Institute of Business Management

Catalog 2019-2020
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 - 2018

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 (AACSBI) and other international and national organizations.
The Governor of Sindh is an ex-officio Patron and the Chancellor, Mr. Basheer Janmohammad is also the Chairman of the Board of Governors of the Institute. The other members of the Board are:

- Mr. Talib Syed Karim, President IoBM
- Secretary, Universities & Boards Department, Government of Sindh
- Dr. Farukh Iqbal, Dean and Director IBA, nominee of Chairman, HEC
- Mr. Jahangir Siddiqui
- Mr. S. M. Muneer
- Mr. Justice (R). Ataur Rehman
- Chairman, Pakistan Stock Exchange Ltd.
- President, Karachi Chamber of Commerce and Industry
- President, Federation of Pakistan Chamber of Commerce and Industry
- Dr. Zafar Saied Saify
- Mr. Muhammad Ali Tabba
- Mr. Masood Hashmi
- Mr. Sikandar Sultan
- Ms. Ameena Saiyid
- Dr. Syed Irfan Hyder
- Mr. M. W. Jahangir, Secretary

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.

**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-hands-on-deck’ sense, is especially appealing. Tastefully landscaped with the help of nature - and sculpture - the IoBM 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.

IoBM 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.

IoBM 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.

“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
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.

IoBM’s vision is to be among the leading educational institution locally and internationally. To achieve this vision, IoBM 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, teamwork, 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 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 reputable companies of the country in various fields.

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 5 course exemptions (F1 - F5) to 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
*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

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
ACC503 Taxation
ACC505 Auditing
ACC506 Analysis of Financial Statements
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*
FIN503 Corporate Finance
FIN504 International Finance
FIN505 Treasury and Fund Management
FIN506 Investment Banking and Security Analysis
FIN507 Portfolio Management
FIN509 Financial Derivatives
FIN511 Analysis of Financial Statements
FIN512 Asset Liability Management
FIN520 Financial Risk Management
FIN530 Commercial and Corporate Banking
FIN531 Real Estate and Alternative Investments
FIN533 Information Technology and Product Innovation in Financial Services
FIN534 Retail and Consumer Banking
FIN613 Financial Modeling for Investment Decisions

Islamic Banking and Finance
ISF601 Economics for Islamic Finance
ISF602 Islamic Banking Practices
ISF603 Accounting for Islamic Finance
ISF604 Islamic Financial Services Marketing
ISF605 Islamic Capital Markets
ISF606 International Islamic Finance Standards
ISF607 Small and Medium Enterprise Islamic Financing
ISF608 Risk Management in Islamic Financial Institutions
FRM514 Takaful and Risk Management in Islamic Products

Management
MAN305 International Relations
MAN410 Introduction to Industrial Management
MAN501 Total Quality Management
MAN502 Business Process Re-engineering
MAN614 Comparative Management

Marketing
MKT405 Marketing Research
MKT506 International Marketing
MKT507 Services Marketing
MKT508 Personal Selling
MKT510 Direct and Digital Marketing
MKT513 Media Planning
MKT520 Merchandising and Sales Promotion
MKT521 Distribution and Channel Management
MKT526 Public Relations and Event Management
MKT530 New Product Management
MKT531 Retail Management
MKT532 Principles of Advertising
MKT608 Small Business Marketing

Management Information Systems
MIS509 Software Project Management
MIS522 Business Information Systems
MIS524 Decision Support Systems
MIS525 Enterprise Systems
MIS526 Enterprise Resource Planning Systems
MIS527 Information Security
MIS528 Advanced Information Security
MIS530 Information Systems Research
MIS532 New Perspectives on Organizations & Info. Systems

Logistics and Supply Chain Management
SCM302 Quantitative Methods in Production and Logistics
SCM306 IT Applications in Logistics
SCM309 Packaging Design and Environmental Aspects
SCM501 Supply Chain Management
SCM504 Procurement and Inventory Management
SCM506 Transportation Techniques and Management
SCM523 Import Export Management
SCM526 Shipping, Ocean Freights and Port Operations
SCM527 Supply Chain Finance
SCM528 Logistical Projects in ERP
SCM529 Food Security and Sustainability
SCM530 Lean Six Sigma and Lean Manufacturing
SCM531 Innovation Management in Supply Chain & Logistics
SCM532 Globalization and Outsourcing Strategies
SCM533 Mobile Commerce and Mobile Logistics
SCM534 Storage and Warehousing Techniques
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**

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<td>Introduction to Financial Accounting</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>Principles of Macroeconomics</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Calculus for Business Decisions</td>
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<tr>
<td>Islamic Studies (R)</td>
<td>Entrepreneurial Leadership and Motivation (R)</td>
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<thead>
<tr>
<th>Semester Three</th>
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<tbody>
<tr>
<td>Intermediate Financial Accounting</td>
<td>Business and Professional Speech</td>
</tr>
<tr>
<td>Persuasive and Analytical Writing for Business Comm. (E, W)</td>
<td>Introduction to Business Finance (R)</td>
</tr>
<tr>
<td>IS Audit and Management (E)</td>
<td>Business Ethics</td>
</tr>
<tr>
<td>History of Ideas (W)</td>
<td>Marketing Management (R)</td>
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<tr>
<td>Quantitative Business Analysis</td>
<td>Quantitative Skills &amp; Managerial Statistics</td>
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<tr>
<td>Social Advocacy and Community Service (E)</td>
<td>Organizational Behavior (E)</td>
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<thead>
<tr>
<th>Semester Five</th>
<th>Semester Six</th>
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<tbody>
<tr>
<td>Introduction to ERP Systems</td>
<td>Financial Management</td>
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<tr>
<td>Financial Institutions (E)</td>
<td>Foreign Language II</td>
</tr>
<tr>
<td>Foreign Language I*</td>
<td>Production &amp; Operations Management</td>
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<td>Methods in Business Research (E)</td>
<td>Consumer Behavior</td>
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<tr>
<td>Human Resource Management (E)</td>
<td>Corporate and Business Law</td>
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<tr>
<td>Cost and Management Accounting</td>
<td>CRM System and Applications (E)</td>
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<tr>
<th>Semester Seven</th>
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<tbody>
<tr>
<td>Sales Management (E)</td>
<td>Pakistan Economic Policy OR</td>
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<tr>
<td>Entrepreneurship and Small Business Management</td>
<td>Seminar in Economic Policy (R)</td>
</tr>
<tr>
<td>Analysis of Pakistani Industries (R)</td>
<td>Strategic Management (R)</td>
</tr>
<tr>
<td>Elective I</td>
<td>Brand Management (R)</td>
</tr>
<tr>
<td>Elective II</td>
<td>Elective IV</td>
</tr>
<tr>
<td>Elective III</td>
<td>Elective V</td>
</tr>
<tr>
<td></td>
<td>Capstone Project</td>
</tr>
<tr>
<td></td>
<td>Internship (2 credit hours)</td>
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</tbody>
</table>

* 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 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 Economists and Financial Analysts in reputable financial institutions across the country.

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

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

Communication
COM202  Business & Professional Speech (E)
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
*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

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 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

** 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)
- ECO312 Applied Econometrics
- ECO307 Monetary Theory and Policy
- ECO407 Analysis of Pakistani Industries
- ECO206 Mathematical Economics
- ECO310 History of Economic Thought
- ECO411 Islamic Economics
- ECO207 Game Theory
- ECO410 Issues in Political Economics
- ECO412 Public Economics
- ECO418 Resource and Environmental Economics
- ECO419 Agriculture & Food Security
- ECO415 WTO, Disputes & Settlements

### Finance Electives (4 courses)
- FIN403 Islamic Banking and Finance
- FIN504 International Finance
- FIN505 Treasury and Fund Management
- FIN506 Investment Banking and Security Analysis
- FIN507 Portfolio Management
- FIN509 Financial Derivatives
- FIN513 Project Appraisal
- FIN514 Asset Liability Management
- FIN520 Financial Risk Management
- FIN530 Commercial & Corporate Banking
- FIN531 Real Estate and Alternative Investments
- FIN533 Info. Technology & Product Innovation in Financial Services (FINTEC)
- FIN534 Retail & Consumer Banking
- 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

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
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</thead>
<tbody>
<tr>
<td>Principles of Management</td>
<td>Pakistan Studies (W)</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>Islamic Studies (R)</td>
<td>Introduction to Financial Accounting</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Calculus for Business Decisions</td>
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<td>Principles of Macroeconomics</td>
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<td>Academic English (W,R)</td>
<td>Persuasive &amp; Analytical Writing for Business Communication</td>
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<tr>
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<tbody>
<tr>
<td>Business &amp; Corporate Law</td>
<td>Organizational Behavior (E)</td>
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<tr>
<td>IS Audit &amp; Management (E)</td>
<td>Introduction to Business Finance (R)</td>
</tr>
<tr>
<td>Intermediate Financial Accounting</td>
<td>Taxation</td>
</tr>
<tr>
<td>Probability Theory &amp; Statistics</td>
<td>Model &amp; Inferences</td>
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<tr>
<td>Development Economics</td>
<td>Managerial Economics</td>
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<tr>
<td>Business &amp; Professional Speech (E)</td>
<td>Marketing Management</td>
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<tbody>
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<td>General Equilibrium and Welfare Economics</td>
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<tr>
<td>Human Resource Management (E)</td>
<td>Foreign Language II</td>
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<tr>
<td>Methods in Business Research (E)</td>
<td>Analysis of Financial Statements</td>
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<tr>
<td>Financial Management</td>
<td>Small Business and Entrepreneurship</td>
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<tr>
<td>Methods of Data Analysis</td>
<td>Introduction to Econometrics</td>
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<td>Foreign Language I</td>
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<th>Semester Seven</th>
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<tbody>
<tr>
<td>Pakistan &amp; Economic Policy</td>
<td>Economics Elective II</td>
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<tr>
<td>Corporate Finance</td>
<td>Finance Elective II</td>
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<tr>
<td>Contemporary Issues in Macroeconomics</td>
<td>Economics Elective III</td>
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<tr>
<td>Financial Modeling</td>
<td>Finance Elective III</td>
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<td>Economics Elective I</td>
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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 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 and Financial Analysts in reputable companies and financial institution across the country.

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**Foundation**

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<th>Course Code</th>
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<tbody>
<tr>
<td>COM100</td>
<td>Foundation English**</td>
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<tr>
<td>COM107</td>
<td>Academic English (W,R)</td>
</tr>
<tr>
<td>PSC301</td>
<td>Pakistan Studies (W)</td>
</tr>
<tr>
<td>REL101</td>
<td>Islamic studies (R)</td>
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<tr>
<td>MTH101</td>
<td>College Algebra</td>
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**Business Core**

**Accounting**

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<tbody>
<tr>
<td>ACC101</td>
<td>Introduction to Financial Accounting</td>
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<td>ACC201</td>
<td>Intermediate Financial Accounting</td>
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<td>ACC350</td>
<td>Cost &amp; Management Accounting</td>
</tr>
<tr>
<td>ACC503</td>
<td>Taxation</td>
</tr>
<tr>
<td>ACC506</td>
<td>Analysis of Financial Statements</td>
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</table>

**Communication**

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>COM202</td>
<td>Business &amp; Professional Speech (E)</td>
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</table>

**Economics**

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<tr>
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<tr>
<td>ECO101</td>
<td>Principles of Microeconomics</td>
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**Finance**

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<td>FIN202</td>
<td>Financial Management</td>
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<td>FIN301</td>
<td>Financial Institutions (E)</td>
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<td>FIN503</td>
<td>Corporate Finance</td>
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<tr>
<td>FIN613</td>
<td>Financial Modeling</td>
</tr>
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</table>
Human Resource Management
HRM301  Human Resource Management (E)

Language
LAN 10*  Foreign Language I
LAN 20** Foreign Language II
*1 = Introduction to Arabic   *2 = Introduction to French
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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)

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

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### Major Electives

#### Accounting Electives (5 courses)
- ACC302 Accounting & Financial Information Systems
- ACC505 Auditing
- ACC405 Internal Auditing and EDP Accounting
- ACC501 Advanced Financial Accounting
- ACC520 Managerial Analysis and Decision Making
- ACC524 Corporate Governance & Reporting
- ACC521 International Financial Reporting Standards
- ACC522 Strategic Management Accounting & Control
- LAW202 Banking Laws in Pakistan
- LAW203 Insurance Laws in Pakistan

#### Finance Electives (5 courses)
- FIN403 Islamic Banking and Finance
- FIN504 International Finance
- FIN505 Treasury and Fund Management
- FIN506 Investment Banking and Security Analysis
- FIN507 Portfolio Management
- FIN509 Financial Derivatives
- FIN513 Project Appraisal
- FIN514 Asset Liability Management
- FIN520 Financial Risk Management
- FIN530 Commercial & Corporate Banking
- FIN531 Real Estate and Alternative Investments
- FIN533 Info. Technology & Product Innovation in Financial Services
- FIN534 Retail & Consumer Banking
- FIN613 Financial Modeling for Decision Making

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<td>Accounting Elective III</td>
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<td>Finance Elective II</td>
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</tbody>
</table>
**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

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

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<tr>
<th>Semester</th>
<th>Sub-Projects</th>
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<td>Semester-1 &amp; 2:</td>
<td>Foundational Projects</td>
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<tr>
<td>Semester-3:</td>
<td>Projects related to social enterprises in education</td>
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<tr>
<td>Semester-4:</td>
<td>Projects related to social enterprises in health</td>
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<td>Semester-5:</td>
<td>Projects related to social enterprises dealing with poverty issues</td>
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<tr>
<td>Semester-6:</td>
<td>Projects related to social enterprises in environment sector</td>
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<tr>
<td>Semester-7:</td>
<td>Projects related to violence and business incubation</td>
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<tr>
<td>Semester-8:</td>
<td>Projects related to violence and business incubation</td>
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</tbody>
</table>
**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 Anthropocentricty 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:

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<tr>
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<th>Semester Two: Foundational Projects</th>
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<tbody>
<tr>
<td>Research Methodology for Social Projects</td>
<td>Principles of Management and Organizational Dynamics</td>
</tr>
<tr>
<td>Quantitative Analysis for Social Data</td>
<td>Fundamental Economics</td>
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<td>Entrepreneurial Marketing</td>
<td>Visual storytelling: Photography and Documentary in Advocacy</td>
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<td>History of Social Advocacy: Pakistan and Subcontinent</td>
<td>Fundamentals of Business Communication</td>
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<tr>
<td>Principles of Accounting</td>
<td>Entrepreneurial Finance</td>
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<tr>
<td>Ethical Leadership: Islamic Perspective</td>
<td>Leadership</td>
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<tr>
<th>Semester Three: Projects on Education</th>
<th>Semester Four: Projects on Health Issues</th>
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<tbody>
<tr>
<td>Philosophy of Education and its Psychological Roots</td>
<td>Philosophy and Psychology of Human Nature and Wellbeing</td>
</tr>
<tr>
<td>Social, Political &amp; Economic Dynamics of Education in History</td>
<td>Historical Foundations of Health Care Institutions</td>
</tr>
<tr>
<td>Computer Arts and Graphics Designing</td>
<td>Recitations/Readings Related to Health and Well Being</td>
</tr>
<tr>
<td>Creativity, Novelty and Beauty Via Education</td>
<td>Health Issues Across Cultures and Ideologies/Language-1</td>
</tr>
<tr>
<td>Results Based Project Management</td>
<td>Study of Social Enterp. in Health Care: Operations &amp; Processes</td>
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<tr>
<td>Social Enterprise in Education: HRM</td>
<td>Role models in Health Care</td>
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<td>Anthropocentricity and Environment</td>
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<td>Socioeconomic, Political Institutions &amp; History of Development</td>
<td>Socioeconomic Transformation and Threat to Environment</td>
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<td>Poverty/Development Advocacy through Performing Arts</td>
<td>Literary Writing and Expression of Environmental Impact</td>
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<tr>
<td>Poverty and Women Empowerment/Language-II</td>
<td>Artificial vs Natural/Self Sustainable Design</td>
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<tr>
<td>Sustainability</td>
<td>Domestication of Agriculture and self-sustainable living</td>
</tr>
<tr>
<td>Leadership in Social Transformation</td>
<td>Leadership in Environmental Projects</td>
</tr>
</tbody>
</table>
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 be 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**
- INM101 Production Processes
- INM102 Industrial Safety & Health
- INM201 Methods Analysis and Time Study
- INM202 Energy Management
- INM203 Introduction to Production & Operation Management
- INM204 Ergonomics
- INM301 Introduction to Facility Planning & Layout
- INM302 Lean Six Sigma and Production
- INM303 Introduction to Planning and Scheduling
- INM304 Introduction to Project Management
- INM305 Inventory Management
- INM401 Introduction to Supply Chain management
- INM402 Introduction to Quality Management
- INM403 Business Process Methodology

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

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

**Economics**
- ECO301 Managerial Economics

**Finance and Banking**
- FIN201 Introduction to Business Finance
- FIN202 Financial Management

**Human Resource Management**
- HRM301 Human Resource Management

**Language**
- LAN 10* Foreign Language I
- LAN 20** Foreign Language II
  - *1 = Introduction to Arabic
  - *4 = Introduction to German
  - *8 = Introduction to Chinese
  - **1 = Intermediate Arabic
  - **4 = Intermediate German
  - **8 = Intermediate Chinese

**Entrepreneurship**
- ENT403 Small Business and Entrepreneurship

**Management Information Systems**
- MIS104 Computer Programing & Graphics

**Management**
- MAN101 Principles of Management
- MAN302 Organizational Behavior

**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

Economics
ECO402 Pakistan Economic Policy

LAW
LAW409 Corporate and Business Law

Marketing
MKT404 Methods in Business Research

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<td>Introduction to Financial Accounting</td>
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<tr>
<td>Principles of Management</td>
<td>Managerial Economics</td>
</tr>
<tr>
<td>Production Processes</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>Pakistan Studies</td>
<td>Calculus for Business Decisions</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Industrial Safety &amp; Health</td>
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<tr>
<td>Islamic Studies</td>
<td>Introduction to Psychology</td>
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<td>Semester Three</td>
<td>Semester Four</td>
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<tr>
<td>Organizational Behavior</td>
<td>Business and Professional Speech</td>
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<tr>
<td>Persuasive &amp; Analytical Writing for Business Communication</td>
<td>Introduction to Business Finance (R)</td>
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<tr>
<td>Industrial Applications of Statistics</td>
<td>Marketing Management</td>
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<tr>
<td>Methods Analysis and Time Study</td>
<td>Introduction to Production &amp; Operation Management</td>
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<tr>
<td>Computer Programming &amp; Graphics</td>
<td>Ergonomics</td>
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<td>Semester Five</td>
<td>Semester Six</td>
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<tr>
<td>Foreign Language I</td>
<td>Foreign Language II</td>
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<tr>
<td>Cost Management Accounting</td>
<td>Financial Management</td>
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<td>Human Resource Management</td>
<td>Introduction to Planning and Scheduling</td>
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<tr>
<td>Environmental Studies</td>
<td>Introduction to Project Management</td>
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<tr>
<td>Introduction to ERP Systems</td>
<td>Inventory Management</td>
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<tr>
<td>Introduction to Facility Planning and Layout</td>
<td>Lean Six Sigma and Production</td>
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<tr>
<td>Semester Seven</td>
<td>Semester Eight</td>
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<tr>
<td>Small Business and Entrepreneurship</td>
<td>Introduction to Quality Management</td>
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<td>Introduction to SCM</td>
<td>Business Process Methodology</td>
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<td>Project I</td>
<td>Project II</td>
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<td>Elective I</td>
<td>Elective III</td>
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<td>Elective II</td>
<td>Elective IV</td>
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<td>Internship (2 credit hours)</td>
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BS LOGISTICS AND SUPPLY CHAIN MANAGEMENT

BS Supply Chain Management focus on transportation, distribution, and warehousing activities of firms across the supply chain extending from raw material extraction to delivery to consumers. The supply chain starts from mining, to raw material processing and supply to various manufacturing units that add value till the final production of finished goods ready for distribution, retail and delivery to consumers. It also covers imports, exports and other compliance requirements.

The Bachelor of Logistics and Supply Chain Management is a professional and comprehensive management degree program that provides 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 such as Logistics, warehousing and 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 communication, team work, foreign languages and managing diversity.

BS is a four-year program. It requires completion of 144 credit hours of course work 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 degree requirements. Six credit hours are structured into the program for a foreign language course. Students must maintain a CGPA of 2.5 for conferment of the degree.

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 BS 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.

Required Courses:

**Accounting**
- ACC206 Fundamentals of Accounting

**Communication**
- COM107 Academic English
- COM202 Business and Professional Speech

**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
- *1 = Introduction to Arabic
- *4 = Introduction to German
- **1 = Intermediate Arabic
- **4 = Intermediate German
- *2 = Introduction to French
- *8 = Introduction to Chinese
- **2 = Intermediate French
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**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:
SCM404 Supply Chain Project Management
SCM514 Business Process Mgmt. in Supply Chain & Logistics
SCM516 Life Cycle Enterprise Asset Management
SCM518 Packaging Design-Environmental Aspects
SCM520 Contract Management
SCM522 Negotiation strategies in Supply chain Management
EEM410 Environmental Impact Assessment

SCM513 Quantitative Methods in Production in Logistics
SCM515 IT applications in Logistics and SCM
SCM517 Demand Management
SCM519 e-business Strategies in SCM
SCM521 Sustainability & Env. Aspects in Managing Supply
EEM403 Energy Sources and Management Chains

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<td>Fundamentals of Accounting</td>
<td>Foreign Language I</td>
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<tr>
<td>Essentials of Supply Chain Management</td>
<td>Principles of Marketing</td>
<td>Introduction to ERP systems</td>
</tr>
<tr>
<td>Pakistan Studies</td>
<td>Calculus for Business Decisions</td>
<td>Quantitative Business Analysis</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Logistics and operations management</td>
<td>Shipping, Ocean Freights &amp; Port Operations</td>
</tr>
<tr>
<td>Islamic Studies</td>
<td>Import-Export Management</td>
<td>Environmental Studies</td>
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<th>Semester Four</th>
<th>Semester Five</th>
<th>Semester Six</th>
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<tbody>
<tr>
<td>Business and Professional Speech</td>
<td>Logistical projects in ERP</td>
<td>Lean Six Sigma &amp; Lean Manufacturing</td>
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<tr>
<td>Introduction to Business Finance</td>
<td>Food Security and Sustainability</td>
<td>Foreign Language II</td>
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<tr>
<td>Business Ethics</td>
<td>Methods in Business Research</td>
<td>Innovation Mgmt. in Supply Chain &amp; Logistics</td>
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<tr>
<td>Supply Chain Finance</td>
<td>Human Resource Management</td>
<td>Corporate and Business Law</td>
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<tr>
<td>Quantitative Skills &amp; Managerial Statistics</td>
<td>Mobile Commerce and Mobile Logistics</td>
<td>Globalization and Outsourcing Strategies</td>
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<td>Organizational Behavior</td>
<td>Computer Applications-E-Business</td>
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<tr>
<th>Semester Seven</th>
<th>Semester Eight</th>
<th>Internship (2 credit hours)</th>
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<td>Seminar in Economic Policy</td>
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<td>Transportation Techniques &amp; Mgmt.</td>
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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

Statistics
STA411  Quantitative Analysis for Decision Making

Law
LAW409  Corporate and Business Law

Marketing
MKT402  Marketing Management
MKT404  Methods in Business Research

Communication
COM402  Business Communication

Finance
FIN408  Theory and Practice of Financial Management

Human Resource Management
HRM410  Managing Human Capital

Management
MAN418  Management and Organizational Dynamics

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:

1. 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.

2. 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.

- Specialization in Health and Hospital Management  (Page No. 42)
- Specialization in Media Management and Marketing  (Page No. 44)
- Specialization in Finance and Risk Management  (Page No. 46)
- Specialization in Environment and Energy Management  (Page No. 47)
- Specialization in Logistics and Supply Chain Management  (Page No. 50)
- Specialization in Industrial Management  (Page No. 52)
- Specialization in Entrepreneurship and SME Banking and Financing  (Page No. 54)
- Specialization in Educational Management  (Page No. 107)
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 intrapreneurial 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*

**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  Capstone Project I*
XXX692  Capstone Project II*

* Indicates MBA level courses

1 MBA Students with business relevant bachelor program from IoBM will instead take MAN604 Emerging Organizational Models for Dynamic Change.

2 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.

**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:
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**
MAN401  Principles of Management  
MAN402  Organizational Behavior  
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**
MI526  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

*Indicates MBA level courses
Elective Courses

Majors in Accounting
ACC302 Accounting and Financial Information Systems
ACC503 Taxation
ACC505 Auditing
ACC506 Analysis of Financial Statements
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

Majors in Marketing
MKT501 Strategic Marketing and Planning
MKT602 Marketing Analytics
MKT605 Pricing Models and Strategies
MKT611 Integrated Marketing Communications
MKT613 Marketing of Financial Services
MKT615 Brand Management
MKT618 Advertising Management and Strategy
MKT621 Marketing Strategies for Emerging Economies
MKT622 Marketing Strategies for Bottom of the Pyramid (BOP)
MKT623 Pharmaceutical Marketing & Quality Assurance
MKT625 Business to Business Marketing
MKT626 Marketing for Social Impact
MKT627 Future Marketing Technologies
MKT628 Competitive Strategies
MKT629 B2B Sales by Simulation/Gamification
MKT630 Growth Marketing

Majors in Finance and Banking
FIN602 Behavioral Finance
FIN603 Entrepreneurial Finance
FIN608 Project Appraisal
FIN610 Debt and Equity Markets
FIN612 SME and Micro-Financing
FIN613 Financial Modeling for Investment Decisions
FIN630 Options, Swaps and Futures
FIN631 Applied Corporate Finance
FIN632 Fixed Income Securities
FIN633 Mergers, Acquisitions and Restructuring
FIN634 Enterprise Risk Management
FIN635 Risk Management with Derivatives

Majors in Human Resource Management
HRM607 Talent Acquisition
HRM608 Labour Studies and Employee Relations
HRM609 Learning and Organizational Development
HRM610 Negotiations and Conflict Resolution Skills
HRM611 Managing Organizational Change
HRM612 Strategic Human Resource Management
HRM615 Leadership Studies
HRM616 Talent Management and Performance Development
HRM617 HR Analytics

Majors in Management
MAN501 Total Quality Management
MAN610 Environmental Issues and Management
MAN611 Project Management
MAN613 Corporate Governance
MAN614 Comparative Management

Majors in Logistics and Supply Chain Management
SCM601 Quantitative Methods in Production and Logistics
SCM602 Business Process Mgmt. in Supply Chain & Logistics
SCM603 IT Applications in Logistics
SCM604 Packaging Design and Environmental Aspects
SCM605 Supply Chain Management
SCM606 ERP Systems Design and Implementation
SCM607 Strategic Supply Chain Management
SCM608 Procurement and Inventory Management
SCM609 Storage and Warehouse Techniques
SCM610 Transportation Techniques and Management
SCM611 Sustainability & Env. Aspects in Managing Supply Chains
SCM612 Risk Management in Supply Networks
SCM613 Innovation Management in Supply Chain and Logistics
SCM614 Corporate Consultancy Project in Logistics
SCM615 Contract Management for Supply Chain & Negotiations
SCM616 Life Cycle Enterprise Asset Management
SCM617 Mobile Commerce and Mobile Logistics
SCM618 Aviation Logistics Supply Chain Management
SCM619 Humanitarian Logistics Supply Chain Management
SCM620 Supply Chain Project Management
SCM621 Lean Construction Supplychain Management

Majors in Development Studies
SSC601 Dimensions of Development
SSC602 Development Sociology
PDE703 Development Economics
STA601 Development Statistics and Research Methodology

Majors in Islamic Banking and Finance
ISF601 Economics for Islamic Finance
ISF602 Islamic Banking Practices
ISF603 Accounting for Islamic Finance
ISF604 Islamic Financial Services Marketing
ISF605 Islamic Capital Markets
ISF606 International Islamic Finance Standards
FRM514 Takaful and Risk Management in Islamic Products

Majors in Entrepreneurship
ENT503 Competitive Strategies for Startup
ENT504 Technology Support for Small Business
ENT505 Innovative Internet Based Business Models
ENT506 Guerrilla Strategies in Business
ENT507 Affordable Design and Frugal Innovation
ENT508 Commercializing and Monetizing Ideas
ENT509 Building and Managing Start-Up Teams
ENT510 New Venture Finance
ENT511 Managing Family Business
ENT512 Growth Hacking Strategies
ENT513 Design Thinking and Strategy
CBM MBA’s Domain Specialization in Health and Hospital Management is designed for building careers as healthcare leaders, managers and decision makers in health care institutions and pharmaceutical industry. The specialization focuses on creative and critical thinking, decision making, team building and entrepreneurial skills that can generate market driven results. The department of Health and Hospital Management provides an environment of continual learning and development of the health and managerial expertise of its students and faculty. It continuously refines the needs, demands and expectations of the healthcare industry. The department uses state of the art teaching methodologies for capacity-building of future healthcare leaders who are trained to be sensitive to the needs of society, and to promote ethical practice of the health care business with the objective of serving the community and the nation.

Students selecting the domain based specialization in Health and Hospital 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. 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, the NGO sector, pharmaceutical industries and population programs. 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 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**

*Elective Business Courses are offered based on availability and demand.*
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

Business Elective Courses:
Page No. 41
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*

*Indicates MBA level course

Course Structure

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<td>Digital Business Communication</td>
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<td>Media and Social Change</td>
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<th>Semester Five</th>
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<td>Business Analytics and Decision-Making</td>
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<td>Integrated Marketing Communication</td>
<td>Seminar in Media Marketing</td>
</tr>
<tr>
<td>Media Psychology</td>
<td>Documentary Filmmaking</td>
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<tr>
<td>Capstone Project 1</td>
<td>Capstone Project 2</td>
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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 ENVIRONMENT 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*

*Indicates MBA level courses

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
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*

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
SCM601 Quantitative Methods for Logistics & Supply Chain Management
SCM605 Supply Chain Management
SCM607 Strategic Supply Chain Management
SCM612 Risk Management in Supply Networks
SCM613 Innovation Management in Supply Chain and Logistics
SCM615 Design of Business Processes - Workflow Management

Capstone Project
SCM691 Capstone Project I* (Logistical Projects in ERP- Case Study Development)
SCM692 Capstone Project II*(Corporate Consultancy Projects in Logistics)

*Indicates MBA level courses

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
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

**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

HRM / Management
HRM606  Leadership, Ethics and Change
MAN501  Total Quality Management
MAN606  Business Analytics for Decision Making
MAN608  Technology, Operations and Innovation

Marketing
MKT615  Brand Management
MKT624  New Product Development Management
MKT625  Business to Business Marketing

Supply Chain and Logistics Management
SCM606  ERP System Design and Implementation
SCM607  Strategic Supply Chain Management
SCM608  Procurement and Inventory Management

Engineering
ENG408  Facilities Planning
ENG601  Maintenance Management
ENG602  Manufacturing Process and Systems
ENG603  Technology 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

Environmental and Energy Management
EEM404  Industrial and Municipal Waste Management
EEM408  Safety, Health and Environment Management
EEM409  Risk and Disaster Management

Finance
FIN602  Behavioral Finance
FIN603  Entrepreneurial Finance
FIN608  Project Appraisal
FIN610  Debt and Equity Markets
FIN612  SME and Micro-Financing
FIN613  Financial Modeling for Investment Decisions
FIN630  Options, Swaps and Futures
FIN631  Applied Corporate Finance
FIN632  Fixed Income Securities
FIN633  Mergers, Acquisitions and Restructuring
FIN634  Enterprise Risk Management
FIN635  Risk Management with Derivatives
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
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. 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

<table>
<thead>
<tr>
<th>Modules</th>
<th>Number of Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Business English</td>
<td>12 hrs</td>
</tr>
<tr>
<td>2 Economics</td>
<td>12 hrs</td>
</tr>
<tr>
<td>3 Personal Effective and Leadership</td>
<td>12 hrs</td>
</tr>
<tr>
<td>4 Introduction to Management and Case Method</td>
<td>12 hrs</td>
</tr>
<tr>
<td>5 Introduction to Marketing and Case method</td>
<td>12 hrs</td>
</tr>
<tr>
<td>6 Business Finance</td>
<td>12 hrs</td>
</tr>
<tr>
<td>7 Business Accounting</td>
<td>12 hrs</td>
</tr>
<tr>
<td>8 Excel for Business Decision Making</td>
<td>18 hrs</td>
</tr>
<tr>
<td>9 Research Tools and Techniques</td>
<td>12 hrs</td>
</tr>
<tr>
<td>10 Business Mathematics and Statistics</td>
<td>12 hrs</td>
</tr>
</tbody>
</table>
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 3 CGPA or B-Grade
- Candidates must clear IoBM Admission test or HAT/GAT test
- Candidates must have a Master in Applied Linguistics, ELT, TESL, or Literature and Linguistics
- An interview conducted by the Institute
- All other HEC stipulated requirements

Program Structure

MS in English - Applied Linguistics is a 1.5 - 4 years program and has 30 credit hours. The course work comprises a total of eight 3-credit hour courses (4 Core and 4 Electives) to be completed over a period of one year; this is followed by a thesis bearing a 6 credit load.

After successful completion of the course work, students are required to carry out a research study for the thesis under the guidance of a research supervisor selected by the students and approved by the Institute. The student must convert the research thesis into a publishable paper as part of the degree requirement.

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.
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 HAT/GAT/IoBM entrance test and interview as per IoBM rules.

Program Structure

The MPhil is a 30 credit hours program with 8 courses and one thesis of 6 credit hours.

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
- 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 at least four pre-requisite courses (HEC equivalency required)
- GRE Subject or GAT subject test conducted by the NTS or HAT subject test of HEC. 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

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
- 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
MPM603 Advanced Quantitative Research
MPM610 Independent Study
MPM616 Econometrics

Note: Additional Pre-requisites may be assigned according to the level of previous work.

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directed Research Elective I</td>
<td>Directed Research Elective III</td>
</tr>
<tr>
<td>Directed Research Elective II</td>
<td>Directed Research Elective IV</td>
</tr>
<tr>
<td>Exploratory Research Elective I</td>
<td>Exploratory Research Elective II</td>
</tr>
</tbody>
</table>

Semesters Three to Nine
Registration in one of the following courses is must for continuing in the research stage.

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>PBM921</td>
<td>Research Thesis</td>
</tr>
<tr>
<td>PBM922</td>
<td>Research Thesis</td>
</tr>
<tr>
<td>PBM923</td>
<td>Research Thesis</td>
</tr>
</tbody>
</table>

Graduate Courses:

Directed Research Electives in Area of Specialization
The objective of the directed research electives is to enable the PhD students to link their chosen areas of specialization with the philosophy and methodology of business research and to benchmark their proposed research with quality publications.

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>PBM701</td>
<td>Philosophy of Business Management</td>
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<tr>
<td>PBM703</td>
<td>Multivariate Analysis</td>
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<tr>
<td>PBM705</td>
<td>Readings in Business Research</td>
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<td></td>
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<tr>
<td>PBM707</td>
<td>Replication of Business Research Design and Results</td>
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<td></td>
</tr>
<tr>
<td>PBM708</td>
<td>Directed Study of a Business Research Problem</td>
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</tbody>
</table>

Exploratory Research Electives in the Area of Specialization
PhD students may select the following and/or other PhD level courses from CESD and CSIS on the advice of their supervisors.

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBM801</td>
<td>Marketing Models</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PBM803</td>
<td>Marketing Theory</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PBM805</td>
<td>Advanced Topics in Marketing</td>
<td></td>
<td></td>
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<tr>
<td>PBM811</td>
<td>Advanced Topics in Strategic Management</td>
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<tr>
<td>PBM813</td>
<td>Advanced Topics in Organization Theory</td>
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<tr>
<td>PBM815</td>
<td>Advanced Topics in Human Behavior in Organization</td>
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</tr>
<tr>
<td>PBM821</td>
<td>Advanced Topics in Operations Management Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBM823</td>
<td>Advanced Research Topics in Operations Management</td>
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<td></td>
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<tr>
<td>PBM825</td>
<td>Advanced Research Topics in Management Information Systems</td>
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<tr>
<td>PBM831</td>
<td>Advanced Topics in Finance</td>
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<tr>
<td>PBM841</td>
<td>Advanced Readings in Business Ethics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBM842</td>
<td>Globalization Discourses of Ethics</td>
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</tr>
</tbody>
</table>

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.
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

Mission of the College of Computer Science and Information Systems is to develop abstract skills of mathematical and statistical reasoning and analytical skills of theoretical computer science to solve problems of industry and society. The objective is to develop professionals who can design applied solutions in the area of data sciences, actuarial sciences, and scientific computing with strong theoretical foundations.

1. Challenging careers in data sciences, data mining, and predictive analytics
2. Design ICT and Computer Science solutions for problems of industry and society
3. Careers in actuarial sciences and financial risk management
BS COMPUTER SCIENCE

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 then 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 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 conferment of the degree.

Foundation Courses

Accounting
ACC101 Introduction to Financial Accounting

Economics
ECO104 Micro and Macroeconomics

Management
MAN101 Principles of Management
MAN411 Project Management

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

Information Technology
CSC111 Information & Communication Technology
CSC111 Information & Communication Technology LAB
CSC219 Professional Practices

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

Physics
PHY111 Applied Physics

Political Sciences
PSC301 Pakistan Studies

Mathematics
MTH107 Calculus and Analytical Geometry
MTH204 Linear Algebra

Statistics
STA203 Probability Theory and Statistics

Religious Studies
REL101 Islamic Studies

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
### Computer Science (Compulsory Courses)
- **CSC115** Digital Logic & Design
- **CSL115** Digital Logic & Design LAB
- **CSC211** Computer Organization and Assembly Language
- **CSL211** Computer Organization and Assembly Language LAB
- **CSC311** Theory of Automata & Formal Language
- **CSC315** Design & Analysis of Algorithm
- **CSC411** Compiler Construction
- **CSC413** Artificial Intelligence
- **CSL413** Artificial Intelligence LAB
- **CSC418** Parallel & Distributed Computing

### Computer Science (Elective Courses)
- **CSC371** Computer Graphics
- **CSC373** Database Administration and Management
- **CSC471** Enterprise Systems
- **CSC473** Big Data Analytics
- **CSC477** IT Infrastructure
- **CSC479** Digital Signal Processing
- **CSC482** Formal Methods in Software Engineering
- **CSC484** Network Security
- **CSC486** Wireless Network

### Course Structure

#### Semester One
- Intro to Info. & Comm. Technology (2+0) [Pre Req. NA]
- Programming Fundamentals (3+0) [Pre Req. NA]
- Calculus and Analytical Geometry (3+0) [Pre Req. NA]
- Academic English (3+0) [Pre Req. NA]
- Multivariable Calculus (3+0) [Pre Req. MTH107]

#### Semester Two
- Theory of Automata & Formal Language (3+0) [Pre Req. CSC231]
- Object Oriented Programming (3+0) [Pre Req. CSC113]
- Probability Theory and Statistics (3+0) [Pre Req. NA]
- Operating Systems (3+0) [Pre Req. CSC215]
- Operating Systems LAB (0+1) [Pre Req. CSC215]

#### Semester Three
- Computer Organization & Assembly Language (3+0) [Pre Req. NA]
- Data Structures and Algorithms (3+0) [Pre Req. CSC213]
- Discrete Structures (3+0) [Pre Req. NA]
- Professional Practices (3+0) [Pre Req. NA]
- Numerical Computing (3+0) [Pre Req. MTH204]

#### Semester Four
- Design & Analysis of Algorithms (3+0) [Pre Req. CSC215]
- Compiler Construction (3+0) [Pre Req. CSC311]
- Foreign Language I (3+0) [Pre Req. NA]
- Numerical Computing (3+0) [Pre Req. MTH107]
- Foreign Language II (3+0) [Pre Req. NA]

#### Semester Five
- Computer Networks (3+0) [Pre Req. CSC215]
- Computer Networks LAB (0+1) [Pre Req. NA]
- CS Elective I (3+0) [Pre Req. NA]
- Business & Professional Speech (3+0) [Pre Req. COM107]

#### Semester Six
- Artificial Intelligence (3+0) [Pre Req. CSC231]
- Artificial Intelligence LAB (0+1) [Pre Req. CSC231]
- Operating Systems (3+0) [Pre Req. CSC215]
- Operating Systems LAB (0+1) [Pre Req. CSC215]

#### 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]
- FYP II (0+3) [Pre Req. CSC317]
- FYP III (0+3) [Pre Req. LAN10x]
- Pakistan Studies (3+0) [Pre Req. NA]

#### Semester Eight
- CS Elective V (3+0) [Pre Req. NA]
- Project Management (3+0) [Pre Req. NA]
- FYP II (0+3) [Pre Req. CSC317]
- Information Security (3+0) [Pre Req. NA]
- Islamic Studies (3+0) [Pre Req. NA]
- Intro to Financial Accounting (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
*4 = Introduction to German
*8 = Introduction to Chinese
*2 = Introduction to French
*6 = Introduction to Italian
**1 = Intermediate Arabic
**4 = Intermediate German
**8 = Intermediate Chinese
**2 = Intermediate French
**6 = Intermediate Italian

LAW
LAW401 Business Law
<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Political Sciences</th>
</tr>
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<tbody>
<tr>
<td>MTH104  Calculus I</td>
<td>PSC301  Pakistan Studies</td>
</tr>
<tr>
<td>MTH105  Calculus II</td>
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<tr>
<td>MTH204  Linear Algebra</td>
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<tr>
<td>MTH209  Financial Mathematics I</td>
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<td>MTH405  Numerical Analysis</td>
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<td>Statistics</td>
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<td>STATA10  Sampling Theory</td>
<td>STATA301  Model and Inferences</td>
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<tr>
<td>STATA302  Methods of Data Analysis</td>
<td>STATA303  Time Series Analysis and Forecasting</td>
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<td>STATA305  Applied Regression Analysis</td>
<td>STATA307  Decision Theory</td>
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<td>STATA309  Loss Models I</td>
<td>STATA310  Loss Models II</td>
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<td>Elective Courses</td>
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<td>Finance and Risk Management</td>
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<tr>
<td>FRMS03  Corporate Risk Management</td>
<td>FRMS504  Theory of Risk and Insurance</td>
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<td>FRMS505  Corporate Treasury and Risk Management</td>
<td>FRMS506  Financial Regulation for Risk Management</td>
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<tr>
<td>FRMS512  International Risk and Financial Reporting</td>
<td>FRMS513  Project Risk Management</td>
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<td>FRMS514  Takaful and Risk Management in Islamic Products</td>
<td>FRMS516  International Financial Reporting and Standards</td>
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<td>FRMS517  Property Risk Management</td>
<td>FRMS518  Management of Insurance Institutions</td>
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<td>Computer Sciences</td>
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<td>CSC103  Structured Programming Language</td>
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<th>Semester Two</th>
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<tr>
<td>Academic English</td>
<td>Introduction to Financial Accounting</td>
<td>Principles of Marketing</td>
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<td>Numerical Computing</td>
<td>Financial Derivatives</td>
<td>Portfolio Management</td>
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<td>Business Law</td>
<td>Actuarial Mathematics</td>
<td>Life and Other Contingencies</td>
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<td>Introduction to Econometrics</td>
<td>Principles of Risk Management</td>
<td>Enterprise Risk Management</td>
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<td>Principles of Management</td>
<td>Stochastic Processes</td>
<td>Sampling Theory</td>
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<td>Pakistan Studies</td>
<td>Financial Econometrics</td>
<td>Models in Financial Economics I</td>
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<td>Method of Data Analysis</td>
<td>Corporate Finance</td>
<td>Methods in Business Research</td>
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<td>Semester Seven</td>
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<td>Institutional Investments</td>
<td>Decision Theory</td>
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<td>Loss Models II</td>
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<td>Applied Regression Analysis</td>
<td>Risk Financing Techniques</td>
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<td>Computational Methods in Risk Mgmt.</td>
<td>Time series Analysis &amp;forecasting</td>
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<td>Loss Models I</td>
<td>Project</td>
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<td>Elective I</td>
<td>Elective II</td>
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BS MATHEMATICS AND ECONOMICS

BS (Mathematics & Economics) is an inter-disciplinary undergraduate program that enables graduates to design econometric models for economic and financial decision making. The graduates distinguish themselves with rigorous modeling and predictive techniques.

This program is designed for students with robust mathematical skills and a keen interest in economics and is a perfect blend of pure and applied mathematics which does not only ensure a solid quantitative foundation for both disciplines but also provides coverage of Statistics, Actuarial sciences and Finance. The training this degree provides is a unification of critical economic analysis and strong mathematical skills, which can help student pursue an esteemed position in the financial services industry, growth and development centers, business enterprises, as well as the public sector. Graduates with this degree are increasingly valued by employers because of their critical reasoning and sound knowledge as much as for economic theory as 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 perfect for those who aim at Master/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 HSc with a minimum of 55% marks in Pre-Engineering or in General Group (with Mathematics) or A-Levels with a minimum of 2 Cs in three principal subjects (with Mathematics) are eligible to apply for admission. Graduation requirement is the completion of 141 credit hours of course work and 3 credit hours of project approved by 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 the 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 for the short fall in summer session. Students must maintain a CGPA of 2.5 for the conferment of degree.

Required Courses

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Economics</th>
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</thead>
<tbody>
<tr>
<td>MTH104 Calculus I</td>
<td>ECO101 Principles of Microeconomics</td>
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<tr>
<td>MTH105 Calculus II</td>
<td>ECO102 Principles of Macroeconomics</td>
</tr>
<tr>
<td>MTH203 Introduction to Formal Mathematics</td>
<td>ECO103 Intermediate Microeconomics</td>
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<tr>
<td>MTH204 Linear Algebra</td>
<td>ECO105 Intermediate Macroeconomics</td>
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<td>MTH213 Introduction to Computing</td>
<td>ECO207 Game Theory</td>
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<td>MTH224 Multivariable Calculus</td>
<td>ECO208 Development Economics</td>
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<td>MTH251 Number theory</td>
<td>ECO301 Managerial Economics</td>
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<td>MTH301 Real Analysis I</td>
<td>ECO302 International Trade</td>
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<td>MTH311 Real Analysis II</td>
<td>ECO303 Financial Economics</td>
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<td>MTH344 Introduction to Differential Equations</td>
<td>ECO307 Monetary theory and Policy</td>
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<td>MTH346 Partial Differential Equations</td>
<td>ECO402 Pakistan Economic Policy</td>
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<td>MTH350 Topics in Mathematical Economics</td>
<td>ECO410 Econometrics I</td>
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<td>MTH405 Numerical Analysis</td>
<td>ECO412 Econometrics II</td>
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<td>MTH427 Topology</td>
<td>Management Information System</td>
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<td>MTH401 Complex Analysis</td>
<td>MIS402 Computer Concepts and Applications</td>
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<td>MTH433 Optimization Techniques</td>
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<td>MTH437 Functional Analysis</td>
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Political Sciences
PSC301  Pakistan Studies

Religious Studies
REL101  Islamic Studies

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

Elective Courses

Mathematics
MTH211  Actuarial Mathematics
MTH205  Financial Mathematics
MTH207  Stochastic Models and Mathematical Finance
MTH421  Abstract Algebra
MTH423  Combinatorics
MTH430  Operations Research
MTH439  Introduction to Dynamical Systems

Economics
ECO305  Topics in Microeconomics
ECO306  Topics in Macroeconomics
ECO414  Islamic Economics
ECO416  Growth Theories
ECO418  Resource & Environmental Economics
ECOXXX  Energy Economics
ECOXXX  Public Finance
ECOXXX  Economics of Logistics
ECOXXX  History of Economics Idea
ECOXXX  Agronomics

Course Structure

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
<th>Semester Three</th>
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<tbody>
<tr>
<td>Islamic studies</td>
<td>Pakistan Studies</td>
<td>Business and Professional Speech</td>
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<td>Principles of Microeconomics</td>
<td>Principles of Macroeconomics</td>
<td>Model and inference</td>
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<td>Calculus I</td>
<td>Calculus II</td>
<td>Introduction to Formal Mathematics</td>
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<tr>
<td>Computer concepts and applications</td>
<td>Probability &amp; Statistics</td>
<td>Introduction to Computing</td>
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<th>Semester Four</th>
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<th>Semester Six</th>
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<td>Intermediate Macroeconomics</td>
<td>International Trade</td>
<td>Monetary theory &amp; Policy</td>
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<td>Development Economics</td>
<td>Managerial Economics</td>
<td>Financial Economics</td>
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<td>Game Theory</td>
<td>Applied Regression Analysis</td>
<td>Econometrics I</td>
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<td>Methods of Data Analysis</td>
<td>Topics in Mathematical Economics</td>
<td>Numerical Analysis</td>
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<tr>
<td>Number Theory</td>
<td>Real Analysis I</td>
<td>Real Analysis II</td>
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<tr>
<td>Linear Algebra</td>
<td>Introduction to Differential Equations</td>
<td>Partial Differential Equations</td>
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<th>Semester Seven</th>
<th>Semester Eight</th>
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<tr>
<td>Econometrics II</td>
<td>Time Series Analysis</td>
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<td>Pakistan Economic Policy</td>
<td>Optimization Techniques</td>
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<td>Topology</td>
<td>Functional Analysis</td>
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<td>Complex Analysis</td>
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<td>Mathematics Elective II</td>
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<td>Mathematics Elective I</td>
<td>Project</td>
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</tbody>
</table>
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 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-hour of course work and 2 credit hours of 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.
2. 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.

Required Courses

Accounting
ACC101 Introduction to Financial Accounting

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

Economics
ECO104 Micro and Macroeconomics
ECO304 Introduction to Econometrics

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

Management
MAN101 Principles of Management
MAN411 Project Management
Data Science
BDS101 Introduction to Data Science
BDS201 Business Process Analysis
BDS301 Data Mining-I
BDS302 Data Mining -II
BDS401 Data Visualization
BDS402 Big Data Concept & Techniques
BDS403 Big Data & Analytics
BDS404 Machine Learning

Mathematics
MTH107 Calculus and Analytical Geometry
MTH204 Linear Algebra
MTH215 Differential Equations
MTH222 Discrete Structures
MTH224 Multivariable Calculus
MTH405 Numerical Analysis

Statistics
STA203 Probability Theory & Statistics I
STA204 Probability Theory & Statistics II
STA301 Model & Inference
STA302 Methods of Data Analysis
STA305 Applied Regression Analysis
STA303 Time Series Analysis

Computer Science
CSC105 Data Structures and Algorithms
CSC111 Intro. to Information & Communication Technology
CSC112 Object Oriented Programming
CSC113 Programming Fundamentals
CSC205 Computer Architecture
CSC217 Digital Logic Design
CSC220 Introduction to Database Management Systems
CSC315 Theory of Automata and Formal Language
CSC317 Introduction to Software Engineering
CSC318 Design & Analysis of Algorithms
CSC410 Data Communication and Networking
CSC412 Artificial Intelligence
CSC428 Web Engineering
CSC443 Mobile Computing
CSC445 Network Security
CSC461 Project I
CSC462 Project II
CSC463 Introduction to Data Warehousing

Religious Studies
REL101 Islamic Studies

Political Sciences
PSC301 Pakistan Studies

Course Structure

<table>
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<tr>
<th>Semester One</th>
<th>Semester Two</th>
<th>Semester Three</th>
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</thead>
<tbody>
<tr>
<td>Introduction to Data Science</td>
<td>Multivariable Calculus</td>
<td>Linear Algebra</td>
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<tr>
<td>Programming Fundamentals (2+1)</td>
<td>Object Oriented Programming (2+1)</td>
<td>Intro. to Info. &amp; Comm. Tech. (2+1)</td>
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<td>Probability Theory &amp; Statistics I</td>
<td>Probability Theory &amp; Statistics II</td>
<td>Model &amp; Inference</td>
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<td>Islamic Studies</td>
<td>Discrete Structures</td>
<td>Data Structures and Algorithms (2+1)</td>
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<tr>
<td>Academic English</td>
<td>Pakistan Studies</td>
<td>Micro and Macroeconomics</td>
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<tr>
<td>Semester Four</td>
<td>Semester Five</td>
<td>Semester Six</td>
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<tr>
<td>Differential Equations</td>
<td>Numerical Computing (2+1)</td>
<td>Principles of Management</td>
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<tr>
<td>Computer Architecture &amp; Org. (2+1)</td>
<td>Data Mining -I</td>
<td>Introduction to Econometrics</td>
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<td>Methods of Data Analysis</td>
<td>Applied Regression Analysis</td>
<td>Data Mining -II</td>
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<td>Business Process Analysis</td>
<td>Intro. to Software Engineering (2+1)</td>
<td>Design &amp; Analysis of Algorithms (2+1)</td>
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<td>Data Communication &amp; Networking (2+1)</td>
<td>Mobile Computing</td>
<td>Artificial Intelligence</td>
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<td>Intro. to Database Management Systems</td>
<td>Theory of Automata &amp; Formal Language</td>
<td>Network Security</td>
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<td>Semester Seven</td>
<td>Semester Eight</td>
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<tr>
<td>Data Visualization</td>
<td>Project II</td>
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<td>Digital Logic Design (2+1)</td>
<td>Introduction to Data Warehousing</td>
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<td>Time Series Analysis</td>
<td>Big Data &amp; Analytics</td>
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<td>Project I</td>
<td>Project Management</td>
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<td>Big Data Concept &amp; Techniques</td>
<td>Machine Learning (2+1)</td>
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<tr>
<td>Introduction to Financial Accounting</td>
<td>Web Engineering (2+1)</td>
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</table>
MS COMPUTER SCIENCE

The Master of Science program in Computer Science enables graduates to learn the techniques related to the design, development and maintenance of software.

It 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 conferment of the degree.

Eligibility
BS(CS) / MCS / BE in Computer Engineering candidates are required to fulfil 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
2. Assembly Lang. / Computer Architecture
3. Computer Networks
4. Computer Programming
5. Data Structures
6. Database Systems
7. Operating Systems
8. Software Engineering
9. Theory of Automata

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.

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

Course Structure

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<td>Research Methodology</td>
<td>Advanced Operating Systems</td>
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<tr>
<td>Advanced Computer Architecture</td>
<td>Theory of Programming Languages</td>
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<td>Advanced Analysis of Algorithm</td>
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<td>Semester Three</td>
<td>Semester Four</td>
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<td>Elective IV</td>
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<td>Elective III</td>
<td>MS Thesis-II</td>
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<td>MS Thesis-I</td>
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</tbody>
</table>
MS MATHEMATICS AND MS STATISTICS (SCIENTIFIC COMPUTING)

The MS programs in Mathematics & Scientific Computing and in Statistics & Scientific Computing develop rigorous foundational mathematical and statistical tools that help in careers as researchers, and solution providers.

It prepare students for careers in research, applications, and teaching. Students choose courses from two areas of concentration for their course work: Mathematics and Computations or Statistics and Computations. Students are required to qualify successfully for eight courses (4 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. Students will be required to qualify for Final (Comprehensive) Examination, as well as write and defend a thesis. The MS Program takes usually two years to complete and students must pass GRE/NTS exam prior to completion of the degree.

Eligibility

16 Years of education in Computer Science, Engineering, Mathematics or Statistics or any relevant field.

Required Courses

MS (Mathematics & Scientific Computations)

Compulsory Courses (12 credit hours)
MTS614  Mathematical Statistics
MTS615  Dynamical System
MTS617  Advanced Numerical Analysis
MTS618  Statistical Modeling and Computing

Elective Courses

Mathematics Concentration (6 credit hours)
MTS610  Calculus of Variation
MTS612  Numerical Methods for ODEs and PDEs
MTS620  Asymptotic Analysis
MTS624  Advanced Fluid Dynamics
MTS626  Advanced Convex Analysis
MTS628  Advanced Numerical Optimization
MTS630  Advanced Mathematical Physics
MTS632  Advanced Variational Inequalities
MTS634  Advanced Numerical Linear Algebra
MTS636  Advanced Hilbert Space
MTS640  Symmetry Methods for Differential Equations
MTS641  Continuum Mechanics
MTS642  Geometric Methods in Mechanics and Physics
Computation Concentration (6 credit hours)
MTS622  Fundamental Algorithms
MTS637  High Performance Computing
MTS657  Machine Learning and Pattern Recognition
MTS691/692 Thesis
MTS635  Information Retrieval and Data Mining
MTS639  Principles in Parallel Computing
MTS658  Production Quality Software

Course Structure
MS (Mathematics & Scientific Computing)

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematical Statistics</td>
<td>Statistical Modeling &amp; Computing</td>
</tr>
<tr>
<td>Advanced Numerical Analysis</td>
<td>Mathematics Concentration I</td>
</tr>
<tr>
<td>Dynamical System</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Three</th>
<th>Semester Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics Concentration II</td>
<td>Thesis (Mathematics Oriented)</td>
</tr>
<tr>
<td>Computation Concentration I</td>
<td>6 credit hours</td>
</tr>
<tr>
<td>Computation Concentration II</td>
<td></td>
</tr>
</tbody>
</table>

MS (Statistics & Scientific Computing)

Required Courses

Compulsory Courses (12 credit hours)
MTS611  Advanced Statistical Inference
MTS614  Mathematical Statistics
MTS617  Advanced Numerical Analysis
MTS618  Statistical Modeling and Computing

Elective Courses

Statistics Concentration (6 credit hours)
MTS647  Advanced Design of Experiments
MTS649  Stochastic Processes
MTS651  Theory and Practices of Forecasting
MTS648  Time Series Analysis
MTS650  Applied Regression Models
MTS652  Statistical Quality Control

Computation Concentration (6 credit hours)
MTS622  Fundamental Algorithms
MTS645  Decision Theory
MTS658  Production Quality Software
MTS661  Simulation and Modeling
MTS662  Principles in Parallel Computing
MTS691/692 Thesis
MTS635  Information Retrieval and Data Mining
MTS657  Machine Learning and Pattern Recognition
MTS661  Simulation and Modeling
MTS691/692 Thesis

Course Structure
MS (Statistics & Scientific Computing)

<table>
<thead>
<tr>
<th>Semester One</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Mathematical Statistics</td>
<td>Statistical Modeling &amp; Computing</td>
</tr>
<tr>
<td>Advanced Numerical Analysis</td>
<td>Mathematics Concentration I</td>
</tr>
<tr>
<td>Advanced Statistical Inference</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Three</th>
<th>Semester Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics Concentration II</td>
<td>Thesis (Statistics Oriented)</td>
</tr>
<tr>
<td>Computation Concentration I</td>
<td>6 credit hours</td>
</tr>
<tr>
<td>Computation Concentration II</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Four</th>
<th></th>
</tr>
</thead>
</table>
MS ACTUARIAL SCIENCE (AS) & COMPUTATIONAL FINANCE (CF)

The MS (AS&FC) degree program is for those candidates who have demonstrated high academic ability at BS level programs in the fields of Actuarial Science, Economics, Mathematics, Statistics, Computer Science, and Physics and are interested in exploring actuarial science, risk management, financial mathematics and computing sciences in insurance and finance. Computational finance along with actuarial science is in demand nationally and internationally in banks, financial institutions and insurance companies.

Eligibility

1. Sixteen years of schooling or 4-year education (130 credit hours) after HSSC/F.A./F.Sc./Grade 12 equivalent will be required for admission in the MS (AS&CF).

2. Taking the test conducted by IoBM Admission Dept. or some equivalent agency acceptable to HEC (NTS) with a minimum of a 50% cumulative score will be a requirement at the time of admission to MS (AS&CF). The test is valid for a period of two years.

MS (AS&CF)

- For the award of MS (AS&CF) candidates will be required to complete 30 credit hours with 24 credit hours of course work along with a minimum of 6 credit hours for a thesis.

- (*1. 6 credit hours may be exempted only for those disciplines where research is not possible)

- (*2. The HoD may allow students to do course work of 6 credit hours in lieu of 6 credit hours of research work. This exemption can only be allowed if students wish to terminate their course work at MS and not pursue PhD)

- Course work of 12 credit hours has to be completed in two semesters and thesis should be completed within a year after completion of course work. All examinations and grading will be as per the Institute’s rules.

Required Courses

Compulsory Courses (12 credit hours)
ACF601  Financial Mathematics and Computational Finance
ACF602  Finance and Financial Reporting
ACF603  Life Insurance Mathematics and Computing
ACF604  Advanced Life Insurance Mathematics and Computing
Elective Courses
(12 credit hours)

Actuarial Science Concentration
ACF605  Economics of Risk and Insurance
ACF606  Statistical Methods (for Insurance and Risk Management) with Computing
ACF607  Stochastic Modeling (for Insurance and Risk Management) with Computing
ACF608  Survival Models & Theory of Reliability
ACF609  Risk Theory (for life insurance)
ACF610  Financial Economics
ACF611  Introduction to Model Office Building in Life Insurance
ACF612  Social Insurance in Emerging Markets
ACF613  Hedge Funds
ACF614  Risk Assessment and Decision Analysis Using Bayesian Network (BAN)

Computing Concentration
ACF615  Time Series Modeling & Forecasting
ACF616  Simulation & Modeling
ACF617  Machine Learning
ACF618  Actuarial Computing Using R or Other Software
ACF619  Financial Soft Computing /Advances in Computational Finance

Thesis Writing and Evaluation (6 credit courses)
Thesis writing and evaluation will be done as per rules of IoBM (BASR). Thesis should be Mathematics of Insurance and Computing oriented.

Course Structure
MS (Actuarial Science & Computational Finance)

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Mathematics and Computational Finance</td>
<td>Advanced Life Insurance Mathematics and Computing</td>
</tr>
<tr>
<td>Finance and Financial Reporting</td>
<td>Elective I</td>
</tr>
<tr>
<td>Life Insurance Mathematics and Computing</td>
<td>Elective II</td>
</tr>
<tr>
<td>Semester Three</td>
<td>Semester Four</td>
</tr>
<tr>
<td>Elective III</td>
<td>MS Thesis</td>
</tr>
<tr>
<td>Elective IV</td>
<td>(6 credit hours)</td>
</tr>
</tbody>
</table>
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.

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 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 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

Semesters One to Nine (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
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
PST850  Research Thesis

PhD (Mathematics & Scientific Computing)

PMT701  Advanced Numerical Computing
PMT703  Linear Algebra and Lie Algebra
PMT705  Applied Matrix Theory
PMT707  Numerical Methods for PDEs
PMT709  Topics in Inverse Problems
PMT711  Topics in Numerical Differential Equations
PST701  Advanced Statistical Computing & Graphics
PST703  Regression Modeling & Computation
PST713  Nonlinear and Integer Programming
PMT850  Research Thesis
“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)

1. 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.

2. 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)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>PLOs/GAs</th>
<th>Program Educational Objectives (PEOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Engineering Knowledge</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Problem Analysis</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Design/Development of Solutions</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Investigation</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Modern Tool Usage</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The Engineer and Society</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Environment and Sustainability</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Ethics</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Individual and Team Work</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Project Management</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Lifelong Learning</td>
<td></td>
</tr>
</tbody>
</table>
Required Courses

Communication
COM106 Functional English
COM108 Communication Skills
COM208 Technical Report Writing

Computer Engineering
CME102 Fundamentals of Computing
CME104 Computer Programming 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)*

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Physics (3+1)</td>
<td>Linear Algebra (3+0)</td>
</tr>
<tr>
<td>Functional English (3+0)</td>
<td>Islamic Studies (2+0)</td>
</tr>
<tr>
<td>Linear Circuit Analysis (3+1)</td>
<td>Communication Skills (2+0)</td>
</tr>
<tr>
<td>Fundamentals of Computing (2+1)</td>
<td>Basic Electronics (3+1)</td>
</tr>
<tr>
<td>Calculus &amp; Analytical Geometry (3+0)</td>
<td>Computer Programming &amp; Problem Solving (2+1)</td>
</tr>
<tr>
<td>Electronic Workshop Practices (0+1)</td>
<td>Electrical Network Analysis (3+1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Three</th>
<th>Semester Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan Studies (2+0)</td>
<td>Signals &amp; Systems (3+1)</td>
</tr>
<tr>
<td>Digital Logic Design (3+1)</td>
<td>Differential Equations (3+0)</td>
</tr>
<tr>
<td>Data Structure &amp; Algorithms (3+1)</td>
<td>Technical Report Writing (3+0)</td>
</tr>
<tr>
<td>Complex Variables &amp; Transforms (3+0)</td>
<td>Electromagnetic Field Theory (3+0)</td>
</tr>
<tr>
<td>Computer Aided Engineering Designs (0+1)</td>
<td>Microcontroller &amp; Microprocessor Systems (3+1)</td>
</tr>
<tr>
<td>Electronic Devices and Circuits (3+1)</td>
<td></td>
</tr>
</tbody>
</table>
Course Structure

Stream 1: Electronic Engineering

<table>
<thead>
<tr>
<th>Semester Five</th>
<th>Semester Six</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Machines (3+1)</td>
<td>Elective I (3+0)</td>
</tr>
<tr>
<td>Numerical Analysis (3+0)</td>
<td>Engineering Economics (2+0)</td>
</tr>
<tr>
<td>Linear Control Systems (3+1)</td>
<td>Communication System (3+1)</td>
</tr>
<tr>
<td>Instrumentation and Measurements (3+1)</td>
<td>Digital Signal Processing (3+1)</td>
</tr>
<tr>
<td>Probability Methods in Engineering (3+0)</td>
<td>Power Electronics (3+1)</td>
</tr>
</tbody>
</table>

Stream 2: Telecommunication Engineering

<table>
<thead>
<tr>
<th>Semester Five</th>
<th>Semester Six</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Machine (3+1)</td>
<td>Elective I (3+0)</td>
</tr>
<tr>
<td>Linear Control Systems (3+1)</td>
<td>Engineering Economics (2+0)</td>
</tr>
<tr>
<td>Computer Communication Networks (3+1)</td>
<td>Digital Signal Processing (3+1)</td>
</tr>
<tr>
<td>Probability Methods in Engineering (3+0)</td>
<td>Communication System (3+1)</td>
</tr>
</tbody>
</table>

Elective Courses

**ELE415** Opto-Electronics
**ELE423** Digital Control Systems
**ELE429** Introduction to Nano Technology
**ELE433** Artificial Neural Networks
**ELE434** Introduction to Smart Grid Technology
**CME414** Digital Image Processing

**ELE417** Industrial Electronics
**ELE422** VLSI Design
**ELE428** Digital Electronics
**ELE430** Solid State Devices
**ELE432** Wireless Power Transmission
**CME301** Computer Communication Networks
**TCE416** Digital Communication

Course Structure

Stream 2: Telecommunication Engineering

<table>
<thead>
<tr>
<th>Semester Seven</th>
<th>Semester Eight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective II (3+0)</td>
<td>Elective IV (3+1)</td>
</tr>
<tr>
<td>Elective III (3+1)</td>
<td>Community Service (0 ch)</td>
</tr>
<tr>
<td>Management &amp; Organizational Dynamics (3+0)</td>
<td>Senior Design Project II (0+3)</td>
</tr>
<tr>
<td>Senior Design Project I (0+3)</td>
<td>Small Business and Entrepreneurship (3+0)</td>
</tr>
<tr>
<td>Renewable Energy Methods (3+0)</td>
<td>Principles of Applied Mechatronics (3+1)</td>
</tr>
</tbody>
</table>

Elective Courses

**TCE415** Transmission and Switching Systems
**TCE420** Information Theory and Coding
**TCE424** Radar Systems
**TCE426** Electromagnetic Compatibility
**TCE428** Mobile and Pervasive Computing
**TCE430** Satellite Communication
**TCE433** Multimedia and Optical Fiber
**TCE461** Wireless and Mobile Communications
**CME414** Digital Image Processing
**ELE415** Opto-Electronics

**TCE416** Digital Communications
**TCE423** RF and Microwave Engineering
**TCE425** Telecom Management
**TCE427** Antenna Theory and Design
**TCE429** Teletraffic Engineering
**TCE431** Digital Filter Design
**TCE434** Wireless Sensor Networks
**TCE471** Optical Fiber Communication

**TCE461** Wireless and Mobile Communications
**CME414** Digital Image Processing
**ELE415** Opto-Electronics
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: 2 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)

MS Projects (Compulsory)

MEM601 Thesis I (3+0)
MEM602 Thesis II (3+0)

**Elective Courses (Any Four Courses)**

MEM505 Applied Engineering Analysis (3+0)
MEM506 Production System Design and Analysis (3+0)
MEM507 Operations Analysis & Resource Allocation (3+0)
MEM508 Operation Management (3+0)
MEM509 Simulation Modeling (3+0)
MEM510 Production Planning and Control (3+0)
MEM511 Advanced Practices in Engineering Management (3+0)
MEM512 Environmental and Safety Management (3+0)
MEM513 Industrial Costing Management (3+0)
MEM514 Technology Management (3+0)
MEM515 Lean Six Sigma & Lean Manufacturing (3+0)
MEM516 Marketing Management (3+0)

**Course Structure**

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
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<tbody>
<tr>
<td>Project Management (3+0)</td>
<td>Design, Patents, Contract &amp; Legal Engineering (3+0)</td>
</tr>
<tr>
<td>Quality Processes for Design &amp; Production (3+0)</td>
<td>Elective I (3+0)</td>
</tr>
<tr>
<td>Research Methodology (3+0)</td>
<td>Elective II (3+0)</td>
</tr>
</tbody>
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<tbody>
<tr>
<td>Elective III (3+0)</td>
<td>Thesis-II (3+0)</td>
</tr>
<tr>
<td>Elective IV (3+0)</td>
<td></td>
</tr>
<tr>
<td>Thesis-I (3+0)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Student will be allowed to register in thesis only after completing the course work of first two semesters.*
### 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.

### Program Scope

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 life long 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 Independent Study 3+0

<table>
<thead>
<tr>
<th>Stream 1</th>
<th>Stream 2</th>
<th>Stream 3</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Systems Engineering</td>
<td>Control Automation Engineering</td>
<td>Communication Systems and Networks</td>
<td>3+0</td>
</tr>
</tbody>
</table>
| EPE602 (Core)  
Power Electronics | ELE602 (Core)  
Linear Control Theory | ECE602 (Core)  
Wireless Communication | 3+0 |

Elective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
</table>
| EPE611  
Power System Analysis | CME601  
Advanced Digital Signal Processing | 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 |
| CME602  
Artificial Intelligence 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:

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Methodology (3+0)</td>
<td>Independent study (3+0)</td>
</tr>
<tr>
<td>Simulation Modeling (2+1)</td>
<td>Elective-I</td>
</tr>
<tr>
<td>Required Stream based Course (3+0)</td>
<td>Elective-II</td>
</tr>
<tr>
<td></td>
<td>Initial Seminar / Symposium</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Three</th>
<th>Semester Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective-III</td>
<td>Thesis (4+0)</td>
</tr>
<tr>
<td>Elective-IV</td>
<td>Final Seminar / Symposium</td>
</tr>
<tr>
<td>Thesis (2+0)</td>
<td></td>
</tr>
</tbody>
</table>

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

## Program Summary:

- **Duration**: 02 years
- **Total Credit hours**: 30 credit hours
- **Course work**: 24 credit hours
- **Thesis**: 06 credit hours
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.
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
2. F2-Management Accounting
3. F3-Financial Accounting
4. F4-Corporate and Business Law
5. F5-Performance Management
6. F6-Taxation
7. F7-Financial Reporting
8. F9-Financial Management
9. F8-Audit and Assurance

Required Courses

**Accounting**
- ACC201 Introduction to Accounting I (ICAP-CAF-1)
- ACC203 Introduction to Accounting II (ICAP-CAF-1)
- ACC204 Taxation I (ICAP-CAF-6)
- ACC206 Taxation II (ICAP-CAF-6)
- ACC303 Financial Accounting I (ICAP-CAF-5)
- ACC304 Financial Accounting II (ICAP-CAF-5)
- ACC306 Financial Reporting I (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
### Law
- LAW105  Mercantile Law (ICAP-CAF-3)
- LAW106  Company Law (ICAP-CAF-3)
- LAW202  Banking Laws in Pakistan
- LAW203  Insurance Laws in Pakistan
- LAW301  Intellectual Property, Patents, Copyrights
- LAW400  Company Secretarial Practices
- LAW404  Arbitration
- LAW407  Statutory Compliance

### Language
- LAN 10*  Foreign Language I
  - *1 = Introduction to Arabic
  - *2 = Introduction to French
  - *4 = Introduction to German
  - *6 = Introduction to Italian
  - *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)

### Course Structure

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

*Includes Introduction to concepts of Supply Chain Management
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
MMM335  Magazine Production
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

Course Structure

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Reading &amp; Creative Writing</td>
<td>Appreciation of Literary Text</td>
</tr>
<tr>
<td>Urdu I</td>
<td>Urdu II</td>
</tr>
<tr>
<td>Introduction to Mass Communication</td>
<td>Islamic Studies</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>Media Literacy</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>Introduction to Design Tools</td>
</tr>
<tr>
<td>Introduction to Photography</td>
<td>History of Filmmaking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Three</th>
<th>Semester Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan Studies</td>
<td>International Relations</td>
</tr>
<tr>
<td>Basic Economics</td>
<td>World Civilization &amp; Culture</td>
</tr>
<tr>
<td>Important Concepts in Philosophy</td>
<td>Writing Workshop</td>
</tr>
<tr>
<td>Basic Statistical Methods</td>
<td>Appreciation of Vernacular Literature</td>
</tr>
<tr>
<td>News Writing &amp; Reporting</td>
<td>Studio Production</td>
</tr>
<tr>
<td>Creative Portfolio Management (P)</td>
<td>Editing &amp; Post-production</td>
</tr>
<tr>
<td>Screenplay I</td>
<td>Screenplay II (P)</td>
</tr>
</tbody>
</table>

Required Courses (Production Thesis):

Media Studies
MMM339  Cinematography II
MMM342  Filmmaking – The Art & Craft I
MMM345  Screenplay II
MMM351  Production Management
MMM356  Ad-Film Production
MMM357  Advanced Editing & Sound Design II
MMM366  Filmmaking – The Art & Craft II (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)
<table>
<thead>
<tr>
<th>Semester Five</th>
<th>Semester Six</th>
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<tbody>
<tr>
<td>Logic &amp; Critical Thinking</td>
<td>Business Journalism</td>
</tr>
<tr>
<td>Media Law &amp; Business Ethics</td>
<td>Contemporary World Media</td>
</tr>
<tr>
<td>Current Affairs</td>
<td>Methods in Media Research</td>
</tr>
<tr>
<td>Introduction to Advertising &amp; PR</td>
<td>Sub-Editing &amp; Page-Design</td>
</tr>
<tr>
<td>News Production/ News Anchoring</td>
<td>Introduction to Sound Design</td>
</tr>
<tr>
<td>Theater Arts</td>
<td>Cinematography II (P)</td>
</tr>
<tr>
<td>Production Management (P)</td>
<td>Introduction to Documentary</td>
</tr>
<tr>
<td>Cinematography I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester Seven</th>
<th>Semester Eight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Communication</td>
<td>Magazine Production</td>
</tr>
<tr>
<td>Human Rights &amp; Gender Reporting</td>
<td>Production Design (P)</td>
</tr>
<tr>
<td>Environmental Journalism</td>
<td>Filmmaking – The Art &amp; Craft II (Thesis) (6C) (P)**</td>
</tr>
<tr>
<td>Sports Journalism</td>
<td>Advanced Documentary Production</td>
</tr>
<tr>
<td>Director’s Toolkit (P)</td>
<td>Media Marketing</td>
</tr>
<tr>
<td>Ad-Film Production</td>
<td>Digital Journalism</td>
</tr>
<tr>
<td>Filmmaking – The Art &amp; Craft I (6C) (P)**</td>
<td>Photojournalism</td>
</tr>
<tr>
<td></td>
<td>Investigative Journalism (Thesis)</td>
</tr>
</tbody>
</table>
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
*4 = Introduction to German
*8 = Introduction to Chinese

*2 = Introduction to French
*6 = Introduction to Italian

**1 = Intermediate Arabic
**4 = Intermediate German
**8 = Intermediate Chinese

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

Law

LAW105 Mercantile Law
LAW106 Company Law
LAW202 Banking Laws in Pakistan
LAW203 Insurance Law in Pakistan
LAW301 Intellectual 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

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
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<tbody>
<tr>
<td>Academic English</td>
<td>Persuasive &amp; Analytical Writing for Business Communication</td>
</tr>
<tr>
<td>Calculus for Business Decisions</td>
<td>Foreign Language II</td>
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<tr>
<td>Foreign Language I</td>
<td>Pakistan Studies</td>
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<tr>
<td>Principles of Microeconomics</td>
<td>Microeconomic Analysis</td>
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<tr>
<td>Introduction to IR</td>
<td>Probability Theory &amp; Statistics</td>
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<tr>
<td>Principles of Macroeconomics</td>
<td>Political Geography</td>
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<thead>
<tr>
<th>Semester Three</th>
<th>Semester Four</th>
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<tr>
<td>Business and Professional Speech</td>
<td>Development Economics</td>
</tr>
<tr>
<td>Macroeconomic Analysis</td>
<td>Mathematical Economics</td>
</tr>
<tr>
<td>Globalization</td>
<td>Introduction to Econometrics</td>
</tr>
<tr>
<td>World Politics</td>
<td>History and Practices of Diplomacy</td>
</tr>
<tr>
<td>Mercantile Law</td>
<td>Confidence Building Measures</td>
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<tr>
<td>Model &amp; Inferences</td>
<td>Company Law</td>
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<table>
<thead>
<tr>
<th>Semester Five</th>
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<tbody>
<tr>
<td>Managerial Economics</td>
<td>Applied Econometrics</td>
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<tr>
<td>Game Theory</td>
<td>General Equilibrium and Welfare Economics</td>
</tr>
<tr>
<td>History of Economic Thought</td>
<td>Contemporary Issues in Macroeconomics</td>
</tr>
<tr>
<td>Strategic Studies</td>
<td>Religion, Culture and International Relations</td>
</tr>
<tr>
<td>Islamic Studies</td>
<td>Borders in a Globalized World</td>
</tr>
<tr>
<td>Banking Laws in Pakistan</td>
<td>Intellectual Property, Patents and Copyrights</td>
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<table>
<thead>
<tr>
<th>Semester Seven</th>
<th>Semester Eight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan Economic Policy</td>
<td>Analysis of Pakistani Industries</td>
</tr>
<tr>
<td>Monetary Theory and Policy</td>
<td>Trade Routes and Economic Corridors</td>
</tr>
<tr>
<td>Energy Politics</td>
<td>Statutory Compliance</td>
</tr>
<tr>
<td>Peace Building and Conflict Zones</td>
<td>Arbitration</td>
</tr>
<tr>
<td>Insurance Law in Pakistan</td>
<td>Elective I</td>
</tr>
<tr>
<td>Company Secretarial Practices</td>
<td>Elective II</td>
</tr>
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</table>
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
  *1 = Introduction to Arabic
  *4 = Introduction to German
  *8 = Introduction to Chinese
  *2 = Introduction to French
  *6 = Introduction to Italian
- **1 = Intermediate Arabic
- **4 = Intermediate German
- **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

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

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<thead>
<tr>
<th>Semester One</th>
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<tbody>
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<td>Academic English</td>
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<td>Calculus for Business Decisions</td>
<td>Pak Studies</td>
</tr>
<tr>
<td>Introduction to Photography</td>
<td>Microeconomic Analysis</td>
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<tr>
<td>Principles of Microeconomics</td>
<td>Probability Theory &amp; Statistics</td>
</tr>
<tr>
<td>Introduction to IR</td>
<td>Political Geography</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>Foreign Language I</td>
</tr>
</tbody>
</table>

Semester Three
Business and Professional Speech
Macroeconomic Analysis
Globalization
Foreign Language II
World Politics
Media Literacy

Semester Four
Development Economics
Mathematical Economics
History and Practices of Diplomacy
Confidence Building Measures
Model & Inferences
Creative Writing Workshop

Semester Five
Managerial Economics
Game Theory
Strategic Studies
News Writing and Reporting
Introduction to Econometrics
Islamic Studies

Semester Six
General Equilibrium and Welfare Economics
Religion, Culture and International Relations
Borders in a Globalized World
History of Economic Thought
Contemporary Issues in Macroeconomics
Sub-Editing and Page Design

Semester Seven
Pakistan Economic Policy
Monetary Theory and Policy
Energy Politics
Peace Building and Conflict Zones
Applied Econometrics
Business Journalism

Semester Eight
Analysis of Pakistani Industries
Trade Routes and Economic Corridors
Methods in Media Research
Digital Journalism
Elective I
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

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
*1 = Introduction to Arabic
*8 = Introduction to Chinese
*2 = Introduction to French
*4 = Introduction to German
*6 = Introduction to Italian
*8 = Introduction to Chinese

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

Political Sciences
PSC301 Pakistan Studies

Social Sciences
SSC104 Principles of Sociology
SSC301 History of Ideas
SSC401 Business Ethics

Psychology Core Courses
PSY300 Introduction to Psychology
PSY302 Writing Business Psychology Research
PSY304 Experimental Psychology
PSY306 Understanding Individual: Personal Construct
PSY308 Psychological Aspects of Advertising
PSY310 Positive Psychology
PSY312 Psychology Capstone Project

PSY301 Research Methods in Organizational Psychology
PSY303 Introduction to Psychological Testing
PSY305 Contemporary Social Psychology
PSY307 Psychology of Organizational Change
PSY309 Developmental Psychology
PSY311 Consumer Psychology

Religious Studies
REL101 Islamic Studies

Statistics
STA201 Quantitative Business Analysis
STA202 Quantitative Skills and Managerial Statistics
**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

**Course Structure**

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
<th>Semester Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic English (W, R)</td>
<td>Principles of Macroeconomics</td>
<td>Persuasive Analytical Writing for B.C (E,W)</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>Principles of Marketing</td>
<td>Writing Business Psychological Research</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>Research Methods in Org. Psychology</td>
<td>Contemporary Social Psychology</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>Pakistan Studies</td>
<td>History of Ideas</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>Entrepreneurial Leadership &amp; Motivation</td>
<td>Social Advocacy And Community Service</td>
</tr>
<tr>
<td>Islamic Studies</td>
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<tr>
<th>Semester Four</th>
<th>Semester Five</th>
<th>Semester Six</th>
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</thead>
<tbody>
<tr>
<td>Business and Professional Speech</td>
<td>Language I</td>
<td>Understanding Indiv.: Personal Construct</td>
</tr>
<tr>
<td>Introduction to Business Finance</td>
<td>Psychological Aspects of Advertising</td>
<td>Language II</td>
</tr>
<tr>
<td>Introduction to Psychological Testing</td>
<td>Experimental Psychology</td>
<td>Psychology of Organizational Change</td>
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<tr>
<td>Developmental Psychology</td>
<td>Quantitative Business Analysis</td>
<td>Consumer Psychology</td>
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<tr>
<td>Business Ethics</td>
<td>Positive Psychology</td>
<td>Corporate &amp; Business Law</td>
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<tr>
<td>Organizational Behavior</td>
<td>Quantitative Skills &amp; Managerial Statistics</td>
<td>Financial Management</td>
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<table>
<thead>
<tr>
<th>Semester Seven</th>
<th>Semester Eight</th>
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<tbody>
<tr>
<td>Elective I</td>
<td>Elective VI</td>
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<tr>
<td>Elective II</td>
<td>Elective VII</td>
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<tr>
<td>Elective III</td>
<td>Elective VIII</td>
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<td>Elective IIV</td>
<td>Elective IX</td>
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<tr>
<td>Elective V</td>
<td>Elective X</td>
</tr>
<tr>
<td>Capstone (Psychology)</td>
<td><em>Internship (2 credit hours)</em></td>
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</table>
BS EDUCATION

The 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. It is a 4-year program to fill in the niche in Pakistan’s educational scenario. It will provide a strong foundation in the field of education and integrate the core principles of effective teaching.

The main goal of this program is to produce graduates who have the ability to apply the science of learning to practical educational problems. 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 (MPhil/PhD).

This is a 144 hours credit program, which will be offered during the week days in the afternoon.

Foundation Courses

**Communication**
- COM101 General English
- COM107 Academic English
- COM108 Communication Skills

**Computer Science**
- CSC111 Introduction to Information and Communication Technology (ICT)

**Language**
- LAN112 Urdu I

**Political Science**
- PSC301 Pakistan Studies

**Psychology**
- PSY300 Introduction to Psychology

**Religious Studies**
- REL101 Islamic Studies

Required Courses

**Core Education Courses**
- BSE311 General Science
- BSE316 General Methods and Principles of Teaching.
- BSE321 Classroom Management
- BSE323 General Mathematics
- BSE327 Teaching of General Science
- BSE332 Foundation of Education
- BSE335 Early Childhood Education
- BSE337 Teaching Practicum - I
- BSE412 Classroom Assessment
- BSE422 Teaching of English
- BSE432 Teaching of Mathematics
- BSE442 School, Community and Teacher
- BSE448 Teaching Practicum II
- BSE505 Curriculum Development
- BSE512 Contemporary Issues and Trends in Education
- BSE521 Teaching Practicum III
- BSE605 Teaching Practicum – III
- BSE611 School Management
- BSE616 Gender Studies
- BSE621 Inclusive Education

**Social Enterprise Design**
- SED102 Philosophy of Education and its Psychological Roots
- SEM102 Social Enterprise in Education: HRM
- SEM103 Ethical Leadership: Islamic Perspective
Educational Management
- EDM403 Critical Thinking and Reading
- EDM422 Learners and Learning Styles
- EDM423 Reflective Inquiry in Education
- EDM414 Creativity in Education
- EDM416 Comparative Education System
- EDM417 Educational Counseling
- EDM421 Sociology of Education
- EDM406 Educational Policy and Economics
- EDM416 Comparative Education System
- EDM419 Managing Teaching and Learning
- EDM429 Research Methods in Education I (Quantitative)
- EDM427 Research Methods in Education II (Qualitative)
- EDM624 Innovations and Technology in Education
- EDM689 Thesis Writing-Capstone Project I
- EDM690 Thesis Writing-Capstone Project II

Elective Courses
- EDM402 Applied Linguistics
- EDM518 Evaluation and Assessment in Education
- EDM650 Quality Assurance in Education
- EDM654 Lifelong Learning in Changing Contexts

Course Structure

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
<th>Semester Three</th>
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<tbody>
<tr>
<td>Foundation English</td>
<td>Academic English</td>
<td>Teaching of General Science</td>
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<td>Islamic Studies</td>
<td>Introduction to Information and</td>
<td>Foundation of Education</td>
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<td>Introduction to Psychology</td>
<td>Communication Technology (ICT)</td>
<td>Social Enterprise in Education: HRM</td>
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<td>Urdu I</td>
<td>Classroom Management</td>
<td>Ethical Leadership: Islamic Perspective</td>
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<tr>
<td>General Science</td>
<td>General Mathematics</td>
<td>Early Childhood Education</td>
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<td>General Methods &amp; Principles of Teaching</td>
<td>Pakistan Studies</td>
<td>Teaching Practicum – I</td>
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<td>Philosophy of Education &amp; its Psy. Roots</td>
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<th>Semester Five</th>
<th>Semester Six</th>
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<td>Teaching of English</td>
<td>Learners and Learning Styles</td>
<td>Sociology of Education</td>
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<tr>
<td>Teaching of Mathematics</td>
<td>Reflective Inquiry in Education</td>
<td>Teaching Practicum III</td>
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<td>School, Community and Teacher</td>
<td>Creativity in Education</td>
<td>Managing Teaching and Learning</td>
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<td>Critical Thinking and Reading</td>
<td>Curriculum Development</td>
<td>Educational Policy and Economics</td>
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<td>Educational Counseling</td>
<td>Research Methods in Education II</td>
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<th>Semester Eight</th>
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<tbody>
<tr>
<td>School Management</td>
<td>Gender Studies</td>
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<tr>
<td>Elective I</td>
<td>Innovations and Technology in Education</td>
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<tr>
<td>Elective II</td>
<td>Inclusive Education</td>
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</tr>
<tr>
<td>Research Methods in Education I</td>
<td>Comparative Education System</td>
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<tr>
<td>(Quantitative)</td>
<td>Lifelong Learning in Changing Contexts</td>
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<tr>
<td>Teaching Practicum – III</td>
<td>Thesis Writing-Capstone Project I</td>
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</tr>
<tr>
<td>Thesis Writing-Capstone Project I</td>
<td>Thesis Writing-Capstone Project II</td>
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</table>
MBA SPECIALIZATION IN EDUCATIONAL MANAGEMENT (TWO YEAR) (WITH 16 YEARS OF EDUCATION)

The MBA program is designed for students with 16 years of education with degrees in a wide range of disciplines such as business, commerce, law, science, and social sciences. This program provides knowledge, skills and tools required for 21st century leadership and management for educational institutions in the fast changing economy.

Students selecting the domain-based specialization in MBA Educational Management program 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 12 credit hours of strategy courses, 9 credit hours of operational level courses and 12 credit hours of elective courses.

The Department of Education has developed strategy, operational and 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. MBA track for specialization in Educational Management.

Required Courses

**Educational Management**
- EDM406 Educational Policy and Economics
- EDM415 Educational Philosophy and Ethics
- EDM419 Managing Teaching and Learning
- EDM420 Academic Writing and Seminar Skills
- EDM427 Research Methods in Education II (Qualitative)
- EDM429 Research Methods in Education I (Quantitative)
- EDM518 Evaluation and Assessment in Education
- EDM514 Early Childhood Development*
- EDM526 Curriculum Management and Planned Change*
- EDM624 Innovations and Technology in Education*
- EDM689 Thesis Writing-Capstone Project I*
- EDM690 Thesis Writing-Capstone Project II*

**Finance**
- FIN408 Theory and Practice of Financial Management
- FIN411 Finance for Entrepreneurial Ventures

**Social Sciences**
- SSC406 Psychology and Learning

**Human Resource Management**
- HRM410 Managing Human Capital
- HRM606 Leadership, Ethics and Change*

**Management**
- MAN418 Management and Organizational Dynamics

**Accounting**
- ACC419 Financial Accounting

**Marketing**
- MKT402 Marketing Management
- MKT610 Marketing Strategies and Value Innovation*

**Elective Courses**

**Educational Management**
- EDM650 Quality Assurance in Education
- EDM652 Knowledge Management
- EDM654 Lifelong Learning in Changing Contexts
- EDM656 Teacher Education
- EDM658 Gender Studies in Education
- EDM660 Inclusive Education

*Indicates MBA level courses
## Course Structure

<table>
<thead>
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<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester One</strong></td>
<td>Managing Teaching and Learning</td>
</tr>
<tr>
<td>Psychology and Learning</td>
<td>Theory and Practice of Management</td>
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<tr>
<td>Financial Accounting</td>
<td>Marketing Management</td>
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<tr>
<td>Educational Philosophy and Ethics</td>
<td>Research Methods in Education I (Quantitative)</td>
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<tr>
<td>Academic Writing and Seminar Skills</td>
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<table>
<thead>
<tr>
<th><strong>Semester Three</strong></th>
<th>MBA Stage</th>
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</thead>
<tbody>
<tr>
<td>Research Methods in Education II (Qualitative)</td>
<td><strong>Semester Four</strong></td>
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<tr>
<td>Educational Policy and Economics</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>Managing Human Capital</td>
<td>Leadership Ethics and Change</td>
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<tr>
<td>Theory and Practice of Financial Management</td>
<td>Curriculum Mgmt. and Planned Change</td>
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<tr>
<th><strong>Semester Five</strong></th>
<th><strong>Semester Six</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Strategies and Value Innovations</td>
<td>Finance for Entrepreneurial Ventures</td>
</tr>
<tr>
<td>Innovations and Technology in Education</td>
<td>Thesis Writing (Capstone II)</td>
</tr>
<tr>
<td>Thesis Writing (Capstone I)</td>
<td>Elective II</td>
</tr>
<tr>
<td>Elective I</td>
<td>Elective III</td>
</tr>
</tbody>
</table>
MBA SPECIALIZATION IN EDUCATIONAL MANAGEMENT (THREE YEAR) (WITH 14 YEARS OF EDUCATION)

The MBA program is designed for students with 14 years of education with degrees in a wide range of disciplines such as business, commerce, law, science, and social sciences. This program provides knowledge, skills and tools required for 21st century leadership and management for educational institutions in the fast changing economy.

The 108 credit hours program is divided into a foundation stage of 72 credit hours followed by the 36-credit hours of rigorous MBA level courses and a capstone project dealing with strategy and educational transformation. The program covers areas such as accounting, finance, marketing, economics, quantitative analysis, ethics, HRM, management and education management and consists of foundational course work necessary for higher level MBA courses. This program is designed for students who have passed a two-year bachelor’s degree. Students can take a minimum load of 6 credit hours (two courses) or maximum of 12 credit hours (four courses) in each of the 3 semesters (Fall, Spring and Summer).

Required Courses

**Accounting**
ACC419  Financial Accounting

**Communication**
COM403  Interpersonal Communication Skills
COM407  English Language Development

**Educational Management**
EDM402  Applied Linguistics
EDM403  Critical Thinking and Reading
EDM406  Educational Policy and Economics
EDM413  Creativity in Education
EDM415  Educational Philosophy and Ethics
EDM417  Educational Counseling
EDM419  Managing Teaching and Learning
EDM420  Academic Writing and Seminar Skills
EDM421  Sociology of Education
EDM422  Learners and Learning Styles
EDM423  Reflective Inquiry in Education
EDM429  Research Methods in Education I (Quantitative)
EDM430  Research Methods in Education II (Qualitative)
EDM416  Comparative Education Systems
EDM518  Evaluation and Assessment in Education
EDM514*  Early Childhood Development
EDM526*  Curriculum Management and Planned Change
EDM624*  Innovations and Technology in Education
EDM689*  Thesis Writing-Capstone Project I
EDM690*  Thesis Writing-Capstone Project II

**Finance**
FIN408  Theory and Practice of Financial Management
FIN603*  Entrepreneurial Finance

**Human Resource Management**
HRM410  Managing Human Capital
HRM606*  Leadership, Ethics and Change

**Management**
MAN418  Management and Organizational Dynamics

**Marketing**
MKT402  Marketing Management
MKT610*  Marketing Strategies and Value Innovation

**Social Sciences**
SSC406  Psychology and Learning

**Statistics**
STA403  Statistics and Mathematics

**Elective Courses**

**Educational Management**
EDM650  Quality Assurance in Education
EDM652  Knowledge Management
EDM654  Lifelong Learning in Changing Contexts
EDM656  Teacher Education
EDM658  Gender Studies in Education
EDM660  Inclusive Education

*Indicates MBA level courses
## Course Structure

<table>
<thead>
<tr>
<th>Foundation Stage</th>
<th>Semester Two</th>
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</thead>
<tbody>
<tr>
<td><strong>Semester One</strong></td>
<td><strong>Semester Two</strong></td>
</tr>
<tr>
<td>Applied Linguistics</td>
<td>Semester Two</td>
</tr>
<tr>
<td>Critical Thinking and Reading</td>
<td>Reflective Inquiry in Education</td>
</tr>
<tr>
<td>English Language Development</td>
<td>Learners and Learning Styles</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>Interpersonal Communication Skills</td>
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<tr>
<td>Statistics and Mathematics</td>
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<thead>
<tr>
<th>Semester Three</th>
<th>Semester Four</th>
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<tbody>
<tr>
<td><strong>Comparative Education Systems</strong></td>
<td>Psychology and Learning</td>
</tr>
<tr>
<td>Educational Counseling</td>
<td>Financial Accounting</td>
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<tr>
<td>Sociology in Education</td>
<td>Educational Philosophy and Ethics</td>
</tr>
<tr>
<td>Creativity in Education</td>
<td>Academic Writing and Seminar Skills</td>
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<tr>
<th>Semester Five</th>
<th>Semester Six</th>
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</thead>
<tbody>
<tr>
<td><strong>Managing Teaching and Learning</strong></td>
<td>Research Methods in Education II</td>
</tr>
<tr>
<td>Management &amp; Organizational Dynamics</td>
<td>(Qualitative)</td>
</tr>
<tr>
<td>Marketing Management</td>
<td>Educational Policy and Economics</td>
</tr>
<tr>
<td>Research Methods in Education I (Quantitative)</td>
<td>Managing Human Capital</td>
</tr>
<tr>
<td>Theory &amp; Practice of Financial Management</td>
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<tr>
<th>MBA Stage</th>
<th>Semester Eight</th>
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<tbody>
<tr>
<td><strong>Semester Seven</strong></td>
<td>Marketing Strategies &amp; Value Innovations</td>
</tr>
<tr>
<td>Early Childhood Development</td>
<td>Innovations and Technology in Education</td>
</tr>
<tr>
<td>Leadership Ethics and Change</td>
<td>Thesis Writing-Capstone 1</td>
</tr>
<tr>
<td>Curriculum Mgmt. and Planned Change</td>
<td>Elective I</td>
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<tr>
<td>Evaluation and Assessment in Education</td>
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<tr>
<th>Semester Nine</th>
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<tbody>
<tr>
<td><strong>Entrepreneurial Finance</strong></td>
<td></td>
</tr>
<tr>
<td>Thesis Writing-Capstone 2</td>
<td></td>
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<tr>
<td>Elective II</td>
<td></td>
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<tr>
<td>Elective III</td>
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</table>
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)

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

*Note: For the 6th Semester students are required to choose 2 Psychology electives and 2 HRM electives.*
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
HRM611 Managing Organizational Change
HRM612 Strategic Human Resource Management

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

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
<th>Semester Three</th>
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</thead>
<tbody>
<tr>
<td>Intro. to Organizational Psychology</td>
<td>Management &amp; Organizational Dynamics</td>
<td>Managing Human Capital</td>
</tr>
<tr>
<td>Introduction to Behavioral Statistics</td>
<td>Principles of Marketing</td>
<td>Strategic Management</td>
</tr>
<tr>
<td>Principles of Sociology</td>
<td>Personality Theories</td>
<td>Performance Appraisal</td>
</tr>
<tr>
<td>Computer Applications</td>
<td>Business Ethics</td>
<td>Business Communication</td>
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<tr>
<td>Semester Four</td>
<td>Semester Five</td>
<td>Semester Six</td>
</tr>
<tr>
<td>Social Advocacy and Community Service</td>
<td>Human Resource Issues in Pakistan</td>
<td>Research Methods in Org. Psychology</td>
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<td>Group Dynamics</td>
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<td>Strategic HRM</td>
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<tr>
<td>Semester Seven</td>
<td>Semester Eight</td>
<td>Semester Nine</td>
</tr>
<tr>
<td>Counseling Psychology</td>
<td>Psychological Testing-II</td>
<td>Elective I</td>
</tr>
<tr>
<td>Personnel Psychology</td>
<td>Behavior Modification in Industry</td>
<td>Elective II</td>
</tr>
<tr>
<td>Employees Training and Development</td>
<td>Leadership &amp; Strategic Change</td>
<td>Elective III</td>
</tr>
<tr>
<td>Negotiation Skills</td>
<td>Research Practicum in HRM</td>
<td>Elective IV</td>
</tr>
</tbody>
</table>

*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
2- Energy Economics
3- Modelling
4- Regulations and Policy
5- Efficiency and Security

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

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
<th>Semester Three</th>
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</thead>
<tbody>
<tr>
<td>Micro and Macro Analysis</td>
<td>Econometrics II</td>
<td>Economics of Energy Management</td>
</tr>
<tr>
<td>Econometrics I</td>
<td>Theory and Practice of Public Policy</td>
<td>Energy Regulation and Policy Analysis</td>
</tr>
<tr>
<td>Quantitative Methods in Economics</td>
<td>Industry Economics</td>
<td>Environmental Mgmt. &amp; Green Technology</td>
</tr>
<tr>
<td>Research Methods and Dissertation</td>
<td>Energy Sources and Management</td>
<td>Economics of Inter. Energy &amp; Its Issues</td>
</tr>
<tr>
<td>Energy Economics and Technology</td>
<td>Financial Accounting</td>
<td></td>
</tr>
</tbody>
</table>

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.*
The MS in Education is specially designed for teachers and administrators at all levels in private and public sector institutions, who have an interest in research. This is a two-year degree program completed by an advanced course work and research. Candidates can enroll for a minimum of one and half year 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 the research proposal, candidates are guided in the conduct of research and are finally examined on the basis of defense of the thesis.

**Eligibility**

- As per HEC policy 16 years of education in the relevant field of study with 2.5 CGPA or C-Grade
- Candidates must clear NTS test
- Candidates should have BEd/MEd/Masters in Education/MBA in Education (3 years) for admission in MS in Education

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

- MS Proposal/Synopsis Development
- MS Proposal/Synopsis Defense
- BASR Approval of MS Proposal/Synopsis
- Continuous enrollment in supervised research
- Completion of MS Thesis
- Selection of External Examiner by BASR
- Open defense of MS Thesis
- Any other HEC requirement
- Final MS Thesis Submission to BASR
- Publication of a research article in HEC recognized research journal

**Course Structure**

**Core Courses**
- MPE604 Developing a Research Project
- MPE608 Readings in Education
- MPE610 Philosophical Foundations in Education
- MPE615 Qualitative Research Methods in Education
- MPE617 Statistical Testing and Inferences in Education
- MPE618 Policies and Education in Pakistan

**Elective Courses**
- 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

*NB: It is mandatory for research students to attend defense sessions given by MS and PhD students*
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 education.

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 is a mandatory pre-requisite for 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 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
- 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 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
- PED705 Developing and Conducting Independent Research

**Electives**
- PED810 Planning Developing and Evaluating Curriculum
- PED812 Educational Policies and Organizational Development
- PED814 Managing Educational Projects and Interventions
- PED820 Innovations and Pedagogies in Teacher Education
- PED990 Research Thesis

NB: It is mandatory for research students to attend defense sessions given by MS and PhD students
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
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 3 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.

1. To pass the comprehensive examination, a student must get satisfactory grades in one of his/her 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 student has completed all course requirements and attained a CGPA of at least 3.0 in his/her 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 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 examiner’s 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 manual 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 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 examiner’s report to BASR for final approval of degree
- The Rector to confirm the award of the degree
TEACHING AND LEARNING AT IoBM

IoBM 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Marks</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>96-100</td>
<td>4.00</td>
</tr>
<tr>
<td>A</td>
<td>91-95</td>
<td>3.89</td>
</tr>
<tr>
<td>A-</td>
<td>87-90</td>
<td>3.78</td>
</tr>
<tr>
<td>B+</td>
<td>84-86</td>
<td>3.67</td>
</tr>
<tr>
<td>B</td>
<td>79-83</td>
<td>3.33</td>
</tr>
<tr>
<td>B-</td>
<td>74-78</td>
<td>3.00</td>
</tr>
<tr>
<td>C+</td>
<td>68-73</td>
<td>2.75</td>
</tr>
<tr>
<td>C</td>
<td>65-67</td>
<td>2.67</td>
</tr>
<tr>
<td>C-</td>
<td>62-64</td>
<td>2.50</td>
</tr>
<tr>
<td>D</td>
<td>60-61</td>
<td>1.75</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60</td>
<td>0.00</td>
</tr>
</tbody>
</table>

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 I 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 I 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 Rector.

Following tables shows the approved absences for a course during a semester.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Approved Absences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Semester</td>
<td></td>
</tr>
<tr>
<td>Weekdays</td>
<td>4 days</td>
</tr>
<tr>
<td>Weekend</td>
<td>2 days</td>
</tr>
<tr>
<td>Summer Semester</td>
<td></td>
</tr>
<tr>
<td>Weekdays (Crash)</td>
<td>3 days</td>
</tr>
<tr>
<td>Weekend</td>
<td>2 days</td>
</tr>
</tbody>
</table>

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 Rector for approval. After Rector’s approval, the student will have to sign an attendance undertaking.
IoBM 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 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.co/

DRESS CODE POLICY

Appropriate attire enhances the personality and contributes to successful nonverbal communication in the workplace.

IoBM expects its students to reflect its values & standards in every way, and especially in the way they dress and conduct themselves. This will enable them to make a positive impression and project a professional image wherever they go.

In order to achieve the above stated objectives, the following guidelines must be strictly observed:

• All clothing worn by students should be well laundered.
• Clothes should be inoffensive in terms of cuts and style, or by way of messages printed on them.
• Female students may only wear jeans provided their tops are of mid-thigh length. They should also be modest and avoid transparent materials and short lengths for sleeves and trousers/shalwars.
• Only light make-up jewelry and perfume is permitted.
• Male students are only allowed full length trousers and jeans. For footwear, they must wear dress shoes, moccasins, joggers or sandals with back straps.
• Male students should maintain proper haircuts and refrain from piercing their ears and faces.

No variation or violation in all of the above will be permitted and students doing so will be marked absent in their respective classes.


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. Traditionally, 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 check 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 pretext.

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 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 equivalnecy may also be required for A-Level

In addition:
- Atleast 5C’s in O-Level exam or minimum 55% marks in SSC or equivalent
- Success in aptitude test and interview conducted by IoBM

*Subject to revision by the IoBM Management

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:
- Success in aptitude test and interview conducted by IoBM

*Subject to revision by the IoBM Management

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

*Subject to revision by the IoBM Management
In addition:
- Success in aptitude test and interview conducted by IoBM

*Subject to revision by the IoBM Management

Eligibility for entrance to two year Master’s Programs:
The admission for Master’s Programs would be based on any one of the following:
- A four-year Bachelor’s degree 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
- Success in aptitude test and interview conducted by IoBM

*Eligibility criteria is subject to revision by the IoBM Management.

Eligibility for entrance to two year MBA (Regular) Weekend / Evening Programs:
The admission for MBA (Regular) Weekend Program would be based on any one of the following:
- A four-year Bachelor’s degree 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
- Students with 2/3-year Bachelor’s degree are eligible only for MBA Evening (3.5 year) program

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
- Success in aptitude test and interview conducted by IoBM

*Eligibility criteria is subject to revision by the IoBM Management

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
- Success in aptitude test and interview conducted by IoBM
- Candidates must score minimum 50% marks in exam conducted by IoBM OR in NTS GAT
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 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-requisite 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:
- Success in interview conducted by IoBM
- Candidates must pass NTS (60% or more marks in subject exam) or equivalent

Programs Duration:

<table>
<thead>
<tr>
<th>Program</th>
<th>Credit Hours</th>
<th>Minimum Years</th>
<th>Maximum Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Undergraduate Programs</td>
<td>108</td>
<td>3.5</td>
<td>5</td>
</tr>
<tr>
<td>Graduate Programs</td>
<td>72</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>Postgraduate / MS / MPhil</td>
<td>36</td>
<td>1.5</td>
<td>4</td>
</tr>
<tr>
<td>Postgraduate PhD</td>
<td>36</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

In special cases IoBM has the right to grant additional extension which will be decided on case to case basis.

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 from IoBM are eligible to register for MBA. 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

IoBM 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
IoBM 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:

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Registration Fee</th>
<th>Tuition Fee* (per course)</th>
<th>Fee on the basis of Per Credit Hour</th>
<th>Tuition Fee Full Load**</th>
<th>Total Fee* (per semester)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Bachelor’s Programs</td>
<td>10,000.00</td>
<td>15,900.00</td>
<td>5,300.00</td>
<td>95,400.00</td>
<td>105,400.00</td>
</tr>
<tr>
<td>All Master’s (Regular) Programs</td>
<td>10,000.00</td>
<td>17,100.00</td>
<td>5,700.00</td>
<td>102,600.00</td>
<td>112,600.00</td>
</tr>
<tr>
<td>All Master’s (Specialized / Weekend) Programs</td>
<td>7,000.00</td>
<td>17,100.00</td>
<td>5,700.00</td>
<td>68,400.00</td>
<td>75,400.00</td>
</tr>
</tbody>
</table>

* Subject to change
** Six courses for regular, four courses for weekend / evening programs and three courses for MS/Phil or PhD programs

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.

<table>
<thead>
<tr>
<th>Post Graduate Programs</th>
<th>Registration Fee (1-2 Courses)</th>
<th>Tuition Fee Per Course</th>
<th>Thesis, External Examiner, Viva Voce, Exam, Supervisors and Foreign Examiner Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS / MPhil Programs</td>
<td>3,500.00</td>
<td>11,500.00</td>
<td>63,000.00</td>
</tr>
<tr>
<td>PhD Programs</td>
<td>5,000.00</td>
<td>12,500.00</td>
<td>325,000.00</td>
</tr>
</tbody>
</table>

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.
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 7 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:

<table>
<thead>
<tr>
<th>%age of Tuition Fee</th>
<th>Timeline for Semester System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full (100%) Fee Refund</td>
<td>up to 7th day of commencement of classes</td>
</tr>
<tr>
<td>Half (50%) Fee Refund</td>
<td>From 8th-15th day of commencement of classes</td>
</tr>
<tr>
<td>No Fee (%) Refund</td>
<td>From 16th day of commencement of classes</td>
</tr>
</tbody>
</table>
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 department 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.
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 Syed Karim, President IoBM
- Mr. Justice Irfan Saadat Khan
- Secretary Universities & Boards Department, Government of Sindh
- Prof. Dr. M. Ajmal Khan
- Prof. Dr. Sarosh Hashmat Lodi
- Mr. Muhammad Ali Tabba
- Mr. Masood Hashmi
- Prof. Dr. Syed Irfan Hyder, Rector IoBM
- Deans of respective Colleges
- 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 study 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

IoBM 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:

- Dr. Muhammad Saleem
- Dr. Abuzar Wajidi

Board of Studies

The following departments exist in the Institute:

**College of Business Management (CBM)**

**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)**
Electronics & Telecommunication

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
- Dr. Mehtab S. Karim
- Mr. Sani Ahmed
- Dr. Musarrat Hasan
- Mr. Mohsin Furqan
- Dr. Ahmer S. Karim
- Mr. Mehboob S. Karim
- Mr. Nabhan Shah Karim
- Mr. Talha S. Karim
- Mr. M.W.Jahangir, Secretary
FACULTY
Rector

Prof. Dr. Syed Irfan Hyder, Rector IoBM, 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.

College of Business Management (CBM)

The Acting Dean

Prof. Dr. Amanat Ali Jalbani, Senior Advisor to President and HoD ORIC & Graduate Studies, holds a PhD in Business Management from Edinburgh University, Scotland, UK. In addition, he holds a Post Graduate Diploma from Scoula Mattie, Milan, Italy and Master in Business Management from The University of Sindh, Jamshoro. His career spans over 30 years of experience in higher education leadership, academics, management, tertiary level teaching, and research. He has worked as Vice President, Acting President, and Dean Management Sciences at SZABIST from 2002 to 2014. In addition, he worked as a faculty member at International Technological University (USA) and Professor and Chairperson at Isra University Hyderabad and SALU. He has provided administrative and business consultancy to both public and private domains in Pakistan. He is an HEC approved research supervisor having supervised several PhD and MPhil/MS students. He is a member of various academic and non-academic bodies and an editorial boards of different research journals. He has reviewed various research papers, theses, and dissertations of various universities in and outside Pakistan. He has over 60 research publications to his credit at national and international levels. He has organized several international conferences and has conducted various workshops and training with the UNO, UNoPS, SIDA, SMEDA, PITAC, etc.

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.

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. Pirzada’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 include 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.

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 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.
Communication & Languages

**Dr. Mehwish Saleem**, Assistant 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 an MPhil from Iqra University, MBA from IoBM and an MA in English Literature and Linguistics from the University of Karachi. He is a PhD Scholar in Education from IoBM. 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.

**Muhammad Irfan Sheikh**, Assistant Professor, holds an MPhil. He received his MA in English Literature and Linguistics from the National University of Modern Languages (NUML) and his BCom from the University of Karachi, Bachelor of Education from Hamdard University and ‘Training to Teach English for Specific Purposes’ (TTESP) from the Aga Khan University. Currently, he is a PhD Scholar at IoBM. He is a member of PARE (Pakistan Association for Research in Education) and SPELT (Society of Pakistan English Language Teachers). He has developed a website “Webell” for ELT and research purposes.

**Shumaila Omar**, Assistant Professor, is a CELTA and IELTS qualified teacher and a trainer, holds an MPhil (Linguistics) from Hamdard University, MA in English Literature and MA in Linguistics from Karachi University. Currently, she is enrolled in the PhD program (Linguistics) at Hamdard University. She has a diverse and rich teaching experience in Academic English and Business Communication. In addition to teaching, she has held workshops in ELT across UAE Universities and was working part-time at Collegiate American school, Dubai. She is a member of TESOL (Teaching English to Speakers of Other Languages) International and Arabia, IATEFL (International Association of English as a Foreign Language) and SPELT(Society for Pakistan English Language Teachers). Her research interests are ‘motivational strategies in the classroom,’ ‘learners’ autonomy’ and ‘language assessment’.
Syed Muhammad Sajid Siraj, Senior Lecturer, holds a Master in English Linguistics from the University of Karachi and is currently enrolled in an MS Applied Linguistics program at NED University of Engineering and Technology. He has also earned CELTA certification from University of Cambridge and ESP certification from the Aga Khan University. He has worked locally and internationally in different reputable organizations as a teacher, lecturer, trainer in ESL, ESP and EAP contexts. He is an active member of Society of the Pakistan English Language Teachers (SPELT) and Cambridge English UK. He has presented research paper at International EFL conference and has been associated with British Council’s programs.

Akhlaq Ghouri, Senior Lecturer, holds a Master’s degree in International Relations from the Karachi University and completed his MPhil course work at ASCE Karachi. He has done a two-year Diploma in French Language from University of Karachi. He also obtained DELF-Diplôme d’études en langue française from République Française Ministère de l’Éducation Nationale. He has a vast experience of teaching French language. His areas of interest include communication skills and in the near future he plans to pursue his MPhil and PhD in Applied Linguistics.

Lubna Farhan Ali, Senior Lecturer, is a researcher by passion and an ELT practitioner and entrepreneur by profession. She holds an Honor’s degree in English Literature and Linguistics, a Master’s degree in English Literature and another Master’s degree in English Linguistics from the University of Karachi. She is currently pursuing an MPhil in Applied Linguistics and actively participates in research related events and activities. She has presented papers at multiple conferences and forums including ICLAP (International Conference of Linguistic Association of Pakistan); USICOLL (University of Sindh, International Conference on Literature and Linguistics); ICETESS (International Conference on Innovation and Emerging Trends in Education and Social Sciences, Iqra University); ICELLES (1st International Conference on English Language, Literature, Education and Society, Lahore Garrison University); ICEL (3rd International Conference on Experiential Learning, Institute of Business Management); 11th International Conference on Assessment and Evaluation in the Global South: Engaging and Transforming Discourses and Practices, Agha Khan University) and conducted workshops at SPELT and other forums. Her areas of interest include historical and comparative linguistics, global Englishes and strategic vocabulary development in ESL context.

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.
Ahsan Alam, Lecturer, holds a Master’s Degree in English Linguistics & Literature from National University Modern Languages, Islamabad and Bachelor in Education. Currently, he is pursuing his MS in English Linguistics. He has worked in various private Universities, NGOs and O/A Levels schools as teacher, lead teacher, trainer, lead trainer, academic coordinator and project coordinator. He is a foreign certified teaching and learning professional who has had extensive experience of working with youth and professionals from all over Pakistan and abroad on a wide array of subjects such as English language teaching and learning, personality development, communication skills and public speaking, promotion of leadership qualities and career guidance. He is currently pursuing his MPhil in English Linguistics from Iqra University. He is a speaker, coach and mentor; He delivers presentations addressing specific challenges. He has run the English Access Micro-scholarship Program with Society for International Education in partnership with the US Embassy, Islamabad from 2010 to 2016 developing both students’ personalities and English language skills. He has also run a project with Development in Literacy Foundation as Project Manager Cum Master Trainer, working with underserved youth from Karachi on leadership, communication, English Language, SAP and community peace activism. In addition, he has also achieved significant milestones in short term projects effectively and efficiently.

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.

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 the 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 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.
Health and Hospital Management

Dr. Asima Faisal, Assistant Professor and Head of the Department, is an MPhil in Business Management, PhD Scholar and an MBA (Health & Hospital Management) graduate of IoBM. She did MBBS from Sindh Medical University (now JSMU). She has more than 20 years of experience in the health industry and has served in diverse areas of Health Management in Pakistan. She served as Director Media & Marketing and Director, Programs for Institute of Health Management (IHM) at DOW University of Health Sciences (DUHS). She was associated with the Sind Education Foundation, where she arranged health camps and health Trainings of Teachers (TOTs) all over Sind for more than 900 underprivileged schools. Dr. Asima Faisal has been actively involved in CSR activities like free Health camps, flood relief, disaster management activities and conducting TV shows on various medical and health management issues of society. She is a member of the subject committee for pharmaceutical representatives training and assessment by the National Testing Service (NTS). Being a Certified Master Trainer, Dr. Asima Faisal has been conducting GlaxoSmithKline Continuing Medical Education programs (CME) for health care professionals, all over Pakistan. Added to her credentials, on the academic front, Dr. Asima Faisal has presented research papers at various National and international conferences and forums in Italy, USA, India, Japan and France. She has authored and co-authored more than 17 published research papers and supervised more than 35 MBA thesis in the field of Health Management. She was sent by the British High Commission as a Counselor to the universities in the United Kingdom for pursuing avenues of internationalization of higher education between the two countries. She was also affiliated with South City Hospital in sharing her expertise in managerial and administrative areas.

Dr. Ather Akhlaq Assistant Professor, has done PhD in eHealth (Health Informatics) from the University of Edinburgh, Scotland UK. He is currently working at IoBM as an Assistant Professor of eHealth in the department of Health and Hospital Management. He did his MPhil in Management (digital commerce) and also received a Master’s degree in Computer Sciences from IoBM. At IoBM, he is teaching Advanced Qualitative Research and Health Management Information Systems to PhD, MPhil and MBA students. His research interests include health information technology (HIT) / eHealth and telehealth to enhance safety, efficiency and quality of healthcare.

Abdur Rahman Aleemi is Senior Lecturer and Research Consultant to the MHM Research Cell (MRC) at IoBM, Karachi. He currently holds an MPhil from IQRA University and MBA from the Virtual University of Pakistan in Finance. He is also pursuing his PhD in Business Management from IoBM where his research interests fall in the area of Banking Regulations, Supervision and Stability. He is also a lead researcher in the area of Banks, Charter Value and Market Discipline. Mr. Aleemi possesses more than nine years of diversified experience of industry and academia. He has served both in academia and industry at different positions for various projects and responsibilities. He is an experienced researcher and consultant in the field of Islamic and Conventional Finance, Economics, Management, Operations and Health Management. He has published several research papers in HEC-recognized and impact factor journals and has also presented his research work in several national and international conferences. He is also leading Capstone Projects at IoBM.
Management and HRM

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 Management 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 Seputy 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. Bilqees Ghani is 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 Rafif Ghauri, Assistant Professor, holds an MPhil degree in Business Management from IoBM and a PhD in Business Management. She has worked with different business universities and has been associated with IoBM for the past nine years, teaching Management courses and has been involved with curriculum development and training manuals. Her research interest areas are Organization Behavior, Job satisfaction, Contemporary issues in Management; Leadership styles, Motivation and Creativity. She 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 six 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, Moblink, 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, carrying out 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.
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 currently engaged as a full time academic at IoBM and is also engaged in business consultancy, training and research. 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.

Muhammad Azeem Qureshi, Senior Lecturer, holds an MS in Management Sciences and MBA in HRM from Institute of Business and Technology, Karachi. Currently, pursuing a PhD in Business Management from IoBM, where his research interest falls in the area of leadership character, he also serves as Section Editor, Management & HR for Pakistan Business Review. He was awarded a gold medal and a Summa Cum Laude Award for outstanding performance in MS. He obtained professional certification in Oracle 8, Develop 2000 and Database Administration. He also has certification in Database Management System. He has diverse experience of more than fourteen years and has served both in academia and industry in different positions for various projects. He is an experienced researcher and has published several research papers in HEC recognized peer-reviewed journals. He has presented his research work in several national and international conferences. His research area covers leadership, ethics and layoff survivor sickness.

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.

Farheen Khalid, Lecturer, she completed her MBA & BBA from IoBM. Currently she is enrolled in PhD in Business Management at IoBM. Before that, she has worked at Allied Bank (Corporate Investment Banking), Continental Biscuits, Dewan Mustaq Group and Brand Image. Her main areas of research areas are Neuro Marketing, Consumer Behavior, Experiential Learning, and Strategic Marketing & Branding.

Kanwal Gul, Lecturer, holds an MPhil in Business Management from IoBM and an MBA in Marketing from IBA Sukkur. She has also served at IoBM as Research Assistant in Human Resource & Management Department. She has worked for financial institutions such as UBL, HBL, NIB Bank and Jubilee Insurance for approximately 3 years. In addition to her corporate experience, she had worked as a Senior Auditor and member of Faculty in Management Sciences at ILMA University. She has also served as visiting member of faculty at IQRA University where she taught qualitative and quantitative research techniques to the Master’s students. Along with teaching experience, she became seriously committed through pursuing a career in research and teaching. She has two years of academic research writing experience. Her research focus lies in the areas of Employee Engagement, Student Engagement and Emotional Intelligence and organizational efficiency.

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.
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.

**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. Syed Amir Saeed**, Assistant 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.

**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 member 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 6 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, 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.

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.
College of Computer Science and Information Systems (CCSIS)

Dr. Muhammad Mansoor Alam, Associate Professor and Associate Dean has nineteen years of research and teaching experience in Canada, England, France, Malaysia, Saudi Arabia and Bahrain. He has the honor of working as an online laureate (facilitator) for the MSIS program run by Colorado State University, USA and Saudi Electronic University, KSA. He has been also engaged in research collaboration with the Universiti Kuala Lumpur (UnikL) and Universiti Malaysia Pahang (UMP). Currently, he is supervising six PhD students at UnikL and UMP. He holds a PhD in Computer Engineering, a PhD in Electrical and Electronic Engineering, an ME in Systems Engineering and MSc in Computer Science. He is an active researcher in the field of Telecommunication and Network. He has authored more than 60 research articles published in ISI indexed journals, as book chapters and in peer reviewed conferences. He is also an author of the book “Study guide of Network Security” copyrighted by Open University Malaysia and Open University Hong Kong. He is also an active reviewer of ISI indexed journal “Pertanika Journal of Science and Technology (JST)

Actuarial Science, Risk Management, Mathematics and Statistics

Dr. S. M. Aqil Burney, Professor and Head of the Department, holds a PhD (Mathematics) from Strathclyde University, Glas-gow-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 Department of of Computer Science, University of Karachi. He has published more than 150 research papers and 7 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.

Dr. Tajuddin Islamuddin, Associate Professor, holds a PhD in Statistics from the University of Windsor, Canada. He has taught for about eight years at the University of Karachi and IBA and over thirty years outside Pakistan. He received number of merit scholarships throughout his academic career. He has to his credit a number of publications in reputed international journals and has developed a new measure of skewness. He has refereed a number of papers for well-known international journals.

Dr. Massarrat Ali Khan, Associate Professor, holds a PhD from Hamdard University, MBA from IBA and MSc in Statistics major-ing in Operations Research from the University of Karachi. He has 16 years of professional experience in private sector industr-ies in Pakistan and abroad in which he worked with companies such as Philips Electric Company of Pakistan, Al-Futtaim Group of Companies, Juma Al Majid Establishment in UAE and NMC(National Management Consultant) Pakistan. He also has more than 19 years teaching experience in different universities and colleges. He taught at IBA, Hamdard University, ICMAP, Bahria University, CAMS, Textile Institute of Pakistan and has been associated with IoBM for 14 years as visiting faculty before joining the Institute on a permanent basis. He has conducted several marketing research and business development studies in Pakistan and abroad. His areas of interests are Operations Research for Management, Operations and Production Management, Quantitative Analysis for Business and Management, Statistical Inference and Mathematics.
Dr. Muhammad Danish, Assistant Professor, holds a PhD from Lahore University of Management Sciences, MSc in Mathematics from Federal Urdu University and BS in Computer Science from Petroman Training Institute. He has taught at Lahore University of Management Sciences, Lahore School of Economics and University of Punjab prior to joining IOBM. Dr. Danish has several publications in leading international journals to his credit.

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 Finance, 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 Pakistan 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.

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, Professor and HoD of Computer Science & MIS Department, has received BSc (Hons) and MSc degrees in Computer Science from the University of Sindh, Jamshoro, Pakistan and holds a PhD (1999) in Computer Applications from Zhejiang University, Hangzhou, China. He has had more than twenty four 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, 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 seventy five 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, Member Project Management Institute (PMI) and Senior Member, International Association of Computer Science and Information Technology (IACSIT). Also, he is life member, Computer Society of Pakistan (CSP) and global member, Internet Society (ISOC) USA since 2006.

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, has an MS in Computer Science Data Mining from IoBM. He completed his Master in Computer Science from the University of Karachi and had an MBA in Banking & 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 a senior member of IEEE and Rapid Miner Community. His research interests include Data Mining, Big Data, Fuzzy Logic, Human Centric Computing, Image processing and Machine Learning. He has proficiency in Programming Languages specially Object Oriented Programming (Java and C++), Computer Graphics, Engineering Dr.awing, Computer Aided Designing, Multimedia Technologies, Relational Database Management System and Customer Relationship Management. He has a mix of over seventeen years of experience in industry including Dawlance (Pvt) Ltd and Pakistan Petroleum Ltd.

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 abreast 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 masters 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 teaching spend 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.
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 at the University of Malaga, Spain. She did her MS-CS / Telecommunication from The University of Missouri Kansas City, USA and a BE in Electronics from NED-University of Engineering & Technology. Her research includes publications in JCR Impact factor journals, international journals & conferences and book chapters. She contributed chapters to books titled: “Wireless Sensor Networks and Energy Efficiency: Protocols, Routing and Management” and “Handbook of Research on Trends and Future Directions in Big Data and Web Intelligence,” both published by IGI GLOBAL, USA in 2011 and 2015 respectively. She is associated with the R & D research groups, TIC102 and TIC128, ETSI Telecommunication, University of Malaga, Spain. Her research areas are Underwater Communications and Analytical Analysis of MAC protocols for Underwater Acoustic Wireless Sensor Networks.

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 focusses 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, has designed a framework for the convergence of Information and Communication Technology in Pakistan.
Dr. Shadi Khan Baloch, Assistant Professor, obtained his PhD in Electrical and Electronics Engineering from Koc University, Istanbul, Turkey. He was awarded an MS leading to a PHD scholarship by HEC under “UESTP-HRDI Scholarships / Faculty Development Program”. He did Bachelor in Electronics Engineering from Mehran UET Jamshoro, Sindh. His research interests include using Micro-Electro-Mechanical Systems and Optofluidics (Refractive Index Based Sensing) for sensing applications (Chemical and biosensors). He worked on the European Union’s Horizon 2020 research and innovation programme under grant agreement No 685648 project. He has five years of teaching/research assistant experience. He also worked as Assistant Manager Transmission in PTCL for four years. He has published three journal papers in good impact factor journals and presented his research work in important conferences.

Rashid Qutub, Senior Lecturer, has an MSc in Production Management from Technical University Hamburg Harburg, Germany and B.E Mechanical Engineering from NED Engineering University. He got the opportunity to work with German Aluminium manufacturing company, Hydro Aluminium in Hamburg and has worked in-depth 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, Lecturer, 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 also has four research publications in journal recognized by HEC, that is, PJETS (Pakistan Journal of Engineering Technology & Science).

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.

Industrial Engineering

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 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 has industry experience of eight years with her prime working areas as quality control, inventory control, project management and supply chain dynamics. She taught as visiting faculty since 2015 before joining IoBM as full time.
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.

Abdul Jabbar Kasim, Associate Professor, brings a rich blend of corporate, professional and academic experience. Besides heading listed leasing companies as a CEO and member board, he has taken seats as nominee director on various corporate boards. He obtained his MBA and BBA degrees from IBA Karachi. His main emphasis during the last several years is on Corporate Governance and best business practices and corporate affairs. His articles on the said subject appear in the Daily Dawn and Business Recorder. He joined IoBM as a full time faculty in October 2011.

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. 169)

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 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.

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-i-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).

Hira Mujahid, Senior Lecturer, is enrolled in a PhD Economics program at the University of Karachi. She has acquired MPhil degree from the Applied Economic Research Center. She has written seven research articles which have been published in international journals and local articles in local newspapers. She has also participated in many international conferences and worked as a team player in organizing international conferences and seminars.
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 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 diversified 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 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 twelve years of teaching experience at diversified levels. So far, he has published 5 peer-reviewed articles in reputed international journals. He is an HEC Approved PhD Supervisor and also an Associate Editor of the Journal of Education and Educational Development (JoEED). He is on the editorial/review board of several other research journals in the field of education. He has 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 include 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’s in Government and International Studies from the University of South Carolina where she went on Fulbright Hayes Scholarship. Her first Master’s 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 Initiative.

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 representatives 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, Associate Professor and Head of the Department, received Post-Doctoral Fellowship from 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 20 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, Tbilisi, Georgia in 2014 on Leadership Development for Higher Education Reform (LEADHER) project funded by 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, Senior Lecturer, is currently a PhD scholar in the University of Karachi. She holds an MPhil in Psychology from University of Karachi. She secured first class first position in MA in Organizational Psychology. Her research focuses on Organizational Dynamics, Consumer Psychology, Psychometrics, and Human Factors at work place. She has published two papers and few other 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 5 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 SPLEU 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 in 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.

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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MA, KU
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree/Program</th>
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<tr>
<td>Naveed Ilyas Saya</td>
<td>MBA-Marketing-IoBM</td>
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<td>Obaid Ur Rehman</td>
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<td>MS-Comp. Sc., SZABIST</td>
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<td>Pervez Mobin</td>
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<td>Qazi Muhammad Zulqarnain</td>
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<td>Rahul Aijaz</td>
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<td>Saad Shakeel</td>
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<td>Shaharyar Ahmed</td>
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<tr>
<td>Syed Zia Abbas Rizvi</td>
<td>MAS, M Phil-Economics, AERC</td>
<td></td>
</tr>
<tr>
<td>Tabbasum Shaikh</td>
<td>Bachelors, KU</td>
<td></td>
</tr>
<tr>
<td>Taha Durrani</td>
<td>MBA-Media, IoBM</td>
<td></td>
</tr>
<tr>
<td>Taimoor Mushtaq</td>
<td>M.Com-Commerce, Australia</td>
<td></td>
</tr>
<tr>
<td>Tanveer Ihsrat</td>
<td>MPhil-HRM</td>
<td></td>
</tr>
<tr>
<td>Syed Muhammad Arif Azam</td>
<td>MBA (Ind. Mgmt) IoBM</td>
<td></td>
</tr>
</tbody>
</table>
Tariq Aziz
MBA-MIS, USA

Tariq Hamid Butt
MBA

Tarique Aslam Qureshi
MBA-Marketing, IoBM

Tooba Kamil
MA-English Literature, KU

Umair Masoom
MBA-Marketing, IoBM

Umair Sani
MSc-Computer Science, SZABIST

Usman Ali
MPphil, Iqra

Usman Sajjad
MBA-Finance, IBA

Waliya Ahmed Mughis
MS (Psychology), Kent-UK

Waseem Akhtar Mufti
MS (Software Engg.), Denmark

Yasir Hussain
Master (Cultural Studies), USA

Yousuf Aboya
MS (Economics) IoBM

Yousuf Ikram
CA-Finalist, ICAP

Zain Ul Abydeen Khandwani
MBA-Marketing, IoBM

Zain Zulfiqar Ali
PGD-Photography, Indus Valley

Zain Zulfiqar Hussaini
MA (Education), London-UK

Zaki Anwar Khan
MBA, IBA
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. Amanat Ali Jalbani
Dean CBM & Advisor to President & HoD
Office of Research, Innovation and Commercialization (ORIC) & Graduate Studies
PhD Edinburgh University, Scotland, UK

Najmuddin A. Shaikh
Advisor Research and Head of Global and Regional Studies Centre
MA from the Fletcher School of Law and Diplomacy

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)
Dr. Samra Javed  
Head of EMEC & Advisor to Office of the President  
PhD in Education

Muhammad Muzhar Uddin Ahmed  
Senior Manager & HoD  
Maintenance and Security  
MS

Syed Maqbool ur Rehman  
Controller of Examinations  
MBA

Kausar Saeed  
Senior Manager & HoD  
Internship  
MS

Muhammad Misbahuddin  
Advisor to ED-Admin  
HR, Purchase & General Administration  
MBA, LLB

Aslam Kurban Ali  
Senior Manager & HoD, Finance  
ACMA

Parvez Jamil  
Manager  
Public Relations  
MA

Riaz Akbar Contractor  
Proctor and Manager Sports & Student Affairs  
B.Com

Syed Aley Ahmed  
Manager Projects  
BE Civil, FIE, PE

Imdad Ali Mugheri  
Manager & HoD  
Admissions  
MBA, LLB

Asim Farooq  
Manager & HoD  
Information Technology  
BCS

Syed Adnan Faisal  
Manager, Maintenance  
BE, Electrical Engineering

Nadeem Ahmed Khan  
Manager, Internal Audit  
MBA, CIMA Finalist (England)  
Chartered/Corporate Sec. FCIS (Pak/England)

Shaikh Muhammad Sharif Nasir  
Librarian  
MLIS
Malik Barolia  
Manager  
Salary & Compensation  
MBA, ACMA-II

Fesal Bin Naseem  
Senior Assistant  
Controller of Exam  
MS IT, MS Applied Physics

Yasir Jamal Pasha  
Assistant Manager &  
Head of Academics Department  
MBA

Muhammad Hassan Sayeed  
Assistant Manager  
Admissions  
MBA

Syed Kamran Ahmed Bilgrami  
Manager Alumni &  
Head of Corporate Trainings  
MSC Marketing, UK

Atif Shahab  
Senior Assistant Manager  
Quality Enhancement Cell (QEC)  
MPhil, PhD Marketing (in Progress)

Muhammad Adnan  
Assistant Manager  
Information Technology  
MBA, MIS

Abdul Latif  
Senior Assistant Manager  
Human Resource Department  
MA

Abdul Khaliq  
Assista Manager  
Internship & Placement  
MBA

Nabhan Shah Karim  
Assistant Manager  
Media Studies  
MA (UK), BA, (USA)

Masood Hasan  
Assistant Manager  
Finance  
MBA

Naseem Haq  
Assistant Manager  
Purchase  
MBA

Lt. Cdr. (R) Sartaj Hussain  
Senior Assistant Manager &  
HoD Purchase  
BA

Fesal Bin Naseem  
Senior Assistant  
Controller of Exam  
MS IT, MS Applied Physics

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Assistant Manager  
Purchase  
MBA

Lt. Cdr. (R) Sartaj Hussain  
Senior Assistant Manager &  
HoD Purchase  
BA
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mehmood Ahmad</td>
<td>Senior Accountant</td>
<td>B.Com</td>
</tr>
<tr>
<td>Mohammad Arif Shaikh</td>
<td>Senior Maintenance Officer</td>
<td>Diploma of Associate Engineering</td>
</tr>
<tr>
<td>Syed Mustafa Hussain</td>
<td>Senior Academics Officer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MA</td>
</tr>
<tr>
<td>Abdul Sajid Khan</td>
<td>Senior Accountant</td>
<td>CA (Intermediate)</td>
</tr>
<tr>
<td>Rashid Aqeel</td>
<td>Senior Officer, Internal Audit</td>
<td>CA Finalist</td>
</tr>
<tr>
<td>Syed Khalid Mehmoood</td>
<td>Senior Officer/Project Lead (CMS)</td>
<td>Analyst MS, MBA</td>
</tr>
<tr>
<td>Abid Ali</td>
<td>Senior Accountant</td>
<td></td>
</tr>
<tr>
<td>Mohammad Kamran</td>
<td>Senior PR Officer</td>
<td>MCS</td>
</tr>
<tr>
<td>Ameen Ali</td>
<td>Assistant Librarian</td>
<td>MLIS</td>
</tr>
<tr>
<td>Naeeem Mirza</td>
<td>Assistant Librarian</td>
<td></td>
</tr>
<tr>
<td>Muhammad Omar Iftikhar</td>
<td>Senior Accounts Officer</td>
<td></td>
</tr>
<tr>
<td>Hafiz Humayun Baig</td>
<td>Senior Registrar Officer</td>
<td></td>
</tr>
<tr>
<td>Muhammad Zahid</td>
<td>Senior Accounts Officer</td>
<td></td>
</tr>
<tr>
<td>Midhat Nadeem</td>
<td>Senior EMEC Officer</td>
<td></td>
</tr>
<tr>
<td>Muhammad Nazim Khan</td>
<td>Senior Maintenance Officer</td>
<td>MBA</td>
</tr>
<tr>
<td>Syed Irfan Hussain</td>
<td>Senior HVAC Officer</td>
<td></td>
</tr>
<tr>
<td>Hafiz Ahsan Ul Haq</td>
<td>Senior Purchase Officer</td>
<td></td>
</tr>
<tr>
<td>Farooq Ahmed</td>
<td>Executive Secretary to the President</td>
<td>BA</td>
</tr>
<tr>
<td>Ghulam Dastagir</td>
<td>Executive Secretary, Dean Office</td>
<td></td>
</tr>
<tr>
<td>Noman Ahmed</td>
<td>Corporate Affairs Officer</td>
<td></td>
</tr>
<tr>
<td>Zohaib Ian</td>
<td>HR Officer</td>
<td>MBA</td>
</tr>
<tr>
<td>Dr. Rustam Ali Leghari</td>
<td>Medical Officer</td>
<td></td>
</tr>
<tr>
<td>Farah Habib</td>
<td>OGS Officer</td>
<td>MBA</td>
</tr>
<tr>
<td>Faiza Hasan Rizvi</td>
<td>Coordinator, EMEC Projects</td>
<td></td>
</tr>
<tr>
<td>Farida Nawaz Ali Khuawaja</td>
<td>Student Exchange Officer</td>
<td>MBA</td>
</tr>
<tr>
<td>Sumaiya Mithani</td>
<td>Alumni Officer</td>
<td></td>
</tr>
<tr>
<td>Samiullah Sarwar</td>
<td>Editorial Officer</td>
<td>MPhil</td>
</tr>
<tr>
<td>Raheel Naz</td>
<td>H&amp;HM Officer</td>
<td>MBA</td>
</tr>
<tr>
<td>Nida Iqbal</td>
<td>Library Officer</td>
<td>MLIS</td>
</tr>
<tr>
<td>Syed Noman Reyaz</td>
<td>Network Support Officer</td>
<td>BA</td>
</tr>
<tr>
<td>Muhammad Faisal Nisar</td>
<td>IT Officer</td>
<td>B.Com</td>
</tr>
<tr>
<td>Asad Hussain</td>
<td>Outreach Officer</td>
<td></td>
</tr>
<tr>
<td>Amir Ali Khan</td>
<td>Admission Officer</td>
<td>BA</td>
</tr>
<tr>
<td>Syed Muhammad Zeeshan</td>
<td>Accounts Officer</td>
<td>MA</td>
</tr>
<tr>
<td>Syed Muhammad Ayaz</td>
<td>Administrative Officer</td>
<td></td>
</tr>
<tr>
<td>Tariq Majeed</td>
<td>Graphic Designer</td>
<td>BS</td>
</tr>
<tr>
<td>Hussain Ali</td>
<td>Media Coordinator</td>
<td>BS</td>
</tr>
<tr>
<td>Sheroonia Zameer</td>
<td>Admission Officer</td>
<td></td>
</tr>
<tr>
<td>Bushra Mairaj</td>
<td>Editorial Officer</td>
<td></td>
</tr>
<tr>
<td>Amna Khalil</td>
<td>HR Officer</td>
<td>B.Com</td>
</tr>
<tr>
<td>Syed Shahzad Alam</td>
<td>HR Officer</td>
<td>M.Com</td>
</tr>
<tr>
<td>Asim Ahmed Khan Yousfi</td>
<td>Assistant Registration Officer &amp;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Catalog Composer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diploma in Graphic Designing</td>
<td></td>
</tr>
</tbody>
</table>
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 2016-2017:

**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 2019

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration of Courses and Fee Payment</td>
<td>Saturday, August 03, 2019 to Monday, September 16, 2019</td>
</tr>
<tr>
<td>(On board students)</td>
<td></td>
</tr>
<tr>
<td>Orientation for newly admitted students</td>
<td>Saturday, September 07, 2019</td>
</tr>
<tr>
<td>Commencement of Regular Classes</td>
<td>Monday, September 09, 2019</td>
</tr>
<tr>
<td>Commencement of Weekend Classes</td>
<td>Saturday, September 14, 2019</td>
</tr>
<tr>
<td>Muharram*</td>
<td>Monday, September 09, &amp; Tuesday September 10, 2019</td>
</tr>
<tr>
<td>Last day to drop courses without penalty</td>
<td>Saturday, October 19, 2019</td>
</tr>
<tr>
<td>Iqbal Day</td>
<td>Saturday, November 09, 2019</td>
</tr>
<tr>
<td>Eid-e-Milad-un-Nabi (SAW)*</td>
<td>Sunday, November 10, 2019</td>
</tr>
<tr>
<td>Last day to drop courses with penalty</td>
<td>Saturday, November 23, 2019</td>
</tr>
<tr>
<td>Classes End</td>
<td>Sunday, December 15, 2019</td>
</tr>
<tr>
<td>Break</td>
<td>Monday, December 16 to Sunday, December 22, 2019</td>
</tr>
<tr>
<td>Quaid-e-Azam’s Birthday</td>
<td>Wednesday, December 25, 2019</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Monday, December 23, 2019 to Monday, January 06, 2020</td>
</tr>
</tbody>
</table>

## Exam Schedule for Regular and Executive Students

<table>
<thead>
<tr>
<th>Week</th>
<th>Exams</th>
<th>Regular</th>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>1st Hourly</td>
<td>14/10 - 17/10</td>
<td>19/10 - 20/10</td>
</tr>
<tr>
<td>11th</td>
<td>2nd Hourly</td>
<td>18/11 - 21/11</td>
<td>23/11 - 24/11</td>
</tr>
<tr>
<td>16th</td>
<td>Final</td>
<td>23/12/2019 to 6/01/2020</td>
<td></td>
</tr>
</tbody>
</table>

* Subject to the appearance of moon.

**Note:**
All dates are subject to change. Students will be informed of the changes well in advance.
### SPRING 2020

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration of Courses and Fee Payment</td>
<td>Monday, December 10, 2019 to Saturday, January 18, 2020</td>
</tr>
<tr>
<td>(On board students)</td>
<td></td>
</tr>
<tr>
<td>Commencement of Weekend Classes</td>
<td>Saturday, January 11, 2020</td>
</tr>
<tr>
<td>Commencement of Regular Classes</td>
<td>Monday, January 13, 2020</td>
</tr>
<tr>
<td>Last day to drop courses without penalty</td>
<td>Friday, February 22, 2020</td>
</tr>
<tr>
<td>Pakistan Day</td>
<td>Monday, March 23, 2020</td>
</tr>
<tr>
<td>Last day to drop courses with penalty</td>
<td>Thursday, March 21, 2020</td>
</tr>
<tr>
<td>Classes End</td>
<td>Sunday, April 19, 2020</td>
</tr>
<tr>
<td>Break</td>
<td>Monday, April 20, 2020 to Thursday, April 24, 2020</td>
</tr>
<tr>
<td>Labor Day</td>
<td>Friday, May 1, 2020</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Saturday, April 25, 2020 to Thursday, May 7, 2020</td>
</tr>
</tbody>
</table>

#### Exam Schedule for Regular and Executive Students

<table>
<thead>
<tr>
<th>Week</th>
<th>Exams</th>
<th>Regular</th>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>1st Hourly</td>
<td>17/2 - 20/2</td>
<td>15/2 - 16/2</td>
</tr>
<tr>
<td>11th</td>
<td>2nd Hourly</td>
<td>24/3 - 30/3</td>
<td>21/3 - 22/3</td>
</tr>
<tr>
<td>16th</td>
<td>Final</td>
<td>25/4/2020 to 7/5/2020</td>
<td></td>
</tr>
</tbody>
</table>

* Subject to the appearance of moon.

**Note:**
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## SUMMER 2020

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration of Courses and Fee Payment (On board students)</td>
<td>Monday April 20, 2020</td>
</tr>
<tr>
<td>Commencement of Weekend Classes</td>
<td>Saturday, May 16, 2020</td>
</tr>
<tr>
<td>Orientation for newly admitted students</td>
<td>Saturday, May 16, 2020</td>
</tr>
<tr>
<td>Eid-ul-Fitr*</td>
<td>Sunday, May 24 to Tuesday, May 26, 2020</td>
</tr>
<tr>
<td>Last day to drop courses without penalty</td>
<td>Thursday, June 20, 2020</td>
</tr>
<tr>
<td>Last day to drop courses with penalty</td>
<td>Thursday, July 11, 2020</td>
</tr>
<tr>
<td>Eid-ul-Azha*</td>
<td>Friday, July 31, 2020 to Sunday, August 02, 2020</td>
</tr>
<tr>
<td>Independence Day</td>
<td>Friday, August 14, 2020</td>
</tr>
<tr>
<td>Classes End</td>
<td>Sunday, August 16, 2020</td>
</tr>
<tr>
<td>Break</td>
<td>Monday, August 17, 2020 to Friday, August 21, 2020</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Saturday, August 22, 2020 &amp; Sunday, August 23, 2020</td>
</tr>
<tr>
<td></td>
<td>Saturday, August 29, 2020 &amp; Sunday, August 30, 2020</td>
</tr>
</tbody>
</table>

### Exam Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Exams</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>1st Hourly</td>
<td>20/6 to 21/6</td>
</tr>
<tr>
<td>11th</td>
<td>2nd Hourly</td>
<td>25/7 to 26/7</td>
</tr>
<tr>
<td>15th</td>
<td>Final</td>
<td>22/8 &amp; 23/8 to 29/8 &amp; 30/8</td>
</tr>
</tbody>
</table>

## SUMMER CRASH 2020

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration of Courses and Fee Payment (On board students)</td>
<td>Tuesday, April 23, 2020 to Thursday, May 23, 2020</td>
</tr>
<tr>
<td>Commencement of Regular Classes</td>
<td>Monday, June 08, 2020</td>
</tr>
<tr>
<td>Last day to drop courses without penalty</td>
<td>Saturday, June 22, 2020</td>
</tr>
<tr>
<td>Last day to drop courses with penalty</td>
<td>Saturday, July 06, 2020</td>
</tr>
<tr>
<td>Classes End</td>
<td>Thursday, August 13, 2020</td>
</tr>
<tr>
<td>Eid-ul-Azha*</td>
<td>Friday, July 31, 2020 to Sunday, August 02, 2020</td>
</tr>
<tr>
<td>Independence Day</td>
<td>Friday, August 14, 2020</td>
</tr>
<tr>
<td>Break</td>
<td>Saturday, August 15, 2020 to Sunday, August 23, 2020</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Monday, August 24, 2020 to Thursday, August 27, 2020</td>
</tr>
</tbody>
</table>

### Exam Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Exams</th>
<th>Crash Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>Mid-Term</td>
<td>13/7 to 16/7</td>
</tr>
<tr>
<td>11th</td>
<td>Final</td>
<td>24/8/2020 to 16/8/2020</td>
</tr>
</tbody>
</table>

* Subject to the appearance of moon.

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