programs		4	6		
Graduate Programs	108	3.5	5	In special cases IoBM has the right to	
	72	2	5	grant additional extension which w	
	36	1.5	3	be decided on case to case basis.	
Postgraduate / MS / MPhil		1.5	4		
Postgraduate PhD		3	8		

#### **Transfer of Credits**

Students desiring credit transfer in a specific degree program will be required to submit application along with their transcripts and course outlines/descriptions soon after their admission formalities have been completed. The equivalence committee will examine such cases and decide accordingly, keeping in view the following:

- All requests must be for same level of program. Courses completed in Bachelor's program cannot be considered for Master's program.
- Transfer application can be submitted once and in the first semester, late applications for transfer of credits will not be considered.
- Student must have secured B or better grade as per IoBM grading plan in each course meant to be transferred and the course title /outline must match with IoBM course plan.
- Maximum of 3 courses can be transferred in MPhil/PhD program as per the procedure mentioned above.
- Courses of two semesters can be accepted in bachelor's / master's program from highly reputed and HEC recognized
  institutes of Pakistan and abroad. However, each case will be reviewed separately and the decision will be taken considering
  the grades and the reasons for transfer.

#### **Re-Admission and Continuation Policy**

- Students who stop attending classes at the Institute, for any reason, without informing the concerned authorities about their absence for more than one semester, their admission shall be suspended.
- Admissions can be deferred for maximum of two semesters with justification and approval of the Executive Director Admissions. Any relaxation not beyond two years is subject to approval of Executive Director Admissions.
- Students who complete their Bachelor program from IoBM are eligible to register for MBA if there were no any disciplinary issues. However, if Security Deposit has been withdrawn, candidates may apply for restoration of admission to office of the Executive Director.
- Students dropped due to below good standing (for Master's program below 2.5 CGPA and for Bachelor's below 2 CGPA) may also apply for re-admission and to qualify both the entry test and interview.
- Students dropped out from the Institute for any reason will not be considered for enrollment as an external candidate
- On successful completion of readmission process in undergraduate and graduate program: the degree/transcript section
  will consider transfer of previous courses completed in IoBM based on grades and their relevancy.
- A MPhil or a PhD student dropped due to below good standing / time barred or absent for more than two years and CGPA is below 3.00, may also apply for readmission and to qualify both the entry test and Interview.
- After readmission, the student will follow current program structure and obsolete courses will not be considered. However, the Program Head and OGS Office may recommend transfer of previous courses having minimum C+ grades to degree/ transcript section for consideration.



# SCHOLARSHIPS AND FINANCIAL ASSISTANCE PROGRAMS

#### Internal

loBM has established a financial assistance fund for students who are unable to afford the financial costs associated with an academic program. Assistantships and financial assistance are provided to students on the basis of merit and need. Currently, about 25% of the students are receiving some form of financial aid.

#### **External**

Following external financial assistance are being provided to students:

- Endowment Fund Education Department, GOS
- IoBM Endowment Fund
- · Shahjehan Karim & Family Endowment Fund
- Janmohammad Dawood Trust
- Tabba Foundation
- Endowment Fund Shan Foods
- Sui Southern Gas Company Ltd.

# Scholarships are also available on reciprocal basis to:

- · Bilkent University, Turkey
- International Burch University, Bosnia
- University of Florence, Italy
- Vytautas Magnus University, Lithuania
- Hanyang University, South Korea
- · Guilin University of Technology, China
- Erfurt University, Germany



# FEE STRUCTURE\*

loBM operates on a self-financing basis as a non-profit institution. All students are required to pay a one-time CAUTION MONEY of Rs. 15,000.00 which is refundable only as per the policy.

The fee structure for various degree programs, per semester, is as follows:

	Registration Fee	Tuition Fee* (per course)	Fee on the basis of Per Credit Hour	Tuition Fee Full Load**	Total Fee* (per semester)
All Bachelor's Programs	10,000.00	17,490.00	5,830.00	104,940.00	114,940.00
All Master's (Regular) Programs	10,000.00	18,810.00	6,270.00	112,860.00	122,860.00
All Master's (Specialized / Weekend) Programs	7,000.00	18,810.00	6,270.00	75,240.00	82,240.00

<sup>\*</sup> Subject to change

#### Note:

Additional fee will be charged for remedial (non-credit) courses such as MTHXXX or COM100 which have to be taken by those students who have not been able to reach the desired level of competence in the relevant section of the admission test.

Rs. 26,500/- will be additional Lab Charges for BE Electrical Engineering in Electronics and Telecommunication program.

Rs. 47,700/- will be additional Lab Charges for BS Computer Science program.

Rs. 20,000/- will be charged for MBA Boot Camp (Page No. 55) for MBA students joining IoBM for the first time.

The summer session fee is charged on the basis of courses taken. A convocation fee of Rs. 12,500.00 is charged on completion of the degree program, inclusive of degree charges of Rs. 4,000.00. MBA executive and weekend students, planning to take less than a full load, would be charged registration and tuition fees accordingly. However, caution money will remain the same.

Post Graduate Programs	Registration Fee (1-2 Courses)	Tuition Fee Per Course	Thesis, External Examiner, Viva Voce, Exam, Supervisors and Foreign Examiner Fee
MS / MPhil Programs	3,500.00	12,650.00	63,000.00
PhD Programs	5,000.00	13,750.00	325,000.00

The registration duration of thesis is one year (3 consecutive semesters) after 3rd semester. Students will be required to get themselves re-registered in thesis by paying registration fee and one course fee for the subsequent semesters.

#### Note:

5% advance tax as per section 236I of the Income Tax Ordinance 2001 will be collected in addition to fees. Further, tax collected under above section shall be adjustable against the tax liability of either of the parents or guardian making payment of the fee.



<sup>\*\*</sup> Six courses for regular, four courses for weekend / evening programs and three courses for MS/Phil or PhD programs

# **Fee Refund Policy**

#### Interpretation

1. In this policy reference to the masculine also includes the feminine.

# Caution Money (Security deposit)

- 2. Students are eligible to claim refund of caution money:
  - a. after completion of their respective programs or
  - b. upon cancellation of admission by the student or by IoBM if claimed within six months of such cancellation.
- 3. Any amount receivable from a student for whatsoever reason will be deducted from the amount due to that student on account of caution money.
- 4. Without prejudice to the above, both provisional students and deferred candidates (details for both appear below) are entitled to be refunded security deposits in accordance with the terms of this policy if any have been collected.

#### **Registration Fee**

5. Registration fees paid is nonrefundable and nontransferable.

# **Continuing students**

- 6. In case a course or courses are dropped during any given semester, and provided that such course or courses had been dropped without penalty, the tuition fee of such course or courses
  - a. shall be fully refunded if the course or courses had been dropped within 7 days of commencement of classes.
  - b. shall be refunded 50% if dropped after seven but within 15 days of commencement of classes.
  - c. shall not be claimed from the 16th day of commencement of classes.
- 7. Provided that the refund in clause 6 above shall be made only after completion of program or admission cancellation.
- 8. Tuition fees for students suspended for one semester shall also be refunded as per clause 6 above.
- 9. Tuition fees for courses dropped after the due date (with penalty) will be forfeited.

#### **Fresh Entrants**

10. If after securing admission, a fresh entrant decides to withdraw from the Institute, the tuition fees paid will be refunded as per Higher Education Commission (HEC) refund policy outlined hereunder:

%age of Tuition Fee	Timeline for Semester System		
Full (100%) Fee Refund	up to 7th day of commencement of classes		
Half (50%) Fee Refund	From 8th-15th day of commencement of classes		
No Fee (%) Refund	From 16th day of commencement of classes		



#### **Provisional Admission**

11. Candidates awaiting the results of last required qualification shall be provisionally admitted provided they qualify in the written test as well as the interview. If such a candidate fails to meet the set admission criteria after declaration of the last required results, he will be refunded the tuition fees and the caution fees provided that an application for refund is submitted within seven days of declaration of results/grades (along with a copy of result/grades). If a candidate fails to do so the tuition fee shall stand forfeit. The caution fee shall remain payable only for refund till six months from the date of application for refund. This is without prejudice to the other terms of this policy.

#### **Deferment of Admission-Fresh Entrants**

- 12. In case of a written request of the candidate for deferment of admission for a semester, the paid tuition fee shall be carried forward to the next semester
- 13. If a candidate of the nature in clause 12, later decides not to join and informs the Institute of his withdrawal after admissions close and the semester has begun, the tuition fee shall stand forfeit provided that:
  - a. Clause 10 will always apply after commencement of classes notwithstanding the other contents of clauses 12, 13 and 14; and
  - b. the Institute and candidate were otherwise agreed upon admission in the current semester i.e. were agreed upon admission in the current semester but for the candidate's withdrawal.
- 14. Notwithstanding clause 12 above, if any deferred candidate decides to withdraw from admission at any time, the security deposit, if collected, shall be fully refunded and shall remain payable till six months from the date of intimation of withdrawal from the Institute. Upon expiry of the said period the security deposit shall also stand forfeit.
- 15. If any candidate is allowed a second attempt to improve his grade/percentage/results in order to qualify for the admission, he must sign an affidavit stipulating the matters stated in this policy and duly notarized. If the candidate fails in the second attempt or does not avail the opportunity of second attempt:
  - a. caution money, if collected, will be fully refunded and shall remain payable till six months from the date of intimation of the final refusal of admission from IoBM. Upon expiry of the said period the caution money shall also stand forfeit,
  - b. the tuition fee shall stand forfeit provided the Institute and candidate were otherwise agreed upon admission in the current semester but for the candidate's failure to achieve the results required by the Institute.
- 16. A candidate will retain his status as candidate until completion of the formalities provided herein.

### Dispute

17. In case of any dispute/disagreement regarding interpretation of any clause of this policy, the decision of the IoBM management shall be final and binding.

#### **Amendment**

18. This policy may be amended or changed at the discretion of the management provided always that any amendment or change may only take place at the start of every semester and that such amendment or change must be incorporated in all new admission letters from the semester in which the amendment or change takes place onwards.



# **ORGANIZATION**

#### **Board of Governors**

The Board of Governors exercises the powers to hold, control and administer the property, funds and resources of the Institute. It also approves the annual report, plan of work, statements of accounts and the annual budget estimates as recommended by the Executive Council. It is also responsible for ensuring the effectiveness of the Institute's operations and the continuity and preservation of its autonomy.

# Members of the Board of Governors (listed on Page No. 8)

#### **Executive Council**

The Executive Council is responsible for formulating and approving the principles, policies and plans governing the activities and operations of the Institute so as to facilitate teaching and other academic work. It can appoint faculty, researchers and officers on the recommendation of the Selection Board. It can also create new components of the Institute such as faculties/departments/college, and constitute standing committees, subcommittees, councils, and other administrative or academic advisory bodies, if necessary. It can undertake initiatives to ensure efficient and effective management and functioning of the Institute. It proposes plans of work for the approval of the Board of Governors.

#### Members of the Executive Council

- Mr. Bashir Janmohammad, Chairman
- Mr. Talib S. Karim, President
- Secretary Universities & Boards Department, Government of Sindh
- Mr. Justice Irfan Saadat Khan
- Chairman Higher Education Commission
- Mr. Masood Hashmi
- Mr. Muhammad Ali Tabba
- Dr. Syed Irfan Hyder, Rector
- Dr. Shahida Wizarat
- Dr. Tarig Rahim Soomro
- Mr. M.W. Jahangir, Secretary

#### **Academic Council**

The Academic Council is responsible for:

- Advising the Executive Council on academic matters
- Regulating the conduct of teaching, research, publications and examinations
- Regulating the admission of students to courses of studies and examinations at the Institute
- Regulating the conduct and discipline of the students of the Institute
- Regulating award of financial assistance, exhibitions, medals and prizes
- Formulating courses of study, syllabi and outlines of all examinations conducted by the Institute

#### **External Members of the Council:**

- Mr. Mazhar ul Haq Siddiqui
- Ms. Rukhsana Asghar
- Mr. Khalid M. Nagra



#### **Board of Advanced Studies and Research**

loBM has a Board of Studies which reports to the Academic Council. It supervises teaching research and academic discipline. It has three sub-committees on curriculum, resources, and discipline. External members on the Board of Studies are:

#### **External Members of the Board:**

- Prof Dr. Bhawani Shankar
- Dr. Nadeem Hanif
- Dr. Amjad Waheed

#### **Board of Studies**

The following departments exist in the Institute:

#### College of Business Management (CBM)

Communication, Management, Marketing, Human Resource Management, Health & Hospital Management, Accounting and Finance, Environment & Energy Management, Risk Management, Industrial Management, Advertising & Media Management and MPhil Business Management

#### College of Computer Science and Information Systems (CCSIS)

Mathematics and Statistics, Computer Science & MIS and Actuarial Science

#### College of Economics and Social Development (CESD)

Economics, Commercial and Professional Studies, Media Studies, Education, Policy & Area Studies, Business Psychology, Social Sciences and Organizational Psychology

#### College of Engineering and Sciences (CES)

Electrical (Electronics & Telecommunication), MS-Engineering Management and MS-Electrical Engineering

HoDs report to the Dean and the academic work of each department is governed by a departmental board of studies consisting of both internal and external members.

#### Foundation for Higher Education

Foundation for Higher Education was established in 1994 under the Societies Registration Act, 1860 as a non-profit institution committed to the provision of quality education in Pakistan. IoBM is the first educational institution established by the Foundation. Following are the members of the Foundation:

- Mr. Talib Syed Karim, President
- Ms. Sabina Mohsin
- Mr. Sani Ahmed
- Dr. Mehtab S. Karim
- Dr. Musarrat Hasan
- Mr. Mohsin Furguan
- Dr. Ahmer S. Karim
- Mr. Mehboob S. Karim
- Mr. Nabhan Shah Karim
- Mr. Talha S. Karim
- Mr. M. W. Jahangir, Secretary



# **FACULTY**

# Rector & Acting Dean

# **College of Business Management**



**Prof. Dr. Syed Irfan Hyder**, Rector IoBM and Acting Dean, CBM, holds a PhD and MS from University of Texas at Austin, USA. In addition, he holds an MBA from IBA and BE-Electronic from DCET/NED. He has a wide experience in academic leadership, consultancy, entrepreneurial ventures, training, teaching, research, in the design and implementation of innovative programs and motivational talks. He provides consultancy for change management, entrepreneurial and personal visions, students/parental counseling and education. In his career spanning over 24 years, he has worked in leadership positions at various organizations. He was Deputy Director at IBA and Dean and VP of PAF-KIET. He has extensive industry consultancy experience for private and public sector organizations such as Oxford University Press, Trade Development Board (EPB), Pakistan Ordnance Factories, Pakistan Steel, Ministry of Science and Technology, etc. His entrepreneurial ventures include E Patterns Software Solutions, Ahsan Memorial (AEF) and L2L Academy. He has over 20 papers in diversified research areas which include entrepreneurship, leadership, technology innovations, experiential learning, software engineering management, etc.

# **Accounting and Finance**



**Tazeen Arsalan**, Assistant Professor and Head of Department, Accounting and Finance, holds an MPhil in Business Administration as well as a Master's and a Bachelor's degree in Business Administration from the IoBM. She is currently pursuing a PhD in Business Management. She has over seventeen years of experience in the corporate sector and academia. She has worked for Saudi Pak Leasing, SMEDA and various reputed business schools as visiting member of faculty before joining IoBM as permanent member of faculty. Besides teaching Accounting & Finance courses, she is also actively involved in capstone projects where she has supervised more than twelve projects related to financial institutions and markets. She is also faculty advisor of Finance Society of IoBM and has been performing the duties of the Coordinator-BBA program for the last five years.



**Sharique Ayubi**, Associate Professor, holds a Master in Business Administration (MBA) from IBA, Karachi and another Master's degree in Economics from the University of Karachi. He also has a Banking Diploma from the Institute of Bankers, Karachi. Currently, he is enrolled in the MS/PhD program. His experience in industry has been in the National Development Finance Corporation, where he worked for fourteen years. He has been teaching courses in Finance, Accounting and Management for over twelve years at various universities and business schools. His research interests are Corporate Governance; Regulation of Banking and Securities Markets; and Comparative Management.



**Dr. Imam Uddin**, Associate Professor, is an active academician and a researcher in the field of Islamic Banking & Finance. He has more than ten years of experience in teaching, research, product development, product management and Sharia compliance and has authored many books as well as numerous research papers that have been published in the International Journal of Islamic Finance recognized by the AAOIFI, IRTI, and IDB, etc. He holds a PhD in Islamic Banking & Finance from the University of Karachi, a doctoral degree in Islamic Jurisprudence from Jamia Darul Uloom, Karachi, an LLB in International Law & a PGD in Islamic Banking & Finance from the Center for Islamic Economics (CIE). He has served the Islamic Banking Division (IBD) of the National Bank of Pakistan (NBP) as Vice President in the capacity of a member, Sharia' committee.



**Tauseef A. Qureshi**, Assistant Professor, holds an MBA from the IBA. He has a unique blend of industry and teaching experience and has held senior management positions in Pakistan, USA and Canada.



Mehboob Moosa, Assistant Professor, holds an MPhil in Business Management and is currently pursuing a PhD in Business Management at IoBM. He is also FCMA from Institute of Cost & Management Accountants of Pakistan, a CA Finalist from the Institute of Chartered Accountants of Pakistan and holds a PGD in Islamic Banking & Finance from the Center for Islamic Economics (CIE). His 38 years' experience include working with national and multinational companies like BOC (Pakistan) Ltd., Al-Futtaim Engineering, Dubai, Habib Group, World Group of Companies (Automobiles), Liberty Textiles, Century-21 Textiles etc., as well as audit firms like KPMG Taseer Hadi, Sidaat Hyder, Rahim Jan and teaching in educational institutions of UK and Pakistani education streams.



**Dr. Kashan Pirzada**, Assistant Professor, holds a PhD in Accounting from Faculty of Business and Accountancy, University of Malaya, Malaysia. In addition, he holds MS from SZABIST and MBA from Bahria University. He has more than 9 years of research, teaching, training and consultancy experience. He has been involved in an extraordinarily diverse range of university programmes and conferences, editorial activities, international study, and professional internships. Dr. Pirzada has acquired considerable expertise by supervising a number of research students. He has acted as a reviewer and a lead guest editor of Elsevier Procedia, Pertanika Journals, IJEM, GBER as well as founding editor of GATR Journals. This rendered an immense service for emerging scholars. He has published in many international academic journals, such as Elsevier Journal of Social and Behavioral Sciences, British Accounting and Finance; Polish Journal of Management Studies; Pertanika Journal of Social Sciences and Humanities, and International Journal of Economics and Management. Dr. Prizada's research has focused on many accounting and finance issues in Asia, Australia and USA. He is currently working on a number of projects.



Misbah Iqbal, Assistant Professor, Coordinator of Social Entrepreneurship & Social Leadership department, holds a BBA (Honors), MBA and MPhil in Business Management from IoBM. She is currently pursuing a PhD in Finance. She has been teaching Finance and Accounting courses for 11 years and has professional experience as an Investment Analyst (covering the cement, tractors, FMCG and automobile sectors). She has been quoted on various national and international magazines on these subjects. Her research papers have been published in the Pakistan Business Review and presented in the International Sindh Conference'12. Her research interests includes behavior of Capital Markets, Financial Management Techniques, evolution of Shariah Financing and the Development & History of Sindh.



**Bilal Ahmed Chishty**, Assistant Professor, has over 23 years' experience of accounting, finance, management and teaching at middle and senior positions. He has been associated with private and public sector organizations of the country and has served at Pakistan Defense Housing Authority (DHA), the Federal Urdu University Karachi, Suffa University and Decent Exports. He holds a Master in Business Administration (MBA) from Khadim Ali Shah Bukhari Institute of Technology, Karachi and did an MS (finance) from Hamdard Institute of Management Sciences (HIMS) Karachi. He is currently enrolled in a PhD program of the University of Malaysia, Sarawak in the field of finance. His core areas of research are Short-term Financing, Capital Structure, and Corporate Finance. Bilal Ahmed Chishty has been teaching various courses in the field of Accounting, and Finance for the last 14 years at various universities and business institutes at Karachi.







**Syed Sarmad Hasan**, Assistant Professor, received CMA from ICMA, Pakistan in 1994. He has worked in the corporate sector and international NGOs for about 25 years at various positions including CFO and Director Finance in several organizations in different countries. After a successful career in Accounting & Financial Management with diverse roles distinguished by commended performance and proven results, he restarted his formal education and completed his MBA in 2016 from UMS, Malaysia and is now pursuing PhD in Management Accounting. Sarmad's area of expertise include strategy development, financial planning, analysis, managerial accounting and change management. His current research interest is in the field of organizational performance management in the not-for-profit sector. He has recently published two articles in peer reviewed journals on the subject.



**Dr. Muhammad Ali**, Assistant Professor, is currently associated with the Institute of Business Management (IoBM) as Assistant Professor in the Department of Accounting & Finance. He completed his PhD degree in Finance from University Malaysia Sarawak (UNIMAS). Dr. Ali has a vast experience of working with industry and academia. He served for banking industry along with leading higher education institutes of Pakistan. He has published several impact factor research articles in the area of Finance. His area of research includes Behavioral Finance, Islamic Banking, Corporate Finance and Financial Econometrics. Dr. Muhammad Ali presented his research papers in various national and international conferences. He also participated in several international conferences as guest speaker and panel discussant. Dr. Ali provided his consultancy to the industry projects that helps organizations to solve their business problems. He has supervised many undergraduate and graduate level students. At present, Dr. Ali is pursuing his Postdoctoral fellowship from University of Malaya under the supervision of Distinguished Professor Dr. Raja Rasiah.



**Dr. Arslan Qayyum**, Assistant Professor, did his Bachelor of Commerce (B.Com Honors with specialization in Finance) from Hailey College of Commerce, Punjab University in 2009. He got his M.Phil (Finance) from University of Central Punjab in 2012. He got his PhD (in Finance) from University of International Business and Economics (UIBE), Beijing, China in 2019. He has a vast teaching experience in the field of accounting and finance and served nationally and internationally. He has also published research articles in reputable international journals and has presented working papers in international conferences. He has also won best tutor award at UIBE in 2018.



**Kamran Rabbani**, Senior Lecturer, is an MBA in Finance from Greenwich University, Karachi. He has working experience of 20 years mainly in the banking sector, where he trained Saudi bankers in the area of small and medium enterprise financing. He has four years of teaching experience as a visiting member of faculty.



**Muhammad Asim Khan**, Senior Lecturer, received his MBA from the Karachi University Business School, MCom from the University of Karachi and is currently pursuing an MPhil leading to a PhD program. He has served with Siemens Pakistan, Shaheen Air International and Aga Khan Education Service Pakistan in commercial, corporate planning and education management capacities for more than fourteen years. He has also been associated with several prestigious institutions as a visiting faculty member. His areas of interest include management accounting practices and diversifying learning strategies.



**Muhammad Muzaffar Ali**, Senior Lecturer, received his MCom, MEd and BEd from the University of Karachi and is currently pursuing an MPhil leading to PhD program. He worked with several corporate sector companies in shipping and manufacturing and automobile sector in accounting and finance capacities for seven years. He has also served Aga Khan Education Service, Pakistan and Fatimiyah Education Network as Head of Department for more than eighteen years. He also served in the Ministry of Education of the Maldives where he was a convener of accounting and finance department in Male City. He has also been associated with several universities as a visiting faculty member for more than twelve years. He teaches accounting and finance related courses. His research interests include capital markets, analysis and forecasts related to corporate accounting and financial markets.



**Nayeem Ansari**, Senior Lecturer, holds an MPhil in Management Sciences from KASBIT. He is currently pursuing his PhD in Management Sciences from KASBIT. He has over 18 years of work experience both in the corporate sector and academia. In the corporate sector he has served as CFO and Company Secretary. He has also been associated with several prestigious institutions as a visiting faculty member. Besides teaching Accounting, Financing and research courses, he has been actively involved in the research projects of BBA & MBA students. He has presented papers in various international conferences and also published papers in numerous International journals. He is also a peer reviewer of the Cost Management Accountant business journal.



**Najeha A. Bela**, Lecturer, holds an MBA and BBA in finance from the University of Karachi, and has been teaching accounting and finance core and elective courses at IoBM for eight years. She is currently pursuing an MPhil in Business Management from CBM. Her research interests are in behavioral finance and stock returns. She has been involved in curriculum review and course coordination of accounting and finance courses and has been involved in creating linkages between IoBM, ACCA and CFA associations.



**Shakira Fareed**, Lecturer, has worked as a student counselor and secondary teacher at Groom Well School. She has been a coordinator of capstone projects besides working on capstone database development and management. She is currently enrolled in a PhD (Business Management) program at IoBM having specialization in Finance. She has one and a half years of research experience. She did her MBA (Finance and Risk Management) from IoBM and MA (Economics) from Karachi University.



Aisha Naz, Lecturer, holds BBA and MBA majoring in finance from the Institute of Business Management. She is serving academics past 3 years, teaching core courses of accounting and finance. She is currently pursuing PhD in Business Management from IoBM and is in the process of completion of course work. Her goal is to become a PhD in Business Management and contribute to academia through research and spreading of valuable information in finance and business management topics, such as corporate finance, asset pricing, stock returns, financial management techniques, capital structures, and customer equity. Her research paper on The Empirics Effect of Foreign Aid and Growth in Pakistan, was published in the Journal of Independent Studies and Research-Management, Social Sciences and Economics, AERC International Conference 2018 16(2), 49-64. She has also presented several conference papers in International and National conferences. Ms. Aisha Naz is also CFA Level I candidate.





# **Communication & Languages**



**Dr. Mehvish Saleem**, Associate Professor and HoD, has completed her PhD in the field of English and American Studies from the University of Graz, Austria and holds a Master's degree in English Linguistics from the University of Karachi. She has been teaching since 2005. Her professional experience includes teaching varied English language and communication courses in diverse higher education contexts. She was a committee member of the IATEFL ReSIG and worked as the Joint Events Coordinator. Her key academic and professional achievements include receiving a PhD fellowship from the HEC, Pakistan, working as an editor, ELT Graz Working Paper at the University of Graz, Austria, working as a support teacher trainer for EDLINKS-USAID and studying as a visiting postgraduate student at the University of Warwick, UK. Her research interests include psychology of language learning and teaching, Complex Systems Theory and teaching English in 'difficult circumstances'.



**Dr. Aliya Sikandar**, Associate Professor, holds a PhD in Education from the Institute of Business Management, MA TESOL from the Institute of Education, University of London, UK, and a Master's degree in English Literature from the University of Karachi. Dr. Sikandar's PhD concerns Critical Discourse analysis of research consultations in higher education. She also has an RSA certificate in Teaching of English (COTE) from the University of Cambridge. She has worked for the Aga Khan University for almost 24 years before joining IoBM full time in September, 2013. Currently, she is engaged in teaching Business Communication courses. Her areas of interest are Business Writing and Speech, Critical Discourse Analysis, Scholarly Writing and Spoken Discourse.



**Dr. Muhammad Asif Khan**, Assistant Professor, has a PhD in Education from IoBM, an MPhil from Iqra University, MBA from IoBM and an MA in English Literature and Linguistics from the University of Karachi. He has a rich experience of teaching English and communication related subjects to various categories of students ranging from intermediate and A-Levels to BBA and MBA. His areas of interest include TESL, Business Communication and Interpersonal Skills. He is also a contributor to the Pakistan Business Review (PBR), where his interviews with prominent personalities of the corporate world are published.



**Pir Muhammad**, Lecturer, holds a Master's degree in Arabic and Islamic Studies from the University of Karachi, and also a Master's degree in English Literature and Applied Linguistics from the National University of Modern Languages (NUML). He completed his Dars-e-Nizami (Aalim-e-Deen) course of eight years and a year's specialization course in Islamic Jurisprudence from Jamia Darul Ullom Karachi. He is currently enrolled in MPhil in Islamic Studies from University of Karachi. He is also a student of PGD in Islamic Banking and Finance at CIE Karachi. He had been teaching at IoBM as a visiting faculty since 2012 before joining the Institute as a full time faculty.



**Bushra Irshad**, Lecturer at the Communication Department, College of Business Management. She earned her Master's in Linguistics at the University of Karachi and went on to teach as a visiting faculty at the department of English. Currently, she is pursuing her Mphil at the University of Karachi in ELT and Applied Linguistics. Her area of research includes, metacognition, writing as a process and learner autonomy.



**Mahrukh Zahid**, Lecturer at the Communication Department and is currently pursuing her Mphil in ELT & Applied Linguistics from the University of Karachi. She earned MA in English Linguistics from the University of Karachi as well and went on to join the Teacher Development Center where she spent a year developing her teaching and research skills. Her fields of interest include teacher-research, teacher autonomy and learner autonomy.



# **Environment and Energy Management**

**Dr. Shahid Amjad**, is a Professor and Head of the Department. He has a PhD from School of Ocean Sciences, University of Wales, UK. His MS is from the University of Oslo Norway in Benthic Ecology. He has completed courses in Management of R&D Institutes from University of New South Wales, Australia. He has been associated with the National Institute of Oceanography as Director General and with various top universities of Pakistan as Acting Vice-Chancellor and Professor. He has also been associated as a visiting faculty with NED and the University of Karachi since 2005.



**Dr. Jamshaid Iqbal**, Assistant Professor Department of Environment and Energy Management, holds PhD in Environmental Sciences from National University of Sciences and Technology (NUST), Islamabad. Dr. Jamshaid has more than 12 years of professional experience including teaching, research and industry. Solid Waste Management, Environment and energy management, Environmental Impact Assessment, Occupational Health and Safety are the key areas of his research interest. Dr. Iqbal has been associated with various national and international organizations including World Bank (WB), International Finance Corporation (IFC), Asian Development Bank (ADB), United States Agency for International Development (USAID), Rambol-UK, China Three Gorges Development Company (TGDC), RSW-Canada, Energy Market Group (EMG)-USA, Pakistan Water and Power Development Authority (WAPDA), Punjab Power Development Board (PPDB), Kot Addu Power Company (KAPCO), Pakhtunkhwa Energy Development Organization (PEDO), International Islamic University (IIU), Islamabad and National University of Sciences and Technology (NUST), Islamabad.



### Entrepreneurship

**Dr. Omar Javaid**, Assistant Professor and Coordinator, received his PhD in Socially Sustainable Entrepreneurship from IoBM in 2018. He has a BE in Industrial & Manufacturing Engineering from NED University and Executive MBA from IoBM with majors in Marketing and MS in Management Sciences from PAF-KIET. He has a total of 14 years of experience of working in the corporate, non-profit and education sectors. His core competence is mentoring new startups and ventures. During the previous five years he has helped hundreds of students in their entrepreneurial ambitions. He has also been helping students to setup micro businesses for poor unemployed folk, and has successfully initiated around 450 such projects during his academic career to date. He has published various research articles and editorials in various journals, magazines and newspapers. He is a reader of Islamic Economics & Finance, Micro-finance & Entrepreneurship, Social Entrepreneurship, Political Theory, and Philosophy of Economics and Business Management. Apart from teaching at IoBM, he is also responsible for the mentoring IoBM students so as to enable to setup the entrepreneurial ventures and facilitate them in developing of an entrepreneurial ecosystem within the Institute.



**Dr. Mohammad Ali Shamim**, Assistant Professor and Advisor to the President, has a PhD in Civil Engineering from the University of Paris, France and an MBA from INSEAD, Fontainebleau, France. He has over 45 years' experience of working in different organizations, to name a few, the Islamic Development Bank, Jeddah, the IFC and the World Bank. His geographical work exposure spans North America, Europe, Africa and Asia. In addition, he has taught in a business school. His last assignment was as the Managing Director & Chief Executive of a cement plant project.



**Rehan Muzammil Butt**, Senior Lecturer, holds an MBA from University of Wales, UK in management in developing countries and the Japanese management system. He has over 15 years of business experience in marketing and distribution of FMCG, B to B tender business, raw material supplies to the fan industry, several CSR projects, research paper presentations in international conferences. His special interests are Business Ethics, Islamic Marketing and Islamic Supply Chain. He has over 15 years of experience of working in several reputable universities.







Samiya Hameed, Senior Lecturer, has done an MPhil in HR and an MS in Design Marketing & Merchandising from Iqra University. She is also pursuing LLB. Previously, she has been a faculty member and project supervisor in different universities including Iqra University. She has attended different international conferences of management sciences and has also done research work and presented a paper at the IU International Conference 2016. Ms. Samiya is also an entrepreneur and runs her fashion accessories brand (Swank by Samiya) and Beautypreneur venture by the name of "Face Value -The Salon Institute". She is also engaged with multiple NGOs in women entrepreneurship programs and street students education for the under privileged. She won the Women Excellence Award in 2016.



**Noman Mahmood**, is a Senior Lecturer, did his MBA from PAF-KIET and is currently pursuing a PhD in Business Management from IoBM. He played an instrumental role in the diversification of IoBM by developing entirely new BS Entrepreneurship and BS Social Entrepreneurship degree programs. Over a number of years, he has facilitated numerous socially deprived people, mentored aspiring and existing entrepreneurs by helping them set ups their own small businesses or by helping them enhance their already existing business setups through strategic and tactical counselling. He currently teaches Small Business, Guerrilla Marketing, Design Thinking, Entrepreneurial Leadership and Social Advocacy. Previously he was involved in the Marketing Department of IoBM as a Research Fellow. His research interests include Entrepreneurial Strategies, Social Entrepreneurship and Innovation, Community Operations, Language Strategies, Work-Life balance, Creativity and Design Thinking.



**Sardar Muhammad Nawaz**, Lecturer, he did MBA from PAK KIET. His areas of expertise are delivering motivational talk, business startups strategies business plans, public dealing, developing SOPs, business reporting strategies, legal advisory to entrepreneurs. He started his career by founding an NGO with the motive of providing free education to the underprivileged community. He was responsible for marketing strategies and fund raising campaigns. He has working experience in corporate industry i.e. Banking, Outsourcing Businesses or BPO Services.



**Bazla Mukhtar**, Lecturer, holds a BS degree in Zoology from the University of Karachi and MBA degree in marketing from the Institute of Business Management. She has been serving in the academics for the past two years, teaching core courses of business and entrepreneurship. She is currently pursuing PhD in Business Management from IoBM and her goal is to contribute to the academia through research and spreading of valuable information with respect to business management topics, such as entrepreneurial mindset, factors impacting entrepreneurial intention, community entrepreneurship and psychological and biological underpinnings of the entrepreneurial mindset. In addition to this, she also has a part-time venture since 2014 by the name of Sharp Digital Solutions which provides professional writing services to clients across the globe.



Marium Mateen Khan, Lecturer, she started working in academia as a Subject Coordinator and teacher at APSAC (Army Public School and College). Marium has taught Marketing courses as a visiting faculty at PAF KIET to BBA, BS and MBA level students. She has also supervised BBA Final Year Projects (Research Theses) at PAF KIET. She has 8 years of research experience. She has freelance working experience of academic writing, creative writing and graphic designing. Seeing the gaps and issues in the current academic environment made her pursue a career in academia. Marium is currently enrolled in the PhD (Business Management) program at IoBM having specialization in Marketing. She did her MBA and BBA (Honors) both in Marketing from Karachi Institute of Economics and Technology (PAF-KIET). She has been a scholarship holder since her first semester throughout her BBA and MBA. She received Summa Cum Laude honor in both programs.



**Kazim Usman**, Lecturer, holds a Master's degree in Economics from University of Karachi. He has been serving in the academics for the past three years, teaching core courses of Economics and social entrepreneurship. He is currently pursuing MPhil in Applied Economics from Applied Economics Research Centre (AERC) and his research interest is economics of happiness, axiology of economics and Islamic economics. His goal is to serve in interdisciplinary research in philosophy of economics and its sociological repercussion especially in developing countries.



# **Health and Hospital Management**

Dr. Asima Faisal, Associate Professor and Head of Department in Health and Hospital Management Program. She is PhD in Business Management from IoBM, also MPhil and MBA from the same Institute, and MBBS from Jinnah Sindh Medical University (former SMC). She has more than 20 years of experience in the healthcare industry serving diverse roles in the areas of Health Management in Pakistan. Dr. Asima Faisal served as Director Media and Marketing and afterwards Director Programs for the Institute of Health Management (IHM) at Dow University of Health Sciences (DUHS). She was associated with Sind Education Foundation where she arranged health Camps and health Trainings of Teachers (TOTs) all over Sind for more than 900 schools for underprivileged. Dr. Asima Faisal has been actively involved in CSR activities like free Health camps, flood relief, disaster management, and conducting TV Talk shows on various medical and health management issues of the society. She served as a member of the subject committee for pharmaceutical representatives training and assessment from the National Testing Service (NTS). Being a Certified Master Trainer, she has been conducting Continuing Medical Education program (CME) for health care professionals, all over Pakistan from the renowned platform of a multinational pharmaceutical industry. Added to her credentials, on the academic front, Dr. Asima Faisal has presented her research work at various national and international conferences and forums in Italy, USA, India, Japan, France, and Australia. She has authored and co-authored more than 20 published research papers in the field of Health Management in HEC recognized peer reviewed journals. She represented Pakistan as a Counselor for the inward mission sponsored by British High Commission to universities in United Kingdom for pursuing avenues of internationalization of higher education between the two countries. As a medical doctor, she was also affiliated with South City Hospital in sharing her expertise in clinical and administrative areas.



**Dr. Ather Akhlaq** Associate Professor, did PhD in Health Informatics and Management from The University of Edinburgh, UK. He is currently working at IoBM in the department of Health and Hospital Management. He did MPhil in Management and also received a Master's degree in Computer Sciences from IoBM. He has been involved in many funded international projects and has published in many high impact factor journals. At IoBM, he teaches to PhD, MPhil and MBA students. His research interests include health management, health information technology (HIT), mixed methods and qualitative research, and digital business.



**Dr. Abdur Rahman Aleemi**, Assistant Professor and Research Consultant to the MHM Research Cell (MRC) at the Department of Health & Hospital Management. He holds a PhD in Business Management from IoBM, an M.Phil. from IQRA University and MBA from Virtual University of Pakistan. His main research interests fall in the areas of Health Economics, Financial Economics, Corporate Finance, Equity Pricing, Islamic Banking & Finance, Banking Regulations, Supervision and Stability. He is also a lead researcher in the areas of banks' Charter Value, Market Power, Franchise Value, and Market Discipline. He possesses more than ten years of diverse experience of industry and academia at different positions for various projects and responsibilities. He has published several research papers in HEC recognized peer reviewed journals and has also presented his research work in several national and international conferences. Last but not the least, he is also leading Capstone Projects.





# **Management and HRM**



Prof. Dr. Nadeem A Syed, is Professor, Head of Management, Human Resource Department and Coordinator for MPhil, Ph.D. Programs at the College of Business Management (CBM), Institute of Business Management (IoBM). He has his MBA and PhD in Business Management from the University of Santa Thomas in 1997. He is also HEC Approved Ph.D. Supervisor. He has over 20 years of vast administrative and academic experience of working in different higher education institutions of national repute. He served at Bahria University Karachi as Head of the Department for eight years and streamlined various systems and processes in its inception phase. Later he moved to FAST - National University (FAST-NU) and served as the Head of Department of their newly developed Business School for seven years. Later he joined SZABIST to manage the MS-PhD program and served as the head of the department of the largest student body of management science for four years. He has also served as the Professor and Dean, Management Science for two years at Ilma University, Karachi before joining IoBM in 2019. Besides his professional academic administrative career, he is a member of various National Committees at HEC and represented his affiliated institutions at various national, international forums as conference chairs, PhD. examiner, and business projects evaluator. He has rich experience in publishing his research work in national and international journals and contributes as a reviewer for several international journals. He is actively involved in enhancing the research activities at CBM, IoBM for promoting research culture.



Prof. Dr. Riaz Ahmed Mangi, is working as Professor in Management & HR at CBM-loBM, before he was working as a faculty member at the Department of Commerce, Shah Abdul Latif University Khairpur Sindh since September 1996 and full Professor from 18 September 2015. He also worked as Dean, Faculty of Management Sciences at Indus University Karachi. He earned MPhil in Management Science from the University of Lahore and PhD in Management Science from SZABIST Karachi. He also acquired Diploma in Education Leadership and Management from Pakistan Institute of Management, Karachi in 2019. Dr. Mangi possesses more than 22 years' experience of teaching and administrative experience in higher education institutions. His focus on teaching and research remained on Organizational Behavior, Research Methods, Strategic Management, and Leadership to graduate and post-graduate programs. Further, he had authored and co-authored more than 25 research papers published in reputable and refereed journals. He has supervised 08 MPhil/MS students and 01 PhD student. He is a pioneer editor of the annual research journal (SALU- Commerce & Economics Review) and was also Chief Editor of Indus Journal of Management Sciences (Indus University Karachi). He possesses hands-on experience in the preparation of SAR of BBA, MBA. MS and PhD programs. Further, he has supervised the preparation of documents for NBEAC business schools' accreditation process at the Faculty of Management Sciences, Indus University Karachi. He can work on software, like, SPSS and SmartPLS.



**Abdul Qadir Molvi**, Associate Professor, has specialized in sales management training, marketing and strategy for corporate clients. He has earned an MPhil from IoBM, professional diploma in International Trade and Commerce from UC Berkeley, (USA), MBA from IBA, and BSc from the University of Karachi. He has over 33 years marketing experience of pharmaceutical and consumer products with leading MNCs. He was elected to the Council of the Marketing Association of Pakistan (1996-98) and served as its Vice President in 1998. He has also been invited to lecture on international marketing to the classes of Brand Managemen at Fullerton College, California, USA.



Javaid Ahmed is Associate Professor Strategy & Innovation and has been Head of the Departments of Marketing and Management & HRM from 2003 to 2015. He is a (IFC) Certified Board Director, FCMI-Fellow of the Chartered Management Institute, FCIM-Fellow of the Chartered Institute of Marketing (UK), Member of MENSA and a UK Chartered Engineer. He has an MBA with Distinction from Lancaster University Management School where his empirical research was awarded 1st prize by the now CMI and a BSc Engineering from the University of London, Kings College. He brings to academia over 28 years of a successful top management career with the global pharmaceutical industry, including over a decade in Switzerland, Malaysia and the Philippines. He is the recipient of the 2013 Faculty Excellence Award bestowed jointly by IoBM and the International Association of University Presidents and has served on the Jury of the Prime Ministers' Corporate Awards of Excellence. He is case research active in competitive strategy and market innovation, has supervised MPhil research and taught the pre-doctoral course on Strategy and Governance. He has written two research based dissertations, published twenty two papers and cases, delivered over 900 successful man-days of industry engagement sessions and in 2018 was lead consultant in a 10 year strategic plan exercise of a major conglomerate. Javaid says he is a facilitator, not a teacher, nor an entertainer. A firm believer in collaborative learning, his sessions engage participants in active reflection leading to practical knowledge and skills.



**Dr. Fazal Anwer Khalidi**, Assistant Professor, has 24 years of consultancy and senior management experience with multinational pharmaceutical companies. He has also been associated with leading business schools of Karachi as an adjunct member of faculty. His qualifications include MSc Marketing from Salford University, UK; MBA from IBA; and MBBS from Dow Medical College. He was awarded a Chevening Scholarship by the British Council to pursue a Master's program at Salford University. He has also attended an executive development program at the Thunderbird School of Global Management, Arizona, USA.



**Dr. Mirza Dilshad Baig**, Assistant Professor, Management & HRM, has a doctorate in Management Sciences. He has rich experience of over two decades in Human Resources and Organizational Development for both multinational and local organizations. He served as Head of Human Resources and OD in most of the organizations. Besides having had successful corporate exposure and before joining IoBM as a permanent faculty, he has taught Human Resources Management, Strategic Management, Leadership Ethics and Change, Managing Human Capital, HR Audits & Procedure, Learning, Talent Management, Compensation Management, Organizational Structure; Change, Strategic HR Planning, HR Technology and its Impacts, Global HR Business as a visiting member of faculty in various educational institutions. He is also a corporate trainer and has provided consulting services to renowned organizations in Pakistan in the field of Strategic HR Management and Organizational Development.



**Dr. Muhammad Arif**, Assistant Professor, and Director QEC, holds a PhD in management sciences and an MBA in HRM from SZABIST Karachi. He did his Master in a Maritime affairs from Bahria University. He has done number of management and leadership courses at national and international level. He was commissioned in the Executive Branch of Pakistan Navy in 1988. He has served in the special arm of PN i.e Submarine Service till the level of executive officer. He has held various command and staff appointments and has served as Base Commander PNS ABDOZE, Director Submarine Training center, Captain Training of all Karachi based Educational/Training organizations overseeing the working of Bahria University and all schools/cadet colleges of Sindh under the management of Pakistan Navy. He has also served as Commandant/Project Director of Cadet College Sanghar. He has a versatile and enriched teaching/management experience. He has served as a senior faculty member at the Pakistan Naval Academy as well as directing staff at Pakistan Navy Staff College Lahore, teaching Management/Leadership as well as supervising the research works of senior national and international military officers. As Director Submarine Training Center, Dr. Arif was awarded Tumgha-e-Imtiaz Military TI (M) by the President of Pakistan in recognition of his unique efforts of single-handedly managing and leading the team that indigenously produced three submarine training simulators using local resources and talent for the training of submarine crew; thereby saving a huge amount for the national exchequer.







**Dr. Bildees Ghani**, an Assistant Professor, has done both her PhD and MPhil in Business Management from IoBM. She has around four years' experience of corporate and teaching. She has published her research in both national and international journals, and has also presented a paper in an international conference. Her research draws on the performance appraisal process with exchange perspective, justice/fairness, social interaction, employee intentions & behaviors.



**Dr. Shagufta Ghauri**, Assistant Professor, holds a PhD degree in Business Management from the Institute of Business Management .She has worked with different business universities and has been associated with IoBM for the past fourteen years, teaching Management and HR courses and has been involved with curriculum development and training manuals. She is also an honorary member to the Pakistan Education Foundation. Her research interest areas are Organizational Behavior, Job satisfaction, Contemporary issues in Management; Leadership styles, Motivation and Creativity and has several research publications and conference presentations to her credit. She is also the faculty advisor of the Strategic Human Resource Society at IoBM and has organized the Zenith Leadership & Development Conference on an annual basis for the last eleven years.



Shiraz Ahmed, Assistant Professor, holds an MS in Management Sciences from SZABIST. He has received training from master trainers from the UK, Africa and Pakistan. He has been trained by foreign teachers of the British Council for their Global Leadership Development Program. He is also a British Council Trained Management Trainer and a Certified HR Professional. He has spoken at and facilitated sessions for local and foreign dignitaries including a British Foreign Minister, British High Commissioner and a Global CEO and Regional Directors. Managers for junior and senior positions including heads of department and directors have attended his workshops. Employers of Nokia, Siemens, RBS, Shell, Wal-Mart, Emirates Airline, ICI, Haier, Engro, Coca Cola, AC-Nelson, B Braun, Bayer, Mobilink, Byco, Descon engineering, Toyota Indus Motors and other companies have benefited from his workshops. He has been visiting member of faculty in leading business schools of the country.



**Zafar Mehdi**, Assistant Professor, is pursuing his PhD at IoBM. He has worked in several business institutions before joining IoBM. He has also worked in multinational companies, carryingout the responsibilities as Administrative Manager and Director on 'Japan –Turkey-Mitsubishi joint venture' in UAE. Locally, he has worked as an Administrative Officer in Inter Cable Communication (Business Partner, Paktel)-Karachi. Mr. Mehdi worked as term paper and assignment supervisor as well as online tutor for the students of the London School of Economics and Political Science, University of Leeds, University of Nottingham and London Metropolitan University. He was rewarded by ICMAP for four 'Roll of Honour' producing the best results at national and international levels. His special areas of the research and publications/range from political economy, training and development to human and organizational development, globalization and labor governance. He has contributed 120 research-based articles on "business economy and international relations" to daily Dawn, the News International, daily Jang Newspaper and Management Accountant Journal, daily Jung and Family Magazine.



**Dr. Muhammad Azeem Qureshi**, Assistant Professor, he obtained his PhD degree in Business Management and was awarded the Certificate of Merit for his distinguished performance during his PhD (3.93 CGPA). He was awarded MS degree in Management Sciences with a Gold Medal for securing 4.00 CGPA and Summa Cum Laude Award for outstanding academic performance. He earned MBA degree in the field of Human Resource Management from the Institute of Business and Technology, Karachi. He obtained professional certification in Oracle 8, Develop 2000 and Database Administration along with the Certification in Database Management System. He has expertise in Statistical Package for the Social Sciences (SPSS), AMOS and Smart PLS. He is an experienced researcher. His research area encompasses Business Management, Organizational Behavior and specifically, Leadership, Ethics and Layoff survivor sickness. He has published several research papers in HEC recognized peer-reviewed journals. He has also presented his research work in several national and international conferences. He has been supervising MS/MPhil-level research for several years. He has been teaching courses like Advanced Research Methods, Survey of Current Literature in Business Management, Seminar in HRM and Leadership Ethics and Change. Prior to joining IoBM, he has been Research Associate and Lecturer at the Institute of Business and Technology, Karachi.



**Dr. Afaq Ahmed Kazi**, A senior Human Resources and Industrial Relations professional with over 27 years of professional experience. He has served the industry in the HR field at C-level positions at leading multinational companies in Pakistan and abroad. Dr. Kazi got professional trainings from liP International Quality Centre UK. ASI/Examplus Consultants UK, New HR Competency Training -by Global Learning Program Warner Lambert USA,Total Productivity Management - Wavin Overseas Holland, "Making the Merger Work" - Certified Trainer by Pritchett Associates USA, Change Management and Business Process Restructuring by Catalyst Consulting Group USA. As a researcher, academician and trainer, he has been associated with a number of universities in Pakistan including IBA Karachi and CBM besides providing consultancy services to the Industry. Based on his experiences at companies like Parke Davis, Pfizer and Dadex, Dr. Kazi has developed a research based model specific to the HR environment in Pakistan 'HR Model for Improved Productivity". As a Consultant, he has helped a number of businesses implement this model as a business improvement tool. Dr. Kazi is also a specialist in labor management relations, collective bargaining, contract labor and its legal implications besides Human Resources.



Juveria Baig, Senior Lecturer, She is a researcher, trainer consultant and above all a lifelong learner. She has more than 10 years of experience in the areas of Business Development, Project Management, training, Coaching and Mentoring and Performance Management. She has worked in Pakistan and Australia in various positions, namely SGS Pakistan (Pvt) Ltd, United States Agency for International Development (USAID), Aga Khan University and University of New South Wales, Australia. She has provided management & OD consultancy in various sectors including Pharmaceuticals, Banking, Healthcare, Engineering Services, Development Sector, Shipping, Logistics etc. She is also serving as a coach and mentor at HerCareer.pk. She has done BSc (Hons) from the Textile Institute of Pakistan, MBA from Hamdard University and a Master's in Human Resource Management from the University of New South Wales, Sydney, Australia. She is seriously committed to a career in research, consultancy, learning & development and teaching. Her research focus remains in the areas of Knowledge Management and Workforce Development.



Saba Gulzar, Senior Lecturer in Human Resource Management, holds an MS in Human Resource Management from PAF-KIET Karachi. She has had eight years of teaching, research and consultancy experience in different organizations in Karachi and also has experience of multiple managerial positions in academic. Her area of interest include academics, training, coaching, leadership, business education, research, and organizational development. Her main focus is research work and development of innovative tools to increase the efficiency of Human Resource professionals in different industries.



Kanwal Gul, Lecturer in Management and HR department at IoBM holds MBA degree in Marketing from IBA Sukkur, MPhil (Business Management) from IoBM and currently enrolled in PhD. in Business Management at IoBM. She has also served at IoBM as Research Assistant in the Human Resource & Management Department. She has worked for financial institutions like (UBL, HBL, NIB Bank and Jubilee Insurance) for approximately three years. Besides her corporate experience, she had worked as a Senior Auditor and Faculty in Management Sciences at ILMA University. She has also served as a visiting faculty at IQRA University where she taught qualitative and quantitative research techniques to the Masters' students. Along with teaching experience, she became seriously committed to pursuing a career in research and teaching. She has two years of writing academic research experience.



**Syeda Tayyaba Fasih**, Lecturer, pursuing a PhD in Business Management at IoBM. She completed her MSC in HRM and Organization psychology from IoBM and BBA (HRM) from Bahria University. She has been associated with IoBM for the last two years in different capacities. In research, she had integrated ontological research with business analytics. Her research interest are talent management, human capital, employer branding and HRM. She has several research publications and conference presentations to her credit.



Farah Habib, Lecturer, holds her Master Degree in Business Administration from IoBM. Also, She holds her Bachelor's degree in Bio-Medical Engineering from NED University of Engineering Technology in 2013. Approximately She has more than 6 years of working experience related to Higher Education, Academics and Management. She has previously worked as Asst. Editor of Pakistan Journal of Medicine and Dentistry (PJMD), in Zia Uddin University (X-Category Journal) and Research Assistant in Patel Hospital. Her areas of research interest are Organization Behaviour, entrepreneurship, and Leadership.





# Marketing



Mohammad Ekhlaque Ahmed, Assistant Professor, Head of the Department and Lead Capstone Course Projects, he holds a Master's degree in Business Administration from the IBA, Karachi. He has over 30 years of working experience in the corporate sector at various senior management positions in both multinational and local companies. He worked for Philips, Osram, Dadabhoy Cement and Rajby industries before joining IoBM as a permanent member of faculty. Besides basic marketing courses like Marketing Management, Principles of Marketing, Sales Management, he has also been teaching Strategic Marketing Planning, Marketing Strategies and Value Innovation, Distribution and Channel Management. Currently he is pursuing his MPhil in Business Management from IoBM. He is also a corporate trainer in the field of Marketing & Management. He has been instrumental in bridging the gap between academia and the corporate world by implementing experiential learning programs at IoBM.



**Kausar Saeed**, Associate Professor, Marketing and Senior Manager & Head of Internship & Placement Department, holds MS degree in Management Sciences and has over 28 years of diversified experience of the corporate, academic, entrepreneurial and developmental sectors. She has served with various organizations in different positions which include Aga Khan Foundation, Interflow Communications and Gtz-a German NGO. She teaches various courses of marketing, management and business research. She is an experienced academician, researcher and consultant in the field of marketing and management. She has presented research papers at national and international conferences and has several published papers to her credits. Currently, she is pursuing her PhD in the area of Management Sciences.



**Dr. Syed Amir Saeed**, Associate Professor, Marketing, did his PhD in Marketing from IM Sciences, Peshawar. He has an MPhil in Marketing and an MBA from the University of Peshawar. Subsequently, he joined Gulf Ship Chandlers Dubai, where he was responsible for managing marketing activities and supplies to United Arab Shipping Corporations. He has executed multiple research projects in collaboration with Gallup Pakistan. Clients for those projects include the World Bank and British Council. He has also provided advertising consultancy services to different national and multinational brands.



Saadiyeh Said, Assistant Professor has an MBA from IBA, Karachi. She has over 30 years of academic, marketing and market research experience, having worked in organizations such as Johnson and Johnson and as Executive Director for Aftab Associates. She has also worked as a marketing consultant for Feroze sons Laboratories, Pakistan Ltd and Shazeb Industries. In addition, she has been actively involved in marketing management training programs for various organizations and has undertaken several market research projects at a national level.



**Dr. Nawaz Ahmad**, Assistant Professor & Research Consultant, is a PhD in Management Sciences. He has done MPhil in Management Sciences, Master in Finance and Bachelor in Commerce. He started his teaching career in 1999 and research career in 2006. He has been associated with different universities during this period, and has also worked as Principal Consultant with a research firm for three years. He is also a member of the Editorial Board of leading national and international Journals. He has 121 research publications in national and international repute journals and conferences and 188 citations on Google Scholar with 9.4 Impact Factor to his credit. He is leading IFJ (impact factor journal) Publication Consultancy Support Center and editing IJELCS—International Journal of Experiential Learning & Case Studies.



**Dr. Muhammad Adnan Bashir**, Assistant Professor, Marketing has done his PhD in Marketing from IoBM and an MPhil & MBA from Iqra University, Karachi. He holds BSc (Hons) & MSc degrees in Microbiology from the University of Karachi. He has over six years of work experience in both multinational and national pharmaceutical companies. He has worked for GlaxoSmithKline, Atco Laboratories and Novartis Pharma Pakistan. His research areas include Branding and Customer Engagement through Online Social Media.



**Dr. Amber Raza**, Assistant Professor & HoD Academics, holds a PhD in Business Management and MBA in HRM from IoBM. She did her MPhil in HRM from PAF-KIET. She has worked with AKESP in the field of Education Research in Pakistan, and was part of the team that developed evaluating and monitoring instruments for the project QUAID (Quality Advancement through Institutional Development). She has 10 years of teaching experience at university level; and has supported 100 plus students in their research projects which were based on diverse topics with focus on Management and Marketing.



**Fareen Razzak**, Assistant Professor, has done her MBA from IBA and is currently pursuing her MPhil at IoBM. She teaches Consumer Behavior, Brand Management and Marketing Management. She has had corporate experience related to Brand Management in Colgate Palmolive and Candy Land. She is also the founding partner in an entrepreneurial venture called Rashk Fashions, a designer brand which sold premium designer wear in various high end multi designer stores in Dubai, Toronto, Bangladesh and Chicago with branches in Karachi including Brand Just Pret, The Designers, Shabis and Labels.



**Syed Muhammad Fahim**, Assistant Professor, has extensive experience in the field of research and marketing. With more than 25 research papers at his credit, he has developed specialized skills in partial least square structural Equation Modeling (SEM). He received customized training on PLS SEM in Malaysia. His forte is structural equation modeling via Smart PLS. He has attended and conducted workshops on Smart PLS at various national and International forums.



**Mukhtar Ahmed**, Senior Lecturer, is a well-rounded professional hailing from pharmaceutical sales & marketing; with a diverse experience of over 30 years in the corporate circuit. He has been fortunate enough to have spent his career in multinational organizations; where he had ample opportunities to learn & evolve from a budding sales professional to a visionary corporate thinker. He spent a major part of his career in Schering AG, a German Pharmaceutical specializing in Gynecology & Dermatology, and then joined Bayer Pharmaceuticals, one of the largest global names in the industry. As a Business Unit Head, in addition to Pakistan business, he was also responsible for Bayer Pharma business of Srilanka from 2012 – 2015.



Fariha Raza, Senior Lecturer, she did MBA from IBA, Karachi (1994), MS in Management Sciences from SZABISTKarachi (2015), and is currently pursuing PhD in Management Sciences from SZABIST, Karachi. She has 13 years of corporate experience and 6.5 years of full time teaching experience at HEIs. She has worked with Hilal Confectionery Pvt. Ltd from May 1998 till April 2006, where her last title was General Manager Business Administration. She has served as Deputy General Manager Marketing, Dewan Farooque Motors Limited from May 2006 till November 2011. She has served as Lecturer at SZABIST, Karachi, from June 2013 till January 2017, and as Assistant Professor and Assistant Director Accreditation, MS Department, DHA Suffa University, from January 2017 till January 2020. Before starting her career as a fulltime faculty, she has been associated with IBA, SZABIST and IoBM as visiting faculty also from Fall 2011 till Spring 2013. She has six publications to her credit. Her areas of interest are consumer behavior, marketing management and mixed methods research methodology.



**Muhammad Tabish**, Lecturer, holds an MBA in Marketing and Finance from MA Jinnah University. He has five years of academic and alternative professional experience. He is currently pursuing his PhD in Business Management Sciences from IoBM. His research area includes Consumer Behavior and Brand Management.







Marium Mateen Khan, Lecturer, is currently enrolled in a PhD in Business Management at IoBM and is specializing in Marketing. She did her MBA and BBA (Honors) in Marketing from PAF-KIET. She has taught Marketing courses as a visiting faculty to BBA, BS and MBA level students. She has also supervised BBA final year projects (Research Theses). Marium has also worked at Askari Bank Ltd. and Metaphor consultancy. She has five years of research experience. She also has freelance working experience of academic writing, creative writing and graphic designing. Seeing the gaps and issues in the current academic environment made her pursue a career in academia. She has been a scholarship holder since her first semester throughout her BBA and MBA. She graduated in both programs with Summa Cum Laude honor. She has a number of international and national research publications in Scopus, X category and Y category research journals to her credits. Her research areas include Consumer Animosity, Design Thinking, Consumer Behavior, Neuromarketing, Branding, Small Enterprises and Microfinancing.



Maryam Masud, Lecturer, Marketing and Officer, Case Study Cell, received her MBA from IoBM, with a Gold medal. Throughout her journey at IoBM she was the recipient of a Merit Scholarship. She received Summa Cum Laude award in BBA from PU. She has a vast experience as entrepreneur since 2011. She has been heading two ventures; an event organizing company and a graphic designing firm. She presented her case study at the conference organized by LUMS, AMRC in 2017, where universities from around the globe participated. Her areas of interest include Marketing, Innovation, Value creation, and Business Management. She became academician by choice working to develop a case study cell at IoBM.



Asma Rehman, Lecturer, is currently enrolled in a PhD in Business Management at IoBM and is specializing in Marketing. She did her MBA (Marketing) and BS(H) from IoBM. She has been teaching in IoBM as a Visiting faculty for the last two years. Prior to working in Higher Education, she has worked in the capacity of Marketing Manager for a private firm. She is also the founding member and Marketing Consultant in an entrepreneurial venture called Murtafiyah, a Training & Consultancy Firm.



# College of Computer Science and Information Systems (CCSIS)

#### **Advisor**

**Dr. Ahmer S. Karim**, Advisor, College of Computer Science and Information Systems (CCSIS), has a PhD and a Master's degree from Arizona State University, USA, preceded by MIS and Bachelor of Science in Finance from the University of Arizona, USA. He has over nine years of teaching experience at the University of San Diego, USA. He has published in Decision Sciences, Information and Management and other academic conference proceedings. Dr. Karim has also published several academic books on Information Systems.



#### Dean

Dr. Tariq Rahim Soomro, Professor, and Dean of the College of Computer Science & Information System; has received BSc (Hons) and MSc degrees in Computer Science from University of Sindh, Jamshoro, Pakistan and holds a PhD in Computer Applications from Zhejiang University, Hangzhou, China. He has had more than twenty-five years of extensive and diverse experience as an administrator, computer programmer, researcher, and teacher. He has served as Coordinator, Head of Department, Head of Faculty, Dean of Faculty, Head of Academic Affairs and he had wide experience in accreditation related matters, including ABET USA, NCEAC, HEC Pakistan and Ministry of Higher Education and Scientific Research, United Arab Emirates (UAE). His research focuses on GIS, IDNs, Distance Education, E-Commerce, Multimedia, UNICODE, WAP, P2P, Bioinformatics, ITIL, Cloud Computing, Green Computing, Big Data, IoT, Quality of Software, Telemedicine, VoIP, Databases, Programming and Higher Education. He has published over ninety peer-reviewed papers and is actively involved in community services in the research field. He is on the editorial and advisory board of several leading HEC recognized journals and national & international conferences. He is Senior Member of IEEE, IEEE computer society and IEEE Geosciences & RS Society since 2005 and IEEE Member since 2000. Member ACM since 2019, Member Project Management Institute (PMI) since 2007. Senior Member, International Association of Computer Science and Information Technology (IACSIT) since 2012. Life Member, Computer Society of Pakistan (CSP) since 1999. Global Member, Internet Society (ISOC) USA since 2006. He has been an active member of IEEE Karachi Section (Region 10) and currently serving as Vice-chair IEEE Karachi Section and R10 Southern Area Coordinator of Computer Society (CS).



#### **Actuarial Science and Risk Management**

**Dr. S. M. Aqil Burney**, Professor and Head of the Department, holds a PhD (Mathematics) from Strathclyde University, Glasgow UK, MPhil (Risk Theory and Insurance - Statistics) and MSc (Statistics). He has taught for more than forty five years at University of Karachi and delivered lectures at different institutions and universities of Pakistan and abroad. He also has extensive experience of academic management and organization as Provost, Registrar, Project Director Development of Computer Science and Institute of Information Technology and founding Director of Main Communication Network of University of Karachi. He was Meritorious Professor and headed the Department of Computer Science, University of Karachi. He has published more than 150 research papers and seven books nationally and internationally in ICT, Mathematics, Statistics and Computer Science. He has supervised numerous theses in Mathematics, Computer Science and Statistics. He has more than 730 citations on his research work and frequently delivers invited lectures at various institutions. He is Chairman (elect) National ICT Committee for Standard PSQCA- Ministry of Science & technology Govt. of Pakistan (2013- Cont.) and member, NCEAC, member, IEEE (USA), Member ACM (USA) and had been Fellow Royal Statistical Society UK). He is editor of Pakistan Journal of Engineering and Technology of IoBM, and many other journals of reputed institutes.





#### **Mathematics and Statistics**



**Dr. Muhammad Mansoor Alam**, is a Professor of Computer Science. He is working as an Associate Dean in CCSIS and HoD Mathematics, Statistics and Computer Science Departments. He is enjoying 20 years of research and teaching experience in Canada, England, France, Malaysia, Saudi Arabia and Bahrain and authored 200+ research articles which are published in well reputed journals of high impact factor, Springer Link book chapters, Scopus indexed journals and IEEE conferences. He has honor to work as an online laureate (facilitator) for MSIS program run by Colorado State University, USA and Saudi Electronic University, KSA. He has also established research collaboration with Universiti Kuala Lumpur (UniKL) and Universiti Malaysia Pahang (UMP). Currently, Dr. Alam is also working as an adjunct professor in UniKL and supervising 12 PhD students and 4 Post-Doctoral Scholars. He has done PostDoc from Malaysia in "Machine Learning Approaches for Efficient Prediction and Decision Making". He has done PhD in Computer Engineering, PhD in Electrical and Electronics Engineering, MS in System Engineering and M.Sc. Computer Science from France, United Kingdom and Malaysia. Universite de LaRochelle awarded him Très Honorable (with distinction) PhD due to his research impact during his PhD.



**Dr. Khurram Iqbal**, Assistant Professor, obtained his PhD degree in Aerospace Mechanics and Engineering from the Dalian University of Technology (DUT), China in 2016, MS degree in Materials and Surface Engineering from the National University of Sciences & Technology, and MSc & BSc (Hons) degree in Mathematics from the University of Karachi. His extensive academic and research experience is on materials processing, mathematical modelling, thin films and silicon carbide-based composites for high-temperature and energy applications. He has successfully accomplished a number of research projects and published his research papers in some national and international academic journals.



Laiq Muhammad Khan, Assistant Professor, holds an MSc in Statistics from University of Karachi and MS (Statistics and Scientific Computing) from IoBM. He has over forty three years experience of teaching Statistics. His research work is in field of Insurance in developing Statistical model for Aggregate Losses as well as in other fields. His research interest are Statistical Modelling & Inferences. He has published research work in many national Journals. He has taught as visiting faculty at Fast, Institute of Computer Science for the period 1995- 2001.



**Sohail Ahmed Khan**, Assistant Professor, holds an MS in Finance (specialization: Financial Mathematics) from Germany and MSc in Applied Mathematics from the University of Karachi. He has worked for five years at P3 Communication GmbH and LogicaCMG GmbH & Co. KG in Germany. He has also served as cooperative lecturer at the department of Computer Science at the University of Karachi. His research interests includes Computational Finance, Application of Methods from Financial Mathematics in Insurance, Interest Rate Modeling.



**Mushtaq Ahmad Khan Barakzai**, Assistant Professor, holds MS in Actuarial Science from Heriot Watt University, UK, a Master's degree in Statistics from University of Peshawar. He is a PhD scholar at IoBM. He is also a member of the Society of Actuaries, USA and Institute and Faculty of Actuaries, UK. He has a mix of professional and teaching experience. He has worked at the prominent organizations of the country such as Ministry of Fi-nance, Securities & Exchange Commission of Pakistan and State Bank of Pakistan in the capacity of Senior Actuary, Assistant Director Insurance and Statistical Officer respectively. Before joining IoBM, he was working as Actuary at Ministry of Finance. In addition to his professional work, he has taught courses of Actuarial Science & Risk Management at University of Karachi and University of the Punjab. He has a great interest in carrying out research in the field of Actuarial Mathematics and Risk Management.



**Steve James**, Assistant Professor, holds an MS in Financial Mathematics from Technical University Kaiserslautern, Germany. He has more than five years of teaching experience at PAF KIET. He has also worked at Daimler (Germany).



**Dr. Fatima Riaz**, Assistant Professor of Mathematics, holds a PhD degree in Applied Mathematics in the field of fluid dynamics which she received from the University of Karachi in 2016. She has 12+ international publications to her credit. She had made presentations in national and international conferences and workshops. She has almost three years of teaching experience at university level.



**Dr. Sumaira Khan**, Assistant Professor, Mathematics holds PhD in Applied Mathematics from University of Karachi. She also holds on MSc and a BSc (Hons) in Applied Mathematics from the University of Karachi. She is a professional educator with over ten years of teaching experience. She has taught at NUST-PNEC, Iqra University and FAST-NUCES prior to joining IoBM in 2012. She also conducted workshops on Military Operations Research, Operations Research and its applications in defense, etc. Her areas of interest are Operations Research, ODE's and PDE's, and Numerical Methods.



**Rizwan Ahmed**, Assistant Professor, Mathematics and Statistics, has done his MSc in Statistics and MPA (Finance) from the University of Karachi. He has also done his MAS (Applied Economics) from Applied Economics Research Center, University of Karachi and completed MS (Economics) degree from IoBM. He is doing PhD in Economics from IoBM. He is associated with IoBM as a permanent faculty for more than twelve years. He has nineteen years teaching experience. He has five research publications in his credit out of which three in Pakistan Business Review ('X' category Journal) published by IoBM. His areas of interest are Quantitative Analysis for Business and Management, Statistical Inference, Macroeconomics, Mathematical Economics and Business Finance.



**Hina Samreen**, Assistant Professor, Mathematics, holds an MSc in Applied Mathematics and Master in Applied Economics from the University of Karachi. She has been actively involved in research related work and assisted Paki-stan Institute of Education and Research in the development and preparation of various policy papers in labor management and allied subjects.



**Ghulam Abbas**, Assistant Professor in the Mathematics and Statistics Department, has an MPhil in Finance from Iqra University and an MSc in Economics from the University of Karachi. He has more than twenty nine years of teaching experience at graduate and under graduate levels in various reputed business schools of Karachi. He has always taught quantitative subjects such as algebra, calculus, statistics, operations research, mathematical economics etc. In one of the universities, he changed the teaching culture by introducing various softwares. He brought teaching from the classroom to the computer lab. Apart from teaching, he also has work experience of more than twelve years in the financial sector as an economist.



**Dr. Insia Hussain**, Assistant Professor, holds a PhD degree in Statistics from the University of Karachi in the year 2019. She also holds MSc (Statistics) and MA (Applied Mathematics) from the University of Karachi. She has worked as a research assistant at the Department of Mathematics, University of Karachi and co-supervised PhD students. She has actively been involved in research and has published research work in national and international journals. Her research interests encompass Functional Data Analysis, Time Series Analysis, and Computer Programming.







Wajahat Ali, Senior Lecturer, has an MSc from the University of Karachi. He has been involved in research and teaching in Mathematics and Statistics. He has almost twenty five years of teaching experience at various institutes. His areas of interest are Design of Experiment, Quantitative Analysis for Business & Management, Statistical Inference, Advanced Quantitative Methods, College Algebra and Calculus for Business Decisions. He is enrolled in MS (Statistics & Scientific Computing) from IoBM. He is also a faculty advisor of Mathematics Society at IoBM and has organized the Mathematics Colloquium, annual national and international conferences in the Collaboration with International Organizations and also organized Foreign Faculty Guest Speaker sessions for twelve years.



**Azam Hashmi**, Lecturer, holds Master's degree in Statistics from Karachi University and an MBA from IBA. He has passed ISO 9000 Lead Auditor Course conducted by the British Standard Institution. He has attended a six-week management training program at Ashridge Management College, England. Prior to joining IoBM in 2002 he was working at a public sector management training and development institution. He has over thirty years of experience in teaching, training and management consulting services. Presently, he is teaching Statistics and Mathematics courses to MBA and BBA students.



Attra Ali, Lecturer in Mathematics, has an MSc in Mathematics from the Federal Urdu University. She received three gold medals, for departmental position, being the highest achiever in the university. A BSc (Hons) in Mathematics from the Federal Urdu University, she joined IoBM, after teaching for two years at NUST, Karachi campus. In addition, she has done an educational development course at PNS BAHADUR and attended workshops related to teaching and education.

# **Computer Science**

Dr. Tariq Rahim Soomro, See Profile on Page No. 171.



**Muhammad Asghar Khan**, Assistant Professor with a Master's degree in Network and e-business centered computing from the University of Reading (UK), an MBA and Master in HRM from the Australian Catholic University (Aus), an MS in Computer Software Engineering from NUST and BS Computer Engineering from Sir Syed University. He has had seven years of teaching and industrial experience at various national and international organizations. His areas of interest are Cyber Security; Open Source ERP and IS Audit. He is a member of many professional bodies such as Pakistan Engineering Counsel, Australian Endeavour Network, ISACA and Australian Human Resources Institute.



Khalid Bin Muhammad, Assistant Professor, currently doing PhD in Computer Science, did MS in Computer Science from IoBM, also did Masters in Computer Science from the University of Karachi and an MBA in MIS / Finance from MA Jinnah University with first-class first position. He also holds a Bachelor of Engineering degree from NED and is a lifetime member of Pakistan Engineering Council. He is also a member of IEEE, IEEE-Executive Committee, IEEE Computer Society and Rapid Miner Community. Currently working on Natural Language Processing and its applications in Urdu Language. Research interests include but not limited to Data Warehouse, Data Mining, Big Data, Business Intelligence, Data Science, Artificial Intelligence, Image-recognition, Internet of Things, Fuzzy Logic, Human Centric Computing and Machine Learning. He has proficiency in Programming Languages specially Object Oriented Programming (Java and C++), Computer Graphics, Engineering Drawing, Computer Aided Designing, Multimedia Technologies, Relational Database Management System and Customer Relationship Management. He has a mix of over 22 years of experience working in Teaching, Mentoring, Education Management (IoBM) and Industry (Dawlance / Pakistan Petroleum Limited). He possess practical I.T Knowledge, exceptional interpersonal and communication skills, work ethics and sincere dedication towards his objectives. He takes pride in initiating projects and work diligently towards making them successful endeavors.



Syed Farhan Mazhar, Assistant Professor in Computer Science, is a professional educator with over 12 years of experience in the educational and professional services industry including national and international organizations; some of these being: NED University, Concordia University College, Canada, Capital Health, Edmonton, Canada. He received his M.Eng degree in Software Engineering and Intelligent System from the University of Alberta, Edmonton Canada. He also holds an MSc in Applied Physics with specialization in electronics from University of Karachi. He has also completed his MPhil course work from Department of ISPA, University of Karachi. Currently, he is pursuing his PhD in Canada. His areas of interest are Software Engineering, Semantic Web, Data Mining, ERP, Database Management System and Project Management.



**Najmus Saher Shah**, Senior Lecturer, has an MS (Computer Science) from IoBM. She is also a 2nd position holder in her BSc (Hons) in Economics from the University of Karachi. She has more than ten years of teaching experience. Her research interests include areas such as Data Mining, Forecasting, Artificial Intelligence, and Database Management System.



Muhammad Waqar Khan, Senior Lecturer, has earned Master in the area of Telecommunication Engineering, a Postgraduate Diploma in Computer and Information Sciences, Master in Computer Science and a Bachelor in Electrical Engineering. Currently, he is a PhD scholar in the area of Machine Learning. He has been associated with academics for over twenty two years and has worked as a consultant. He has been an active member of various academic, regulatory, and professional bodies. He has played a key role in both national and multinational industries such as Pakistan Telecommunication Company Limited, Wateen Telecom Pvt Ltd, Pakistan Electronic Media Regulatory Authority, Com 4rewqstar (ISA) Ltd. He has also served in Pakistan Navy Engineering College, NUST, Aligarh Institute of Technology, Sir Syed University of Engineering and Technology, Bahria College and Sir Adamjee Institute of Technology. He is also a permanent member of Pakistan Engineering Council (PEC). He has executed and supervised various projects of industrial standards in the Sindh, Punjab and Balouchistan regions.



Asim Iftikhar, Senior Lecturer, is pursuing PhD (Information Technology) from Universiti Kuala lumpur, Malaysia. He also holds MS and MCS degrees in Computer Science. He has fourteen years of teaching experience at university level and has conducted several professional training programs for faculty, students and corporate level. He has published nine research papers in conference proceedings, local and leading international journals. His specialization areas include Software Engineering, Digital Communications, Artificial Intelligence, Web Development and Computer Graphics.



**Sobia Younus**, Senior Lecturer, holds an MSC in pure Mathematics and BSC Honors in Mathematics from the University of Karachi. She is currently enrolled in an MS program leading to a PhD in Mathematics from KU. She has two international publications in the International Journal of Applied Mathematics and Mechanics, India to her credit. She has also taught at NUST as a visiting faculty member.



**Syed Mubashir Ali**, Senior Lecturer, holds Master's degree in Information Technology from SZABIST, Dubai and a Bachelor's degree in Computer Engineering from FAST-NUCES Karachi. He is currently pursuing his PhD in Computer Science at IoBM. Prior to joining IoBM as a full time lecturer, he worked as an IT Administrator and Computer teacher at the American International School, Dubai. He has published 10 research papers in various national and international conferences and journals. His research interests are in the areas of Information Technology Standards, Electronic Commerce, Big Data, Ubiquitous Computing, Internet of Things and Gamification.







**Rabab Naqvi**, Senior Lecturer, holds a Master in Computer Science from University of Karachi. She has more than eight years of experience in academia. She is well-informed with current practices in the field of Computer Science by attending workshops, seminars and symposiums. She has an inspiring track record of attending both national and international conferences and publishing articles in reputable journals. Her major research areas include DBMS, Data Mining, e-Learning, and impact of Social Media in academics.



Saadia Karim, Lecturer, pursuing her PhD in Computer Science at IoBM, holds an MS in Computer Science from Muhammad Ali Jinnah University and Bachelor (Hons) degree in Computer Science from Sir Syed University of Engineering & Technology. She has served at IoBM as an IT personnel and also adjunct faculty member, where she taught ERP and SAP to the Master's students. She has over four years of academic experience and seven years of experience as a Software Programmer and Team Lead in IT. Her areas of interests are Artificial Intelligence, Machine Learning, Big Data, and Fuzzy Set Theory. She has published research work in national and International Journals.

# **Logistics and Supply Chain Management**



Muhammad Moin Uddin Ali Khan, Associate Professor and Head of Logistics & Supply Chain Management, has done an MS in Engineering from the University of Missouri, USA and BSc and BE degrees from the University of Karachi. He has been trained in the fields of Operations Management, Quality Assurance, Environmental Management, Supply Chain Management and Technology Management from USA, Japan, UK, South Korea, Sweden, Russia, Brazil and Australia. He has been associated with industry and education for over forty years and is a certified lead Auditor ISO 9000 QMS & ISO 22000 Food Safety Management System. He is actively involved in developing Quality Enhancement activities at IoBM in close coordination with the HEC of Pakistan as a result of which IoBM was awarded a score of 100% in QEC scorecard by QA of HEC. His research interests are in the areas of Food Supply Chain, High Strength Steels, Quality Management, Enterprise Resource Planning Solutions, Climate Change & Supply Chain, Energy Management etc. He has conducted institutional performance evaluation of several universities and is an active member of APQN, AMDISA, INQAAHE, CHEA and SEPA.



**Dr. Mahmood Ali**, Associate Professor, holds PhD from University of Greenwich, UK. Before undertaking his PhD, he worked for several corporate organizations in different managerial roles. He is an active researcher and has published in international journals and participated in conferences. His research interest includes Supply Chain Management, Enterprise Systems, Logistics, Decision Support Systems, User Resistance and Information Technology.



Syed Adeel Shah, Senior Lecturer, holds an MPhil in Supply Chain Management from Iqra University. He also holds an MBA and BSC (Hons) in Textile Sciences from the Textile Institute of Pakistan. He has a wide experience in Textile Supply Chain, teaching, training, research and SCM. He provides consultancy, students/parental counseling and education. His career spans over fifteen years and he has worked in leadership positions at various organizations. He was Country General Manager at Karl Rieker GmbH & Co. KG (Bodelshausen / Germany) and Country Head Supply Chain Management in Wünsche Group (Germany). His experience in SCM and Textile Studies is over twelve years, during which he has served in Karachi's most prominent institutes, including, AIFD and KUBS.



Sajid Nazir, Lecturer, has completed his Master in Supply Chain Management from Coventry University, United Kingdom. He attended the Coventry University Global Leadership Program and holds a Diploma in Global Leadership from UK as well. As part of Global leadership program, he has been to different countries for presentations and leadership trainings. He has completed his Bachelor in Business Administration from Iqra University. Before Joining IoBM, Sajid worked in different corporate sectors at national as well as international levels such as Banking, Aviation, Pharmaceutical and other service industries as a supply chain professional. He also has done research analysis on the impact of China Pakistan Economic Corridor (CPEC) on transit routes from China to overseas markets.



**Rizwan Ellahi**, Lecturer / Program Coordinator, Logistics and Supply Chain Department, an ACCA member also holds MBA in Logistics and Supply Chain Management from IoBM and BSC in Applied Accounting from the University of Oxford Brookes. He has rich experience from top multinationals such as ICI Pakistan, Toyota, Deloitte and Standard Chartered Bank. Because of his passion for the education he is now associated fulltime with academia, Moreover, he is actively involved in research and has publications in top international journals indexed by Scopus and Clarivate.





# College of Engineering and Sciences (CES)

# **Electrical Engineering and Engineering Management**



**Dr. Seema Ansari**, Associate Professor and Associate Dean, holds a PhD in Telecommunication Engineering, University of Malaga, Spain. She did her MS-CS/Telecommunication from University of Missouri Kansas City, USA and BE in Electronics from NED-UET Karachi, Pakistan. She has 35+ years of experience in teaching and management at renowned public engineering universities like DUET and NED-UET and private sector. She was the Director of Asia Pacific Institute of Information Technology, Karachi Campus, a joint venture of APIIT-Malaysia and affiliated with Staffordshire University, the United Kingdom. She got them HEC recognition in foreign University collaboration in Pakistan. Her research includes 65+ publications in International and national Journals, Conferences and Book Chapters. She is associated with "The Oceanic Engineering Research Institute" of University of Malaga (UMA) Spain and the research group, ETSI Telecommunication, UMA, Spain. She is technical research paper reviewer for IEEEAccess, Springer/WPC, GCWOC. Her research area is Underwater Communications, Analysis of MAC strategies for Underwater Acoustic Wireless Sensor Networks, Internet of Things (IoT) and Internet of Underwater Things (IoUT). Her ORCID is: 0000-0002-0108-7481.



**Dr. Muhammad Imran Majid**, Associate Professor, has a PhD in Electronics from the University of Surrey, UK, MSc in Space Engineering from Umea University, Sweden and BSc in Electrical Engineering from UET Lahore. He is a Commonwealth Academic Fellow 2017 and has been a Commonwealth PhD scholar from 2006-2010. He has about ten years experience in industrial consultancy, teaching and mentoring young professionals in the high technology sector. He has worked for Telenor, SSBV, Surrey Satellite, MVCE, Space Flight Laboratory, OCE, BeneFACT and various consultancies during the course of his career. He was awarded the Commonwealth Scholarship towards his PhD in Frequency Planning for Clustered Cellular Multiple Access Channel at the prestigious Centre for Communication Systems Research (now 5G Innovation Centre), University of Surrey, UK. After his PhD, he consulted and later worked at the University of Toronto Canada as Optics Team Lead for two of Canada's most advanced remote sensing satellites, NEMO-AM and NEMO-HD. He is also currently involved with the Ontario Centre of Excellence as Technical Reviewer and Consultant for BeneFACT Consulting Group. Most recently Dr. Majid was appointed Honorary Research Fellow, School of Engineering, University of Warwick, UK.



**Dr. Zeeshan Shahid**, Assistant Professor, has a PhD and MSc in Electrical and Electronics Engineering from the International Islamic University, Malaysia. He obtained BE from the Usman Institute of Technology. He has published several articles in prestigious international scientific journals and conference proceedings. He has a vast experience in industrial and academic fields. His research focuses on power engineering, specialized in grid-tied inverters, multi-level inverters, DC-DC converters, Integration of Renewable Energy Sources with utility grids and power quality improvement.



**Dr. Syed Fayaz Ahmad**, Assistant Professor, holds a PhD in Engineering Management from Gomal University and an MS in Telecommunication Engineering Management from University of Engineering and Technology Peshawar. In addition, he holds BS-Telecommunication Engineering from Baluchistan University of Information Technology, Engineering and Management Sciences Quetta. He has vast experience in research and conducted many researches in Public and Private Sector organizations of Pakistan. Furthermore, he has also designed a theoretical framework for the regulation of Telecommunication Industry. Also, he has designed a framework for the convergence of Information and Communication Technology in Pakistan.



**Dr. Zeeshan Asim**, Assistant Professor, has a PhD (2019) degree in Technology Management from Universiti Malaysia Pahang. He also did his Masters (2009) from Coventry University, England. He obtained his BS (Electronic Engineering) from Sir Syed University of Engineering and Technology in 2007. He has published several articles in high quality international scientific journals. Dr. Zeeshan Asim has about four years of industrial experience and six years Academic Experience in mentoring young Engineering professionals across various Universities and public sector R&D firms. He has worked for National Productivity Organizations, Asian Science Consortium, Jaguar- DHL joint venture Project in Coventry, UK and served as Senior Lecturer with Sir Syed University of Engineering and Technology, Karachi during the course of his career.



Rashid Qutub, Senior Lecturer, has an MSc in Production Management from Technical University Hamburg Harburg, Germany and BE Mechanical Engineering from NED Engineering University. He got the opportunity to work with German Aluminium manufacturing company, Hydro Aluminium in Hamburg and has worked indepth to investigate and correlate the microstructure & mechanical properties of Aluminium Alloy. He has worked in the production planning, material planning and in the mechanical design department of Siemens Engineering and KSB Pumps. He has expertise in mechanical designing of various standard and customized Electrical Motors and Diesel Generators. He has worked with ERP such as SAP/R3 and Comet in these organizations. He has also worked in an automobile industry and has been associated with Dawood Yamaha Ltd and Agri Autos Ltd in their Production departments. He is fond of learning foreign languages and is fluent in German language.



**Osama Mahfooz**, Senior Lecturer, pursuing PhD in Telecommunication Engineering from the University of Malaga, Spain, holds an MBA degree in Telecommunication Management from IoBM and BE degree in Electronics from the PAF-Karachi Institute of Economics & Technology. He has completed a CCNA Exploration certification from Aptech. He has published several articles in prestigious international and national scientific journals, conference proceedings and book chapters.



**Abdullah Aziz**, Lecturer, holds a Master's degree and a gold medalist in Mechanical Engineering and a Gold Medalist from NUST. He did his Bachelor of Engineering (Mechanical) from NED University of Engineering & Technology. He has a combined working experience of seven years with four years in academia. He began his career at Karachi Shipyard & Engineering Works as Assistant Superintendent (ASp) and took charge as acting Manager (QHSE) before he began pursuing his career in academia. He is NEBOSH ICG1 & GC3 certified, ISO 22000 Associate, ISO 9001 Lead Auditor, OHSAS 18001 Auditor, and Six Sigma Green Belt.



Rabia Hassan, Lecturer & Research Associate, holds a Master's degree in Engineering Management from IoBM. She obtained her Bachelor of Engineering (Electronics) degree from PAF-Karachi Institute of Economics & Technology. She has been associated with the automotive industry of Pakistan for the last five years where her major area was product planning and development. Her areas of research are Climate Change assessments, Waste Management, Pollution Control and Management and Environmental issues.



**Tahniyat Aslam**, Lecturer, is a PhD scholar at NED University of Engineering and Technology, Karachi, Pakistan. She holds M.E Degree in "Telecommunication Engineering" from NED University of Engineering and Technology and B.S in "Telecommunication Engineering" from Sir Syed University of Engineering and Technology, Karachi, Pakistan. She taught as a Visiting faculty in NED University of Engineering and Technology and currently working as a Lecturer in Electrical Engineering Department of Institute of Business Management (IoBM). Her research interest includes antenna and microwave systems network security, Internet of Things (IoT) and its applications.



Fatima Maqbool, Lecturer, received her MS Degree in Engineering Management from Institute of Business Management, Karachi Pakistan. She did B.E in Electronics from Pakistan Air Force Karachi Institute of Economics & Technology. She has been awarded "Best Achiever Award" from PAFKIET and awarded merit certificate, based on her academic excellence from IoBM. Currently she is lecturer, in the electrical engineering department at IoBM. Her research area includes: Power Electronics, Signal Processing and Business Process Reengineering (BPR). Her area of expertise are Project Management, Power Electronics and Drives, Industrial Control Electronics, Automation and Robotics, Embedded Systems and Designs; Navigation, Guidance and Control





# **Industrial Engineering & Management**



Dr. Shahzeb Malik, Assistant Professor and Head of the Department, has recently established Risk and Innovation Research Centre at IoBM, a multidisciplinary research Centre and a knowledge hub aimed at helping organizations to have better understanding of various business risks. Dr. Malik holds PhD in Information Systems from Manchester Business School (MBS), University of Manchester, UK. He is a proficient researcher and technical expert with several years of experience in working on various academic and commercial projects. He has been associated with the area of Risk Management (with special interest in Cyber Security Risk) for several years. Most recently, he worked at University of Cambridge (Judge Business School) UK, as a postdoctoral researcher in Cyber Risk track where he conducted research to cover cyber threat landscape, participated in writing technical reports, and worked closely with business clients. Prior to this role, he worked as Technical and Research Manager at International Institute of Risk and Safety Management (IIRSM), UK, where he was involved in various academic/commercial research projects, providing Management and IT consulting services to clients, and representing the Institute at UK and International level. He has also been associated with University of Manchester as a Project Manager and postdoctoral researcher to lead a Knowledge Transfer Partnership (KTP) project which is a government funded programme to encourage collaboration between businesses and universities in the UK. During this project, he conducted a review of existing risk management practices within various commercial organisations in the UK.



**Dr. Mohammad Irshad Khan**, Professor, holds a PhD degree in Chemical Engineering and a Postgraduate Diploma from University of Bradford, UK. He has over 30 years experience of industry and management and is a registered consultant of the Islamic Development Bank, Jeddah and SMEDA, Pakistan. He is a professional member of Institute of Industrial Engineers, USA.



**Mukhtar Ahmed**, Associate Professor, has MS (Mechanical Engineering) from the University of Southern California, Los Angeles, USA and BE (Mechanical Engineering) from NED. He has teaching experience of almost twenty three years and started his teaching career with NED where his last appointment was as Associate Professor. He also went to Zimbabwe, Harare Polytechnic as Lecturer. He has four years working experience with Roti Corporation of Pakistan as Deputy Manager.



**Fahad Bin Abdullah**, Senior Lecturer, holds an MSC From University of South Bank-London. He has specialized in Mechanical Engineering Management, Robotics and Simulations, Advanced Materials and Advance Human Machine Designing. He Holds a BE Mechanical Engineering Degree from NED University. His expertise is in the project coordination and maintenance engineering mainly related to the field of mechanical engineering & management.



Falak Shad Memon, Senior Lecturer, holds an MBA (Finance) degree from IoBM and a degree in BE (Industrial & Manufacturing) from NEDUET. She is currently enrolled in PhD (Energy and Environment management) program. she has presented her research articles in couple of international conferences, and has published her research work in HEC recognized research journals. Her research interest focuses on environmental issues, climate change supply chain management and quality management. She also contributes in research journals as reviewer. She has six years of industrial experience in leading automotive industries as a head of production and purchase department. She is a certified ISO lead auditor by IRCA (UK) and possesses expertise on SAP in PP, MM and CO module.



**Mehreen Kausar**, Lecturer, completed her Master's degree in Industrial Management and Bachelor's degree in Industrial and Manufacturing Engineering from NED University. She joined IoBM in 2015 before this she was working with a renowned MNC where her key areas were quality control, inventory control, project management and supply chain dynamics. Her research interest includes industry 4.0, renewable energy and sustainability. She has read papers at a number of national and international conferences and has published research articles in international journals as well.



#### College of Economics and Social Development (CESD)

#### The Dean

**Dr. Shahida Wizarat**, Dean of College of Economics & Social Development and Head of the Department, Economics is an independent economist and has been involved in research, teaching and administration. Her areas of interest are industrial economics focusing on industrial productivity, its determinants; concentration and profitability; development economic issues; economic policies; debt and its management. She is the author of forty-five research papers and articles published in journals of international repute in Pakistan and abroad. She has organized, attended and read papers at several international and national conferences. She earned her PhD in Economics from the University of East Anglia, Norwich, England and an MA in Economics from Vanderbilt University, USA. She has served as the Editor of the Pakistan Journal of Applied Economics and Director of the Applied Economics Research Center, University of Karachi. She has also served as Director Research and Chief Editor Pakistan Business Review. She was on the Board of Directors of the Karachi Stock Exchange and advisory boards and research councils of several organizations and universities.



#### Commercial and Professional Studies

Sartaj Qasim, Head of the Department of Commercial and Professional Studies, is a qualified Chartered Management Accountant (FCMA) from England. He is a Fellow Member of the Chartered Institute of Logistics and Transport (FCILT, UK). He has done MPhil (Business Management) from IoBM and MBA from IBA, Karachi, and was awarded the MBA Gold Medal, BSc (Hons) in Mathematics with distinction from Karachi University. He has done MPhil (Business Management) from IoBM. He had over thirty years of experience in international aviation financial management prior to joining IoBM in 2011. He has been posted in the Netherlands and Saudi Arabia as Head of Finance. He has travelled extensively to several countries in Europe, North America, Asia and Africa on official assignments. He holds several airline industry qualifications from IATA including the IATA/ UFTAA International Travel Consultant Diploma. His area of research is airline service quality. He has conducted several training courses in airline finance and accounting for middle and senior management levels.



**Muhammad AsadUllah**, Lecturer, holds an MPhil in Business Management from IoBM to be followed by a PhD in Finance. Initially, he joined EMEC- IoBM as a facilitator for training projects. Later on, he worked as a visiting faculty for three years at the Department of Accounting & Finance and Department of Professional & Commercial Studies. He has also worked as a visiting faculty in various business schools. His research interest includes Panel Data Analysis of secondary data from different sectors. He has presented various papers in national and international Conferences. One of his research papers has been published and few are in the process of evaluation. During his three years' professional experience, he managed adjustments of advances from all regional zones of Pakistan at TeleCard Ltd. and performed operational duties at MCB Bank Ltd.



**Muhammad Rashid Jamil**, Senior Lecturer, did his MBA from IBA, Karachi. He has almost thirty years of experience in international aviation financial management. He was permanently posted as Finance Manager at Manila, the Philippines. He has traveled widely on official assignments in Europe, America and Asia. In addition to his educational qualifications, he holds a Diploma in Cargo Proration from Geneva, Switzerland. Apart from aviation finance he has experience in financial analysis of different projects in public and private sectors. He has been teaching several courses in airline finance and accounting and also taught courses at IoBM as visiting faculty.



**Rabia Sabri**, Senior Lecturer, is a qualified Chartered Management Accountant (FCMA) and MBA in Accounting and Finance. Currently, she is pursuing MS Finance from Bahria University and Chartered Financial Analyst level (CFA) from CFAI. She has fifteen years of teaching and corporate experience. She has taught Accounting, Finance, Corporate Reporting Economics courses in various universities in Karachi and served in two universities of Saudi Arabia, also taught ACCA and PIPFA courses. Her area of research is financial reporting and analysis of equity and fixed income securities.





#### **Economics**

**Dr. Shahida Wizarat**, is a Professor and Head of the Department, Economics. (See Profile on Page No. 181.)



Muhammad Ajaz Rasheed, Assistant Professor, received an MPhil in Economics from IoBM, an MAS (Applied Economics) from the Applied Economics Research center (University of Karachi) and MSc (Statistics) from the University of Karachi. He is a PhD Scholar at IoBM. He has 30 years of professional, including teaching experience in the area of Statistics and Economics. He has taught at the University of Karachi, the University of Baluchistan and Defence School of Business Education. He has worked with Social Policy and Development Center as a senior researcher. His research primarily focuses on Macro-Economic Modeling and social sector development. He has published research papers in national and international journals and has contributed to many research projects of national interest. The area of his contribution has been as follows: Sindh Economic Survey, review of Pakistan's large scale manufacturing sector 2010, comprehensive development strategy for Baluchistan and many other researches. He has been a member of FPCCI's standing committee on research and development from July 2005 to June 2007.



Mirza Aqeel Baig, Assistant Professor, has an MPhil in Economics from IoBM, an MAS in Applied Economics from AERC, University of Karachi and Master in International Relations. He is a PhD Scholar at IoBM. He has had over eighteen years of teaching experience at various business institutions, mainly IoBM. His research interests are in the areas of International, Monetary and Macro Economics. He has presented many papers in diversified areas of economics at national and international conferences. His research papers have been published in reputed refereed journals both national and international. He has been part of different research projects at IoBM conducted in collaboration with FPCCI, TDAP, IUCN and WWF, etc. He has also contributed to the Sindh Economic Survey. He authors articles for magazines and newspapers on current, economic, and social issues.



**Dr. Shujaat Abbas**, Assistant Professor, holds a PhD in Economics with specialization in International trade and development issues from the University of Karachi and a Master degree in Business Management with specialization in Finance from the Federal Urdu University of Arts, Sciences, and Technology, Pakistan. He has worked for the University of Karachi as an adjunct member faculty for one and a half years before joining the institute as a full-time faculty member in 2016. His research interest include international trade and finance, open-economy macroeconomics, and international political economics. He has published various research articles for national and international journals. His research interest include international economic issues of developing and least developed economies.



**Dr. Kashif Imran**, Assistant Professor, he is doing research and teaching at IoBM. His areas of interest are development economics focusing on international remittances, household development and poverty and financial economics. He obtained a PhD in Economics from the University of Malaya, Kuala Lumpur, Malaysia. Thirteen of his articles have been published in journals of international repute in Pakistan and abroad. He has attended a number of international research conferences. He is member of review board committee of various research journals.



**Dr. Muhammad Usman**, Assistant Professor in Economics holds a PhD from University of Malaya, Kuala Lumpur, Malaysia. He has secured his MAS (Master of Applied Sciences) from Applied Economics Research Center (AERC), University of Karachi. He has a wide experience in teaching, research and conducting projects. His several research projects are completed under the Ministry of Higher Education Malaysia and University of Malaya. His areas of interest are social and behavioral sciences including not for profit organization, faith-based organizations, Islamic Economics and finance, Islamic Social finance, and, especially the institution of waqf. He has published various of his research articles and book chapters in the nationally and internationally recognized refereed journals and presented his research findings at various international conferences. At present, he is associated with the College of Economics and Social Development (CESD), Institute of Business Management (IOBM) as an Assistant Professor in the Department of Economics.



**Dr. Hira Mujahid**, Assistant Professor, she has been teaching since 2018. Mainly she teaches Principles of Microeconomics and Macroeconomics, Managerial Economics, Micro and Macroeconomics and Seminar in Economic Policy. She has completed PhD in 2019 and the title of her dissertation is "The Impact of Quality of Institutions on Macroeconomic Volatility in Open Economies". She is also supervising MPhil thesis and looking to supervise more on Governance and Macroeconomic issues. Her research articles are published in many national (PJAE, AEFR) and international journals (GLER,EER), some others are in the pipeline. In addition, she writes in newspapers on current issues. In fact, she has participated and presented papers in several International conferences. Previously, she has served at National Centre of Maritime Policy and Research, Bahria University, Karachi Campus as a Research Associate where she organized numerous seminars and international conferences. She was a sub editor of Maritime News Digest. Other than that she had been associated with multiple organizations Like KASBIT, Manzil Pakistan and Maritime Training Institute.



**Ch. Sohail Ahmed**, Senior Lecturer, holds an MSc (Statistics) from KU, MPA from IBA, and an MAS (Economics) from the Applied Economics Research Center, Karachi. He also holds PGD (Computer Science) from the University of Karachi. His research primarily focuses on International Trade and Econometrics. He is pursuing MPhil Degree in the area of International Trade. He has served for 18 years at various public and private institutions.



**Muhammad Zubair**, Senior Lecturer, holds on MS in Economics from IoBM and Master's degree in Economics & Finance from the University of Karachi. He has also obtained postgraduate diploma in Economics & Finance and BA (Hons) in economics and statistics from University of Karachi. He has four years experience of broadcasting with Radio Pakistan in the capacity of business anchor and reporter, covering economic policy and stock market, etc. He has regularly contributed articles on economic issues to the Express Tribune newspaper over a period of two years. He is also engaged in research and has presented his research work at various conferences nationally and internationally.



Sadia Mansoor, Senior Lecturer, holds an MS Economics (Equivalent to MPhil). She did her MAS Economics in 2011 from the Applied Economics Research Center, University of Karachi. She received an MSc degree in Economics, from Quaid-e-Azam University, Islamabad. Her areas of research are development economics and public policy. She worked as a visiting faculty in different universities before joining IoBM as a full time faculty member. She has attended a number of international conferences and has various publications to her credit. She is also a co-supervisor of MS thesis at IoBM. She has been associated with the Institute as visiting faculty in the past.



**Irfan Lal**, Senior Lecturer, is currently enrolled in an MPhil Program at IoBM. He received an MAS from the Applied Economics Research Centre, University of Karachi and an MA in Economics from the University of Karachi.



**Zia Ullah**, Senior Lecturer, holds a Master's degree in Applied Sciences (MAS Economics) from the Applied Economics Research Center (AERC), University of Karachi and an MSc degree in Economics from Quaid-e-Azam University, Islamabad. His research areas include International Economics and Macroeconomics. His research papers have been published in PBR and various national journals. He has also contributed in various projects of International Union for Conservation of Nature (IUCN) and World Wide Fund for nature (WWF).





#### **Education**



**Prof. Dr. Nasreen Hussain**, Professor and the Head of the Department, holds a PhD in Education from Hamdard University. She is also the Editor-in-Chief of the Journal of Education and Educational Development published by the Institute. She brings to academia over thirty five years of diverse teaching, administrative, research, and consultancy experience. She has edited books as well as written articles and book chapters. Dr. Hussain is the external moderator for the University of Cambridge and has received British Council, Hornby Trust, USIS, USAID, Aga Khan University, and Aga Khan Development awards for recognition of her distinguished academic career and research projects at national as well as international levels in diversified areas. Her forte is qualitative research methods with a special focus on field research. Her specialization includes teacher education, strategic planning/educational planning, leadership development, and organizational learning.



**Dr. Zehra Habib**, Associate Professor, holds a PhD in Education from George Mason University (USA) and a Master in TESOL from the American University (USA). She also holds a Master in English Literature from the University of Karachi. Dr. Habib has over two decades of teaching and research experience and has presented her research at various international forums, including George Washington University, USA, Washington State University, USA, International Education Conference Doha, Qatar and most recently at the International Conference on the Future of Women, 2018 at Kuala Lumpur, Malaysia. Additionally, she is a certified examiner of International English Language Testing System, the certificate being granted by the University of Cambridge, ESOL Examinations. Focusing particularly on qualitative methods of inquiry, her research interests are in gender studies, peace education, social justice, colonial and post-colonial education, professional teacher growth and curriculum development. She is a member of TESOL International (Teachers of English to Speakers of Other Languages), IATEFL (International Association of Teachers of English as a Foreign Language) and AERA (American Education Research Association).



**Dr. Samra Javed**, Assistant Professor, Head of ORIC, Head of Entrepreneurship & Management Excellence Center (EMEC) and Advisor to the Office of the President, has done her Master's in English from Government College, Lahore and holds an MPhil in Social Sciences (with specialization in English Language Teaching). She has received her PhD in Education from IoBM, being the first researcher in Pakistan on Experiential Learning. In addition, she has completed In Service Certification in English Language Teaching (International TESOL certification), Cambridge University, UK conducted by SPELT with merit in Teacher's Language and Methodology. She is a trainer in English Language, Interpersonal Skills & Communication Skills at IoBM and IELTS' Master Trainer with the British Council. She has been a trainer in the English Language Proficiency Program of USAID, Proposal Writing of Citizen's Voice project-USAID and has conducted numerous training programs in Communication and Interpersonal Skills for clients including Aga Khan University, EFU Life, 10Pearls, Pakistan Oil Refinery, PharmEvo Private Limited and others. She has also been contributing in research on various aspects of teaching and learning. Dr. Samra has worked as a consultant in Proposal Writing, Project Management and Research, Head of Programs and Networking at INJAZ and Head of the Office of Research Innovation & Commercialization (ORIC).



**Dr. Sarwat Nauman**, Assistant Professor, holds a PhD in Education and her areas of expertise are experiential learning, academic writing and critical thinking. She has done MA in English Literature from the University of Karachi and has a diversed teaching experience of fifteen years. She has been associated with various schools, colleges and universities and taught courses related to academic writing, business communication as well as education and research. She also holds the position of Associate Editor for the Journal of Education and Educational Development published biannually by the Department of Education, IoBM. She has many research articles published in high ranking international and Pakistani journals to her credit and is continuously working on various research projects and also received appreciation. Her research projects have been presented at national and international level.



Dr. Kamal Ahmed Soomro, Assistant Professor, holds a PhD in Education with a specialization in Instructional Design and Technology from West Virginia University, USA. He was awarded PhD scholarship for doctoral studies in the United States by USAID under Training for Pakistan Project. His research interests include investigations on the digital divide in educational settings and effective use of ICT to enhance teaching-learning process. He has fifteen years of teaching experience at diversified levels. Dr. Soomro has published several articles in high-ranking international journals. He has presented his research in Harvard University, AERA, and national conferences. American Psychological Association (APA) has included the FICTA scale, a quantitative instrument developed by him, in the APA PsycNet record. His scale has already been translated into Turkish language and has been used in Russian, Indonesian, Malaysian, and Pakistani contexts by other researchers. He is an HEC Approved PhD Supervisor and also an Associate Editor of the Journal of Education and Educational Development (JoEED) which is an HEC recognized Y-category journal. He is on the editorial/review board of several other research journals in the field of education. Dr. Soomro had also been associated with the Chicago School of Professional Psychology USA as an SME/Consultant for their online doctoral program in Educational Psychology and Technology.



Amna Shahid, Lecturer, holds an MBA in Educational Management and is pursuing her PhD in Education at IoBM. She did her Bachelor in Professional Psychology at the Institute of Professional Psychology, Bahria University. Her areas of research interest are early childhood education and educational psychology. Her experience covers teaching children of three to graduate level students. Apart from being an educationist, she is also an entrepreneur and enjoys venturing into different creative tasks.



#### **Center for Policy and Area Studies**

**Dr. Talat A. Wizarat**, Professor and HoD, Center for Policy and Area Studies, holds PhD from University of Karachi and Master in Government and International Studies from the University of South Carolina where she went on Fulbright Hayes Scholarship. Her first Master in International Relations is from the University of Karachi. She served as Professor at the Department of International Relations at KU and at the Department of Social Sciences and Liberal Arts at IBA Karachi. Dr. Wizarat has been part of several track-II channels including Nimrana Dialogue of which she was a regular member for several years. She has contributed over thirty research articles to renowned journals, and has also contributed chapters to books and edited two books on Middle East and South Asia. She is regularly invited to evaluate research papers for various journals. Her areas of interest include track-II diplomacy, conflict resolution and crisis management, South Asia, Middle East and political geography. Currently, she is working on a research project on One Belt One Road Intitaitive.



**Dr. Ghazala Aleem**, Assistant Professor, holds PhD in Islamic Studies (Medicines of the Prophet PBUH) from Karachi University and is a certified Arabic teacher. She has done Master in Islamic Studies and Arabic and a BEd from Karachi University, Fazil Arabic from Karachi Board, DHMS in Homeopathic Medical Systems. She is also a medical practitioner. She served at several other universities before joining IoBM. She is the author of five books which explore topics such as Islam and medical science. One of her books titled "TIBB-E-NABVI" was given the Presidential Award in 2015. She contributes as freelance journalist in Jung newspaper and other national and international magazines.



**Urfi Khalid**, Assistant Professor, holds an MA in Physical and Political Geography from the University of Punjab. Prior to her current assignment, she was associated with IoBM as visiting member of faculty since 1997. She was teaching at various levels in international institutions in the Middle East before joining IoBM. Her research focus is on gender issues in the economic development of Pakistan. A research paper article by her was published in Pakistan Business Review, April 2011. She presented her paper on Gender Issues of Pakistan Textile Industry at the seminar on "EU Trade Concessions to the Textile Industry of Pakistan" held at IoBM. She has attended various conferences and seminars held at Karachi University and IoBM.







Syed Hasan Habib, Assistant Professor, holds a Master's degree in Science. He worked for four years in the chemical process industry before joining Central Superior Services in 1983. He joined Foreign Services in 1986. He attended the Chinese Language Course at the Beijing University of Language and Culture (1989-91). During the 30 years of his diplomatic career, he worked in different capacities at Pakistan's foreign missions in China, Iran, the Netherlands, Morocco, Switzerland, Chengdu (China) and North Korea. He has also been Pakistan's representative at several international organizations and conferences. He remains deeply involved in Chinese and North Korean affairs. He is part of several local and international bodies in social and international affairs.

#### **Business Psychology**



**Dr. Nadia Ayub**, Professor and Head of the Graduate Studies & Business Psychology Department, received Post-Doctoral Fellowship from the School of Psychology, University of Queensland, Australia, and earned a PhD in Psychology from the University of Karachi, Pakistan. She is an HEC approved PhD supervisor and has supervised a number of MPhil & PhD thesis at IoBM. Her research focuses on identity issues in adolescents, organizational issues, family and marriages, cross-cultural psychology, educational psychology, and psychometrics. She has published more than 30 journal articles, presented research papers at Harvard University in 2012 & 2013 and around the world, served on the editorial boards of International Journal of Psychological Studies, Journal of Pakistan Psychological Association, Universal Research Journal, and Pakistan Business Review. She has worked on research project on Community Health Sciences at the Aga Khan University and Hospital. She is a member of HEC National Curriculum Revision Committee of Psychology. She is a recipient of Group Study Exchange Program Fellowship 2011 for Pennsylvania, USA, hosted by the Rotary Foundation International. She received International Education Faculty Achievement Award from the International Association of University Presidents for 2014 and HEC Best University Teacher Award for 2011. She has visited Caucasus University, Tiblisi, Georgia in 2014 on Leadership Development for Higher Education Reform (LEADHER) project funded by the International Association of University Presidents.



**Dr. Syed Shameem Ejaz**, Assistant Professor, received a PhD in Psychology from the University of Karachi. He has been practicing psychology for more than 18 years as psychotherapist, researcher, and educator in and outside Pakistan. He was the only member of QRCA-USA from Pakistan in 90s. He has authored on research writing and diversity. He is a professional software designer which defines his personal research interest well, i.e., artificial intelligence and emotional machines. He has designed several psychological and analytical softwares. He likes to write about person-environment integration, issues, and reform.



**Tehzeeb Sakina Amir**, Assistant Professor, holds a PhD in Psychology from the University of Karachi. She did her MPhil in Psychology from University of Karachi. She secured first class first position in MA in Organizational Psychology. She has almost twelve years of teaching experience in Higher Education University/Institute. Her research focuses on Organizational Dynamics, Consumer Psychology, Psychometrics, and Human Factors at work place. She has published five papers and two others are under review. She is on the editorial board of Pakistan Business Review and Journal of Education & Social Sciences.



**Emaan Rangoonwala**, Lecturer, completed her Master in Professional & School Counseling Psychology with highest Honours from University of Houston and Bachelors in Psychology with Honours from Southern Methodist University, both from Texas (USA). She received special training in CBT through Beck Institute (New York), as well as received some training in developmental therapy from AKUH. She has previously worked as visiting faculty and thesis adviser at SZABIST, and as a counselor in Karachi and Texas with a combined work experience of nearly five years. She has also been a part of several non-profit organizations such as Amaanah Refugee Services and SINA as a counselor, consultant, and community worker.



### Islamic Studies / Philosophy Unit

Asad Shahzad, Assistant Professor, holds an MS degree in Economic Philosophy from IoBM. He earned his MA in English literature from the University of Karachi. He received intensive training from SPELT under Cambridge University. He is a PhD Scholar at IoBM. He has taught at several educational institutes before joining IoBM. He has also written articles for newspapers. He has presented papers at national and international conferences. His paper "Iqbal's Idealist Critique of Hawking's Materialist Concept of Time" was published in Iqbal Review, April 2008 issue. His papers have also been published in PBR, Business Review, and Journal of Education and Educational Development. He was awarded the best paper award (including all categories) in the area of General Management in the International Research Conference on Contemporary Management Practices 2013 held by Lahore University of Management Sciences (LUMS). Currently, he is involved in research in the area of global social/economic justice.



#### **Media Studies**

**Ejaz Wasay**, Associate Professor and Head of the Department. Prior to that, he had been teaching at IoBM as a visiting member of Faculty since 2005. He holds an MBA from IBA, and has industry experience of over 37 years in the fields of Marketing, Corporate Communications and Advertising. He has worked with leading MNCs and local companies, including Unilever, Gillette, Philips, Orient McCann-Erickson and UBL. He has worked overseas with Gillette in Brazil, and in the UAE where he was Marketing Manager Gillette Middle-East from 1992-1994. He has led two major research projects during his tenure at IoBM: a Consumer Perception Study for Indus Motor Company and a Media Responsibility & Independence Index research for USAID. He was a regular contributor of article on Marketing-related topics to publications such as MAP's Marketing Review and Aurora – a publication of the Herald Group. He was on the Council of the Marketing Association of Pakistan (MAP) for over 15 years, and was its President in 2005. He has also been a Jury Member of PAS Awards since its inception in 2011, and is currently on the Effie Pakistan Awards Steering Committee.



**Dr. Erum Hafeez**, Associate Professor, holds a PhD in Mass Communication with specialization in Social and Cultural Dynamics of Mass Media from the University of Karachi. She has been associated with leading educational institutions and media houses in Pakistan for last two decades. She headed the Communications and Public Affairs Department at IBA, Karachi from 2008 to 2014. Besides, she has been associated with various leading universities, including, SZABIST, Hamdard, Bahria, Greenwich and University of Karachi, as a research faculty member. She also worked in the Dawn Group of Newspapers and MNJ Communications as an editor and concept writer respectively. She has been a regular contributor to academic journals, sharing her work as feature writer and researcher for almost 20 years. Further, she has presented her research both at national and international forums, conferences and seminars. She is an active member of the International Association for Media and Communication Research (IAMCR) and is also working as a reviewer for various distinguished research journals, national as well as international.



Taqi Shaheen, Associate Professor of Practice, joined IoBM in January 2020. He is a film-maker, educator and media artist whose work crosses mediums and defies genre distinctions to fashion witty and curious observations of contemporary South Asian cultures and mediascapes. Since 2004, he has been working closely with creative practitioners to produce collaborative works using artistic practices, pedagogic alternatives, and creative investigations to address the experiences of learning and the dilemmas of education in the developing world. His recent publication includes Subjective Atlas of Pakistan (Oxford University Press, 2020). He has presented his research in the US, Europe, and the Middle East at various academic conferences including International Symposium of Electronic Arts. As a director and curator, his previous works include a documentary series on artists as educators, Lessons on Lessons (TMN, 2016), The Petman Girls (TMN, 2012), Whose Pakistan is it anyway? (TMN, 2010), Morris Mata (2009), Kundun (ILO/BBC/PTV, 2004), and Congregation of the Distressed (2005).







**Nabhan Shah Karim**, Lecturer and Assistant Manager, did his MA in Filmmaking from Kingston University London, UK and Bachelor in Film and Television from Indiana University Bloomington, USA. In the US, he interned for CNN's AC360 and went on to be a producer on a sports broadcast show on the Big Ten Network. After his return to Pakistan, Nabhan was an Assistant Producer at Stimulus Productions working on TV Commercials for big name brands and later on, started his own production company specialising in Digital Videos.



**Muhammad Faraz**, Senior Lecturer, holds a Master in Mass Communication. He is a professional screenwriter, story writer and a poet, has an experience of about three years in teaching screenwriting and twelve years of writing & research for various media groups i.e. CNBC, JAAG Broadcasting System, Total Media Network, etc.

#### **Shahjehan Syed Karim Academic Writing Center**



**Dr. Fareeda Ibad**, Associate Professor, holds a PhD and MPhil in Education from IoBM. Her Master's degree in English from the University of the Punjab. Her professional experience of forty-five years includes teaching English and Communication to adult learners in diversified contexts. She has worked at the Pakistan American Cultural Center in the capacity of language teacher, Officer-in-charge, teacher trainer and curriculum coordinator. She has also worked at the British Council in the capacity of IELTS examiner and trainer, and ICFE examiner. Her teaching experience spans over twenty nine years. Her additional training experience is in the field of testing in ELT and professional and academic writing. She is on the Editorial Review Board of International Journal of Education and Culture (IJEC), Untested Ideas Research Center, Niagara, NY, USA. Her research interests lie in the areas of Communication and Education. She has worked in the areas of curriculum development, soft skills development, teacher training in pedagogy, business communication, and as an ELT trainer. Currently, she is teaching academic writing at all levels and across the curriculum.



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Abdul Hameed Khan

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Abdul Nazeem Diploma de DUFLE

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# **ADMINISTRATION**

#### **ADMINISTRATION**



The administrative staff of IoBM is highly skilled and qualified to perform multifarious tasks, vital for the smooth running of the Institute. The administration implements the policies formulated by the Governing Board and the Academic Council. It is responsible for organizing academic programs, ensuring student progress, providing adequate support facilities to the faculty and students, and liaison with business and industry to arrange internships, ensure career development and placement of students on the completion of their degree. It is also responsible for the organization and supervision of examinations.

#### Members of the Administration



Mr. Talib S. Karim, President, Institute of Business Management, holds a Bachelor's degree in Systems Engineering and a Master's degree in Economics with specialization in International Trade, both from the University of Arizona, USA. He has worked for a financial institution for ten years before joining the Institute full-time in 1997. He has also taught Economics at the University of Arizona, USA and IoBM. He also attended the Oxford Advanced Management & Leadership Program at Oxford University. He is an Executive Council member of the Management Association of Pakistan and the President of Marketing Association of Pakistan and represents the Institute in various Associations nationally and internationally.



Sabina Mohsin
Executive Director
Administration, Admissions and Finance
BBA, University of Arizona, USA
MS, US International University, Nairobi, Kenya



**Dr. Ejaz Ahmed** Professor Emeritus, IoBM PhD



**Dr. Mohammad Ali Shamim** Advisor to President PhD (Civil Engineering), France MBA (INSEAD), France



Muhammad Waziruddin Jahangir Advisor to President for Corporate Affairs BCom, (Sindh University) CA Finalist, (ICAP)



Muhammad Misbahuddin Advisor to ED-Admin HR, Purchase & General Administration MBA, LLB





Aslam Kurban Ali Senior Manager & HoD, Finance **ACMA** 



Dr. Samra Javed Advisor to Office of the President & Head of EMEC & ORIC PhD



Syed Magbool ur Rehman **Controller of Examinations** MBA



**Kausar Saeed** Senior Manager & HoD Internship MS



**Muhammad Muzhar Uddin Ahmed** Senior Manager Maintenance and Security



Syed Ali Hasan Senior Manager & Head of Marketing & Communications MS



Dr. Amber Raza **Head of Academics Department** PhD



**Syed Aley Ahmed Manager Projects** BE Civil, FIE, PE



**Syed Irshad Karim** HoD SAC & Housekeeping BA (Honors)



**Riaz Akbar Contractor** Manager Sports & Student Affairs B.Com



Imdad Ali Mugheri Manager & HoD Admissions MBA, LLB



**Nadeem Ahmed Khan** Manager, Internal Audit MBA, CIMA Finalist (England) Chartered/Corporate Sec. FCIS (Pak/England)



Asim Farooq Manager & HoD Information Technology MSc



Syed Adnan Faisal Manager, Maintenance BE, Electrical Engineering



**Shaikh Muhammad Sharif Nasir** Librarian MLIS





Malik Barolia Manager Salary & Compensation MBA, ACMA-II



Syed Kamran Ahmed Bilgrami Manager Alumni & Head of Corporate Trainings MSC Marketing, UK



Lt. Cdr. (R) Sartaj Hussain Senior Assistant Manager & HoD Purchase BA



Fesal Bin Naseem
Senior Assistant
Controller of Exam
MS IT, MS Applied Physics



Muhammad Adnan Fuzail Senior Assistant Manager & HoD Quality Enhancement Cell (QEC) MBA



Abdul Latif Senior Assistant Controller Examination MA



**Yasir Jamal Pasha** Senior Assistant Manager, HR MBA



**Anjum Aziz**Proctor, Administration
MBA



Muhammad Adnan Assistant Manager Information Technology MBA, MIS



Abdul Khaliq Assistant Manager Internship & Placement MBA



Muhammad Hassan Sayeed
Assistant Manager
Admissions
MBA



Nabhan Shah Karim Lecturer & Assistant Manager Media Studies MA (UK), BA, (USA)



Masood Hasan Assistant Manager Finance MBA



Naseem Haq Assistant Manager Purchase MBA



Ali Abbas Mirza
Assistant Manager
Marketing & Communications
MBA





**Hammad Munir** Assistant Manager, Purchase MBA



Farah Habib Assistant Manager, ORIC/OGS BE, MBA



**Masood Hassan** Editor, PBR MBA

Mehmood Ahmad	<b>Mohammad Arif Shaikh</b>	<b>Syed Mustafa Hussain</b>
Senior Accountant	Senior Maintenance Officer	Senior Academics Officer
B.Com	Diploma of Associate Engineering	MA
Abdul Sajid Khan	<b>Rashid Aqeel</b>	Syed Khalid Mehmood
Oracle Database Administrator	Senior Officer, Internal Audit	Senior Officer/Project Lead (CMS) Analys
MCS, MBA	CA Finalist	MS, MBA
<b>Abid Ali</b>	Muhammad Kamran	Ameer Ali
Senior Accountant	Senior Admission Officer	Assistant Librarian
CA (Intermediate)	MCS	MLIS
<b>Muhammad Omar Iftikhar</b>	<b>Hafiz Humayun Baig</b>	<b>Muhammad Zahid</b>
Senior PR Officer	Senior Registrar Officer	Senior Accounts Officer
MBA	MA	B.Com
Muhammad Asim	Midhat Nadeem	Muhammad Nazim Khan
Senior Officer, Marketing & Comm.	Senior Officer, ORIC	Senior Maintenance Officer
MBA	MBA	MBA
<b>Syed Irfan Hussain</b> Senior HVAC Officer BA, DAE Mechanical	Hafiz Ahsan Ul Haq Senior Officer, House Keeping MBA	Farooq Ahmed Executive Secretary to the President BA
<b>Ghulam Dastagir</b>	<b>Noman Ahmed</b>	<b>Zohaib lan</b>
Executive Secretary, Dean Office	Corporate Affairs Officer	HR Officer
BA	MBA	MBA
<b>Dr. Rustam Ali Leghari</b>	Farah Habib	Faiza Hasan Rizvi
Medical Officer	Assistant Manager, ORIC	Coordinator, EMEC Projects
MBBS	MBA	MBA
<b>Farida Nawaz Ali Khuawaja</b>	Sumaiya Mithani	<b>Nida Iqbal</b>
Student Exchange Officer	Alumni Officer	Library Officer
MBA	MBA	MLIS
<b>Syed Noman Reyaz</b>	<b>Muhammad Faisal Nisar</b>	<b>Asad Hussain</b>
Network Support Officer	IT Officer	Outreach Officer
BA	B.Com	B.Com
<b>Amir Ali Khan</b>	Syed Muhammad Zeeshan	Syed Muhammad Ayaz
Admission Officer	Accounts Officer	Administrative Officer
BA	MA	MA
<b>Tariq Majeed</b>	<b>Hussain Ali</b>	Sheroonia Zameer
Graphic Designer	Media Coordinator	Admission Officer
BS	BS	MBA
<b>Amna Khalil</b>	Aamir Khan	Salman Ahmed
HR Officer	Officer, Salary & Compensations	Officer, QEC
B.Com	B.Com	MBA
<b>Zehra Alam Siddiqui</b> Officer, H&HM MBA	<b>Tooba Farrukh</b> Officer, H&HRM D-Pharm	Capstone Officer, Marketing MBA
<b>Afshan Gul Khan</b>	<b>Dania Shoaib Khan</b>	<b>Syed Shahrukh Hasan</b>
Capstone Officer, Marketing	Editorial Officer, Marketing	Video Grapher, Media Studies
MBA	BS (CS)	BS (Media Studies)
<b>Zohaib Ali</b> Analyst Programmer / Officer BS (CS)	Asim Ahmed Khan Yousfi Assistant Registration Officer & Catalog Composer Diploma in Graphic Designing	

# **CERTIFICATE COURSES**

External students are allowed to register for 15-week Certificate Courses of their areas of interest. The following are some of the Certificate Courses being offered during 2020-2021:

#### Accounting

Accounting Information Systems Advanced Financial Accounting

#### **Advertising and Communication Management**

Principles of Marketing Principles of Advertising Advertising Research Client Management

#### **Finance and Banking**

Analysis of Financial Statements Corporate Finance Money and Capital Markets Treasury and Fund Management

#### **Health Services Administration**

Strategic Management of Health Services
Pharmaceutical Marketing and Quality Assurance

#### **Human Resource Management**

Strategic Human Resource Management Salary and Compensation Leadership Studies

#### **Management Information Systems**

Oracle/Developer 2000 Software Engineering Data Communication and Networking Programming in C++

#### Marketing

Advertising Personal Selling Brand Management Media Planning

#### **Sales Management**

Effective Territory Design
Basic Selling Skills
Distribution and Channel Management
Merchandising



# ACADEMIC CALENDAR

#### **FALL 2020**

Registration of Courses and Fee Payment (On board students)	Monday, August 17, 2020 Onwards
Orientation for newly admitted students	Saturday, September 5, 2020
Commencement of Semester	Monday, September 07, 2020
Last day to drop courses without penalty	Saturday, October 24, 2020
Eid-e-Milad-un-Nabi (SAW)*	Friday, October 30, 2020
Iqbal Day	Monday, November 09, 2020
Last day to drop courses with penalty	Saturday, November 21, 2020
Break	Monday, December 14 to Sunday, December 20, 2020
Quaid-e-Azam's Birthday	Friday, December 25, 2020
Final Exam	Monday, December 21, 2020 to Monday, January 04, 2021
Semester Ends	Tuesday, January 05, 2021

# **Exam Schedule for Regular and Executive Students**

Week	Exams	Dates
6th	1st Hourly	12/10/2020 to 18/10/2020
11th	2nd Hourly	16/11/2020 to 22/11/2020
16th	Final	21/12/2020 to 04/01/2021

<sup>\*</sup> Subject to the appearance of moon.

#### Note

All dates are subject to change. Students will be informed of the changes well in advance. For details of examination please visit the website.



#### **SPRING 2021**

Registration of Courses and Fee Payment (On board students)	Monday, December 14, 2020 Onwards
Commencement of Semester	Saturday, January 16, 2021
Last day to drop courses without penalty	Thursday, March 04, 2021
Pakistan Day	Tuesday, March 23, 2021
Last day to drop courses with penalty	Saturday, April 10, 2021
Labor Day	Saturday, May 01, 2021
Break	Friday, April 23, 2021 to Tuesday, April 27, 2021
Eid-ul-Fitr*	Friday, May 14, 2021
Final Exam	Wednesday, April 28, 2021 to Sunday, May 16, 2021
Semester Ends	Monday, May 17, 2021

# **Exam Schedule for Regular and Executive Students**

Week	Exams	Dates
6th	1st Hourly	20/2/2021 to 25/2/2021
11th	2nd Hourly	27/3/2021 to 1/4/2021
16th	Final	28/04/2021 to 16/05/2021

<sup>\*</sup> Subject to the appearance of moon.

#### Note:

All dates are subject to change. Students will be informed of the changes well in advance. For details of examination please visit the website.



# **SUMMER 2021**

Registration of Courses and Fee Payment (On board students)	Saturday, April 24, 2021 Onwards
Commencement of Semester	Monday, May 17, 2021
Last day to drop courses without penalty	Saturday, July 03, 2021
Last day to drop courses with penalty	Saturday, August 07, 2021
Eid-ul-Fitr*	Friday, May 14, 2021
Eid-ul-Azha*	Wednesday, July 21, 2021
Independence Day	Saturday, August 14, 2021
Break	Monday, August 23, 2021 to Friday, August 27, 2021
Final Exam	Saturday, August 28, 2021 & Sunday, August 29, 2021 Saturday, September 04, 2021 & Sunday, September 05, 2021
Semester Ends	Friday, September 10, 2021

#### **Exam Schedule**

Week	Exams	Dates
6th	1st Hourly	26/6/2021 and 27/06/2021
11th	2nd Hourly	31/07/2021 and 01/08/2021
15th	Final	28/08/2021 to 5/09/2021

#### **SUMMER CRASH 2021**

Registration of Courses and Fee Payment (On board students)	Saturday, April 24, 2021 Onwards
Commencement of Regular Classes	Monday, June 07, 2021
Last day to drop courses without penalty	Saturday, July 03, 2021
Last day to drop courses with penalty	Saturday, August 07, 2021
Eid-ul-Azha*	Wednesday, July 21, 2021
Independence Day	Saturday, August 14, 2021
Break	Saturday, August 14, 2021 to Sunday, August 22, 2021
Final Exam	Monday, August 23, 2021 to Thursday, August 26, 2021
Semester Ends	Thursday, August 26, 2021s

# **Exam Schedule**

Week	Exams	Dates
6th	Mid-Term	12/7/2021 to 15/7/2021
11th	Final	23/8/2021 to 26/8/2021

<sup>\*</sup> Subject to the appearance of moon.

**Note:** All dates are subject to change. Students will be informed of the changes well in advance. For details of examination please visit the website.



# **Institute of Business Management**

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