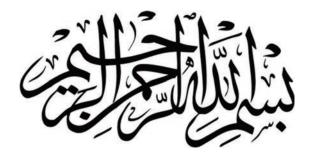


Prospectus 2016-17

Great Place Great Learning Great Future



In the Name of Allah, the Most Gracious, the Most Merciful



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Shaping **Leaders** to **Transform** Society

Why shouldn't you be Great? Even better? Why are you not great? How can you be great? Almost all humans can easily claim to be good, but only a few dream of becoming great, and very few actually achieve true greatness. Why?

The greatest loss that can happen to a person is the lack of ambition to become great. That is human potential gone unchecked, unharnessed. Then comes the loss of those who become casualties in search of greatness. This is different from failure on the road to become great which turns into only another learning opportunity. Imagine how great a human being can be? How noble and valuable a human being can be? How purposeful and productive? How creative and zestful? How unique and beautiful? How trustworthy and sincere? How crystalline and logical? How passionate and awesome?

The University of Management and Technology is here to help you to become great, truly exceptional. The resource persons act first as learners and then let the participants turn into their leaders. There are many good institutions around. Trace the road of the one that can launch you to the orbit of greatness. The one interested in you developing as a whole, a full person, capable of submerging the macrocosm in the microcosm of the self, and defining excellence and refining attributes to the extent that they mirror the pleasure, love, and blessing of *Allah*. Select an institution that will help you reform your attitude, enlighten your mindset, build your knowledge, develop your application, refine your character, and sharpen your practice. You walk in with the power of intention. You go out with the portfolio of all that it takes to achieve success here and the ultimate success in the hereafter. Beyond the degree, what determines your future is your invaluable treasure of self-image, enriched and enlightened, driven to life-long learning. Your future is your family's future, your nation's future, your *Ummah's* future, and your world's future. Infinite possibilities and endless vistas at UMT draw your attention to your own selves and demand that you give to yourself what it deserves the most. Greatness. Help us make you Great!

Dr Hasan Sohaib Murad

Rector



UMT.... A wonderful place to make your future.

Welcome to UMT, your gateway to knowledge and a bright future. You have made a great decision by investing in UMT education. This is a wonderful place where you will observe cultural diversity, feel exhilaration of life, and meet new friends. On the other hand, our professional teaching faculty will take you through a new experience in which you will learn creatively and grow up intellectually in a quite friendly but stimulating environment. The University Administration is here, always ready to support you through thick and thin, and facilitate you in accomplishing your chosen degree program, and exploring wider job opportunities for you both nationwide and abroad. UMT is now among the top ranked universities with strong reputation in national and international market. This is marvelous achievement jointly earned by students, faculty and management in voyage of last 25 years.

Great universities have a long history of their evolution. They are not born in days, neither can they deliver miracles but struggle of years and years makes them the place for higher education teaching. By the grace of Allah, we are now an established institution ready to take next take off for knowledge creation, discoveries, innovations and turning knowledge into wealth creation. Future universities assume greater role than only imparting developed knowledge. I see UMT as the right hand for the state in terms of policy formulation and implementation, a partner of industry for solving problems through cutting edge research, and a member of society adding value in the life of the community.

Our faculty graces the world class knowledge forums and our graduates are leading corporations around the globe. Our innovative research program will take us to resolve the real problems of the 21st century.

As Director General (DG) of University of Management and Technology, I envision UMT as Knowledge Park which will serve the country to stay competitive among the nations to come. Work hard while at UMT and give the message of hope to the world. One day you will become a leader of your field.

Abid H K Shirwani

Director General

Prof Khurshid Ahmed

Chairperson/Patron in Chief/ Member Member of Senate Chairman, Institute of Policy Studies

Dr Hasan Sohaib Murad

President/Managing Trustee

Rector, University of Management and

Technology

Lahore

Mohammedmian Soomro

Member

Former Chairman

Senate of Pakistan

Dr Rafigue Ahmed

Member

Ex-Vice Chancellor, University of the Punjab

Vice Chairman

Nazria-e-Pakistan

Prof Dr M D Shami

Member

Vice President

Islamic-World Academy of Sciences

Dr Ejaz Shafi Gillani

Member

Chairman

Gallup Business Research Services

Arslan Khan Khakwani

Member

CEO, Tricast Media

Faroog Salman Murad

Member

Director, Mizab Group

Abid H K Shirwani

Member/ Secretary

Director General, UMT

CEO. ILM Colleges

Board of Trustees

Board of **Governors**

Prof Khurshid Ahmed

Chairman, Board of Governors Member of Senate

Chairman, Institute of Policy Studies

Mohammedmian Soomro

Member

Former Chairman, Senate of Pakistan

Dr Rafigue Ahmed

Member

Ex-Vice Chancellor, University of the Punjab Vice Chairman, Nazria-e-Pakistan

Prof Dr M D Shami

Member

Vice President

Islamic-World Academy of Sciences

Dr Ejaz Shafi Gillani

Member

Chairman, Gallup Business Research Services

Arslan Khan Khakwani

Member

CEO. Tricast Media

Secretary Higher Education

Government of the Punjab

Member

Dr Tallat Naseer Pasha

Member

Vice Chancellor

University of Veterinary and Animal Sciences, Lahore

Lt. Gen. (Retd.) Muhammad Akram

Member

Vice Chancellor

University of Engineering and Technology, Lahore

Dr Hasan Sohaib Murad

Rector, University of Management and Technology Lahore

Ms Aneesa Rahat

Member/Secretary

Registrar, University of Management and Technology Lahore

School of **Advanced Studies** (SAS)

The exponential growth of knowledge in recent years and the rise of global digital culture needs a multi-faceted response. A response that is based on in-depth understanding of new realities that cut across several disciplines. The academic community and policy institutions need to think out of the box so that new forms of relationships between humans and their institutions can be unfolded through multi-disciplinary engagement. The Rector's vision about this school in his own words is very clear to move ahead. He remarks, "The objective of School of Advanced Studies (SAS) is to develop advanced research based on multi-theoretical, multi-perspective and multidisciplinary undergraduate and graduate degree programs. These new programs should be grounded in the social sciences and humanities as well as in business, law, governance and policy including the overall dimensions of technology."

The School of Advanced Studies was set up to initiate research into multi-disciplinary issues on topics, which are beyond the boundaries of traditional disciplines and normal academic pursuits. SAS was set up to chalk out a new course of evolution for inquiry and research. The purpose was to address the issues and problems facing Pakistan, the Muslim *Ummah*, and the global society. We need to undertake critique of the existing paradigms and theories in a way, which will expose the weaknesses in their formulation, and consequences of following them.

Prof Dr Abdul Hameed

PhD Education Ohio State University USA

School of Advanced Studies

(SAS)

The establishment of School of Advanced Studies (SAS) at UMT is a pioneering effort in Pakistan to offer cross-cutting academic programs to prepare leaders in order to respond to multidisciplinary problems of the social sector. We hope that this endeavor will inspire others to follow the path. It is something that strikes at the heart of a static academia and spurs growth in research output by inspiring collaborative and integrative inquiry. It carries higher social relevance for the problems of human society which do not follow a textbook prescription but require out of the box multiple problem solving strategies. The development of SAS is attuned to the ever-evolving narratives of global academia and is a response to the shrinking knowledge base of the traditional academic disciplines.

SAS research constitutes the core that attempts to open itself to innovative academic avenues and to achieve distinctive focus in the field. SAS looks forward to harness and to turn intellectual aspirations into hard realities by hosting and supporting a diversity of scholars at varying levels leading to a unique blend of various fields of knowledge.

Web Link

For complete details, please visit http://umt.edu.pk/sas/home.aspx

Graduate Programs

MS in Cultural Anthropology

Introduction

The need for a comparative study of cultures and a holistic understanding of human diversity has never been as acute as in the present world. We are living in a period of unprecedented change in which myriad human groups and cultures strive to survive the onslaught of technology and globalization through creative processes of acculturation and confrontation. The solution to innumerable problems faced by societies and countries across the world today lies in an unbiased understanding of the "other." This comparative lens, exclusive to Anthropology, allows for a greater understanding of other groups and cultures and promotes appreciation for a multitude of perspectives. The discipline of Anthropology has never been more relevant.

The MS program in Cultural Anthropology at the University of Management and Technology (UMT) is a bold step in this context. It attempts to promote a greater understanding of various ethnic groups and cultures in Pakistan and the rest of the world, while offering diverse areas of specialization. With equally strong emphasis on anthropological theory and research, this program offers a balanced and all-round training in the core and specialized branches of the discipline.

The MS in Cultural Anthropology at UMT is very broad in scope. It is very useful for both students and experienced professionals seeking advanced learning. With its wide range of courses that offer specialized training in areas of public health, law, environment, politics, development, art, gender, to name a few, this program will launch its graduates into their respective professions and provide them a significant edge over their peers through its superior quality training. The cross-cultural and comparative perspective, which is central to Anthropology, will

promote a greater understanding of the self, the society and the others. Under the School of Advanced Studies (SAS) at UMT, this program aims to develop a dedicated seat of learning for Anthropology in Lahore. This program is intended to produce high quality scholarship in Cultural Anthropology through its emphasis on cutting-edge theory and ethnographic research. Under SAS, this program is expected to generate a regular flow of research, which will be published in national and international journals. This research would be available to address various social and cultural problems facing Pakistan. At present, there is a complete dearth of advanced degree programs in Anthropology in Lahore. The SAS will fill this vacuum by offering a comprehensive and versatile graduate degree program.

Career Opportunities

Training in Anthropology brings great advantages for personal enrichment besides opening a world of career opportunities. Anthropology graduates go on to take up research and teaching positions at universities apart from serving on policy panels, government departments and agencies, non-government organizations, private businesses, independent research institutes, community organizations, service organizations, museums, and the media; while others work as independent consultants and research staff for agencies such as UNICEF, UNESCO, the World Health Organization, and the World Bank. According to an estimate by the American Anthropological Association, more than half of all anthropologists now work in organizations outside the academia.

Their work may involve building research partnerships, evaluating policies, developing new educational programs, assessing economic needs, documenting cultures and littleknown community histories, providing health services, and other socially relevant activities.

Program Summary

Admission Requirement

16 years (BS or MA/MSc) of formal education with the latest degree in any of the social sciences, humanities or liberal arts discipline.

2.5 CGPA or 50% in annual system

GAT 60% and Interview

Duration 02 years

Semesters 04

Credit Hours 30(24+6) (coursework 24

credits + thesis 6 credits)

Undergraduate Programs

BS in Philosophy

Introduction

Philosophy is the study of ideas and knowledge through logic and reasoning to explain reality. Its four main branches are metaphysics (What is the ultimate nature of reality?); epistemology (What, if anything, can be known and how?); logic (What are the principles of correct reasoning?); and ethics (What is moral value? And what moral values should we adopt?). Other branches of this discipline address questions about the nature of art, law, medicine, politics, religion, and the sciences. The BS program in Philosophy at UMT has been designed to provide a solid foundation in Philosophy and to enable students to deal with the issues of the contemporary world. The BS in Philosophy is versatile, and launches students into many wide-ranging career options in diverse fields.

BS in Philosophy with Minors

- BS Philosophy with Minor in Psychology
- BS Philosophy with Minor in English Literature
- BS Philosophy with Minor in Sociology
- BS Philosophy with Minor in Political Science

Career Opportunities

Graduates in Philosophy have career opportunities in nearly all the fields of life and according to a recent survey by ETS, students with a degree in philosophy score better in GRE than those with a degree in accounting, finance and other subjects.

A philosophy graduate also has a higher chance of deploying extraordinary deductive and inductive thinking skills and can run a better business and/or enterprise. If you are looking for wide vistas of opportunities to open before you, then a degree in philosophy is what you need. The BS in Philosophy also prepares the students for further academic pursuits, particularly in social sciences. Following an all-round training in Philosophy through this program, students can choose to specialize in a sub-field of their interest at a university in Pakistan or abroad.

Program Summary

Admission Requirement

12 years of formal education with 2nd division (FA/FSc/A Level/50% Intermediate/50% Matric/Equivalence Certificate)

Duration 04 years

Semesters 08 Credit Hours 135

BS in World History

Introduction

The BS in World History is a four-year degree program designed to introduce the students to chronological, cultural and intellectual past of the world. The program offers a wide variety of courses ranging from the history of ideas to history of science, besides offering major courses on the intellectual and cultural history of various parts of the world. A variety of elective courses is available for specialization in any of the discipline's subfields.

The BS in World History is a distinct program as it offers minors in International Relations, Political Science, Philosophy and Sociology to accentuate interdisciplinary approach in social sciences. The program is designed to help students link the histories of different parts of the world and to understand the role of various civilizations in shaping the contemporary world. It seeks to promote a greater understanding of the intellectual, ideological and cultural developments occurring over the ages. It will offer a fresh perspective on world history through critical analysis of historical manuscripts and artifacts. Besides providing fundamental and primary knowledge of the world, the program will inculcate the abilities of critical thinking, intensive historical writing, analytical reasoning and communication among its students. Moreover, special attention will be paid to building individuals capable of understanding the different paradigms of world history as well as the contemporary world.

Career Opportunities

The degree in BS World History can lead to a career in civil services, international organizations such as UNESCO, print and electronic media, Pakistan Military, international NGOs, and think tanks and research institutions. The degree can also make students eligible for admission in MS Cultural Anthropology and MS Study of Civilizations.

BS in World History with Minors

BS World History with Minor in English Literature

BS World History with Minor in Sociology

BS World History with Minor in Political Science

BS World History with Minor in International Relations

Program Summary

Admission Requirement

12 years of formal education with 2nd division (FA/FSc/A Level/50% Intermediate/50% Matric/Equivalence Certificates)

Duration 04 years

Semesters 80 Credit Hours 135

Future Plans

SAS has decided to launch the following new programs in the near future:

A. Four-year undergraduate degree programs

- Digital Culture and Society
- **Gender Studies**
- **Developmental Studies**
- Home Economics

B. Sixteen year MS/ MPhil degree program

- Muslim Cultures and Civilization
- **Conflict Studies**
- Gender Studies

School of **Architecture and Planning (SAP)**

The School of Architecture and Planning is an important academic entity of the University of Management and Technology, Lahore. The School is well equipped with highly qualified and most experienced faculty of architecture and planning. The School focuses its mission on superior knowledge with the mission to provide the best leadership in the fields of the built environment. The School offers a variety of degrees at undergraduate and postgraduate level. The undergraduate degrees include Bachelor of Architecture (B. Arch) and Bachelor of Science in City and Regional Planning (BS-CRP). Both the degrees have been constituted according to the quidelines of the Higher Education Commission (HEC) of Pakistan and professional requirements laid down by the Pakistan Council of Architects and Town Planners (PCATP).

The School intends to offer more undergraduate degrees such as Bachelor of Product Design, Interior Design, Construction Management and Landscape Architecture and Planning. At the postgraduate level, the School is offering degrees of Master of Architecture (M. Arch), Master of Architecture with specialization in Architectural Conservation (M. Arch- Conservation), and Master of Architecture with specialization in Urban Design (M. Arch-Urban Design). The School is also offering PhD in Architecture with a diversity of specified areas.

The School intends to offer MS in City and Regional Planning, Urban Planning, Environmental Planning and also PhD in various areas of Physical Planning very soon. Various fields of the built environment are bound together with strong commitment to the deployment of technology towards social and cultural good. What also binds these fields together is the use of design and deliberation approaches towards action that are distinct from but complementary to the engineering approach to problem-solving. What furthers brings them together is the shared belief in heightening the aesthetic attributes of our lived experience.

While advocating the forward-looking, technologically-driven optimism of UMT, the School also invests in critically reflecting on technological innovation, its social impact and confrontation with cultural values. The School is fully committed to the vision of leadership through the mission of knowledge. Its faculty and students articulate its mission and show the way towards realizing the vision.

Prof Dr Muhammad Yusuf Awan

Dean, SAP

School of Architecture and **Planning** (SAP)

Vision

The vision is to establish a very important School with undergraduate and postgraduate programs concerning the development and management of the built environment. The programs will be focused on a variety of degrees of architecture and planning. The studies will be focused on needs of the nation in the field of the built environment of our regional, urban and rural settlements.

The students will be equipped with knowledge of advanced skills, latest knowledge and technology used in architecture, building construction, planning and management of various settlements. They need to be fully aware of the current world, new trends and direction of the developments in future. Thus, the vision is superior knowledge.

Mission

The mission of the School is to provide the best leadership in the fields of the built environment; particularly in the development, management and innovation in the fields of architecture, urban planning and related specializations and sub-specializations

Web Link

For complete details, please visit http://sap.umt.edu.pk/

Bachelor of Architecture

Curriculum and Courses of Readings

The program of Bachelor of Architecture (B. Arch) at UMT comprising of a 5-year (ten semesters) program of intensive studies and practical work leading to a professional degree in Architecture was established in 2012.

The curriculum and structure of this program is comparable to any similar international degree with special regard to HEC specified guidelines. To this end, preparation of the curriculum, selection of the faculty, planning of the infrastructure facilities such as dedicated building, classrooms, design studios and other resources are designed to fulfill the PCATP (Pakistan Council of Architects and Town Planners) requirements. The program of study is highly demanding and only those students are recommended to apply who are willing to work long hours. Furthermore, significant components of studies involve fieldwork, where students are required to visit construction sites, conduct field surveys, and join out of station study tours.

B. Arch. Degree requirements include 12 weeks of internship in a professional establishment. The working environment within the Department is pleasant. The students spend a significant part of their working in Design Studios which ensures high degree of interaction among students and academic staff. Our B. Arch graduates will be eligible for license from PCATP and practice as registered professional architects.

Why Degree in Architecture?

Studies of Architecture are considered a bridge between engineering sciences and the arts. In the current ages, it has become imperative for a developing country like Pakistan to equip architects with the right knowledge and tools to service this highly competitive building industry.

Career Prospects

Graduates of the B. Arch program are trained for careers in government and private sector construction companies, engineering and design firms as well as in education and consulting organizations nationally and internationally. B. Arch graduates can work as architects, interior designers, design consultants, project managers in engineering firms, architecture design offices and furniture showrooms.

Program Objectives

The objective of this program is to prepare professionals in the planning, design and construction of commercial, industrial, and institutional buildings and other facilities. The curriculum of Architecture has been developed to inculcate the following objectives in the graduates.

- Ability to think creatively and identify new trends in building construction
- Ability to work efficiently in self-managed projects and in teams
- Commercial awareness related to the field of Architecture Design
- Critical learning for a broad function in various areas of Architectural Sciences including structural, mechanical, electrical, environmental, earthquake and construction management
- Ability to keep themselves abreast of recent developments in the relevant construction technology
- Spirit of discipline and respect for the code of ethics of the profession

Expected Outcomes

Students of B. Arch program at UMT are aimed to graduate with the following skills:

- Fundamental and advanced concepts of Architecture design with particular emphasis on the application of these concepts to further advance state-of-the-art technology and meet the needs of the growing construction industry
- Hands-on experience on key drafting, drawing and design tools, and measurement equipment
- · Effective leadership and decision-making skills
- Ability to function in multi-disciplinary team

- Ability to communicate effectively
- Affinity for lifelong learning and research skills

Admission Requirements for B. Architecture

All applications are evaluated on the basis of merit as determined by their previous academic record and performance in admission test. A general admission test is administered by the University.

Duration

5 Years

Entry Requirements

- 50% in Intermediate with Mathematics/A-Level with Mathematics with Equivalence Certificate
- 50% in Matric /O-Level with Equivalence Certificate

Selection for Admission: Qualification of:

- UMT Entry Test
- Department's Aptitude Test
- Interview

Note: Candidates with Diploma of Associate Engineer (DAE) maximum 5 seats, in the following disciplines instead of A-Level/FSc can also apply:

- Civil
- Architecture
- Surveying
- Construction Management

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Bachelor of Science in City and Regional Planning

Curriculum and Courses of Readings

The BS-CRP program at UMT is comparable to any international 4-year degree program and is compatible with the curriculum suggested by Higher Education Commission (HEC) of Pakistan. Preparation of the curriculum, selection of the faculty, planning of the infrastructure facilities such as dedicated building. classrooms, labs and other resources are designed to fulfill the Pakistan Council of Architects and Town Planners (PCATP) and PEC requirements. The curriculum covers an intensive coverage of theoretical understanding of planning concepts and practical experience of planning projects. The broad areas of knowledge covered under this degree course include Mathematics, Engineering Sciences, Geography, Sociology, Statistics, Economics, Mapping, Community and Social Work, Management and Administrative Sciences, Applied Computer Sciences. Remote Sensing and Geographic Information System (GIS).

Why Degree in City and Regional Planning?

City and Regional Planning helps communities envision their future and find the right balance of new development and essential services, environmental protection, and innovative change.

In the context of Pakistan, rapid urbanization has led to an increased demand for planners and professional developers. Development of new residential colonies in the city outskirts and big business centers has opened vast opportunities for the graduates of this discipline.

Career Prospects

The City and Regional Planners are accepted in government as well as private sectors. The potential employers of BS-CRP graduates include Ministries of Housing, Environment and Urban Affairs, Planning and Development Research Institutes, Provincial Housing and Physical Planning Department, The Punjab Housing and Town Planning Agency, Provincial Local Government and Rural Development Departments, Development Authorities, Improvement Trusts, and *Tehsil* Municipal Administrations, etc.

Program Objectives

The objective of this program is to prepare city and regional planning professionals with the objective to inculcate the following in the graduates.

- Fundamental and advanced concepts of city and regional planning systems with particular emphasis on the application of these concepts to further advance the state of technology and to meet the needs of the regional planning industry
- Effective leadership and decision-making skills
- Ability to function in multidisciplinary team
- Ability to identify, formulate and solve engineering problems
- Understanding of professional and ethical responsibility
- Ability to communicate effectively
- Practice as good and responsible city planners
- Affinity for lifelong learning and research skills

Admission Requirements for BS-CRP

All applications are evaluated on the basis of merit as determined by their previous academic record and performance in admission test. A general admission test is administered by the University.

Duration 4 Years

Entry Requirements

- 50% in Intermediate with Mathematics/A-Level with Mathematics with Equivalence Certificate
- 50% in Matric /O-Level with Equivalence Certificate

Selection for Admission: Qualification of:

- UMT Entry Test
- Department's Aptitude Test
- Interview

Note: Candidates with Diploma of Associate Engineer (DAE) maximum 5 seats, in the following disciplines instead of A-Level/FSc can also apply:

- Civil
- Architecture
- Surveying
- Construction Management

Master of Architecture and PhD in Architecture

Curriculum and Courses of Reading

The curriculum is designed to focus on depth and breadth of knowledge of architecture in continuation of Bachelor of Architecture. This includes special emphasis on Urban Design, Architectural Conservation, Socially Responsive, Sustainable and Energy Efficient Architecture with appropriate considerations of the future needs. The studies help in gaining more confidence and maturity to play a leading role in national and international projects of architecture, planning and various issues of the built environment.

Academic Standards

The world that we live in is increasingly becoming competitive, particularly in the field of technological developments. The programs of architecture are designed to meet the highest academic standards to meet the upcoming challenges. The subjects cover the required depth and breadth of the discipline.

Library Resources

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The UMT Library is well equipped with the variety of books related to the areas of social, cultural, technological and other aspects of life. The Department is fully aware of the requirements of its higher degree programs. In anticipation to the need, the Department keeps on adding books in library as required for these programs.

Administration/Organization

The Board of Studies (BoS) is the main academic body of the department. It mainly administers the undergraduate program of B. Arch. For higher degrees, a Department Graduate Committee (DGC) is formed. The DGC is aimed to regularly review and enhance the program according to the criteria of the HEC. It is mainly aimed to improve the quality of education and research culture. The DGC also aims to invite academia with higher qualification and experience of teaching and research to further improve the standards.

The DGC recommends to the School Graduate Committee (SGC) and the Board of Faculty (BoF) for further improvement and incorporation of superior ideas and suggestions.

Support Resources

The major requirement of higher programs is suitable faculty with higher qualification, advanced knowledge and experience. In addition, support and feedback is required from the professional firms. Being located in Lahore, the second largest city and the cultural heart of the country, a number of leading firms of architecture are accessible.

The persons with high intellect and knowledge are invited to share their experience. Therefore, extension lectures, workshops and seminars are regularly organized. There is another important source of knowledge available in Lahore as it is a historical laboratory of the built environment of continuous centuries with most valuable information.

Career Prospects

Candidates with higher qualifications are needed in architectural firms. They are preferred to be hired as teaching and research faculty for both undergraduate and postgraduate education.

This degree will open up access to jobs in multinational and national companies which need highly skilled persons in planning, design and construction.

Cooperating Institutions

The Department is in close contact with other institutions of Lahore. The interaction with other schools in Lahore and other settlements of country is frequent. The level of cooperation is also very high and quick.

Diversity

The courses designed for the degrees of Master and PhD in Architecture are highly diversified. They include the areas of built heritage, architectural conservation, urban design and planning, construction management, energy efficient architecture, earthquake architecture, advanced structures, building services and advanced presentation skills.

Masters' Degrees of Architecture

The following Masters' Degrees of Architecture with specialization and without specialization mentioned as 1, 2, and 3, are offered with pre-requisite bachelor degrees mentioned below which must be duly accredited by the Higher Education Commission (HEC) of Pakistan and the relevant professional councils such as Pakistan Council of Architects and Town Planners (PCATP) and Pakistan Engineering Council (PEC).

Eligibility / Pre-requisite Qualification

Bachelor of Architecture (B. Arch) accredited by PCATP or

- Bachelor of Science in City and Regional Planning (BSc CRP) accredited by PCATP or
- Bachelor of Science in Civil Engineering (BSc Civil Engineering) accredited by PEC or
- Bachelor of Building and Architectural Engineering accredited by PEC

Masters Criteria

2.5/4.0 CGPA or 50% in annual system

GAT General 50%

Interview

Degree Options

- Master of Architecture (M. Arch) 1.
- Master of Architecture (M. Arch) with specialization in Architectural Conservation
- Master of Architecture (M. Arch) with specialization in Urban Design
- Master of Housing and Community Development (MHCD)

1. Course Requirements for M. Arch Degree

- Every student will study at least nine subjects of three semester credit hours each and a thesis of six semester credit hours.
- (b) A total of 33 credit hours are required to be successfully completed for the award of M. Arch. Degree.
- (c) Pre-requisite subjects are to be followed as given in Courses of Reading.
- Thesis is to be evaluated/ approved by External and Internal Examiner.

2. Course Requirements for M. Arch Degree (with Specialization in Architectural Conservation)

- (a) Every student will study at least nine subjects of three semester credit hours each and a thesis of six semester credit hours, on some aspect/topic related to the Heritage Conservation.
- (b) Out of nine subjects, four subjects with course numbers AR-604(Architectural Heritage of Pakistan), AR-624(Conservation of Architectural Heritage), AR-625 (Conservation of Urban Built Heritage) and AR-626 (Legislation and Conservation of Cultural Heritage) are compulsory.
- (C) A total of 33 credit hours are required to be successfully completed for award of M. Arch. Degree.
- (d) Thesis on Architectural Heritage and Conservation must be evaluated/ approved by External and Internal Examiner.

3. Course Requirements for M. Arch Degree (with Specialization in Urban Design)

- Every student will study at least nine subjects of three credit hours each and a thesis on some aspect/topic related to Urban Design
- (b) Out of nine subjects, four subjects with course numbers AR-607 (Urban Design Studio -I), AR-608 (History of Urban Form), AR-627 (Urban Design Studio -II) and AR-628 (Understanding Urban Settlements) are compulsory

- (c) A total of 33 credit hours are required to be successfully completed for the award of M. Arch. Degree
- (d) Thesis on Urban Design must be evaluated/ approved by External and Internal Examiner

Important Note: The Chairman of the Department is authorized to offer a subject/ subjects on the basis of available faculty and/or the number of students admitted.

4. Course Requirements for MHCD Degree

- (a) Every student will study at least nine subjects of three semester credit hours each and a Thesis of six semester credit hours.
- (b) A total of 33 credit hours are required to be successfully completed for award of MHCD Degree.
- (c) Pre-requisite subjects are to be followed as given in courses of reading.
- (d) Thesis is to be evaluated/ approved by external and internal examiner.

Note: Special consideration will be given to the candidates seeking admission in MHCD with core interest for housing studies and their professional and academic relevance to the masters program.

PhD in Architecture

As per requirements of the HEC of Pakistan and policies of UMT

PhD Criteria

- 3.0/4.0 CGPA or 60% in annual system
- GAT Subject 60%
- Interview

School of **Business and Economics**

Welcome to the School of Business and Economics (SBE) at University of Management and Technology (UMT). This is one of the most exciting times in the history of SBE as we offer new and exciting opportunities at all levels of business education.

SBE offers a comprehensive academic experience with a corporate and global orientation. SBE has an outstanding undergraduate program whereby students will travel to foreign countries to learn how business works globally, will engage in corporate social responsibility projects, and will participate in internships in order to show future employers that the student has already had experience in the business world.

SBE has a wide range of customized MBA programs driven by industry's demand. The four MBA Programs are now set so that students can choose the one that best fits their career trajectory. Our flagship MBA Program, which runs during the day, is meant for serious students interested in an intense, competitive, world-class environment, and who have in mind the career they want to pursue. These students will not only have full access to our faculty, but will also work very closely with our Office of Career Services. SBE students will be prepared for the globalized economies of the world, and the one-week international trip is unique to UMT in Pakistan and ensures that our students have exposure beyond the Pakistani national borders.

The MBA Professional Evening Program offers a unique opportunity for working professionals. It is customized so that students working during the day have the opportunity to earn a living while increasing their earning potential with an MBA credential.

The MBA Corporate Strategy (Weekend) program and Executive MBA program ensure career progression for the seasoned executive. These are state-of-the-art programs, employing international teaching methodologies for experienced professionals in the corporate sector. These programs are also strategically designed so that executives receive hands-on industry-centric applied learning experiences that will move them up their career ladders.

Our industry-focused approach is supplemented with the outstanding research undertaken by our doctoral faculty. Our faculty creates knowledge with its applied research and disseminates it in the classroom, as well as to industry. We have increased the number of PhDs on our faculty from 8 to 21 over the last three years, and we offer the most robust PhD program in Lahore. Currently, there are 118 students pursuing their PhD studies at SBE UMT, including 4 who are studying abroad.

As the newly appointed Dean of SBE UMT, I am excited to be part of this change - in particular in bringing the world-class practices from the top schools in the United States and other countries to SBE UMT.

F. Robert Wheeler III. J.D. Dean

School of Business and **Economics** (SBE)

Business Administration programs at the School of Business and Economics (SBE) are rigorous, result oriented, globally focused, and application based. The programs are geared to equip future leaders, professionals and executives with knowledge, technology, and skills essential to make a difference in their organizations. The graduates are groomed by one of the finest business faculties in the country for the roles of leaders and managers in the fields of Economics, Finance, General Management, Human Resource Management, Information Systems, Marketing, and Supply Chain Management. Salient features of SBE include, but are not limited to, the following:

- Dynamic environment for learning
- Transforming class learning into practical applications
- Corporate associations
- Purpose-built infrastructure
- Strong alumni network

Global Presence

School of Business and Economics (SBE) has continuously been developing collaborations and linkages with international institutions since its establishment. SBE stands among the top business schools of South Asia due to its high rankings and scores in national and regional accreditations. SBE is an active member of AACSB International, USA, and European Foundation for Management Development (EFMD).

As a member of EFMD, SBE is now focusing upon EPAS. EPAS is an international program accreditation system operated by EFMD. UMT School of Business and Economics has also availed membership of The Alliance on Business Education and

Scholarship for Tomorrow, a 21st Century Organization (ABEST21); an accrediting body in Japan. SBE is privileged to be the founder of the Association of Management Development Institutions in Pakistan (AMDIP). It is also a member of the Association of the Management Development Institutions in South Asia (AMDISA) and the Asia Pacific Quality Network (APQN). SBE is an affiliate of Micro Economics of Competitiveness (MOC) (Affiliate). It has been relentless in developing its membership at international forums and in international communities.

SBE maintains a nationally recognized and internationally acknowledged rich and diverse portfolio of higher learning, professional training, executive development, practical research, and consulting solutions. Over a span of two decades, the business school has signed a number of MoUs and international linkages.

International Collaborations

- Northeastern Illinois University, USA
- Eastern Michigan University, USA
- University of Bedfordshire, UK
- Marmara University, Turkey
- Universita Politechnica delle Marche (UNIVPM), Italy
- Wuhan University of Technology, China
- Southwestern University of Finance and Economics (SWUFE), P. R. China
- Universita Degli Studi Di Modena E Reggio Emilia (UNIMORE), Italy
- Near East University, Turkish Cyprus
- HITIT University, Turkey
- South East Missouri State University, USA

Corporate Alliances

- Small and Medium Enterprises Development Authority (SMEDA)
- Pakistan Agriculture and Research Council (PARC)
- Punjab Economic Research Institute (PERI)
- Lahore Chamber of Commerce and Industry (LCCI)
- Pakistan Tourism Development Corporation (PTDC)

Accreditations

South Asian Quality System (SAQS)

The Association of Management Development Institutions in South Asia (AMDISA) has awarded full SAQS accreditation to the School of Business and Economics at University of Management and Technology for a period of 5 years. The UMT School of Business and Economics received a score of 94% from AMDISA for SAQS accreditation

National Business Education Accreditation Council (NBEAC)

SBE at UMT has the distinction of being the first business school in Puniab to achieve NBEAC accreditation.

The National Business Education Accreditation Council has been established as an accreditation authority by the Higher Education Commission for the accreditation of business degree programs nationwide and assure quality in business degrees.

SBE Centers

SBE hosts a number of centers to strengthen and promote industry-academia linkages. These centers not only provide a forum where professionals from the corporate sector share their insight with SBE students but they also serve to act as catalysts for initiation, innovation and research.

The idea behind these centers is to provide real-world exposure and learning to our students so that they may take up challenges anywhere in the world.

- Center for Entrepreneurship and Innovation
- Center for Supply Chain Research
- Center for Retail and Services Marketing
- Center for Graduate Research
- Center for Enterprise Technology Advancement

Web Link

For complete details, please visit http://sbe.umt.edu.pk/

Academic Departments

Department of Economics

The Economics Department is a growing and energetic department that brings together quality faculty and outstanding students. It focuses on community connections, teaching and research.

The Department provides excellent, innovative and rigorous teaching in different disciplines of economics. It provides a vibrant environment for learning. The faculty of the Department is well aware of the critical need to understand global business and economic issues.

The focus is to spark discussion, debate and ideas among students in the class. The Economics Department connects international /national economists and business leaders through conferences and seminars. Teaching is based on theoretical and empirical case studies.

Department of Finance

The Department of Finance encourages strong ethical business

practices and considers social responsibility to be an essential part of every decision that its graduates make in any profession that they pursue. It imparts skills and real-world knowledge required to succeed in their careers.

Department of Information Systems

The Department of Information Systems provides a broad perspective of the role of Information Technology in shaping our world. With fast paced technological changes, the way we conduct business is always changing. Understanding the management of information systems is the key to increase productivity, efficiency and innovation in organizations. Whether you are pursuing your career as a manager, banker, financial analyst, economist, accountant or a consultant, you will have to deal with the information systems.

The Information Systems department is committed to providing highly sophisticated contemporary knowledge to our business students. The Department of Information Systems has successfully partnered with the world's top three ERP solution providers. UMT has a University Alliance with SAP and received the status of 'SAP Associate Membership.' Oracle Academy also has an Academic Alliance with UMT. Microsoft has an Academic Alliance with UMT and is a Premier Partner. SBE is currently the only business education institute in Pakistan which has all three ERP solution providers on board.

Department of Management

The Department of Management is in constant pursuit of uplifting both the professional and personal progression of its stakeholders. The development of our student body, the learning advancement of our faculty, the attention to research and the direct liaisons with industry are key priorities where it excels. The Management Department prepares undergraduate and graduate students to become innovative, proactive and ethical leaders in a globalized world.

Department of Marketing

The Department of Marketing is strongly committed towards providing high quality education. It contributes to the bachelor and master programs in business administration, commerce, engineering, and social sciences. Both in research and teaching. the Department of Marketing leverages its diverse ties to the corporate sector and builds bridges to the world of business. It is committed to further nurture these relationships and develop new collaborations in the future to develop marketing insight, and to remain at the forefront of the latest developments in marketing practices.

Department of Operations and Supply Chain

The Department of Operations and Supply Chain serves as the backbone of any business organization, be it a manufacturing facility or a service provider. It enables organizations to achieve their objectives through providing effective and efficient solutions to customer needs. Concern for environmental and social impact of products and services is an important aspect of this discipline.

The Department of Operations and Supply Chain comprises of highly dedicated faculty which is actively involved in developing managers and entrepreneurs that are not only well versed in the application of various tools and techniques required for optimizing processes and products, but also have a deep understanding of the complex relationship of products with environment and society.

Department of Quantitative Methods

The Department of Quantitative Methods is responsible for the development of Quantitative Methods which are inter alia, the disciplines variously known as Statistics (and all sub-disciplines such as Biostatistics, Biometrics, Econometrics, Technimetrics, Scientometrics), Operations Research, Decision Sciences, Financial Engineering, Quality Management, and also for application of quantitative methods in all areas of human endeavor.

Department of Skills Development

The Department of Skills Development trains and equips the students of UMT with the knowledge, skills and abilities to better perform in their future leadership roles. Courses, final projects, internships, professional skills development workshops, and club activities under the umbrella of this department focus on the development of comprehensive and reliable learning frameworks that include both professional and personal grooming.

The essence of all these activities is to achieve a higher level of ethical awareness, critical thinking and the courage to face the challenges of professional life, the power of right attitude, and excellence in professional life with sensitivity for society in general. Professional skills development workshops on confidence building, life and learning, time and stress management, presentation skills, influencing and negotiation skills, service excellence, critical and creative thinking, leadership skills, team building, conflict management, interview skills and resume writing, and personal grooming, are conducted by the Department of Skills Development.

Degree Programs

The School of Business and Economics offers a variety of programs at the undergraduate, graduate and postgraduate levels. These academic programs are offered in various fields of management sciences.

The programs are flexible, tailored to individual's career needs and reflect the latest approaches to business management. A degree from UMT Business School opens the gateway to global career opportunities for our students, as candidates may chose from many programs and embark on the journey to endless opportunities.

Undergraduate Programs

Bachelor of Business Administration (BBA)

The Bachelor of Business Administration (BBA) teaches fundamental concepts required in today's business world. It prepares students to be prepared for the challenges of new emerging trends and techniques in the fields of Management, Marketing, Economics, and Finance.

The students are guided by high ethical standards and operate smoothly in a business environment. Equipped with an excellent blend of knowledge and pragmatism, the program is designed to produce professionals who are capable of meeting the requirements of the corporate world.

The program distinctly emphasizes development of students' fundamental learning skills including critical thinking, logical reasoning, quantitative and analytical abilities as well as communication and computing skills which they will need for leadership roles in their professional careers.

Program Summary

Duration 04 years Credit Hours 126

Admission Requirements

12 years of formal education

50% in Intermediate or Equivalence Certificate

50% in Matric or Equivalence Certificate

UMT Entrance Test

Specializations

- Entrepreneurship
- Finance

- Management
- Marketing
- Supply Chain
- Information System

Bachelor of Business and Information System (BBIS)

Information systems are the foundation of modern organizations. Companies of all sizes are heavily dependent on these systems to support their operations and decision making processes. Organizations need professionals who can pull together results of their efforts into value-adding solutions using Information Technology. SBE aims to prepare BBIS graduates for current and emerging business related consultancy roles in corporate world. BBIS offers both coursework and industry-based learning experience.

Once students finish their course work, they gain industry experience in their final year by working with our corporate partners. This exposure enables them to put their knowledge and skills into practice in a real-life scenario. Students learn how to use information systems for cutting costs, time and resources in order to amplify the revenue by redesigning / restructuring the business processes. BBIS students also achieve ERP certification.

Program Summary

Duration 04 years Credit Hours 126

Admission Requirements

- 12 years of formal education
- 50% in Intermediate or Equivalence Certificate
- 50% in Matriculation or Equivalence Certificate
- **UMT Interview**

Bachelor of Science in Economics (BS Economics)

The BS Economics program aims to develop professionals with a strong base in the field of economics who will understand and analyze issues faced by developing countries like Pakistan. The BS Economics program helps students to think logically and improve their ability to use their knowledge of economics to analyze 'real world' problems and opportunities.

This program focuses on theoretical, quantitative and research methods approaches to deal with economic and financial problems in the public and private sectors. BS Economics is a comprehensive professional program that offers rewarding careers in public and private sector corporations, banks, education and research organizations, NGOs, international governance institutions and Civil Services of Pakistan.

Program Summary

Duration 04 years Credit Hours 126

Admission Requirements

- 12 years of formal education
- 50% in Intermediate or Equivalence Certificate
- 50% in Matriculation or Equivalence Certificate
- **UMT Entrance Test**

Bachelor of Business Studies (BBS) Leading to MBA

The BBS program is especially tailored for graduates having a 14year education who wish to get an MBA degree. This program is designed to ensure that students have a common knowledge base required for further learning prior to pursuing advanced MBA courses. Rigorously designed advanced curriculum and innovative teaching methodology help in enhancing the conceptual and analytical skills of students.

The curriculum is based on two levels of coursework that provides the foundation for business subjects followed by core courses of business administration. Foundation courses are designed to ensure that students from diversified background all obtain a common knowledge of basic subjects.

These courses also strengthen some of the pre-requisite competencies. Core courses focus on practical applications of business knowledge towards solving technical issues in major functional areas of business. The BBS program has a blend of theoretical knowledge and practical applications to prepare students for dynamic business positions in the corporate sector.

Program Summary

Duration 02 years Credit Hours 66

Admission Requirements

- 14 years of formal education with 50% in annual system or 2.5 CGPA in semester system
- **LIMT Interview**

BS Accounting and Finance

The BS Accounting and Finance program provides a thorough academic grounding of the skills and techniques necessary for the accounting and finance profession. This unique, professionoriented program is designed to develop foundational and contemporary concepts in finance, accounting and taxation. It aims to equip participants with the knowledge and competence necessary in the field of business and commerce to pursue a professional career. The program curriculum challenges participants' through competitive education and also puts

emphasis on inculcating values to transform them into socially responsible managers and business leaders. Moreover, the qualification further develops the participant to qualify professional requirements of middle and executive level places in various departments of the company such as finance, auditing, accounting and taxation. The program integrates study of the theory and practice of accounting and finance and offers significant exemptions from the examinations of professional accountancy bodies.

Graduates of BS Accounting and Finance shall be eligible for:

Exemptions in CA-Pakistan (8 papers)*

- AFC (Assessment of Fundamental Competencies) full stage (4 Papers)
- CAF (Certificate in Accounting & Finance) 1 to 4 papers (4 Papers)

Exemptions in ACCA-UK (9 papers)*

Paper F1-F9

*Conditions apply as per respective MoUs.

Program Summary

Duration 04 years Credit Hours 126 Hours

Admission Requirements

- 12 years of formal education
- 50% in Intermediate or Equivalence Certificate
- 50% in Matriculation or Equivalence Certificate
- BCom-IT with minimum 50% marks are also eligible for admission in BS Accounting and Finance subject to the fulfillment of university policies
- **UMT Entrance Test**

MBA Programs

MBA Program (Full-time)

The MBA Program is a full-time, world-class program with the same attributes found in top MBA programs around the world. It is designed to prepare top students for outstanding opportunities in the job market. It is a competitive program, with the rigor and intensity expected of international MBA students. The courses are taught through a variety of pedagogical methodologies, including team exercises, experiential learning, and case studies. Students will travel to another country for a week and be exposed to international standards of business practices as well learn from local business and government leaders in a unique experience offered only by the world-class UMT MBA Program. With foreign faculty invited to provide a global perspective in the classroom. and working closing with our Office of Career Services from the first semester, our students are ready to work anywhere in the world upon graduation.

Program Summary

Pathway I

1.5 years Duration

Credit Hours 33

Recommended Admission Requirements

- 16 years of formal business education with a minimum 2.5 CGPA*
- GMAT Score or UMT MBA Entry Test
- 3. MBA Admission Essav
- Panel Interview

Pathway II

Duration 2 years Credit Hours 69

Recommended Admission Requirements

- 16 years of formal non-business education with a minimum 2.5 CGPA*
- GMAT Score or UMT MBA Entry Test
- MBA Admission Essay
- Panel Interview
- * Lower CGPA students can be admitted if the performance in GMAT, Entry Test and Panel Interview is exceptional.

Specializations

- Management
- Marketing
- Supply Chain Management
- Finance
- Applied Banking
- **Human Resource Management**
- Information Systems

Professional MBA (Evening) Program

The Master of Business Administration (MBA) program at SBE is rigorous, result oriented, globally focused and application based. The MBA program aims to enrich the corporate world with the excellence absorbed by its students, enabling the students to prepare themselves for their professional achievements and transform them into general entrepreneurs and managers through state-of-the-art pedagogy.

Taught by one of the finest business faculty in the country, the program is delivered in an environment of mutual learning, teamwork, cutting-edge research and dynamic classroom interaction. The MBA Professional Evening at SBE is an interactive program where students are motivated and

encouraged to participate in a constructive dialogue. In the supportive environment of SBE, students not only acquire knowledge but also skills, experience, and necessary networking needed to become successful in today's competitive world.

At SBE, MBA Professional Evening program grants access to a wide range of resources and programs designed to help students on the road to their career aspirations. Whether they want to enhance their skills to further their career at their current organization, or interested in moving into an entirely new function, industry, or geographical area, SBE is eager to support their efforts.

Program Summary

Pathway I

Duration 1.5 years

Credit Hours 33

Admission Requirements

16 years of formal business education with 2.5 CGPA in bachelor degree

Interview

Entry Test

Pathway II

Duration 02 years

Credit Hours 69

Admission Requirements

16 years of formal non-business education with 2.5 CGPA in bachelor degree

Interview

Entry Test

Specialization

- Applied Banking
- Finance
- Human Resource Management
- Information Systems
- Management
- Marketing
- Supply Chain Management

MBA Executive Program

Since its launch in 1992 in Pakistan, the MBA Executive (Weekdays) Program is a pioneering initiative with a superior mix of subjects successfully run by SBE. The curriculum has been developed to merge abstract constructs with real time business applications. The intensive knowledge of practical implications is one of the indispensable necessities of the corporate sector; therefore, students of the MBA Executive Program are fine-tuned with scientific and updated tools to analyze the routine and complex situations for productive outcomes.

The program is specifically designed for professionals to be globally competitive in the business environment. It aims to cultivate a holistic concept of leadership in working professionals who are eager to meet the challenges of the business world. The program aims to engage their professional skills and to nurture their talents for the upcoming challenges of globalization. Instead of traditional teaching methods, the program emphasizes on incorporating multiple tools to coach professionals, e.g., case studies, experiential exercises, group discussions, hands-on applicative assignments and project work.

The program includes the involvement of resource persons from academia and industry to raise students' knowledge and expertise levels through advanced pedagogy.

The successful completion of this program leads participants to lucrative careers in the public and private sectors including large scale business groups focusing on growing their businesses at the national and international levels. This program also provides a solid platform to individuals who are successful businessmen and who wish to be prepared to develop their own entrepreneurial setup.

Program Summary

Duration 02 years

Course Work 22 courses (18 core courses + 04

specialization (elective courses)

Credit Hours

Classes are held from 6:30 p.m. till 9:30 p.m. on weekdays.

Admission Requirements

- 14 years of formal education with at least 4 years of managerial experience or
- 16 years of formal education with at least 2 years of managerial experience
- 2.5 CGPA or 50% in annual system in previous degree
- Interview

Areas of Specialization

- **Applied Banking**
- Finance
- HRM
- Information Systems
- Management
- Marketing
- Supply Chain Management

MBA Corporate Strategy (Weekend) Program

The MBA Corporate Strategy (Weekend) Program is offered on weekends in order to give more flexibility to senior executives in view of their busy schedule. The MBA Corporate Strategy (Weekend) program is a 16-year degree program consisting of 66 credit hours as per HEC policy for an Executive MBA Program. The program is delivered over two (02) years and is ideally suited for middle and upper tier managers, operational heads, government officers and armed forces personnel. The state-of-the-art teaching methodology enhances the skill-based learning experience of the executives.

The program is industry centric and is offered through a corporate training style of teaching. The program uses a holistic approach to arm the executives with a leadership perspective of a globalized business world. The program is geared towards CEOs, owners, directors and entrepreneurs to cultivate a holistic concept of leadership in professionals who are eager to meet the challenges of the modern business world. The program aims to engage their professional skills and to nurture their talent for the upcoming challenges around the globe.

The MBA Corporate Strategy (Weekend) Program offers innovative and industry-centric courses with case study methodology, so as to give the executives an edge in their current or future positions.

A single weekend executive course constitutes three (03) training modules. Each training module will be covered over one (1) weekend thus completing the 03 training modules over 3 weekends (Saturday's and Sunday's) followed by one (1) assessment week.

The MBA Corporate Strategy (Weekend) Program is offered as a general Executive MBA degree program. The teaching methodology at the MBA Corporate Strategy (Weekend) Program centers on outcome-based coursework that involves tools such as case studies, experiential exercises, applicative exams, external speakers, projects, presentations, interactive learning, scenario building, class discussions, and take home assignments.

On successful completion, the program will help executives to either advance upwards from their existing corporate positions or to be able to make a horizontal move within or outside their existing industry. The program equips executives with the necessary leadership traits, entrepreneurial abilities and ethical values of social responsibility required to diligently perform their duties as professionals. These traits will help them attain a solid platform to pursue their careers as professionals or in their own entrepreneurial startups.

Program Summary

Duration 02 years Coursework 22 courses

Credit Hours 66 Industry-centric trainings 66

Trainings held on Saturday (5:00PM- 9:30PM) and Sunday (9:00 AM-6:30 PM)

Admission Requirements

- 14 years of formal education with at least 4 years of managerial experience or
- 16 years of formal education with at least 2 years of managerial experience
- 50% in annual system or 2.5 CGPA in previous degree

MS Programs

MS Applied Statistics

The mission of the MS Applied Statistics is to devise and develop statistical techniques, and to disseminate statistical knowledge through teaching, advising, and outreach programs, in order to serve the needs of academia, local and national bodies in research, government, business, and industry.

The economy of Pakistan is facing many modern day challenges and to meet these challenges we need to have highly qualified professionals with expertise in statistical data analysis. The School of Business and Economics at UMT aims to play a significant role to cope with the challenges by producing academically and technically qualified leaders in Statistics.

This program is designed to equip students with an excellent knowledge of statistical principles and methods required by practicing statisticians. It is also focused on developing skills in Applied Statistics. After completing the MS Applied Statistics students will be eligible for a wide variety of positions in Statistics. They can be considered for jobs in both public as well as private educational institutions, research organizations, the State Bank of Pakistan, and commercial banks. They can also hold positions in various Federal and Provincial ministries.

Program Summary

Duration 02 years

06 credit hours Thesis

Total Credit Hours 30

Admission Requirements

16 years of formal education with 2.5 CGPA in previous degree or 50% in annual system

SBE-UMT entrance test clearance or GAT

Interview

MS Business Analytics

MS in Business Analytics aims to enable students in developing capabilities for highly sophisticated and complex decision making by applying analytical theories and articulating processes for national and global corporations. Students in this program will acquire knowledge in the new information systems design and development that explores how information flow is managed to enable seamless integration within an organization and its value chains. Participants of the program will be prepared to assist in strategic decision-making and strategy formulation necessary to drive better business results by gaining the ability to transform data into a powerful and predictive strategic asset. Business Analytics is critical in preparing organizations to solve 21stcentury business challenges and participants of this program will have exposure to innovative methodologies that support data driven decision making.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

- 16 years of formal education with 2.5 CGPA in previous degree or 50% in annual system
- SBE-UMT entrance test clearance or GAT 60%
- Interview

MS Data Science

Data science is developed to handle the flood of big data engulfing the world. A blend of statisticians, computer scientists and creative thinkers, data scientists have the:

Skills to collect, process and extract value from giant and diverse data sets

- Imagination to understand, visualize and communicate their findings to non-data scientists
- Ability to create data-driven solutions that boost profits, reduce costs and even help save the world

The inter-disciplinary syllabus provides specialist subject knowledge principled in the belief that 'the greatest opportunity for innovation comes from working across disciplines'.

Data scientists work in every industry – from the Defense Department to Internet start-ups to financial institutions – and tackle big data projects on every level.

Objectives

This program is designed to:

- Train students in the field of Data Sciences
- Train student for big data analyses and understand holistic picture
- Train students for developing algorithms and encoding
- To de-enigmatize and decipher muffled reality Career Prospects

The participants after successfully completing the MS Data Science are expected to be eligible for a wide variety of entry level positions in Data Science. They can be considered for jobs in both public as well as private educational institutions, research organizations, State Bank of Pakistan and commercial banks. They can also hold positions in various Federal and Provincial ministries.

Admission Requirements

- Sixteen years of education and Cumulative Grade Point Average (CGPA) of 2.5 out of 4 in BS (Statistics/Mathematics/Economics/Computer Science) / MSc or equivalent
- Clearance of GAT with minimum 50% score. Result of GAT

can be provided within 6 months of after getting the admission.

All academic credentials must be attached with the admission form and interview panel (PhD Committee members) will give the final decision regarding admission in MS in Applied Statistics.

Program Details

Duration	2 years
Semester	4
Semester Duration (Weeks)	15

Description of Courses 4-Core Courses and 4-Elective Courses

Total Credit Hours 30

MS Economics

The economy of Pakistan is facing many modern day challenges. The School of Business and Economics at UMT aims to play a significant role in coping with the challenges by producing academically and technically qualified human resources in Economics through the MS/MPhil in Economics program. More specifically, the primary aim of the program is to produce more qualified professors and researchers/analysts.

An additional aim of this program is to enhance the competitiveness of UMT graduates in Economics so that they have an edge not only in Pakistan's labor market but also in the competition for jobs in the international labor markets.

After successfully completing the MS/MPhil program, students will be eligible for a wide variety of positions in economics. They can be considered for jobs in both public and private educational institutions, research organizations, State Bank of Pakistan and commercial banks. They can also hold po

sitions in various Federal and Provincial ministries.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

- 16 years of formal education with 2.5 CGPA in previous degree or 50% in annual system
- SBE-UMT entrance test clearance or GAT 60%
- Interview

MS Finance

The emerging global scenario necessitates that financial organizations seek and engage capable researchers in finance. who are competent and responsive to the market needs; and who are proficient in analyzing complex problems while making intelligent and cost effective decisions. To overcome the challenges of this era, the MS Finance program is offered at the School of Business and Economics which emphasizes a qualitative and an empirical approach to deal with risk and return a trade-off problems in financial and non-financial sectors of Pakistan.

The main objective of the program is to enable participants to identify, evaluate and explain the financial decisions of the firms that maximize their value. This program has been designed for participants who are interested in serving research organizations. investment companies and other financial institutions in decisionmaking roles.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

- 16 years of formal education with 2.5 CGPA in previous degree or 60% in annual system
- SBE-UMT entrance test clearance or GAT 60%
- Interview

MS Financial Risk Management

The MS Financial Risk Management program seeks to enhance the frontier of knowledge and research in the field of Finance. Banking, and Risk Management in developing countries. especially Pakistan, by bridging the gap between academia and industry. At the same time, the program will inculcate analytical. decision-making, and communication skills in its students.

It aims to enhance students' learning through various teaching methods including research papers and case studies, modeling to solve real world problems, argumentation and positioning, real life simulations, and on-site training and mentoring.

The jobs in finance are growing and graduates may find employment with the State Bank of Pakistan, multinational corporations, commercial banks, Islamic banks, investment banks and Modarbas, insurance and Takaful firms, risk management units of financial and corporate organizations, asset and liability management units of financial intermediaries, asset management companies, risk management consulting firms, credit rating agencies, supervisory bodies for financial markets and institutions, universities, and research centers.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

- 16 years of formal education with 2.5 CGPA in previous degree or 50% in annual system
- SBE-UMT entrance test clearance or GAT 60%
- Interview

MS Management

The MS in Management is committed to developing globally competitive management professionals and organizational leaders capable of contributing to any segment of society, be it academia, research, entrepreneurship, a 'for-profit' or not-forprofit' business ran either publically or privately. Our Master of Science in Management (MS-Management) program is built upon our proven success and internationally acknowledged capability to develop globally competitive corporate and academic leaders.

This program sets new standards of research-driven learning, creative and logical thinking, and leadership in professionalizing profit/non-profit organizations in the emerging global knowledge economies. Accustomed to "Search-Behavior", our graduates are trained to lead organizations through research-driven solutions, creative thinking and strategic decision making.

Our program prepares competitive and ethical leaders who are well aware of the 21st century's management and leadership challenges and understand the significant role of research and knowledge creation in the well-being of organizations, society, and the world.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

- 16 years of formal education with 2.5 CGPA in previous degree or 60% in annual system
- SBE-UMT entrance test clearance or GAT 60%
- Interview

MS Marketing

The MS Marketing program seeks to enhance the frontiers of knowledge and research in the domain of marketing, by bridging the gap between academia and industry. This program seeks to inculcate critical thinking and analytical skills in students, and enables them to add value to the ongoing marketing processes and systems in public and private sectors. This 2-year program is highly challenging, extensively focused, and designed to transform students into market leaders who have the capacity to generate creative and innovative solutions, and apply their acumen in real-world complex marketing issues.

The program emphasizes analytical and quantitative decisionmaking skills besides inculcating the knowledge of marketing concepts, thus preparing the students for today's marketplace. Students go through rigorous training and are exposed to the latest concepts, tools, and techniques in marketing research.

The students are given exposure to paradigms of Consumer Behavior, Brand Management, Services Marketing, Distribution, Integrated Marketing Communications and Strategic Marketing. This program provides students with acumen on how to increase an organization's bottom line by implementing compelling marketing campaigns.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

- 16 years of formal education with 2.5 CGPA in previous degree or 60% in annual system
- SBE-UMT entrance test clearance or GAT
- Interview

MS Supply Chain Management

The MS Supply Chain Management is a pioneer program successful at the national level. It is designed to develop the managerial and leadership abilities in students for a role in managing modern day supply chains.

The objective is not only to expose students to the fundamental knowledge of business management but also to impart cutting edge analytical and quantitative decision-making skills, preparing them to take the challenges of effectively managing supply chains.

Students in this program study new supply chain paradigms that explore material, information, cash flow both in the forward and reverse chains, and the use of technology in managing these flows in an integrated manner. Students develop understanding of the processes that drive their own organization and those that direct suppliers' and customers' businesses. Within this hierarchical decision framework, the program addresses the important leverage points for managing supply chains i.e. inventories, facilities, transportation, and coordination.

The MS Supply Chain Management program focuses on making strategic decisions in such a way that alignment throughout the processes, corporate policies or visions and individual objectives of the departments/sections are not affected.

The program aims to create, apply, and disseminate knowledge of Supply Chain Management (SCM) by focusing on augmenting students' understanding of the role of SCM in enterprise strategy, introducing students to current world-class SCM operating

practices, analytical methods, technology applications, and strategy development, and preparing students to develop a sound ability to integrate and apply this knowledge in organizations to enhance supply chain effectiveness.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

16 years of formal education with 2.5 CGPA in previous degree or 60% in annual system

SBE-UMT entrance test clearance or GAT 60%

Interview

MS Strategic Human Resource Management

MS in Strategic HRM is committed to developing globally competitive inquiring HR professionals capable of meeting strategic HR needs of any segment of society, be it academia, research, entrepreneurship, a 'for-profit' or 'not-for-profit' business being run either publically or privately.

The program is built upon our proven success and internationally acknowledged capability of developing globally competitive corporate and academic leaders. This program opens new avenues for leading organizations in the emerging global knowledge economies by understanding the 21st century's HR philosophies, systems, and practices, needed to meet the strategic HR needs of organizations. In the emerging knowledge the economy the contemporary organization is the one that develops its human resources as an organization's strategic partners who understand the value of research-driven ideas and solutions to make competitive decisions for their organizations.

Accustomed to 'Search-Behavior,' this program prepares competitive and ethical HR professionals who design and implement research-led customized, innovative, and competitive HR solutions to help any kind of organization successfully meet its strategic and operational goals. Due to rigorous world-class research, specialized Strategic HR focus, and a major emphasis on strategic, critical and creative thinking, our MS Strategic-HRM has been able to help participants excel as HR professionals, academicians, researchers, and HR consultants. Our graduates work at senior HR positions, teach in Higher Education Institutes, and undertake national/international consultancy and research projects.

Program Summary

Duration 02 years

Thesis 06 credit hours

Total Credit Hours 30

Admission Requirements

- 16 years of formal education with 2.5 CGPA in previous degree or 60% in annual system
- SBF-UMT entrance test clearance or GAT 60%
- Interview

PhD Programs

PhD Management Sciences

The reflection of the School of Business and Economics' strong commitment to fostering a research culture is manifested in its PhD Program in Management Sciences. The PhD Management Sciences program aims to produce internationally recognized researchers/academicians in the field of management sciences with an integrated perspective on management to address complex issues in the national and international context.

The doctoral program looks for individuals who have a keen interest in research, who have an open mind set and a desire to contribute to knowledge creation. The studies in this program are structured to ensure that students build on intellectual and broad based knowledge and skills. The program is on par with international standards and endeavors to produce high quality professionals who will serve effectively in academia and industry.

This program best suits those seeking research oriented or teaching careers in the future. They can be very successful in industry and can play a strategic role in decision making on the basis of their meticulous knowledge and training while in the teaching career they can play an effective role in improving the quality of education in their field.

Program Summary

Duration (minimum expected) 3 years

Course Work Credit Hours 24 (minimum)

Admission Requirements

- MS or 18 years of formal education with 3 CGPA in relevant discipline
- SBE-UMT entrance test
- Interview
- GAT Subject Test with 60% Score

PhD Statistics

The PhD Statistics program aims to enable students to plan and develop statistical techniques, and disseminate statistical knowledge through local and national bodies in research, government, business, and industry. The program ensures that the students in the doctoral program in PhD Statistics are equipped with advanced training to meet substantial demand for positions in research analysis in different organizations including: government agencies, business empires, and NGOs, etc.

Statisticians are normally concerned with modeling and investigating advanced topics, especially by developing and applying appropriate probability models, statistics including statistical design, and often these efforts are directly connected to policy-relevant decision-making in business and government.

We seek to train statisticians who will contribute to theory, develop inventive and useful statistical models and methods, and conduct applied statistical scientific investigations. Individual statisticians will vary in their emphasis, but the field includes all of these aspects. The program is focused around knowledge areas, skills and research related with statistics like: Applied Analysis and Statistics, Engineering and Statistics, Computing and Statistics, Biology, Survival Analysis and Statistics, Mathematics and Statistics, Business and Statistics, Economics and Statistics.

Program Summary

Duration (Minimum Expected) 3 years Course Work Credit Hours 18 (minimum)

Admission Requirements

- MS (Statistics), MS (Applied Statistics) or equivalent 18 vears of formal education with 3 CGPA in relevant discipline
- SBF-UMT Entrance Test
- Interview
- GAT Subject Test with 60% Score

School of **Commerce and Accountancy** (SCA)

"We don't just train our graduates with the necessary knowledge to be competent accounting professionals. We develop them to be versatile and adaptable business leaders with the right skills, motivation and mindset."

Welcome to the School of Commerce and Accountancy!

Since its launch, the School of Commerce and Accountancy (SCA) is offering quality education in the field of commerce and accountancy and has offered a pathway for non-accountancy degree holders to enter the accountancy sector through its dedicated programs at graduate and undergraduate levels.

If you are looking for opportunities for personal development, career advancement, or a career in the accountancy sector, there is no skillset more valuable than an accounting qualification. Accounting information is essential for any organization to operate profitably in good times and sustainably in challenging times. In today's complex business environment, knowledge of accounting is, more than ever, essential for anyone who aspires to move up the corporate ladder. Accountancy, and its related fields such as taxation, consulting, corporate governance and risk management, are the cornerstone of an economic system.

So what does this mean for accountancy students? It means that when you graduate, you will always be in demand in both accounting and non-accounting industries regardless of market conditions. It also means that when vying for that promotion in your company, your accounting background will tip the scales in your favor.

At School of Commerce and Accountancy (SCA), we will take you one step further.

In today's fast-paced business environment, employers look not only for technical competencies when hiring or promoting, they also look for skilled, articulate, career-savvy and confident workers who can make a positive and long-term impact on their organization. Our Bachelor and Master programs provide a holistic education emphasizing real-world readiness. Centred on a strong accounting core, the curriculum is broad-based, covering business, technology, entrepreneurship, leadership skills, communications and compulsory internship. This ensures that our students graduate with hands-on experience and are ready for the corporate world.

Our faculty is our strength as it continues to grow and we count world-class scholars and business leaders as part of our team. At School of Commerce and Accountancy (SCA), we have qualified Chartered Accountants Cost and Management Accountants, ACCAs and MS and PhD degree holders on our faculty board. With this unique composition, our faculty team is recognized as contributors towards thought-leadership, education and training in the accounting industry.

We look forward to welcoming you as our student.

Muhammad Azeem Naz

Principal

School of Commerce and Accountancy

School of Commerce and Accountancy (SCA)

Vision

To gain recognition as a premier School of Commerce and Accountancy in the region, by producing professional accountants who will distinguish themselves in their chosen careers, and will become agents of change in the corporate world through best and transparent accounting practices

Mission

To prepare its participants at the undergraduate and graduate levels to successfully compete in a very dynamic and challenging business environment. It focuses to provide quality accountancy education through real world focused teaching and open access to life-long learning which enables our participants to update themselves in critical current issues and modern trends in the accounting profession

Introduction

The University of Management and Technology (UMT) has a rich history of academic success and accomplishment. It is well known for upholding a tradition of innovative and challenging programs that meet the requirements of the modern world. UMT is a chartered university and has built a name for imparting high quality education. It has been awarded "W4" category by the Higher Education Commission (HEC), thus placing it among the few selected universities in the country. UMT students are preferred for job placements in business organizations due to better knowledge and higher competency. In today's rapidly transforming and dynamic global business world, the importance and depth of areas of audit and finance is well understood and acknowledged by everyone. Keeping this in view, UMT has established the School of Commerce and Accountancy (SCA) for imparting quality education in the fields of Finance and Auditing. The objective of SCA is to focus on Audit and Finance by developing new programs that meet today's business

requirements. It aims to train students with the requisite knowledge and skills to become leaders in business organizations, both nationally and internationally.

The School of Commerce and Accountancy (SCA) is known for its high profile faculty comprising of chartered accountants, chartered certified accountants, management accountants and MS finance degree holders who have a blend of teaching and practical exposure. SCA offers undergraduate and graduate programs with specializations in Accounting, Finance, Auditing and Information Systems. SCA is also planning to launch diploma programs and coaching for various professional qualifications like CA, CIMA, CFA, etc. in the near future. SCA is committed to produce accounting, audit and finance professionals to compete in a dynamic and challenging business environment. It assures a bright and prosperous future for its students by providing them quality education in the fields of Audit, Finance, Accounting, Corporate Governance and Taxation.

Career Prospects for SCA Graduates

A wide range of highly rewarding career opportunities are available for SCA graduates in the corporate sector. They are employed as accounts executives, accounts officers, internal auditors, financial analysts, chief accountants, and chief financial officers.

Exemptions from Professional Bodies

- 9 papers exemption for MCom
- 7 papers exemption for BCom(H)
- UMT got maximum number of exemptions in ACCA in Pakistan

Acquiring CIMA qualification by UMT graduates

11 papers exemption in CIMA for MCom through gateway assessment.

Web Link

For complete details, please visit http://sca.umt.edu.pk/

Academic Programs

The programs designed at SCA develop knowledge, expertise and skills to enable participants to cope successfully with the challenges posed by the rapidly evolving global business and financial environment. At present, SCA offers the following degrees and professional programs.

MS

- Accounting
- Commerce
- Audit and Control Systems

Master Programs

Master of Commerce (2 years) with specializations in:

- Accounting - Finance - Corporate Governance

Bachelor Programs

- BCom Honors 4 years (For ICom, A-Level, FA, FSc or equivalent)
- BCom Honors 2 years (For BCom IT or equivalent)
- BCom IT 2 years (For ICom, A-Level, FA, FSc or equivalent)

with specialization in:

- Finance Auditing Corporate Governance Taxation
- Islamic Banking

MS in Accounting

Mission

To develop participants' competencies in accounting, technical, analytical and research skills needed to become innovative problem solvers when crafting solutions for the challenges encountered in complex global markets.

Rationale

The emerging global scenario requires financial organizations to look for capable researchers in accounting who are competent of

responding to the market needs, acting as ethical leaders with the capacity to analyze complex problems and make intelligent, cost effective decisions. This is a unique program that emphasizes qualitative and empirical approach to deal with financial reporting problems in financial and non-financial sectors of Pakistan.

Career Opportunities

MS in Accounting program is a gateway to CIMA, ACCA and ICAEW, leading to PhD in Accounting that can offer rewarding career opportunities in research organizations, financial institutions, i.e., banks, insurance companies, leasing companies, etc. and in the teaching profession.

Curriculum Structure

Duration	02 years	Semester	04
Course	8+ thesis	Total Credit Hours	30

Requirements

- 50% or 2.5 CGPA in previous degrees + GAT (General) 50%

MS Commerce

Introduction

The emerging global scenario necessitates the organizations to look for capable researchers in commerce, competent of responding to the market need and who are ethical leaders, having the capacity to analyze the complex problems and make intelligent, cost effective decisions. This is a unique program that emphasizes qualitative and empirical approach to deal with risk and return trade-off problems in financial and non-financial sectors of Pakistan.

Career Opportunities

MS Commerce program is a gateway to PhD in Commerce that can offer rewarding careers especially in academia, research organizations and also in corporate sector like banks, insurance companies, leasing companies, various commercial sectors, etc.

Program Details

Duration	02 years	Courses 8+ thesis
Semester	04	Total Credit Hours 30

Requirements

- 2.5 CGPA in previous degrees + GAT (General) 50%

MS Auditing and Control Systems

Rationale

Listed companies have to follow code of corporate governance, according to which, establishment of the internal auditing department is mandatory. This requirement is to be fulfilled by all listed companies. This necessitates the organizations to look for capable researchers and professionals in the field of Auditing and Control Systems, competent of responding to the market need and who are ethical leaders, having the capacity to analyze the complex problems and make intelligent, cost effective decisions. This program will help the participants in playing their part by adding value to achieve overall objectives of the organizations. effectively and efficiently.

Career Opportunities

MS Auditing and Control Systems program is a gateway to PhD in Auditing that can offer rewarding careers especially in academia, research organizations and also in corporate sector like banks, insurance companies, leasing companies, various commercial sectors, etc.

Program Summary

Duration 02 years Semester 04

08+ thesis Courses

Total Credit Hours 30

Requirements

50% or 2.5 CGPA in previous degrees + GAT (General) 50%

Master of Commerce (MCom)

Developing Business and Finance Professionals Introduction

Get a Master of Commerce degree that will not only thrust you to the next level of professional excellence, but will also provide you with a comprehensive coverage of ACCA syllabus and also provide an opportunity to specialize in Accounting, Finance, or Corporate Governance. The MCom program aims to produce well-trained professionals who have the capacity for independent thought and work, as well as for teamwork. Students are given education and encouragement to develop their full potential, which allows them to make an intellectual contribution at the highest levels of business, government and the community. There has always been a great demand for accounting and finance executives. The innovative MCom program develops critical and conceptual thinking skills in the participants. It also provides them exposure to cutting-edge business/industrial issues being faced by the real world and provides their solutions. The program has been devised keeping in view the current market needs, economy requirements and the global demands.

Career Opportunities

The successful graduates of the MCom program can look for jobs and career related growth opportunities in areas like business/industry, accounting firms, government departments, consulting firms, insurance companies, banking sector and NGOs.

Specializations

The School of Commerce and Accountancy (SCA) offers specializations in Accounting, Finance and Corporate Governance.

Program Duration

Two years (four-semester) program for BCom graduates

Semesters Duration 02 years **Total Credit Hours** 63

Requirements

50% or 2.5 CGPA in BCom IT

BCom (Honors) and BCom-IT

Mission

To provide the participants of BCom proficiency in financial reporting framework and lead them to higher education opportunities and job placement in the field of Commerce. Banking and Finance.

Introduction

The BCom (Hons) program is intended to provide strong foundation to participants in Finance, Accounting and Taxation, It aims to equip participants with the knowledge and competence in the field of business and commerce to pursue a professional career and to provide an environment that challenges the participants' mind through competitive education that emphasizes on inculcating values, thus transforming them into socially responsible managers and business leaders.

Moreover, the qualification further emphasizes the participants to meet the needs of entering into the middle-level management for being placed as executives in various departments of the company.

Rationale

- To meet the HEC requirements for undergraduate programs
- To provide modern commerce education to the youth of Pakistan
- To cater for the existing and upcoming demands for commerce graduates

Pathway 1

4-year program for Intermediate/Equivalence Certificate +50% in Matriculation/Equivalence Certificate

Pathway 2

2-year program for 2-year BCom (IT) with 50% or above marks in Intermediate/Equivalence Certificate + 50% in Matriculation/Equivalence Certificate

Career Opportunities

The program leads students to higher education opportunities in the field of business and commerce such as ACCA, CA, ACMA. CISA, CIA, CIMA, MS in Accounting and MCom (H), etc.

It allows students to enter the profession at entry level positions in various business organizations such as banking, insurance and manufacturing as accounts officers, import officers, tax consultants, brokers, etc.

BCom-IT 2-Year (14-Year Degree Program)

The BCom 4-year program has been designed in such a way that the 1st four semesters (1st 2 years) are equivalent to BCom 2 vears being offered by University of the Puniab. The students desirous of 2-year BCom or those who wish to transfer to MCom can get the degree of BCom 2-years upon the completion of 1st two years (21 courses).

Program Summary

BCom (Hons) 04 years program

Total Courses 42 Duration 04 years **Total Credit Hours** 126

Program Summary

BCom-IT 02 year program

Total Courses 21 Duration 02 years 63 **Total Credit Hours**

*For degree completion, six (06) weeks internship is mandatory in all undergraduate programs.

Requirements

- 50% in Matric or Equivalence Certificate
- 50% in Intermediate or Equivalence Certificate

School of **Engineering** (SEN)

The School of Engineering (SEN) was set up in April of 2013 with the vision to act as a hub for various engineering disciplines. It provides a common regulatory platform for professional education in the field of engineering aiming to achieve national and international accreditation of degree programs offered under its umbrella. Since its creation, SEN is constantly evolving and expanding its programs in an attempt to respond effectively to rapidly changing technologies and workforce demands. Now, more than ever before, global, regional, and local economies are largely driven by technology inventions and innovations.

The School currently has five departments; Electrical Engineering, Industrial Engineering, Mechanical Engineering, Energy Engineering and Civil Engineering. The newly established, Energy Engineering Department, is an example of our initiative to address the current energy crisis in Pakistan and to fulfill the demand of Energy Engineers from key players in energy sector. It is planned to have phased addition of the following departments in the coming years.

- Mechatronics Engineering
- **Chemical Engineering**
- Materials Engineering
- **Environmental Engineering**
- Bio-medical Engineering

SEN is currently offering five undergraduate degrees – BS degrees in Electrical Engineering and Industrial Engineering are accredited by Pakistan Engineering Council (PEC) and BS degrees in Energy Engineering, Mechanical Engineering and Civil Engineering are permitted by PEC.

Five graduate programs, namely MS Electrical Engineering, MS Industrial Engineering, MS Engineering Management, MS Civil Engineering and MS Mechanical Engineering, are also being offered under the umbrella of School of Engineering. The School also offers doctoral programs in the general disciplines of Electrical and Mechanical Engineering. While I feel proud to be the founding Dean of this newborn school. I am also aware of the daunting task of leading it to become the 'Best Engineering School of Pakistan' within the next ten years. However, I shall draw strength out of my 39 years of experience which has seen many new foundations successfully laid and goals achieved. Additionally, the commitment, competency, and devotion of the faculty give me confidence to reach the defined target. My job is to complement these strengths, by enhancing resources and investing in strong faculty and students. At the same time, I am compelled to make sure that everyone in the community is focused on being as good as they can possibly be. You can trust me for support, guidance and an eagerness to involve. Everyone, faculty, staff, students, parents and entrepreneurs (the prospective employers of my students) is important for me. So you are welcome to discuss and share ideas for the development of SEN. I can be reached by telephone, email, or meeting in person.

Dr Salim Abid Tabassum

PhD Applied Energy Cranfield University Bedfordshire, UK

School of Engineering (SEN)

Introduction

School of Engineering was established in April 2013 to offer the PEC regulated Engineering degrees. It consists of Department of Electrical Engineering, Department of Mechanical Engineering. Department of Civil Engineering, Department of Industrial Engineering and Department of Energy Engineering. These departments offer BS, MS, and PhD Programs accredited/recognized by Higher Education Commission (HEC) and Pakistan Engineering Council (PEC).

Vision

To become the best Engineering school of Pakistan within the next ten years.

Mission

The School of Engineering shall offer leading-edge programs to instill design, application and innovation skills in its students by utilizing and involving their curiosity, intelligence and creativity.

Objective

The mission at the UMT, School of Engineering is to give the students a high-quality educational experience; to generate and apply knowledge through research, development and scholarly activity; and to serve society, country and the engineering profession.

Accreditations

BS Electrical Engineering and BS Industrial Engineering are both accredited by PEC, and BS Mechanical Engineering, BS Energy Engineering and BS Civil Engineering have permissions from PEC.

Admission Criteria

Undergraduate Programs

- HSSC (FSc Pre-Engineering) 60% marks or Equivalence Certificate
- UMT Entry Test/ ECAT/ NAT-IE with minimum 50% marks

Graduate Programs MS

- 16-years of education with Bachelors in the relevant*discipline
- GAT General/ UMT Test: 50% or above
- CGPA in Bachelor's degree should be equal to or above 2.25. Relaxation may be granted by taking some deficiency/pre-requisite courses decided by course allocation committee or student's major advisor
- * For MS Industrial Engineering and MS Engineering Management, 16-years of education with Bachelors in any engineering discipline or 16 years of education in any discipline with at least 15 years of technical managerial experience.

PhD

- UMT follows HEC criterion

Web Link

For complete details, please visit http://sen.umt.edu.pk/

Department of Electrical Engineering

The Department of Electrical Engineering, now part of School of Engineering (SEN), currently offers two programs:

1) An undergraduate program (BS in Electrical Engineering)

- 2) A graduate program (MS in Electrical Engineering).
- The Department is planning to offer doctoral program (PhD) in Electrical Engineering.
- BS Electrical Engineering is accredited by PEC from intake of 2005.

BS Electrical Engineering (BS EE)

Overview

Electrical Engineering has brought us today's high-tech world. and here at UMT's Electrical Engineering Department we are continuing to push forward the frontiers of what can be done with devices, circuits, systems, signals, and information. Our department combines top-tier research with a rigorous and vibrant learning environment for all our students, and we are proud of the balance we provide between the many aspects of EE, both theoretical and practical, and between traditional and emerging fields. We aim to produce graduates who are excellently prepared for careers within and beyond EE.

Electrical Engineering has its foundation in physical science, mathematics and a broad knowledge of engineering techniques in many areas including electronic circuits and devices; power generation, transmission and utilization; and communication systems. The BS in Electrical Engineering program at SEN offers an understanding of the breadth of education and depth of training necessary for competence in this profession.

Engineering plays an important role in the overall development of a nation. The electrical and electronics industry needs electrical engineers who have in-depth knowledge of the field and are skillful and competent in running the operations as well as in coping with new developments. This program is built to provide an opportunity for students to acquire expertise in analysis and design to better meet the technical needs of the local industry.

In the Department of Electrical Engineering, our research generates the knowledge, tools and leadership needed to address society's largest and most challenging problems in natural and built environments. We challenge traditional notions of problemsolving and generate creative and groundbreaking solutions.

Career Opportunities

Electrical engineers aren't just "techies." While engineers often work in the technology services arena, their tasks range from designing and building medical equipment to working for the military or Department of Defense. Contrary to popular belief. electrical engineers don't just sit in their labs alone, tinkering with their latest invention. Electrical engineers often work in groups, so a great deal of teamwork is required from them.

The Electrical Engineering (EE) industry is one of the most rapidly growing and evergreen industry in the economy. Typically, EE jobs entail designing, installing, and testing/fixing electrical systems and equipment. The 4-year Bachelor of Science in EE prepares students for professional careers in a range of industries that encompass power plants, WAPDA, NTDC, PIA, Railway, PTCL, Telecommunication Networks such as Mobilink, Zong, Wateen. Warid: software development and teaching positions in various universities across the country.

This combination of knowledge and skills leads to careers as professional chartered engineers in a range of sectors including electronics, broadcasting, telecommunications, mobile technologies, power supply and distribution, instrumentation and control, construction, plus numerous manufacturing industries. Electrical and Electronics Engineers are also valued in business and commerce, where their numeracy, team working, analytical and project management skills can be put to good use. Career options are available in power transmission and switching systems, wireless systems, power generation and distribution, computer aided design and monitoring, data acquisition and supervisory control, industrial control of plants, telecommunication systems, airborne and defense systems.

Program Summary

Minimum/Maximum Duration 4/7 years Credit Hours 135

MS Electrical Engineering (MS EE)

Overview

The Master of Science (MS) program in Electrical Engineering is designed to prepare students for technically demanding careers in industry as well as for post-master's graduate studies 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, electromagnetic and photonics, and materials, circuits, and devices.
- It affords students the opportunity to flexibly choose graduate electives to explore technical or professional interests within engineering.
- It has a practicum requirement that is satisfied by doing UMT prescribed MS EE program.

The MS in Electrical Engineering program aims to produce highly skilled professionals focused on productive research and development in the vast domain of Electrical and Electronics Engineering. MS Electrical Engineering program at UMT offers an understanding of the breadth of education and depth of training necessary for leadership in this profession. The MS EE program provides graduates with the broad technical education necessary for productive employment in the public or private sector with the development of understanding of fundamentals and current issues important for the future. The program has been devised keeping in view the latest market demands and encompasses a

broad area covering advanced digital and analogue electronics, communication, signal processing, multimedia and computer vision, advanced controls for robotics and microelectronics/nano-electronics.

Program Objectives

The goals and objectives of the graduate program in Electrical Engineering are to prepare graduate students for careers in professional practice, research, and for further study towards doctoral degrees in Electrical Engineering. EE Program will allow motivated researchers to expand their knowledge and acquire new skills in analysis and problem solving, creating challenging opportunities for a full, rewarding research career. The program will also cater to the demands and needs of the local industry and strategic research and development (R&D) organizations of the country. This graduate program will impart:

- 1. Knowledge of the engineering principles.
- 2. Knowledge of current events and contemporary societal issues.
- 3. Knowledge of the state-of-the-art Information Technologies.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
- Ability to facilitate systems engineering and project management.
- 6. Ability to communicate effectively (written, verbal and presentation) across all levels in the enterprise.
- 7. Ability to grow through lifelong acquisition of knowledge.
- Ability to design an electrical system, component or process to meet desired needs within realistic

- constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- 9. Ability to identify, formulate and solve Electrical Engineering problems.
- 10. Ability to function in multidisciplinary teams.
- 11. Capability to use state-of-the-art engineering/computer tools necessary for engineering practice or research.
- 12. Skills to find and use available technical information.
- 13. Ability to communicate effectively in written reports.
- 14. Ability to design and conduct experiments, tests or simulations as well as to analyze and interpret data to validate assumptions and hypotheses.
- Ability to evaluate current electrical engineering techniques.

Career Prospects

Electrical Engineering being one of the core fields of engineering is always evergreen in terms of scope and job prospects.

Electricity has become the basic need for survival globally. As such, electrical engineers find their utilization in several domains including maintenance and running of industrial plants, communication and satellite navigation systems and domestic electronic equipment. Electrical Engineering equips the learner with the knowledge of electrical circuit design, digital electronics, instrumentation, control systems, modern telecommunication and signal processing.

Program Summary

Minimum/Maximum Duration 1.5/4 years

Credit Hours 30

PhD Electrical Engineering (PhD EE)

Overview

Human development with equity and sustainability is the greatest challenge of the time. Today's prosperity is achieved on the basis of research done in engineering sciences which has its foundation on mathematics and physical sciences in last few decades. Our national population has reached the figure of 180 Million with some careful estimates and there would be a tremendous need of quality research in the field of engineering education. A PhD holder in Electrical Engineering can significantly contribute towards strengthening the national infrastructure for research and involving intelligentsia of the country to work towards meeting national challenges such as energy crisis, exploration of natural resources and their utilization, launch of wireless 3G/4G, industry automation to meet export targets and to bring about the much needed IT revolution.

University of Management and Technology (UMT), with a vision of establishing quality research and meeting market demands, is offering this program that aims to encompass a broad area covering advanced digital and analogue electronics, communication systems, signal processing, Power and energy systems. The PhD EE program provides the graduates with the broad as well as in-depth technical education necessary for productive employment in the public or private sector. It is designed towards development of understanding of advanced issues important for current and future needs of the region. The PhD Electrical Engineering program at UMT also offers an understanding of the breadth of education and depth of training necessary for leadership in this profession.

Program Objective

The goals and objectives of the Doctoral program in Electrical Engineering are to prepare its graduates for careers in

professional practice, research, and university teaching in EE. It will allow motivated researchers to expand their knowledge and acquire new skills in analysis and problem solving, creating challenging opportunities for a full, rewarding research career. The program will also cater for the demands and needs of local industry and strategic research and development (R&D) organizations of the country. This doctoral program will impart

- Knowledge of the engineering principles.
- Knowledge of current events and contemporary societal issues.
- Knowledge of the state-of-the-art Information Technologies.
- The broad education necessary to understand the impact of engineering solutions in a global, economic. environmental and societal context.
- Facilitate systems engineering and project management.
- Ability to communicate effectively (written, verbal and presentation) across all levels in the enterprise.
- Ability to grow through life long acquisition of knowledge.
- Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Ability to identify, formulate and solve Electrical Engineering problems.
- 10. Ability to function in multidisciplinary teams.
- 11. Capability to use state-of-art engineering/computer tools necessary for engineering practice or research.
- 12. Skills to find and use available technical information.

- 13. Ability to communicate effectively in written reports.
- 14. Ability to design and conduct experiments, tests or simulations as well as to analyze and interpret data to validate assumptions and hypotheses.
- 15. Ability to evaluate current electrical engineering techniques.
- 16. Ability to initiate, conduct and report substantial research in national and international journals and conferences.

Career Prospects

The PhD program in SEN at EE department is designed towards educating scholars who will assume leadership positions in industry, academia and government at the regional, national and international levels. The increasing role of technology in critical sectors such as communication, energy and environment, as well as the important role that Punjab province will undoubtedly play in these technologies sectors, puts the PhD program in SEN at EE in a strategically important position with respect to its peers. PhD graduates from UMT will directly contribute towards innovation and solutions to current challenges and towards increasing the intellectual capital of the state and the region. Graduates leaving UMT will serve as ambassador and help UMT connect with opportunities around the world. Research breakthroughs and technology innovations will lead to new products, growth of existing companies and the formation of new companies within Pakistan.

Program Summary

Minimum/Maximum Duration

3/8 years

Department of Industrial Engineering

The Department of Industrial Engineering currently offers one PEC accredited undergraduate program in Industrial Engineering. Two graduate programs, MS in Industrial Engineering and MS in Engineering Management, are also being offered. Brief descriptions of these programs follow.

BS Industrial Engineering (BS IE)

Pakistan Engineering Council (PEC) permitted UMT to start BS Industrial Engineering Program from Fall 2012 which is now an accredited program. The 4-year degree program (135 credit hours) is being run under the umbrella of School of Engineering in the Department of Industrial Engineering in compliance with PEC/HEC guidelines.

Program Overview

Industrial Engineering track gives an opportunity to its graduates to become engaged in virtually any industry, be it manufacturing or service oriented. Productivity enhancement, process optimization, quality improvement, logistics, ergonomic product design, environmental health and safety are some of the major focal areas of industrial engineering. The vast applicability of the degree program necessitates an all-encompassing scheme of studies that shall satisfy the needs of different industrial sectors not only domestically but also internationally. The Department of Industrial Engineering takes pride in addressing these needs by involving the industry on one hand, and the students on the other.

Experienced academicians from the best universities in Pakistan, highly experienced professionals from the industry alongside the university faculty partake in periodic revision of the curriculum as per market needs.

Students are involved in active group discussions, case studies and industrial visits. Special attention is given to ensure intellectual as well as practical grooming of our students. In

short, the School does its best to create an environment conducive for learning and to transform our students into competent engineers at entry level and then to assume leadership roles later in their professional lives.

The scheme of studies in the BS Industrial Engineering program is constituted by an appropriate blend of courses from engineering, management and social sciences domains. These cover not only the breadth of industrial engineering and crossdisciplinary engineering fields, but also delve deeper into specific areas. The faculty is also encouraged to engage themselves with the industry. This involvement allows faculty members to keep abreast of latest developments and problems faced by the industry. The very knowledge is eventually imparted to the students, which is crucial for students to prepare to prepare themselves for their professional lives.

Career Opportunities

Industrial Engineers are generally employed in different types of industries in the areas of Productivity, Process Optimization. Quality, Environmental Health and Safety, Supply Chain Management, etc. Employment opportunities for Industrial Engineering graduates are quite broad both in the domestic as well as international market.

Typically, the biggest demand for Industrial Engineers in the domestic industry emanates from the textile sector, which makes up more than 60% of Pakistan's total industry. Automotive and other manufacturing sectors also hire the services of Industrial Engineers frequently. Information Technology, consulting and other services sectors are also employing Industrial Engineers. Additionally, different governmental organizations also recruit Industrial Engineers. From international market viewpoint, IE graduates have plenty of employment opportunities in the Gulf Region. Apart from typical industries, there is a huge potential for jobs in academic institutions after higher studies both domestically and abroad.

Program Summary

Minimum/Maximum Duration 4/7 years Credit Hours 135

MS Industrial Engineering (MS IE)

Overview

The Master of Science degree program in Industrial Engineering (MS IE) is built on a core designed to provide breadth of experience in systems modeling, analysis, and applications common in industrial engineering and operations analysis. Industrial Engineering has its foundation in physical sciences, mathematics and a broad knowledge of engineering techniques. MS Industrial Engineering program at SEN offers an understanding of the breadth of education and depth of training necessary to manage and lead industrial setups.

Program Objectives

Graduates will be able to:

- Integrate, model, continuously improve, control and, if necessary, redesign enterprise activities
- Perform data analysis and optimization for enterprise decision making
- Develop business cases for justifying process, organizational and technological projects
- Support enterprise performance, quality, efficiency and productivity enhancement activities
- Facilitate systems engineering and project management
- Communicate effectively (written, verbal and presentation) across all levels in the enterprise

Career Prospects

The diverse academic and professional application of industrial engineering makes it evergreen in terms of job prospects in a wide array of industries. The mission of the graduate program in Industrial Engineering is to educate our students for leadership positions in a broad spectrum of employment including Manufacturing, Quality Management, Supply Chain Management, Health Care, Banking, Information Management and related disciplines.

MS Industrial Engineering degree holders usually work on:

- **Process Optimization**
- Industrial Product and System Design
- Quality Management and Assurance
- Health and Safety Experts
- Industrial Ecology and Symbiosis
- Supply Chain Management

Program Summary

Minimum/Maximum Duration 1.5/4 years 30 Credit Hours

MS Engineering Management

(MS EM)

Overview

The MS degree program in Engineering Management (MS EM) is designed to build both technical competence and business acumen. The program builds understanding and skills critical to the support of fast-to-market strategies, which also guarantee product quality and cost minimization.

A systematic analytical framework is developed and coupled with tools for managing the engineering and technical functions within manufacturing-based companies. This cross-disciplinary program draws from the expertise of the School of Engineering (SEN) and School of Business and Economics (SBE), and develops the engineering leader who is responsible for designing and implementing strategies to successfully compete in the 21st century.

Program Objectives

Graduates will be able to:

- Model, analyze and control design and production activities
- Understand the impact of quality, cost and timeliness metrics on engineering processes
- Perform data analysis and optimization for decision making
- Develop business cases for justifying process, organizational and technological projects
- Support for systems engineering and project management
- Communicate effectively (written, verbal and presentation) across all levels in the enterprise

Career Prospects

MS Engineering Management is a balanced blend of management and engineering courses. Accordingly, it enables the students to grab managerial positions in any kind of industry. Graduates of the MS program generally take up management positions in:

- Logistics and supply chain
- Project management
- Organizational process re-engineering

- Systems and product engineering
- Product development

Program Summary

Minimum/Maximum Duration 1.5/4 years

Credit Hours 30

Department of Mechanical Engineering

The Department of Mechanical Engineering currently offers a BS in Mechanical Engineering (BS ME) program permitted by PEC, an MS in Mechanical Engineering (MSME), and PhD in Mechanical Engineering. PEC conducted an interim visit in April 2016 and declared the BS ME program to be satisfactory and allowed the program to continue. Following is a brief description of the programs.

BS Mechanical Engineering (BS ME)

Program Overview

Mechanical Engineering is the discipline of engineering that applies the principles of Physics and Materials Science for design, manufacturing, operations, analysis and maintenance of mechanical systems. Production and usage of heat and mechanical power; design and analysis of production machinery, industrial equipment, heating and cooling systems, aircrafts, watercrafts; industrial automation, design and production of medical devices, etc. are all directly or indirectly related to Mechanical Engineering. This field requires an understanding of core concepts including mechanics, kinematics, thermodynamics, materials science and structural analysis. Drawing upon these core concepts and the knowledge base from cross-disciplinary engineering fields like aerospace, electrical,

civil, chemical, biomedical and metallurgical sciences, mechanical engineers have contributed extensively in realizing technological advancements in the world today.

The Mechanical Engineering program at SEN is designed to prepare its graduates in multifaceted areas like industry, government and academia. Particular attention is paid so that graduates of our program have solid grounding in scientific. mathematical and technical knowledge. The coursework keeps pace with current relevant technologies. The undergraduate Mechanical Engineering curriculum includes foundation courses in Mathematics, Physics and Materials. Engineering courses in fundamental areas constitute much of the remaining curriculum. A few technical electives allow the undergraduate student to specialize somewhat or to pursue broader understanding in a particular area. A senior capstone project experience culminates the curriculum.

Program Objectives

The main objective of the Mechanical Engineering Program is to provide the students professional and scientific education that allows them to be successful as career engineers. More generally, our students will be trained with a view to:

- Functioning in professional environment in industry. government, and academia applying and building upon engineering sciences knowledge, problem-solving skills, and communication skills;
- Working efficiently both in teams as well as in leadership roles applying ethical standards including the ASME code of ethics within and beyond traditional Mechanical Engineering disciplines; and
- Remaining current with technology and contemporary scientific and societal issues, and consequently improve skills and knowledge through a lifelong process of learning.

Career Opportunities

The graduates of Mechanical Engineering program will be well prepared as competent engineers in consulting, engineering project management, mechanical design, operation and analysis. The existing employment market for mechanical engineers is constituted by all sorts of industries, including manufacturing and production, chemical and process, construction and building, etc. Besides, different governmental establishments, consulting firms and academia also offer a large number of opportunities for mechanical engineers.

Our mechanical engineers will be trained as per the domestic and global industry requirements. Within the country they will have ample opportunities in government and private departments. Water and Power Development Authority (WAPDA), Lahore Development Authority (LDA), Water and Sanitation Agency (WASA), National Engineering Services Pakistan (NESPAK), Pakistan Atomic Energy Commission (PAEC), National Development Complex (NDC), Communication and Works (C&W), Public Works Department (PWD), Oil and Gas Development Company Ltd., Sui Northern (Southern) Gas Pipelines Ltd. (SNGPL and SSGPL) and Pak Arab Refinery Ltd. are just a few of the examples in semi-government sector.

Textile industry, automotive manufacturers/assemblers like Honda, Toyota, Suzuki and a number of motorcycle manufacturers/assemblers and their suppliers, fertilizer plants like Engro, FFC, etc., multinational companies like ICI (paints and chemicals), P&G, Nestlé, Unilever, Schlumberger, etc., manufacturers like Pak Electron Limited (PEL), Sabro, consultants and builders like Allied Engineering Consultants (AEC), DESCON Engineering, Eden Builders, SKB Engineering and Construction, Etimaad Engineering Pvt. Ltd. etc., and many other HVAC and Engineering Services Companies are some of the potential employers for our graduates in the private sector of the country.

Program Summary

Minimum/Maximum Duration 4/7 years

Credit Hours 136

MS Mechanical Engineering (MS ME)

Overview

Mechanical Engineering is one of the broadest and most versatile of the engineering professions. The opportunities and challenges in the field of Mechanical Engineering are diverse and virtually unlimited. Mechanical Engineering involves the design, analysis, manufacture and operation of a wide variety of mechanical components and systems. While there are a number of disciplines within Mechanical Engineering, some of the major areas are thermal power, materials engineering, design engineering, and manufacturing engineering. At SEN, the Mechanical Engineering program is designed to prepare graduate students in many applied fields, including thermal power, emissions controls, design, structural analysis, automatic controls, fluid dynamics and emerging areas in alternative energy.

Program Objectives

This graduate program will impart the ability to:

- Apply knowledge of Mathematics, Science and Mechanical Engineering
- Design and conduct experiments, as well as analyze and interpret data
- Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, and manufacturability
- Function in multidisciplinary teams

- Identify, formulate and solve mechanical design engineering problems
- Develop an understanding of professional and ethical responsibility
- Broaden education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
- Use the techniques, skills, and modern engineering tools necessary for engineering practice

Career Prospects

Students in the Mechanical Engineering masters program generally wish to enter industry as practicing professionals, or pursue doctoral studies. A recent survey indicates that newly graduated students with MS Mechanical degree are working in:

- Product design
- Power engineering in the design and manufacture of electricity-producing systems
- Industries dealing with fuel processing, alternative fuels, fuel handling, transportation and storage
- Organizations involved in designing and building systems that control or utilize flow, such as pumps, turbines, compressors, valves, pipelines and fluid systems
- Solar energy concerns, devising new and innovative ways to utilize solar energy

PhD Mechanical Engineering (PhD ME)

Overview

Mechanical engineering faces dramatic challenges due to rapidly changing technologies and a new pattern of societal and industrial demands. The vision of the PhD Program is to meet these challenges and exceed the expectations of its constituents by focusing on the following:

- Development of a productive research program through a strategic focus on technology development in emerging areas such as thermal power, mechanical design, alternative energy and production engineering.
- A high quality program in tune to the needs of the program's constituents; the students, employers, faculty.
- Healthy enrollment that facilitates diversification of curriculum and faculty research and professional development.
- Become proficient in their focus area core courses and research.
- Produce high quality research and communicate their research clearly and concisely.

Program Objectives

To be a leader in education and research is the goal and objective of the graduate program in Mechanical Engineering. We seek to produce future leaders for industry, academia, government, and society leaders whose vision is founded upon fundamental knowledge, analytical skills, creativity, perspective, and ethics.

We seek to advance technology and science by combining basic knowledge with the innovative application of engineering and scientific principles. And, we seek to enrich our educational and research programs, and ultimately society, through service. This graduate program will impart

- Ability to apply knowledge of mathematics, science, and engineering.
- Ability to design and conduct experiments, as well as to analyze and interpret data.
- Ability to design a system, component, or process to meet desired needs within realistic constraints such as economic. environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- Ability to function on multidisciplinary teams.
- Ability to identify, formulate, and solve engineering problems.
- Understanding of professional and ethical responsibility.
- Ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- Recognition of the need for, and an ability to engage in lifelong learning.
- Knowledge of contemporary issues.
- Ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- Ability to initiate, conduct and report substantial research in national and international journals and conferences.

Career Prospects

A PhD is recognized by employers across a wide range of

sectors as a sign that you will bring a distinctive skill set to their organization. There are also opportunities where your subjectspecific skills and knowledge will be in demand. The PhD program in SEN at Mechanical Department is designed towards educating scholars who will assume leadership positions in industry, academia and government at the regional, national and international levels. The increasing role of technology in critical sectors, as well as the important role that Puniab province will undoubtedly play in these technology sectors, puts the PhD program in SEN at ME Department in a strategically important position with respect to its peers.

PhD graduates from UMT will directly contribute towards innovations, and solutions to current challenges and towards increasing the intellectual capital of the state and the region. Graduates leaving UMT will serve as ambassadors and help UMT connect with opportunities around the world. Research breakthroughs and technology innovations will lead to new products, growth of existing companies and the formation of new companies within Pakistan.

Program Summary

Minimum/Maximum Duration

3/8 years

Department of Energy Engineering

Department of Energy Engineering offers BS in Energy Engineering (BS EnE). The program has been permitted after successful visit of PEC while this program has been also bench marked by PEC and HEC for other institutions to follow.

BS Energy Engineering (BS EnE)

Program Overview

BS Energy Engineering is an exciting and unique undergraduate program offered by the School of Engineering. This BS degree is a first of its kind in the country with the curriculum addressing the call for the development of alternative sources of energy and conventional fossil fuels at the undergraduate level.

The program engages in energy research and development of regional and national relevance, and the training to produce solution oriented leaders in the energy sector and to provide expert advice on energy issues of national and regional interest. The program encompasses both renewable and non-renewable energy production and their effects on environment. Thus, the graduates of this program will have a unique edge in the market as they will be equipped with the knowledge and required skills for the industry.

Program Objectives

Taking into cognizance the need of the hour, the School of Engineering is offering this unique degree program which aims to produce multi-skilled professionals. As a service to the country and industry, the program focuses on providing the necessary skilled personnel for the currently crisis-laden but potentially flourishing energy industry of the country. For students, it gives an opportunity to embark on a remarkable journey filled with potentially high job opportunities both in the domestic as well as in the foreign markets. From academic viewpoint, the program is intended to fill the critical gap in the domain. In addition, the program prepares students to be successful leaders in advancing the technology and management of energy; innovators and entrepreneurs in the energy sector; and educators, practicing engineers, and national leaders in the energy and associated environmental health and safety, policy and economic fields.

Career Opportunities

The graduates of Energy Engineering program will be well prepared as competent professional engineers for the energy industry in accordance with national and international requirements. In the domestic market, they will have ample

opportunities in government and private sector. Water and Power Development Authority (WAPDA), Distribution Companies, Water and Sanitation Agency (WASA), National Engineering Services Pakistan (NESPAK), Pakistan Atomic Energy Commission (PAEC), National Development Complex (NDC), Communication and Works (C&W), Public Works Department (PWD), Oil and Gas Development Company Ltd., Sui Northern (Southern) Gas Pipelines Ltd. (SNGPL and SSGPL) and Pak Arab Refinery Ltd. are just a few of the examples in the government sector. Independent Power Plants (IPPs), existing and soon to be launched hydropower dams, and other energy producing entities are potential employers of energy engineers.

Moreover, different industries, including textile, automotive manufacturers/assemblers like Honda, Toyota, Suzuki and a number of motorcycle manufacturers/assemblers and their suppliers, fertilizer plants like Engro, FFC, etc., multinational companies like ICI (paints and chemicals), P&G, Nestlé, Unilever, Schlumberger, etc., manufacturers like Pak Electron Limited (PEL), Sabro, Dawood Hercules (DH), consultants and builders like Allied Engineering Consultants (AEC), DESCON Engineering, Etimaad Engineering Pvt. Ltd. etc., many other HVAC and Engineering Services Companies and companies in the related fields are to name a few of the potential employers for our graduates in the private sector of the country. In short, the Energy Engineering graduates will have immense opportunities on completion of their studies.

Program Summary

Minimum/Maximum Duration	4/7 years
Credit Hours	136

Department of Civil Engineering

The Department of Civil Engineering currently offers a BS in Civil Engineering (BS CE) program permitted by PEC and an MS in Civil Engineering program.

PEC conducted an interim visit in April 2016 and declared the BS CE program to be satisfactory and allowed the program to continue. Following is a brief description of the programs.

BS Civil Engineering (BS CE)

Program Overview

The Civil Engineering program at SEN is designed to mould students into excellent professional engineers by exposing them to different aspects of Civil Engineering, i.e., Structural, Geotechnical, Water Resources, Environmental and Transportation Engineering. Curriculum includes foundation courses in Mathematics, Physics and Material Sciences.

Engineering courses in fundamental areas constitute much of the remaining curriculum. A few technical electives allow the undergraduate student to specialize somewhat or to pursue broader understanding in particular area. A senior capstone project experience culminates the curriculum. The Department has highly skilled faculty with diverse background to nurture the talent of students and for defining new horizons. Apart from this, state-of-the-art laboratory facilities and adequate computational power will ensure the all-round development of students.

Program Objectives

The main objective of the Civil Engineering Program is to provide the students professional and scientific education that allows them to be successful as career engineers.

More generally, students will be trained with a view to:

- Functioning in professional environment in industry, government and academia; applying and building upon engineering sciences knowledge, problem solving skills, and communication skills;
- Working efficiently both in teams as well in leadership roles applying ethical standards including the ASCE code of ethics within and beyond traditional Civil Engineering disciplines:
- Remaining current with technology and contemporary scientific and societal issues, and consequently improve skills and knowledge through a lifelong process of learning.

Career Prospects

Graduates have sufficient opportunities for getting jobs in a wide range of national and international organizations. The main public organizations include National Highway Authority (NHA), Water and Sanitation Agency (WASA), Communication & Works Department (C&W), Water and Power Development Authority (WAPDA), Public Health Engineering Department, Pakistan Railways, Civil Aviation Authority (CAA) and Irrigation and Power Department, National Engineering Services of Pakistan (NESPAK), Associated Consulting Engineers (ACE), National Development Consultants (NDC), Descon Engineering, Izhar Construction, SKB Engineering & Construction, Habib Rafig and many more.

Program Summary

Minimum / Maximum Duration 4/7 years Credit Hours 136

MS Civil Engineering (MS CE)

Program Overview

Modern civil engineers plan, design, construct and manage the large-scale public works including dams, bridges, buildings, highways and amenities that underpin societies throughout the world. SEN aims to provide graduate engineers with advanced capabilities and in-depth knowledge in a range of specialized aspects of Civil Engineering. In MS program, emphasis is given on modern trends, cutting-edge techniques and advanced knowledge. The overall aim of the MS courses in Civil Engineering is to meet the needs of a broad range of engineering industries by providing high caliber graduates with the skills necessary to lead future development projects. At SEN, Department of Civil Engineering is offering MS in Civil Engineering.

Program Objectives

The graduate program will impart the ability to:

- Extend the engineering and science knowledge from undergraduate to graduate professional level
- Develop the skills required for team-working, social, ethical, economic and environmental awareness, through further studies, such as structural health monitoring, risk assessment and environmental issues
- Use the modern computer tools and programs for engineering practice
- Develop an understanding of how this knowledge may be applied in practice in an economic and environmentally sustainable manner
- Foster the acquisition and implementation of broad research and analytical skills related to structure, transportation, geotechnical and water resources

School of **Governance and Society** (SGS)

The School of Governance and Society (SGS) at UMT is a pioneering venture to teach inter-disciplinary programs in Government Studies. At the School, the purpose of education is not merely to enable prospective students and executives to obtain a degree and to excel in the public sector; it is also to instill in them a capacity to be curious. to discover their inner potential, to ask difficult questions, and to re-interpret the socioeconomic and political environment of Pakistan. The endeavor is focused on enabling the students to find innovative solutions to the many failures of governance that plague us and to promote sustainable development. Learning at the School aims to empower the citizens and the leaders of tomorrow by giving them knowledge with compassion, information with independent thinking, management skills with a sense of justice, and governance capacity with equity. The School's collaboration with domestic and overseas academic and training institutions maintains and, indeed raises, the high standards that are the hallmark of UMT. We hope that by enrolling at the School of Governance and Society, you will immensely enhance your prospects for public, corporate, and nongovernment development sectors, and also become the agent of change in your respective positions, as well as play a constructive role in building a progressive and socially just society as enlightened citizens.

Rahat ul Ain Director SGS

School of Governance and **Society** (SGS)

Vision

A progressive, socially just, and economically viable Pakistan by integrating communities, civil society, and government, through teaching and research, in keeping with the aspirations of the people.

Mission

The core endeavor of the School of Governance and Society is envisaged to be Government Studies. With an interdisciplinary approach, the teaching and research at the SGS aims to build on multiple knowledge sources, informing varied administrative structures, decision-making hierarchies, policy making function of the government as well as the civil society, in a dynamic national setting.

The underlying aim of studying governance and society is to enable prospective learners to systematically understand and examine the governmental and social institutions, identify areas of focus, assess prospects for reform and effect change.

What You Will Gain From SGS Programs

Learning Outcomes

- Master the operational aspects of public administration and public policy
- Polish your planning and management skills
- Make a difference by delivering service to the people
- Communicate effectively with all the stakeholders in government and society

- Identify the best administrative/policy solutions for a specific problem
- Master the principles of effectiveness efficiency and economy despite constraints
- Be able to work independently as well as collaboratively
- Be able to maintain continuity where necessary and effect change where required

Weh Link

For complete details of programs offered by SGS, visit http://umt.edu.pk/sgs/home.aspx

BS Public Administration

Public Administration affects most human activities in many different ways. For this reason, political scientists argue that Public Administration should not be studied by itself, but should be studied along with its impact on society. Through combining theory, policy, practice, and research on all dimensions related to the structure, functions and dynamics of governance and society, UMT offers one-of-a-kind degree in the country. Launched for the first time in Fall 2013. BS Public Administration is an interdisciplinary degree encompassing several academic disciplines. The program is designed to strengthen the skills and knowledge base of students and prepare them for successful careers through rigorous academic training and real-life simulations. A special emphasis is laid on the Pakistani context, drawing upon conditions both internal as well as external that shape the dynamics of public policy and public administration.

Program Summary

Duration 04 years **Program Credit Hours** 132 Program Type Morning Semesters 08

Career Prospects

- Civil Services of Pakistan (via CSS, PMS, etc.)
- Corporate Sector
- **UN Agencies**
- USAID, AUSAID, DFID UK, CBI, CIDA, etc.
- Non-Governmental and Non-Profit organizations
- Electronic and Print Media
- Research Institutes
- Consultancies
- Global, Regional, and Local Think Tanks
- INGO's Working With/Inside Pakistan
- **Teaching Profession**

Requirements

- Matric 50% Marks or Equivalence Certificate
- Intermediate 50% Marks or Equivalence Certificate

Masters in Public Administration (MPA)

The Masters in Public Administration (MPA) program applies a scientific and real-life approach to teaching. The discipline has been developed, keeping in view the environment where governance and service delivery face severe challenges. Through a multi-disciplinary approach, the program affords a distinct advantage to the aspiring practitioners and researchers alike by enhancing their professional skills, familiarizing them with a public manager's challenges, and equipping them with effective tools and techniques to cope with those challenges. The MPA students will learn not only the abstract theory but also the indigenous administrative peculiarities within the political and socio-economic context, the legal and institutional framework, and budgetary constraints. The program equips them with skills to devise feasible solutions to complex problems. During the coursework, the students will have an opportunity to develop their capacity for critical thinking and their capability to assume leadership roles in society.

The learning takes place under an all-encompassing instructional framework where theory is paired with contemporary case studies, best practices, seminars, and discussion sessions that are based on real-world examples of public administration, as well as new ideas, scholarship, and developments in the field. With faculty members engaged in research and applied field work, the School of Governance and Society strives to achieve excellence in teaching and learning that is a hallmark of UMT.

Requirements

- 50% in annual system or 2.5 CGPA in semester system
- Interview

Program Summary

Duration	02 years
No of Courses	22
Per Course Credit Hours	03
Credit Hours	66 (includ

ding research 03 and internship of 03 credit

hours)

Program Type Evening Semesters 04

Career Prospects

- Career in the Government (through CSS, PMS, several other advertised government jobs in health and educational

institutions, agriculture and irrigation, laboratories and technology management institutions, etc.), and public sector corporations

- Criminal Justice System
- NGOs and INGOs
- Human Rights, Child Rights, Women's Rights Groups
- UN and International Financial Institutions, Aid Agencies, **Donor Agencies**
- Government Policy Groups, Think Tanks, Research Institutes and Monitoring Organizations
- Corporate Sector
- Autonomous Organizations, Cultural and Social Work Bodies

MS Public Policy

The program aims at enabling aspiring students to comprehend opportunities, challenges, resource constraints, and systemic impediments that characterize governance and public policy formulation and its implementation.

The courses encompass the entire range of theoretical frameworks, tools and methods, as well as empirical research on applied dimensions of public policy. The underlying focus is on policy that impacts economic development, constitutional and administrative laws, real-life mechanisms and procedures, interagency coordination, psychosocial and cultural dynamics, taxation, human rights, national security, environment, housing needs, and agriculture, to name a few.

This is an activity-intensive learning program. The teaching method is a blend of learning methodologies consistent with modern practices, including seminar courses, case studies, structured group discussion, policy reviews and analysis, simulations, writing and editorial work, class room exams, internship, and research.

Program Summary

Duration 02 years

(First year coursework, second year

research dissertation)

No of Courses 11 Per course credit hours 03 Program credit hours 30 Program Type Evening Semesters 04

Requirements

Graduation with 2.5 CGPA in semester system or 50% in annual system + GAT with 60% Score.

Career Prospects

- Public Sector
- Corporate Sector
- Criminal Justice System
- NGOs and INGOs
- Human Rights, Child Rights, Women's Rights Groups
- Government policy groups
- Think Tanks, Research Institutes and Monitoring Organizations
- Government Planning Departments, Ministries and Attached **Departments**
- Autonomous Organizations, Cultural and Entrepreneurial **Bodies**
- Health, Social and Development Sectors

Terrorism Studies Program (Modular)

This program is designed to disseminate academically formalized knowledge of 'terrorism' appropriately tailored to the multiple needs of civil society, academia, researchers, security analysts, law enforcement and policy circles for a peaceful Pakistan. The participants will be exposed to a cross cutting and structured resource of learning through recourse to state-of-theart and evolving traditions in terrorism studies that will enable them to better understand the phenomenon in its entirety, hence be able to deal with it effectively. Primarily directed toward domestic contexts along with its trans/international linkages, the program contents as well as its multifaceted pedagogy takes into account subjectivities and sensitivities associated with expression of 'terrorism' in Pakistan which makes it a unique project in terms of inception and structure. The modular dimension of the study program is its unique dimension. The participants will be required to register for desired module(s) right at the outset. Withdrawal from the signed up part of the program will not be possible. However, upgrade to the higher level upon completion of initially registered module(s) will be considered.

First Module Certification
 Second Module Diploma
 Third Module MSc
 Fourth Module MS

Program Summary

Duration 2 years or as per signed up

module

No of Courses 9

Per Course Credit Hours 3

Dissertation Credit Hours 6 (for MS degree)

Program Credit Hours 30
Program Type Evening

Modules 4

Career Prospects

- Career in the Government (consultancy home departments, counter terrorism training establishments, armed forces, security organizations, law enforcement agencies)
- Criminal Justice System
- Academic Institutions
- NGOs and INGOs
- Human Rights, Child Rights, Women's Rights Groups
- UN and International Financial Institutions, Aid, Development and Donor Agencies
- Government Policy Groups, Think Tanks, Research Institutes and Monitoring Organizations
- Corporate Sector
- Media and Publication Houses

School of **Health Sciences** (SHS)

Welcome to School of Health Sciences.

Our school is dedicated to professionals who are ready to meet the challenges and are fully capable to perform their jobs in the healthcare industry of the 21st century. We are driven by values that include nurturing staff and students, upholding academic freedom and curiosity, and carrying out exceptional research in diverse areas. Most of the world's economies face a dilemma when it comes to delivering efficient and cost-effective health services. Pakistan is no different.

To address these challenges, we require a new set of tools and a new way of thinking as to how to improve the health status of the population across the board. One of the key initiatives that we have taken is to train a large number of highly qualified professionals in various healthcare fields. In order to achieve our objectives, we have adopted the following principles:

- Developing a world-class healthcare training facility for all students of the School where research, innovation and training form the fundamental basis of our vision
- Adopting teaching methodology that not only fosters the knowledge-seeking environment, but also encourages the students and faculty to develop their professional skills on continual basis
- Offering both excellent didactic education as well as extensive experience in the clinics, hospitals and laboratories of affiliated centres and hospitals
- Including technology-driven educational methodology for all students, faculty, staff, patients and the public
- Emphasizing the importance of preventive care and public health that is not only crucial but central to improving the health status of the population
- Integrating world-class cutting-edge medical technology related to diagnosis, evaluation and treatment into the medical curriculum of all programs offered by the SHS

I encourage you to contact us with your questions, or visit us and meet with our faculty and students. Thank you for considering School of Health Sciences.

Dr Muhammad Naveed Afzal

MBBS, MD (USA), MPH (USA) Fellowship (Johns Hopkins University, USA)

School of Health Sciences (SHS)

Mission

Our mission is to educate the next generation of highly skilled and qualified health professionals who are capable to serve the patients with dedicated compassion, integrity and outstanding professionalism; and SHS to be recognized as a leading School of Health Sciences in Pakistan.

Introduction

At the School of Health Sciences (SHS), we are preparing the next generation of exceptional leaders in healthcare. We are achieving this by embracing a spirit of inquiry and innovation in education and research in all academic programs offered by the School.

At SHS, we use interdisciplinary approach, innovative and technology-driven teaching methodology and world class clinical and lab facilities to provide our students an amazing learning experience. A low student-to-faculty ratio helps to ensure that students achieve academic success within a rigorous and supportive environment. The students are immersed in multidisciplinary, collaborative model of study early and experience hands-on real-life environment right from the beginning of their course work to get a thorough grounding in the subjects of study. SHS offers a wide range of undergraduate and graduate programs in health sciences across a wide spectrum of fields. Presently, programs in Physiotherapy, Biomedical Laboratory Sciences, Health Management, Imaging and Radiation Sciences, Ultrasonography and Nutrition Sciences are being offered. At SHS, we aim to develop highly skilled and compassionate professionals in their chosen careers who aspire to the highest standards of professional integrity and ethics.

Apart from teaching, we also perform other main functions as part of the University of Management and Technology (UMT). These include:

- Identifying new and emerging areas in the field of medicine and health sciences
- Planning and development of new academic modules and degree programs according to the identified need
- Planning and development of world-class healthcare facilities such as Physical Medicine and Rehabilitation Centers, Tertiary-level Diagnostic Laboratory and Radiological Service Centers
- Serving as a resource center and knowledge base in the area of public health, preventive care, nutrition, and disease prevention
- Undertaking research on important and pressing health issues facing Pakistan
- Developing effective and implementable policy tools and interventions to address important health issues at the country, regional and global level
- Development of a Tertiary-Level Teaching University Hospital and affiliated medical school at UMT

With state-of-the-art clinical skills facilities, the School of Health Sciences is a place where students, academics and practitioners come to learn, share and develop their skills.

Web Link

For complete details of programs offered by SHS, please visit http://umt.edu.pk/shs/home.aspx

Academic Programs Undergraduate Degree Programs

- Doctor of Physiotherapy (DPT)
- Doctor of Nutrition Sciences (DNS)
- BS Medical Laboratory Sciences (BS-MLS)
- BS Nutrition and Food Sciences (BS-NFS)
- BS Medical Imaging and Ultrasonography (BS-MI&USG)

Doctor of Physiotherapy (DPT)

About the Program

Physiotherapy is a healthcare profession aimed at changing and improving the mobility, physical independence and quality of life. It focuses on treating a variety of conditions including but not limited to Musculoskeletal, Neurological, Cardio-Respiratory, Pediatrics, Geriatrics, Women Health and Sports Injuries.

Physiotherapists work with patients varying in age, athletic ability and activity level and are responsible for treating a wide spectrum of health conditions – both acute and chronic. Physiotherapy diagnosis is based on principles of clinical decision making through examination, evaluation, prognosis, interventions and outcome evaluation.

They are an important part of healthcare team, who work directly with the patients ensuring their recovery after surgery, injury, fracture or other acquired disability. Patients suffering from chronic conditions such as diabetes, heart disease, arthritis, joint pain, cancer and neurological disorder like Parkinsonism and stroke also require consultation from a trained physiotherapist. People who want to adopt Physiotherapy as a career are required to go through a 5-year Doctor of Physiotherapy [DPT] program.

Doctor of Physiotherapy is a highly respected and sought after professional degree the world over. With the world wide population increasing steadily, DPT is one of those qualifications that will remain in high demand the world over for years to come.

Program Summary

Duration 5 years Semesters 10

Requirements

- Matric 50% Marks or Equivalence Certificate
- FSc (Pre-Medical) 50% Marks or Equivalence Certificate
- UMT Entrance Test or NTS Test or MCAT

Who Should Study?

Students who are interested in life sciences, believe in diversity of profession, want a professional career that is more than a job and also wish to make a difference in peoples' lives should adopt this profession.

Like specialist physicians (MBBS with specialization in one of the fields), physiotherapists are rehabilitation professionals who also work directly with the patients, ensuring their recovery after surgery, injury, fracture or other acquired disabilities.

Career Prospects

Physiotherapists work in the public sector (Grade 17 scale jobs), private hospitals, private clinics, physical medicine and rehabilitation centers, NGOs, aid agencies and organizations, sports clubs and teams, research, academia, medical technology companies, and are well suited for international job placement.

Doctor of Nutrition Sciences

About the Program

Covering aspects of nutrition and health, the Doctor of Nutrition Sciences (DNS) program focuses upon the role that nutrition plays in health, lifecycle, aging and disease. In this program, students learn to make effective nutrition assessments, thus becoming experts in applying the principles of clinical nutrition to patient care in a variety of settings.

Upon completion of the degree, students have the option to further pursue their careers as Registered Dieticians (RD) - a prestigious certification from USA. Dieticians and nutritionists, as they are often referred to, is a highly respected and sought after professional degree the world over.

They play a pivotal role in the wellbeing and improvement of health status through their wealth of knowledge and expertise in the field of diet and healthy nutrition. With the worldwide population increasing steadily, this is one qualification that is likely to remain in high demand the world over for years to come.

Program Summary

Duration 5 years Semesters 10

Requirements

- Matric 50% Marks or Equivalence Certificate
- FSc (Pre-Medical) 50% Marks or Equivalence Certificate
- UMT Entrance Test or NTS Test or MCAT

Who Should Study?

Students who are interested in life sciences, believe in the diversity of the profession, and want a professional career that is more than a job should adopt this profession.

Like specialist physicians (MBBS with specialization in one of the fields), dieticians and nutritionists are those professionals who also work directly with the patients, ensuring maintenance of their health status, early recovery, mobility, and improving their quality of life through dietary interventions.

Career Prospects

After completing this degree, you may work as clinical nutritionist, dietitian, food researcher and scientist, production manager, quality control manager, quality assurance officer in food processing, fitness consultant, food auditor and food processing unit manager.

BS-Medical Laboratory Sciences (BS-MLS)

About the Program

Modern medicine owes its existence to accurate diagnosis – and this in turn is dependent upon highly specialized technical equipment. Medical Laboratory Scientists [MLS] are highly trained professionals who work with state-of-the-art diagnostic laboratory machines that help the physicians in reaching an

accurate diagnosis - often on real-time basis. Their training and expertise assigns them a critical, often life-saving role in healthcare settings. MLS work as healthcare detectives uncovering and providing critical patient information from laboratory analyses.

They are also trained to monitor testing quality and run quality assurance tests in modern diagnostic laboratories to keep the lab equipment performing accurately at all times. MLS are trained to use sophisticated and expensive biomedical instruments and technology, and use computers, and other automated equipment to perform the tests. A certain level of manual dexterity is also required of them to perform laboratory testing on all types of human samples.

Program Summary

Duration 4 years Semesters

Requirements

- Matric 50% Marks or Equivalence Certificate
- FSc (Pre-Medical) 50% Marks or Equivalence Certificate
- UMT Entrance Test or NTS Test or MCAT

Who Should Study?

Students who are interested in life sciences, are technically oriented, like working in individual capacity as well as part of larger team, and those who also wish to make a difference in peoples' lives should adopt this profession.

Career Prospects

Graduates find employment as clinical lab scientists, laboratory managers, academia, research, healthcare organizations, health administration, medical technology industry, pharmaceutical industry and lab equipment and reagent suppliers.

BS Nutrition and Food Sciences (BS-NFS)

About the Program

These professionals work as nutrition experts, extending their expertise in a number of healthcare settings — especially in maintaining and promoting health in patients suffering from chronic diseases — such as Diabetes, Heart Disease, Arthritis, Auto-immune diseases, Chronic Infections such as Hepatitis B and C, and even obesity to name a few. These professionals also work with otherwise healthy individuals needing special dietary requirements — such as under-weight babies, pregnant mothers, under-nourished children and children with special needs.

Program Summary

Duration 4 years
Semesters 8

Requirements

- Matric 50% Marks or Equivalence Certificate
- FSc (Pre-Medical) 50% Marks or Equivalence Certificate
- UMT Entrance Test or NTS Test or MCAT

Who Should Study?

Students who are interested in life sciences, are technically oriented, like working with patients as well as part of larger team and those who also wish to make a difference in peoples' lives should adopt this profession.

Career Prospects

Graduates have the opportunity to work as production managers in food and beverages industry, quality control managers, quality assurance officers in food processing, fitness consultants, food auditors, food processing unit managers, culinary experts, social welfare, special children, gynecology and obstetrics clinics and in fitness centers.

BS Medical Imaging and Ultrasonography (BS-MI&USG)

About the Program

Modern radiology is a highly diversified and advanced field consisting of such diverse areas such as — diagnostic radiology, interventional radiology, radiation therapy and nuclear medicine. The Medical Imaging Scientists, as they are commonly called, work in all these areas of radiological sciences, discharging their duties often at tertiary level medical centers, teaching hospitals and academic research centers. These highly trained and specialized professionals work with patients undergoing procedures such as interventional angiography, computed tomography, magnetic resonance imaging, doppler scanning and ultrasonography. Thus, they are a key part of health care delivery team in any modern hospital setup.

Program Summary

Duration 4 years
Semesters 8

Requirements

- Matric 50% Marks or Equivalence Certificate
- FSc (Pre-Medical) 50% Marks or Equivalence Certificate
- UMT Entrance Test or NTS Test or MCAT

Who Should Study?

Students who are interested in life sciences, are technically oriented, like working with patients as well as part of larger team and those who also wish to make a difference in peoples' lives should adopt this profession.

Career Prospects

Graduates may work in diagnostic radiology departments, radiation therapy, cancer treatment, nuclear medicine, research and academia, medical equipment makers and service providers, biomedical engineering companies and hospital equipment maintenance departments.

School of **Law and Policy** (SLP)

Thank you for your interest in UMT School of Law and Policy.

University of Management and Technology's mission is to "evolve" by "actualizing strategic partnerships with stakeholders, harnessing leadership, generating useful knowledge, fostering enduring values, and projecting sustainable technologies and practices." Training students in legal and policy analysis is fundamental to each of these goals. Also, keeping in view the current state of legal and policy studies in the country, there is a dire need for institutions and programs that introduce students to latest approaches and discourses in these fields. UMT Law has been set up in order to address all these issues. Our unique approach---that focuses on enhancing both theoretical knowledge and practical skills enables students to develop their own expertise and become competent academics and professionals nationally and internationally. UMT Law offers undergraduate and graduate programs. All programs are focused on law with various components related to policy.

At the moment we are offering LL.M. in Commercial Law and LL.B. The objective of LL.M. in Commercial Law is to equip law graduates with knowledge and skills that are most useful for lawyers working in-house for corporations or with law firms doing commercial transactions.

The objective of MS in Commercial Law is to equip business managers, bankers, entrepreneurs, etc., with knowledge and skills that are most useful for understanding the legal aspects and consequences of different commercial transactions.

The objective of our five-year LL.B. program is to produce lawyers who are able to excel, depending on their interest, as general practitioners or specialists not only in the local market, but also in the international arena.

UMT Law is following the U.S. model of legal education while adhering, where applicable, to the standards prescribed by Pakistan Bar Council and Higher Education Commission. Our permanent, adjunct, and visiting faculty comprises alumni of top U.S. and British universities who are both preeminent scholars and accomplished practitioners and who are committed to helping students develop academic and professional competencies.

To learn more about our outstanding programs, I invite you to visit our website, or better yet, to visit us in person.

We look forward to hearing from you.

Sved Imad-ud-Din Asad

LLM, Harvard Law School

School of Law and Policy (SLP)

LL.B.

Objectives

The immediate objective of our five-year LL.B. program is to produce legal practitioners who are not only able to excel in the local market, but are also able to successfully compete in the international arena.

Benchmark

The program follows the guidelines prescribed by Higher Education Commission (HEC). These are available at the Commission's website in Curriculum of Law for 5-Year LLB Program.

Strengths and Prospects

- The faculty comprises alumni of top U.S. and British universities like Harvard University, Yale University, Columbia University, Cornell University, Boston University, UC Berkeley, University of London, University of Cambridge, and University of Oxford
- The visiting foreign faculty exposes the students to latest trends in North American, European, and East Asian jurisdictions, consequently, preparing them for the globalizing legal market
- The electives are designed to equip the students with skills that are highly sought by corporations and law firms doing commercial transactions, thereby, enhancing their job prospects
- During summers, subject to certain conditions, the students can take courses at Boston University School of Law.

- The students, subject to certain conditions, are offered opportunities to participate in foreign moot competitions, summer internships, and foreign study trips
- The School not only encourages its students to proceed to North America and Europe for higher studies, i.e., LL.M., BCL, etc., but the foreign qualified faculty also guides the applicants through the application process
- The rigorous program prepares the students to successfully fulfill the laborious requirements of foreign graduate programs
- The School offers generous merit-based scholarships
- The program offers quality legal education at an affordable price

Teaching Methodology

All courses are taught using the Socratic method, which has been used at top American law schools for over a century.

Program Summary

Duration 5 years Credits 172

Requirements

- Matric 50% Marks or Equivalence Certificate
- Intermediate 50% Marks or Equivalence Certificate

LL.M. in Commercial Law

Objective

The immediate objective of LL.M. in Commercial Law is to equip law graduates with knowledge and skills that are most useful for lawvers working in-house for corporations or with law firms doing commercial transactions. The long-term objective of the program is to provide law graduates with an extensive

understanding of regional and global trends in commercial law, in their areas of interest, producing academics and practitioners that are able to improve the existing legal framework for businesses in Pakistan.

Benchmark

The program is structured in accordance with the precedents set by top European and American law schools while adhering to the curriculum prescribed by Higher Education Commission.

Strengths and Prospects

- The faculty comprises alumni of prestigious U.S. and British universities like Harvard University. Yale University, Columbia University, Cornell University, Boston University, UC Berkeley, University of London, University of Cambridge, and University of Oxford
- During summers, subject to certain conditions, the students can take courses at Boston University School of Law
- The visiting foreign faculty exposes the students to latest trends in North American, European, and East Asian jurisdictions, consequently, preparing them for the globalizing legal market
- The students, subject to certain conditions, are offered opportunities to participate in commercial law clinic, summer internships, foreign moot competitions, and foreign study trips
- The program offers quality legal education at an affordable price

Program Summary

Duration 02 years Credits 36

Requirements

LL.B. (Hons.) or LL.B. Holders with 47% or 2.5 CGPA

Commercial Law Clinic

During summer, UMT Law offers Commercial Law Clinic (CLC) to its students pursuing LL.M. in Commercial Law. The first proper legal clinic in Pakistan, CLC allows the participants to have a thorough experience of commercial practice and, consequently, improve their applied skills in the process. Students interested in learning about the practicalities of commercial transactions can take CLC, as an additional course, for no extra charge.

Application

Interested students apply to be admitted to CLC in April.

License

All applicants must be licensed to practice law in Pakistan.

Duration

The total duration of CLC is 135 hours or 45 hours for three consecutive weeks.

Web Link

For further details, please visit

http://slp.umt.edu.pk/

School of **Professional Advancement** (SPA)

It is my pleasure to welcome you to the School of Professional Advancement. SPA aims to be an institute of professional education dedicated to providing innovative higher education programs specifically designed for professionals and job seekers. For this purpose, SPA provides the platform to synthesize field experiences with theoretical knowledge to foster mutual enhancement between academic study and practice.

During your stay at SPA you will be able to interact with highly qualified and experienced faculty who takes on the role of facilitators rather than traditional instructors. They share your enthusiasm for knowledge and are specifically trained to offer blend of teaching pedagogies to cater for your dynamic needs. Many of you will make professional networks with those who are related to your area of interest. In addition, you will be exposed to the domain of applied research, engage in real time consulting projects, participate in variety of different national and international seminars relevant to your field of interest, and get introduced to our vast corporateinstitutional linkages while working in parallel with other professionals, trained faculty and staff.

By offering a broad range of market oriented educational programs. SPA addresses the concerns of dynamic business environment and changing interests of prospective employers and organizational needs. Our career development programs have gained considerable reputation among professionals and employers and continue to work proactively towards their goals. This mission aligns with our passion to promote a culture of trust, collaboration, knowledge, and transformation. We are committed towards bringing excellence in professional education through innovation in learning, knowledge sharing, and professional development. At SPA, we are committed towards developing a vibrant community of value creators. It is my heartiest pleasure to welcome you to become a part of this community.

Dr Naveed Yazdani

PhD Management Sciences Scholar MS Management UMT, Lahore

School of Professional **Advancement** (SPA)

The School of Professional Advancement (SPA) is a dynamic sub-unit of UMT catering for the lifelong educational needs of participants and professionals. SPA's core activities revolve around the theme of 'Building professionals for the future.' It has been established to provide a base for upward mobility and professional growth of individuals across various sectors.

The recent trends of the business world suggest that professionals will continuously need to learn new knowledge and skills in order to retain their jobs in a highly competitive business environment. SPA not only understands these trends but also makes periodic estimates for future developments which provide professionals a dynamic platform to equip themselves for the mounting competition. SPA pursues a three-pronged mission:

Instructional Mission

- To serve as a source of knowledge and expertise for the students' education and professional development through designing state-of-the-art programs and courses
- To continuously experiment in developing new programs and instructional models which enhance educational quality for SPA students
- To provide high quality research-based master degree programs
- To pitch the same level of intensity by all faculty members (permanent and visiting) in all classes and all courses

Pedagogical Mission

 To ensure that 'learning by doing' approach, underpinned by the philosophy of reflection-change-action, is demonstrated by the faculty throughout all SPA programs

- To encourage students to think critically about their academic as well as personal frames of references and to provide them the skills and abilities to challenge their own and others' habits of mind and points of view
- To ensure provision of technology supported learning environment in and off the classes

Curricular Mission

- To transform SPA students into better individuals and members of society
- To serve as a liaison and a resource between industry and academia
- To enable all SPA staff members to increase their academic and professional knowledge as a means of constantly improving the school and its activities

Weh Link

For complete details, please visit http://spa.umt.edu.pk/

List of Programs

Master Programs

16 Years Degree Programs

- Master of Human Resource Management
- Master of School Management
- Master of Marketing Management
- Master of Project Management
- Master of Banking and Finance
- Master of Supply Chain Management
- Master of Information and Communication Technology

Master of Fashion and Luxury Brand Management

Master of Computer Science

Program Summary

Program Requirements 20 courses (60 credit hours)

(6 credit hours) Project

Total Credit Hours 66

Requirements

50% Marks in previous degree

MS Programs

18 Years Degree Programs

MS School Leadership and Management

MS Project Management

Program Summary

Program Requirements 8 courses (24 credit hours)

Thesis (6 credit hours)

Total Credit Hours 30

Requirements

50% Marks in annual system in previous degree or 2.5 CGPA in semester system

50% Score in GAT (General)

MPS Programs

18 Years Degree Programs

- MPS Organization Development and Consultancy
- MPS Advertising and Marketing Communication
- MPS International Business and Export Marketing

Requirements

2.5 CGPA in previous degree + 50% Score in GAT (General)

CIM Chartered Diplomas

- Foundation Certificate in Marketing
- Certificate in Professional Marketing
- Diploma in Professional Marketing
- CAM Diploma in Digital Marketing
- **CAM Diploma in Marketing Communication**

Master Programs

Master of Human Resource Management

Rationale

Human resources are the real assets for any organization. Even more in today's world than in the past, an organization's efficiency is impacted by the effectiveness of its human talent. The Master of Human Resource Management (MHRM) program is designed for professionals who are seeking a career in HRM.

This program seeks to inculcate HRM skills and capabilities in the participants. The major thrust of the program is to train a group of professionals who are academically strong and judicious in their planning to contrive human resource for the best output while possessing the capacity to work in a challenging environment. The program seeks to prepare participants who are well versed in the art of human relations management.

Career Opportunities

Successful completion of this program would lead participants to dynamic careers in managerial capacities in business

organizations in both the public as well as the private sector as human resource executives and human resource managers. Under the influence of globalization and the resulting technological changes, the structural evolution of organizations is providing new openings to human resource managers. Most of the organizations understand the importance of human resources and are on the lookout for dynamic and capable human resource managers.

Master of School Management

Rationale

Changes in school administration over recent decades are part of a larger trend in the management of public service organizations that can be characterized as the decline of older public administrative models and the rise of a New Public Management (NPM) model.

The ideas and research findings behind the NPM model in public services - flatter management structures, market like mechanisms, decentralization, customer orientation and evidence-based improvement of services – have significantly changed the approach to organizational management.

The effectiveness of these changes is still debated in education research and policy circles, but it is clear that these ideas, and the debate surrounding them, have changed the terms of management.

Career Opportunities

Effective managers are needed at all levels of education - from first line administrators to top executives - to plan and direct the work of the organization, set policy, establish channels of communication, and evaluate the work that is done.

The MSM program is a transformational experience. You will develop deep knowledge and skills in the key areas of the education sector, and the self-awareness and sense of

perspective to make smart choices about your future. This program is geared to help you gain the knowledge and understanding needed to advance your leadership career in the education sector.

Master of Marketing Management

Rationale

Master of Marketing Management is a complete program structured to thrash all areas required for the vivid conception of marketing and advertising which are core areas of business. At SPA, the detailed aspects of business studies with the core subjects of marketing and advertising procures a team of highly skilled people aware of even the minute details of marketing and capable of launching modern techniques with frequent use of new concepts and technology. The progressive approach of SPA sets a solid platform for the participants to become independent learners by recurrent analysis of marketing, advertising and promotion.

Therefore, graduates of the program find themselves at ease as exposure about the practical situations in the different fields of marketing makes them willing to accept challenges with eager anticipation. The use of modern technology and teaching aids nurtures talent and trains participants by developing insight that turns tough trials of reality into a pleasant learning experience.

Career Opportunities

Graduates of the program will find prominent roles in different institutions that are directly or indirectly attached with aspects of sales and marketing. This program is specifically tailored for business sectors that rely heavily on sales and marketing strategies and equips them for evolving the best sales and marketing teams in view of financial dynamics and challenges.

The successful completion of this program would lead participants to dynamic careers in the public and private sector as brand managers/executives, marketing managers, sales managers, and executives in financial institutions and limited companies.

Master of Project Management

Rationale

Project management is required in all sectors of the modern economy, industry, the public and private sector, commerce (including e-commerce), business analysis, product development, marketing, human resource management, information technology, engineering and construction.

It presents challenges in managing the technical, cultural, political and financial aspects inherent in all ventures. Today, companies are employing project managers increasingly to help improve productivity and cut costs by utilizing their expertise in restructuring current processes to increase efficiency and help the business to grow.

The School of Professional Advancement (SPA) provides training and education in meeting the highest professional standards and relevance through the Master of Project Management program which is a specialist program that aims to develop project management leaders through broad-based training and education.

The program provides a thorough understanding of the key elements of project management such as decision-making, risk and value management, financial management, project economics, procurement and business strategies, law and project information systems, project management and people management. Knowledge of these key areas is developed within the context of different project environments and the importance of people and project teams in achieving success. The program helps the participants to develop a set of specialist skills in theory, research and methods of critical evaluation.

Career Opportunities

Successful participants are able to operate with increased authority within their areas of core expertise, manage others in a team environment, and obtain promotions within or outside their organization of employment. Opportunities in the field of project management abound in industry and the corporate sector as high competition calls for increased productivity and efficient management of organizational processes. The successful graduates of the program are able to secure employment as project managers, project planners, managing consultants, business project managers, project controllers, project coordinators, business analysts, client service managers, technical project managers and project analysts.

Master of Information and **Communication Technology**

Rationale

The fundamental educational objective of MICT is to provide broad technical understanding of latest and emerging technologies in the field of information technology. Due to rapid worldwide dependency on software applications and IT related products, the requirement for trained and experienced IT specialists is in great demand. The program provides a competitive edge in the current complex marketplace. The technological understanding and skills presented in the MICT are in high demand throughout the computing industry as society is being transformed by the emergence of highly connected, high speed capacity networks, and a knowledge-based global eeconomy.

Through integration of IT based skills with enhancement of management capabilities. MICT provides practice oriented learning opportunities to professionals and job seekers in the IT industry. For this purpose, the students will not only be exposed to practice oriented sessions but also the required theoretical knowledge within the areas of IT project management, business development, computer programming, database management, computer networks, information system control and audit and IT infrastructure development.

Career Opportunities

The program trains its participants in fields that are essential to the IT industry, but often overlooked by IT professionals. Thus, it provides excellent job opportunities for our graduates in key positions such as IT project managers, network engineers, network system administrators, application developers, IT support managers, business analysts and systems analysts.

Master of Banking and Finance

Rationale

Currently, the banking and finance sector in Pakistan is facing unprecedented transformation towards modernization, liberalization, innovation and integration with the global financial markets. The challenges for the banking sector have become ever more complex and convoluted and demand mentally sound and inquisitive human capital.

There is an increasing demand for highly specialized executives capable of understanding the complexities that govern the financial sector. The Master of Banking and Finance (MBF) presents a unique opportunity to undertake specialized postgraduate studies in the areas of banking and finance. MBF is one of the most demanded programs of SPA. This featured program has wide acceptability in the banking sector. Currently, MBF alumni are working in many banks on very lucrative positions.

Career Opportunities

Successful graduates of this program can find placements in public and private organizations, insurance and leasing

companies. The ideal organizations are banks. Graduates of the program can also be employed as trainers, financial analysts and consultants in the consultancy and training organizations.

Master of Supply Chain Management

Rationale

Master of Supply Chain Management is a complete program structured to thrash all those areas required for the vivid conception of supply chain management. People at all levels in organizations require broader perspectives combined with the ability and motivation to manage change.

Existing management must constantly develop their competencies to manage the supply chain from strategy through implementation to competitive operation. There is also a prime need for the best professionals to provide a fresh, innovative impetus. In support of this need, this program provides training and education of a high academic standard that is relevant to modern industry.

Career Opportunities

Master of Supply Chain Management provides the solution to those who want to link up offer and demand for services. Graduates from the SCM concentration receive the necessary theoretical as well as methodological foundation that is needed to solve the manifold supply chain problems.

They are able to work in supply chain management as supply chain analysts and consultants, area managers in logistics and transportation, heads of logistics and planning departments. business and infrastructure development managers, sales representatives in the key sales channels, operation managers – import/export departments, senior supply chain managers, value chain management instructors, purchasing managers, plant managers, supply chain managers, and contract administrators.

Master of Fashion and Luxury Brand Management

Rationale

The Master of Fashion and Luxury Brand Management program opens opportunities to pursue careers in a wide range of fashion and luxury fields. Students will discover a whole range of opportunities as diverse as clothing design, fashion marketing, fashion merchandising, modeling and apparel design.

The program's objective is to enable students to achieve their career ambitions by giving them regular access to experienced fashion and luxury specialists who have both strong academic skills and practical in-company experience, improving and expanding participating students' career prospects by providing them with training in fashion and luxury management as well as understanding the issues in international trends and working across cultures. For those who may be working or studying outside the field of art, fashion and luxury, this program provides the opportunity for a change in career direction.

Career Opportunities

Students will be perfectly prepared to take on management challenges at leading organizations. Graduates can go to work at top level management, designing, sourcing, merchandising, budgeting, advertising, public relations, product design, event management, store design, retail management and people management in the fashion and luxury goods sector.

Master of Computer Science

Rationale

The Master of Computer Science program seeks to prepare the participants in applying the latest computer technology to the real world business organizations. The program prepares participants

with an in-depth understanding of core and advanced topics in computer sciences, and trains them to use the latest tools to represent, model and solve real world business problems. The curriculum provides a solid foundation and training for practicing computational scientists, computer specialists or software engineers in business, industry or government. The program also offers applied algorithms and data structures, artificial intelligence, distributed systems, operating systems, database design, high performance computing, human-computer interaction, networking, scientific computation and software engineering.

Career Opportunities

Successful completion of this program leads participants to dynamic careers in software industry as software solution consultants, software engineers, network engineers, programmers and system administrators.

Program Summary

Program requirements 21 courses (63 credit hours)

3 credit hours Project

Total Credit Hours 66

MS Programs

MS School Leadership and Management

Rationale

MS Management program is intended to provide a strong foundation in educational research and at the same time, provide other course units relevant for the successful management of schools and other educational institutions. It equips educational managers with transformative skills and knowledge to run and

manage their institutions efficiently and effectively. For many experienced educators, this program opens the door to a world of new professional opportunities for influencing policies and practices which ultimately impact schools and the lives of children.

Graduates work in federal, state and local government, national foundations, advocacy and nonprofit organizations, professional associations, policy think tanks, school improvement organizations, and in local schools and districts. They fill diverse roles, enjoying success as leaders, advocates, policy analysts, consultants, researchers, planners, educators and philanthropists.

Career Opportunities

The course is intended for educationists, principals, vice principals, coordinators, senior teachers, trainers, and instructors in the private, public, commercial or voluntary sectors of education and training who aspire to senior management positions. Many graduates of the course attain senior management positions in education or training organizations.

MS Project Management

Rationale

Project Management operates in all organizational contexts and this course offers a route into this profession which is suitable for graduates from a large range of backgrounds.

Developed with project management specialists, this course represents 'cutting-edge' knowledge for those wishing to become practitioners in a field faced with significant growth and opportunities. This course provides a comprehensive and systematic understanding of Project Management.

Students are exposed to new insights of best practice applications in the field of project management through the most up-to-date academic research and case studies. Skills developed during the program will enable graduates to manage projects within manufacturing, service, social enterprise, charity or public organizations.

Career Opportunities

The specific aim is to develop specialist skills in project management. These arise from the students being exposed to theory, research and methods of critical evaluation, bringing their work-based skills to bear in applying the lessons to their career environment.

Graduates will be able to work as project managers, project planners, managing consultants, business project managers, project controllers, project coordinators, business analysts, client service managers, technical project managers, and project analysts.

MPS Programs

For the first time, School of Professional Advancement (SPA) is launching Master of Professional Studies from Fall 2014.

What is Master of Professional Studies (MPS)?

MPS is an 18-year Master degree program grounded in pedagogy of 'learning by doing fields.' While other Master degrees programs tend to focus on research and theory. Master of Professional Studies tend to emphasize imparting applied and practical skills, and require extensive degree of fieldwork to complement classroom learning.

The MPS ensures and enhances lifelong learnings for midcareer professionals and working students.

International Universities Offering MPS Programs

The MPS programs are renowned internationally and all those universities which are engaged in continuous learning education programs are offering such innovative programs. Following

international universities are running MPS programs:

- George Town University School of Continuing Studies (Washington, USA)
- Carnegie Mellon University Pittsburgh (Pennsylvania. USA)
- The University of Minnesota (Minnesota, USA)

Purpose

MPS Programs are specifically designed to enable the mature learners to create a customized plan of graduate study tailored to their personal and professional needs. This degree offers students the opportunity to gain the advanced knowledge and skills necessary to respond successfully to new and emerging career opportunities.

The MPS programs are for the professionals who wish to specialize in the subjects of their interest to put their careers on fast track. The faculty engaged in the MPS programs brings the latest research and industry practices to the classroom.

The MPS programs equip the students to have a lead in their professional career in the following ways:

- Generating creative ability to make a difference in competitive situations
- Improving their employability
- Placing their career on the fast track
- Gaining skills for success
- Studying while they work

Target Audience

These programs are aimed mainly at:

 Working professionals with a 16-year master degree or

 Graduates with 16-year bachelor degree and relevant work experience

The recent trends of the business world suggest that professionals will continuously need to learn new knowledge and skills in order to retain their jobs in a highly competitive business environment.

SPA not only understands these trends but also makes periodic estimates for future developments which provide professionals a dynamic platform to equip themselves for the mounting competition. Professionals who wish to excel in their fields and be internationally recognized for their work need to advance in these degrees.

MPS Organizational Development and Consultancy

Rationale

The MPS in Organizational Development and Consultancy (ODC) program develops working professionals to assume leadership roles in the transformation of organizations through its emphasis on academic rigor and ethical practice.

This degree will prepare students, through a combination of academic training and practical application, for responsible leadership positions in business, government, human services, and other organizational settings. Graduates will be qualified to fill a variety of challenging and rewarding positions concerned with human resources acquisition, retention, management, education and development.

Designed for the experienced professional, the program will give students the skills and knowledge needed to assume leadership roles in the transformation of their organizations. The MPS ODC program focuses on team and organization change interventions necessary to create productive, compassionate organizations.

Career Opportunities

Graduates often find employment in various settings, including colleges and universities, consulting firms, government agencies and corporations. With ODC Degree, you will develop a portable set of knowledge and skills that aren't about how to perform your job, but are about how to be a leader as it applies to your current job, your future job and all areas of your life.

After successfully completing Master of Professional Studies in Organizational Development and Consultancy program, you should have the tools needed to excel as an OD specialist who can initiate, manage, and sustain workplace change efforts in a variety of areas, including corporate development, talent management, workforce development, performance improvement, training and development, government agencies, nonprofit organizations and independent consulting.

MPS in Advertising and Marketing Communication

Rationale

Master of Professional Studies in Advertising and Marketing Communication is a specialist program under Marketing that focuses on the products and the consumer.

The degree arms you with the necessary skills and knowledge as how to establish a strong relationship between product brands and the end consumer.

The program covers issues of branding in blue chip companies, the service industry, banks, petroleum companies, lifestyle organizations, corporate brand heritage, and nation and place branding.

Career Opportunities

As the area of Branding and Advertising is growing particularly in larger organizations both in Pakistan and internationally, students

have an ideal opportunity to secure employment in a range of organizations and industries. The course would also act as a solid platform for continuing professional development or membership of professional bodies such as the CIM. Graduates can also progress to further study (e.g. PhD).

MPS International Business and Export Marketing

Rationale

The MPS in International Business and Export Marketing is an excellent program for students having interest in the international business career. The program will be presented through the center for International Trade and Marketing Simulation (CITMaS). The increased globalization and dominance of MNCs have created a huge demand for employees who have multicultural experience and exposure. The increased pressure on local business organizations to look for foreign markets has also contributed to an escalating demand for individuals who can meet international challenges. The program hence, can become a natural choice for students who want to work in globalized work place and who have excellent track records with the potential to take on international management responsibilities. The program is highly analytical and aims at enhancing students' international business acumen. It contains two featured courses which make this program different from contemporary academic programs. These featured courses are:

- (a) Marketing Strategies Through Simulation
- (b) International Trade Modeling

The program benefits from in-depth courses taught by our most research oriented faculty and also from very close ties with the business community who take part in courses, skills seminars, consultancy projects and conferences organized on and out of the campus.

Career Opportunities

The graduates of the programs can be hired by MNCs and the local organizations engaged in international businesses. They can be best fit for positions like country managers, trade analysts, export managers, export marketing managers, business analysts, and export officers. Other organizations in Pakistan who can hire our graduates include export houses related to any sector. Chambers of Commerce. Trade Associations, and MNCs like Unilever, Nestle, 3M, Honda, Toyota, Engro Food, Pepsi Cola, Alflah Bank, etc.

CIM (Chartered Institute Of Marketing, UK) Chartered Diplomas

The Chartered Institute of Marketing (CIM) is the largest and oldest marketing organization in the world. In our experience, there's no such thing as an unqualified success, and our unique set of qualifications will make a real difference in your career – whether you're a student, marketing assistant, or responsible for an entire marketing department.

Our specialist arm, the CAM Foundation (CAM), was established as a registered charity in 1970. In 2000, the CAM Foundation formed an alliance with CIM, and since then CAM qualifications have been awarded by CIM. The University of Management and Technology (UMT) and the School of Professional Advancement (SPA) have been accredited by The Chartered Institute of Marketing, UK, to deliver diplomas and certification in marketing.

Accreditation means that each center has been quality-audited and approved to each CIM qualification and that tutors have access to essential teaching resources and information. CIM Accredited Study Centers ensure that you are booked onto the correct level of qualification. The CIM global network means that you can choose from around 300 Accredited Study Centers. which have all been quality-audited and approved

SPA Offers the Following CIM, UK Programs:

- Foundation Certificate in Marketing
- Certificate in Professional Marketing
- Diploma in Professional Marketing
- CAM Diploma in Digital Marketing
- CAM Diploma in Marketing Communication

Career Opportunities

No matter what your industry, you need practical and relevant marketing knowledge to help keep abreast of everything from new technology and channels, shifting consumer moods to the very latest techniques for collecting and analyzing data – as well as the bigger business issues around strategy and process that can give you credibility way beyond the marketing department.

Our qualifications are not only taught by some of the greatest minds in global marketing today but have been shaped by the genuine, practical and ever-changing marketing challenges you face. Marketing is an exciting, challenging and rewarding profession. Whether you're just starting out or a senior marketer, we can offer all the help, advice and resources you need to further your career and Continuing Professional Development (CPD).

Continuing Professional Development (CPD) is hugely important to a marketer's ongoing development, as knowledge quickly becomes out of date. Our Chartered CPD Program can help you stay ahead throughout your studies and career.

Eligibility and Admission Criteria: Applicants must have Bachelor's degree in order to be eligible for admission in Professional Certification and Diploma.

School of Science (SSC)

I welcome you to UMT School of Science (SSC). This will be a very exciting year in the SSC as a phased transition that will sustain and enhance our excellence in education and research. If you are considering graduate studies in a science field, we hope you will look into our interdisciplinary options and internationally ranked programs. We are a research intensive university and you will get a world class experience, working at the cutting edge of nanoscience.

Science plays a vital role in developing reliable and usable systems that are crucial to the survival of virtually all organizations today, the functioning of the global economy and even for our entertainment. Although many challenging issues still remain, we find that a window of opportunity has opened up that gives us a chance to rebuild our core strength, explore new directions and expand our infrastructure.

Our home in UMT boasts active applicable research on real-world problems to enlighten our teaching and pass the latest knowledge on to our students. We have been successful in recent years at doing that, not by blatantly trying to outbid them, but instead by understanding what our faculty members are passionate about, providing what the students need, and facilitating the way they want to carry out their careers and lifestyle ambitions. As a team, our science faculty and staff work closely together to meet the demands of our growing enrollments and expanding commitments in academic activities and public engagement.

The faculty has a common purpose: to impart the knowledge and skills, values and attitudes that constitute a liberal education. To help students solve problems, think and communicate are the primary and essential aims of the School of Science. Whether the course enrollment is large or small, faculty are interested in their students as individuals and make an effort to be accessible for individual conferences and help sessions outside the class.

For the latest in what is happening in the School of Science, visit our website and campus. With the right people and programs in the right place, we're creating new standards in science education. Moreover, I would love to know your thoughts through email.

Prof Dr Muhammad Azhar Igbal

PhD Semiconductor Physics Lancaster University Lancaster, UK ssc.dean@umt.edu.pk

School of Science (SSC)

Vision

The School of Science aspires to the highest standards of excellence in aspects of teaching, research and service

Mission

To provide an excellent quality undergraduate and graduate education in Science and Mathematics and service courses for other departments of UMT, produce high quality research and provide an environment where research and creativity induce and flourish through teaching, scholarship and service

The mission is enhanced by:

- Providing programs that emphasize excellent teaching by committed and dedicated faculty
- Providing effective mentoring for our majors so that our dedicated students can better achieve their full potential
- Having ongoing research or creative scholarship efforts that expose our students to the exciting world of discovery
- Delivering the benefits of analytical, communication, problem solving and critical thinking skills that are necessary for lifelong learning
- Assuming the role of regional Science and Mathematics leadership through university service efforts, technical assistance to local schools, organizations and business; the visiting scientists series; continuing education; and many other service related contributions
- Fostering an educational environment and support services where students with a wide range of abilities can receive training and become proficient in Science and Mathematics

Providing stimulating academic surroundings for traditional and non-traditional students that extend beyond the campus to encompass the entire region

Introduction

The School of Science (SSC) at the University of Management and Technology, Lahore, comprises of the Departments of Chemistry, Physics and Mathematics.

Our programs offer high-level education and research training in basic and applied sciences which aim to develop students into researchers, engineers, and innovators as well as highly specialized professionals with broad vision, excellent research skills, and ability to adapt them to rapidly changing demands. We offer a wide range of pioneering degree programs for both undergraduate and postgraduate studies. A strong emphasis is placed on applying course work to real life challenges with an eye on the needs of the high-tech world of the 21st century. Undergraduate degree programs include many electives, letting our students tailor a curriculum to individual interests and talents. This added flexibility affords the opportunity to begin accelerated programs, pursue dual degrees or begin graduate work.

Goals

The SSC pursues the following goals:

- Discovery and application of new scientific concepts and technologies
- Establish a rigorous science teaching and research program that contributes to meet national and regional needs for human resources in these fields
- Popularize and establish a strong foundation in science, technology, and Mathematics starting early in the life and education of nationals
 - The School achieves these goals by dedicating its staff and students towards the following mandates:
- Provide rigorous foundational courses in sciences for

those students who opt to specialize in engineering, business, natural and built environments, and in technology professions in other schools in the University

- Provide opportunities for advanced theoretical and practical learning leading to under- and post-graduate degrees in sciences for those interested in careers deriving from these fields
- Provide for the education and training of educators and teachers for science subjects at the school and tertiary levels
- Conduct research to advance knowledge and its application and to advance the teaching and learning of sciences at all levels of education.
- Publish and disseminate research results, knowledge, and innovations to society

The science courses at the SSC promote opportunities for our students to excel and shine where students' opinions and ideas are heard and respected. Our caring faculty is dedicated to help you to fulfill your potentials and reach your goals. To ensure success, we start by helping students build a foundation in their core subjects. We make a difference in the lives of our students and prepare them through the basic science concepts and professional studies to think critically, pursue truth, and contribute to a just society.

Values

We inculcate the following values in our students:

Excellence

To be outstanding at what we choose to do

Integrity

To be honest and consistent in our actions

Collaboration

To work together within and across organizational boundaries in pursuit of our common mission

Compassion

To treat all human beings with respect and empathy

Leadership

To educate physicians, researchers and public health professionals who emulate our faculty in becoming leaders in their fields

Creativity

To emphasize rigorous fundamentals while stimulating innovation

Diversity

To live, work and serve in a diverse local, national, and global community

Web Link

For complete details, please visit http://ssc.umt.edu.pk/

Academic Departments

Department of Chemistry

Chemistry is the science of change. By studying the basic properties of substances and the many transformations they undergo, the chemist finds solutions to scientific challenges and contributes to the development of new technologies. The Department of Chemistry at UMT started functioning in January 2014. In the 1st year of its establishment, BS and MS in Chemistry were introduced. Now the Department offers five BS and four MS programs in the fields of Chemistry, Biochemistry,

Biotechnology, Environmental Science and Forensic Science. The research facilities for these programs are under establishing phase.

There is a constant endeavor to improve and strengthen teaching and research facilities and to create an environment conductive for research activity. All programs balance theory with application and give students the chance to begin independent research by using the laboratories in the Chemistry Department.

The Department also encourages and trains students to bridge academia and industry. For the said purpose, the Department regularly arranges industrial trips for the guidance and encouragement of the students.

Department of Physics

The Department of Physics is in constant pursuit of uplifting the quality of education of its students in order to broaden their concepts to study natural phenomena. Currently, the Department offers bachelor, master and doctoral programs. The Department has an outstanding teaching and research environment.

An important characteristic of the Department is embodied in encouraging students to get involved in research questions and exploratory experiments outside the formal classroom or laboratory coursework.

Regular seminars and colloquia are given by the faculty, students and distinguished speakers from outside UMT and provide a chance to keep abreast of cutting-edge and high impact research.

Department of Mathematics

The Department of Mathematics offers a dynamic and supportive environment for both faculty and students. It is highly rated for teaching, research and also for its student support. It has a core position in UMT as it offers an extensive range of undergraduate courses for other programs according to international standards.

Students are facilitated to specialize while taking courses in

Mathematics or in other subjects involving a strong mathematical background with emphasis on concept clearing.

In this way, students realize the role of Mathematics in daily life. Since all UMT undergraduates have to take this subject, the faculty makes a great effort to make the subject student friendly.

Laboratory Facilities

The School of Science has fully functional and well equipped BS General Laboratories for Physics, Chemistry, Biochemistry, Biotechnology, Environmental Science and Forensic Sciences and Advanced Research Laboratories for MS/PhD researchers that include state-of-the-art equipments like UV Visible and Near Infrared Spectrophotometer, Rotary Evaporator, Furnace, Autoclave, Shaker Incubator, Polarimeter, Centrifuge, Laminar Flow Cabinet (Equipped with Florescent and UV-Light), Conductivity Meter, pH Meter, etc.

School of Science has three physics laboratories: Applied Mechanics Lab, Applied Physics Lab and Advanced Research Lab.

Detail of Programs being Offered in the School of Science

Undergraduate Programs BS Chemistry

Overview

Chemistry is the science of the structure, properties and reactions of matter. It is both a basic science, fundamental to an understanding of the world we live in, and a practical science with an enormous number and variety of important applications. The degree and courses offered in Chemistry are designed according to the scheme of studies approved by the Higher Education Commission (HEC) of Pakistan so as to meet the national and international standards.

The courses offered at the Department of Chemistry have the benefit of a flexible curricular program capable of preparing them for advanced studies in Chemistry as well as careers in teaching and research institutes.

Career Prospects

Chemistry is a stepping stone to a wide variety of job opportunities. Chemistry today is a foundation stone of modern science.

While looking for a widespread and interesting career, Chemistry is at the heart of all the important fields such as Textile. Paint. Pharmaceuticals, Dyes, Fertilizers, Cement Industry, Dentistry, Nanotechnology, Genomics, Forensics, Petroleum and Petrochemicals, Metallurgy, Environmental Sciences, Alternate Energy Resources, Waste Management, Irrigation and Agriculture, Education, Research and Development.

Program Summary

Duration 04 years Credit Hours 130

Admission Requirements

- 12 years of formal education A Level/FSc or equivalent with Chemistry
- Matric 50% Marks or Equivalence Certificate
- Intermediate 50% Marks or Equivalence Certificate
- UMT entrance test

BS Biochemistry

Overview

The Bachelor of Science in Biochemistry degree program consists of a combination of requirements and electives that ensure a strong foundation in the chemical and biological sciences while providing the flexibility to tailor the curriculum to satisfy specific interests or career goals. The courses offered provide the students with extensive exposure to basic Biochemistry, as well as Cell Biology and Molecular Biology/Biotechnology. Our faculty maintains active research programs both during the academic year and in the summer.

Undergraduates are strongly encouraged to participate in research projects with faculty members. The opportunity to 'do' Biochemistry in addition to learning the subject can be an exciting and important part of your undergraduate years at SSC. UMT.

Career Prospects

The leaders in this scientific revolution have been biochemists. and molecular biologists. If cancer is to be cured, if solutions to the world's energy crisis are to be found, it will probably be the biochemists and molecular biologists with the knowledge and skills to power these breakthroughs.

Majoring in Biochemistry prepares one for a number of challenging and rewarding career opportunities in areas such as: Forensic Science, Environmental Science, Metallurgy, Plastics, Engineering, Electronics and Biotechnology. Medical Research, Agricultural Feedstock and Chemicals, Drugs and Pharmaceuticals, Medical Devices and Equipment, Research, Testing, and Medical Laboratories.

Program Summary

Duration 04 years Credit Hours 130

Admission Requirements

- 12 years of formal education A Level/FSc or equivalent with Chemistry and Biology
- Matric 50% Marks or Equivalence Certificate
- Intermediate 50% Marks or Equivalence Certificate
- **UMT Entrance Test**

BS Biotechnology

Overview

Biotechnology is an applied science that uses the tools of Biochemistry, Molecular Biology and other fields of Biology to solve problems that affect humans.

Bringing together several scientific disciplines, our course produces graduates who have a high standard of cognitive, practical and transferable skills and the knowledge to begin careers in medical research, in hospital and public health laboratories, and also in the pharmaceutical, food and agricultural industries.

Our highly-regarded courses offer intensive learning, with a strong research focus aimed to equip graduates with the skills necessary to work in the sector. Our subjects are lecture and enquiry based, involving small-group workshops and tutorials.

Career Prospects

Students graduating in Biotechnology may find jobs in various areas such as the government sector, educational and research institutions, medical research, biotechnology industries, Molecular Biology, Genetics, Genomics and Plant Biotechnology.

They are also involved in production of alternative biofuels, production of vaccines, antibiotics, drugs and diagnostic kits, genetic engineering and diagnostics, food manufacturing, environmental microbiology and natural-products chemistry, agriculture, and toxic and industrial waste management.

Program Summary

Duration 04 years Credit Hours 130

Admission Requirements

- 12 years of formal education A Level/FSc or equivalent with Chemistry and Biology
- Matric 50% Marks or Equivalence Certificate
- Intermediate 50% Marks or Equivalence Certificate
- **UMT Entrance Test**

BS Environmental Science

Overview

The Bachelor of Science (BS) degree in Environmental Science aims to provide students in the program with both basic and advanced training in the field of Environmental Science. Students develop skills as to monitor environmental conditions as well as to analyze environmental problems.

The main areas of study will include conservation and restoration ecology, environmental management, geographic information systems, environmental systems, soil, water, global change, environmental law, and environmental assessment. Students also gain hands-on experience with many of the instrumental techniques used in environmental analysis.

Career Prospects

Students graduating in Environmental Science may find jobs in various areas as environmental scientists, environmental technicians, environmental consultants, environmental engineers, conservation biologists, and ecologists. They may also work in government sector, educational and research institutions, toxic and industrial waste management.

Program Summary

Duration 04 years Credit Hours 130

Admission Requirements

- 12 years of formal education A Level/FSc
- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- UMT Entrance Test

BS Forensic Science

Overview

Forensic Science is the application of assorted scientific methods and principles for the proper investigation of crime. With the rising number of incidents of crime and fraud, the scope of Forensic Science is definitely rising.

Forensic experts having skills in different fields like crime scene investigation, fingerprint analysis, handwriting examination, DNA analysis and such others, collect clues from the crime scene and elsewhere to convert them into evidences to prove a crime or solve a case.

Career Prospects

Most of the job prospects for forensic scientists are in government sector, particularly in various law enforcement agencies such as police, NAB, ISI, IB, CTD, etc. Moreover, a demand is increasing in universities which are initiating degree programs in the field of Forensic Sciences. Upon graduation from the Forensic Science program, students will be able to work in forensic science laboratories as experts, in law enforcing and investigation agencies, perform as crime scene experts and demonstrate competency in the collection, processing, analyses, and evaluation of evidence. They may also testify to the interpretation of the evidence, work as defense experts in courts

of law in criminal and civil cases, demonstrate their application of skills and knowledge in a professional environment that they have acquired through their internship experience.

Program Summary

Duration 04 years Credit Hours 130

Admission Requirements

- 12 years of formal education A Level/FSc
- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- UMT Entrance Test

BS Physics

Overview

The BS program offered in Physics is designed according to the scheme of studies approved by the Higher Education Commission (HEC) of Pakistan so as to meet national and international standards. Courses offered in BS Physics program are capable of preparing students for advanced studies in Physics as well as careers in teaching and research institutes. The Department has well equipped labs and encourages students to participate in research projects.

It also provides them with possible facilities and guidance. The opportunity to work closely with a faculty member and to get firsthand research experience is especially helpful in making their postgraduate career decisions.

Career Prospects

Physics, the most basic of the sciences, has intellectual and useful aspects. The usefulness is evident everywhere in high-tech products and computerized communications. Physics can fairly lay claim to be part of modern civilization.

The reasoning, mathematical, experimental and computer skills obtained during this program enable the students to seek careers in Nuclear Science, Education, Research & Development, Software Development, Nanotechnology Instrumentation, Space Science, Nuclear Medicine, Engineering, Biophysics, Astronomy, Environmental Science, Meteorology, and Imaging.

Program Summary

Duration 04 years Credit Hours 130

Admission Requirements

- 12 years of formal education A Level/FSc with Physics
- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- UMT Entrance Test

BS Electronics

Electronics dominates the world of technology today and that significantly serves almost all other disciplines. It is in huge demand in both developed and developing nations for communication and business. Continual advances in the field of electronics in the areas of materials processes, devices and circuits applications have been leading to rapid advances in the existing as well as in the emergence of new applications like Nanoscience.

Electronics program at UMT has been launched with a view to further advance the state of electronic technology since it is important to have strong programs to educate and train individuals in this key discipline.

Career Prospects

An electronic discipline will work in teams with other specialists to design, fabricate, produce, test and supervise the

manufacturing of complex products and systems, i.e., electronics equipment and research based components for a number of industries including hospitals, IT, electronic data processing system for communication and in defense, etc. They supervise productions in the form of robotics, manufacturing processes and overseas installations and maintenance. Electronics discipline works with Physics of semiconductor devices that use extremely small amount of power. They work with microprocessor, fiber optics and in telecommunication, power generation, and networking, etc.

Program Summary

Duration 04 years Credit Hours 130

Admission Requirements

- 12 years of formal education
- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- UMT Entrance Test

BS Mathematics

Overview

The Mathematics Department offers 4-year BS program in Mathematics. The program has been designed according to the scheme of studies approved by the Higher Education Commission (HEC) of Pakistan to assure quality education to equalize it with national and international standards. The Department has offered a variety of courses under the umbrella of School of Science (SSC) to have the benefit of a flexible curricular program. The program aims to produce quality students who are able to prepare themselves for advanced studies, teaching and research in Mathematics as well as careers in other related disciplines.

Career Prospects

The role of Mathematics is inevitably important in today's world. A degree in Mathematics will help students to be highly numerate. Being equipped with such skills will enable them to seek a good career in research and development in Mathematics and related fields, Applied Sciences, Physics, Banking, Economics, Computer Sciences, Finance, Computing, Mathematical Modeling Telecommunications, Accountancy and Actuarial Work, and as Statisticians. Students may also opt for postgraduate study in Mathematics or take up teaching as a career.

Program Summary

Duration 04 years Credit Hours 134

Admission Requirements

12 years of formal education A Level/FSc with Mathematics

Matric 50% or Equivalence Certificate Intermediate 50% or Equivalence Certificate **UMT Entrance Test**

Graduate Programs

MS/PhD Chemistry

Overview

Chemistry is the study of a micro world comprising of atoms and molecules, from simple diatomics such as nitrogen to proteins and nucleic acids. Chemists are the molecular architects, the builders, and the surveyors of the natural landscape in this world which has nanometer dimensions.

The Department of Chemistry at UMT provides a learning environment which enables students to obtain strong foundation of chemical knowledge, laboratory skills, and problem solving skills at levels appropriate for the variety of students that we serve. The faculty members strive to produce a new generation of chemical science professionals, prepared to become leaders in research, teaching and industry.

Career Prospects

The proposed curriculum is designed to prepare the students for future positions in private or government sector by providing them an opportunity to work beyond traditional scientific boundaries to examine the theoretical underpinnings of chemicals and learn how they are part of a bigger picture.

Career opportunities in chemistry include the areas of basic research, applied research, biotechnology, materials for alternate energy solutions, chemical analysis, manufacturing, medicine, business, environmental science, organic, inorganic chemicals and devices, fertilizers, polymers, nanomaterials synthetic. natural products and marketing.

MS Program Summary

Duration	02 years
Credit Hours	30

Admission Requirements

- 16 years of formal education
- 4 years bachelor degree in relevant discipline with 2.5/4 CGPA + GAT 50%
- Interview

PhD Program Summary

Duration (Minimum Expected) 3.0 years Course Work Credit Hours 18 (minimum)

Admission Requirements

- 18 years of formal education
- 18 years of relevant qualification with 3.0/4.0 CGPA + GAT (Subject) 60%
- Interview

MS Biochemistry

Overview

Biochemistry is undergoing a resurgence as detailed mechanistic understanding of biological processes becomes increasingly necessary in academia, industry, and medicine. Current biochemistry-related courses range from biophysical studies of protein structure and conformation to theoretical simulations of protein and nucleic acid. On account of the rising demand for individuals with extensive biochemical training, the Department of Chemistry at UMT has launched a graduate program in Biochemistry. The program is open to students who want to update their theoretical preparation or to test their disposition toward academic training. The atmosphere among students and faculty is one of open informality fostered by a pleasant working environment and state-of-the-art research facilities.

Career Prospects

Graduates of this program will have developed the necessary skills to become productive and ethical contributors to scientific research. Students with the Biochemistry degree are well-suited for positions in academic, government, hospital, pharmacy, industrial laboratories, dental schools, research scientists in a government, industrial or academic labs, forensic scientists or a variety of other professional programs.

MS Program Summary

Duration 02 years Credit Hours 30

Admission Requirements

- 16 years of formal education
- 4 years bachelor degree in relevant discipline with 2.5/4.0 CGPA + GAT 50%
- Interview

MS Biotechnology

Overview

The field of Biotechnology has the potential to not just improve some of the most pressing health, economic, and environmental problems facing humanity, but decisively resolve them. From the food grown at our farms to the medicine we buy and the ways we clean up the environment, Biotechnology affects many facets of our daily lives. The Department of Chemistry at UMT aims to prepare graduates to join in these exciting discoveries. The faculty offers students solid and full depth knowledge of applied biotechnology which prepares them for exciting and rewarding careers in next-generation science and technology. The program facilitates the students to be a part of the biotech future by providing instruction and training in many of the biotech disciplines through courses, seminars, advanced electives, and case studies.

Career Prospects

Biotechnology is a young, vibrant and diverse discipline. The graduate degree in Biotechnology enables the students to pursue a number of Biotechnology professions. A graduate degree in Biotechnology will enable students to work in various Biotechnology industries with the advancement in their careers. There are a number of employment opportunities in companies that discover and develop products in the pharmaceutical, medical device, agricultural, healthcare, biofuels and industrial fields. Students can fulfill the academic requirements for pursuing higher education in this field.

MS Program Summary

Duration 02 years Credit Hours 30

Admission Requirements

- 16 years of formal education
- 4 years bachelor degree in relevant discipline with 2.5/4.0
 CGPA + GAT 50%
- Interview

MS Environmental Science

Overview

The Environmental Sciences program offers a multidisciplinary graduate program. This program is intended for individuals who have undergraduate degrees in Environmental Studies/Science, other natural sciences, engineering, or health professions.

It is designed to meet the needs of students and working professionals preparing for supervisory roles in Environmental Science (research and management), with emphasis on a risk-based approach to finding solutions to environmental problems.

The curriculum requires students to broaden their knowledge with core courses in environmental studies, to deepen their expertise with elective courses, and to demonstrate their abilities to prepare a scholarly thesis.

The study of environment leads to solving environmental problems through remediation technologies, generating environmental awareness among the masses, conservation of natural biodiversity and formulation of environmental policies.

Career Prospects

The MS Environmental Science program aims to develop students for careers in environmental assessment, planning and

in environmental education. The proposed program envisions filling the need for highly trained environmental scientists in the government, private industries and educational institutions. This degree will benefit students who are planning careers with regulatory agencies, environment protection agencies, waste management, research institutes, and consulting firms providing state-of-the-art assessment, management, and remediation.

MS Program Summary

Duration 02 years
Credit Hours 30

Admission Requirements

- 16 years of formal education
- 4 years bachelor degree in relevant discipline with 2.5/4.0 CGPA + GAT 50%
- Interview

MS/PhD Physics

Overview

Physics is devoted to the study and understanding of nature. Considered the most fundamental science, it deals with the constituents, properties, and evolution of the entire universe, from the smallest subatomic particles to the largest galaxies. It is also concerned with the mathematical formulation of the fundamental laws of nature. In our graduate program, students will be engaged mainly in research along with initial broad training in fundamental core topics in Physics as the foundation of modern technologies. This program of study leading to the degree of Master of Science, while emphasizing continued work in basic physics, permits many options in several applied physics specialties.

Career Prospects

This academic program is designed to emphasize preparation for profession as in industry, atomic and space organizations, forensic science, meteorology, electronics, design and development engineering, research laboratories, Career opportunities include areas of basic research, applied research and development, Biotechnology, Radiology, Medicine, materials for alternate energy solutions.

There are hundreds of companies/industries which are active in the areas of semiconductor devices, electronic equipment, nanomaterials and laser- all key areas that are covered by our MS degree. Acquiring this degree will immediately open up access to jobs in many multinational companies, which need highly skilled staff with a Physics background.

MS Program Summary

Duration	02 years
Credit Hours	30

Admission Requirements

- 16 years of formal education
- 4 years bachelor degree in relevant discipline with 2.5/4.0 CGPA + GAT 50%
- Interview

PhD Program Summary

Duration (Minimum Expected) 3.0 years Course Work Credit Hours 18 (minimum)

Admission Requirements

- 18 years of formal education
- 18 years of relevant qualification with 3.0 / 4.0 CGPA + GAT (Subject) 60%
- Interview

MS/PhD Electronics

After almost four decades of research and development. integrated circuit technology based on compound semiconductor material has entered the commercial market place. With the fascination of new technology, the world has turned into a global village. In view of tremendous research taking place all over the world, new ideas and information pours in like of a stream of fresh water, making it imperative to add new disciplines like nanoelectronics, latest development and innovation in the electronics field of knowledge. Perhaps the catalyst to surge in commercial interest and fulfill the condition of Moore's Law has been the introduction of new research ideas based on high efficient and low cost electronics applications for the next generation.

MS/PhD Electronics program at UMT has been launched with a view to further advance the state of electronic technology based on research to have strong programs to educate and train individuals in this key discipline.

Career Prospects

Compound semiconductor integrated circuits have emerged as leading contenders for ultra high speed applications and to produce specialists to design, fabricate, produce, test and supervise the manufacturing of complex products and systems, i.e., electronics equipment and components for a number of industries including hospitals, computer based industry, IT, electronic high speed data processing system for communication and in defense, etc.

Upon graduation from the electronics program, students will be able to work in higher education, national research and development laboratories like Pakistan Atomic Energy Commission, National Engineering and Scientific Commission, SUPARCO and international space agencies, research and development organizations, etc. as experts.

MS Program Summary

Duration 02 years
Credit Hours 30

Admission Requirements

- 16 years of formal education
- 4 years bachelor degree in relevant discipline with 2.5/4.0 CGPA + GAT 50%
- Interview

PhD Program Summary

Duration (Minimum Expected) 3.0 years

Course Work Credit Hours 18 (minimum)

Admission Requirements

- 18 years of formal education
- 18 years of relevant qualification with 3.0/4.0 CGPA + GAT (Subject) 60%
- Interview

MS/PhD Mathematics

Overview

Mathematics plays a very imperative role in the advancement of science and technology today. Its role is inevitable in interdisciplinary sciences and social sciences as well. In this program, we aim to investigate new techniques and algorithms and computational analysis with further emphasis on applications in different disciplines. The Doctor of Philosophy (PhD) degree program is designed to develop knowledge and research skills in various applied/pure mathematics areas.

The dissertation component of this program provides the candidates with an opportunity to solve highly complex, original

problems in their area of interest. The candidates for this degree program can specialize in Peristaltic Flow Problems, Fluid Dynamics, Computational Fluid Dynamics, Magneto Hydrodynamics Flows, Heat and Mass Transfer Analysis, Computational Mathematics, Fuzzy Algebra, Cryptography, etc.

Career Prospects

Mathematics has become one of the main focused research area in Pakistan and around the world as well. Due to applications and usefulness in basic sciences and other disciplines, there is a growing demand for applied mathematicians in public and private sectors, research organizations and industries. The most outstanding career paths of MS/PhD students are teaching, research support or grant administration.

MS Program Summary

Duration	02 years
Credit Hours	30

Admission Requirements

- 16 years of formal education
- 4 years bachelor degree in relevant discipline with 2.5/4.0 CGPA + GAT 50%
- Interview

PhD Program Summary

Duration (Minimum Expected) 3.0 years

Course Work Credit Hours 18 (minimum)

Admission Requirements

- 18 years of formal education
- 18 years of relevant qualification with 3.0/4.0 CGPA + GAT (Subject) 60%
- Interview

School of **Social Sciences and Humanities** (SSS&H)

The School of Social Sciences and Humanities (SSS&H) offers a variety of degree programs focusing on the study of humans and the institutions they create to solve their problems. The school aims to develop of leaders of thought and action who can fight against intolerance, ignorance, injustice and other forms of discrimination that disrupt social order and kill humanity. The knowledge and skills that can bring peace and prosperity to human life is our academic target. We strongly believe in inclusive society that can embrace human diversity and eliminate segregation.

The departments in SSS&H not only function as reputed seats of learning but also strive to remain interdisciplinary by lowering departmental boundaries. They participants draw their strength from the interdisciplinary approach in learning and research. Our supreme concern is not only to impart knowledge but to help you become self motivated learners. Our emphasis is not on knowing but on emancipation through meaningful learning.

I welcome you to this great seat of learning and assure you quality education under the supervision of the faculty of international repute.

Abdul Hameed

PhD Education Ohio State University USA

School of Social Sciences and Humanities (SSS&H)

Vision

To promote values, knowledge and skills that reflect international standards of excellence, national aspirations and institutional pride.

Mission

To demonstrate uncompromising commitment to teaching and research in broad areas of Social Sciences and Humanities with a view to developing human resources capable of creating and applying knowledge in solving problems and meeting future challenges.

About the School

Established in May 2005, the School of Education and Arts now known as School of Social Sciences and Humanities, was the successor to the Faculty of Educational Management and Technology (FEMT) that was set up earlier in 1999. The School offers doctoral, graduate and undergraduate degree programs aimed at preparing social scientists, professionals and educators for the uplift of society. The School actively collaborates with governmental and non-governmental organizations to meet national targets of research and development.

The School of Social Sciences and Humanities (SSS&H) is committed to produce individuals who are capable of applying new knowledge to solve the social problems. All programs are capable of meeting the challenges of technology that relies heavily on the use of the computers, internet and social media.

All programs offered by the School are HEC accredited. The National Accreditation Council for of Teacher Education (NACTE) has accredited teacher education programs at UMT. It is worth mentioning that UMT is one of the first universities in the country to get its degree programs accredited.

The School encourages participants to re-conceptualize learning in a given context through critical thinking, cooperative learning and action research. It rewards research and originality. Interaction between teachers and students is a key ingredient of the School's approach to education.

Students are encouraged to write a journal that tracks their impressions of the learning environment and recommend improvements. Concerned teachers respond to these suggestions effectively.

The School arranges dialogues, debates and discussions over a wide range of topics covering social sector and current issues. Guest speakers are eminent professionals who are widely respected in their specialties.

The discussions are often candid and conducted in a congenial atmosphere. Students are free to express their views on any social, academic or cultural issue. The School of Social Sciences and Humanities has constituted the Boards of Studies (BoS) in its various disciplines to revise or update courses according to contemporary developments and indigenous needs. Each BoS comprises of distinguished scholars and academicians from the public and private sector.

The School of Social Sciences and Humanities holds conferences and seminars on social sector issues. In these forums, academicians and researchers share their knowledge and experiences. Most of the faculty is member of highly respected professional organizations. The alumni of this school contribute positively both at national and international levels.

To make academic programs more useful, an attempt shall be made to introduce new subjects of contemporary significance. Effort shall be made to impart practice-based knowledge.

Core Values

We value:

- each learner by promoting a love of learning, civic and moral obligations, personal success and high academic standards;
- the mastery of the core competencies, i.e., thinking, communicating and acting;
- a caring and professional relationship among participants, employees and the community;
- diversity in creating new learning opportunities;
- the purposeful use of the technology and other tools that enhance overall competence.

Web Link

For complete details, please visit http://ssh.umt.edu.pk/

Department of Education

Introduction

The Department of Education provides students a unique experience of academic life with a strong focus on research and career preparation in the chosen field. The Department has an impressive spectrum of expertise within the field of education with a faculty that has wide ranging research and teaching interests. Students gain avid understanding of professional fields through networking opportunities and industry-related knowledge provided by the faculty and the University of Management and Technology (UMT). Our graduates are highly sought after by some of the most prestigious organizations. The Department of Education and the University of Management and Technology take every possible step to facilitate the students to acquire academic and professional excellence to become outstanding members of any social and/or professional community they join after graduating.

PhD Education

PhD in Education program is for individuals who aspire to the positions of professional educational leadership or to a career in educational research. The program focuses on extending knowledge and research expertise of students through scientific inquiry. To accomplish these objectives, the program offers challenging curricula, a variety of teaching-learning methodologies and a supportive academic environment.

The large pool of in-house PhDs in various schools of UMT, including the School of Social Sciences and Humanities, provides interdisciplinary discussion in the areas of common interest, whilst widening the learning horizons of the students.

Program Summary

Duration	03 years
Credit Hours	
Coursework	18
Thesis	27
Total	45

Requirements

- MS/MPhil in Education
- 3.0/4.0 CGPA
- GAT Subject with 60% Score/UMT Entry Test
- Interview

MPhil Education

The program focuses on extending knowledge and research expertise of students through scientific inquiry. It is designed for individuals who have the intellectual capacity for advanced research and who wish to contribute to future development of

Education as a discipline. To accomplish this objective, the program offers challenging curricula, a variety of teachinglearning methodologies and a supportive academic environment. The large pool of in-house PhDs in various schools of UMT. including the School of Social Sciences and Humanities, provides interdisciplinary discussion in the areas of common interest, whilst widening the learning horizons of the students.

Program Summary

Duration	02 years
Credit Hours	
Coursework	24
Thesis	06
Total	30

Requirements

- MA Education/Special Education
- 2.5/4.0 CGPA in semester system or 50% marks in annual system
- GAT General 50%/UMT Entry Test
- Interview

MPhil in Technology Education

MPhil in Technology Education program is designed to prepare vibrant pedagogical leaders to meet emerging challenges in technical and vocational education. This will help to equip the existing or prospective leaders and professionals with the latest knowledge and skills required to bring technical and vocational education to new realm of educational excellence.

Clearly, it will equip candidates with the necessary knowledge, skills and capabilities to lead their organizations effectively at a time of rapid change. It also provides an excellent opportunity for in-depth study of current issues in the management of education and training programs in technical and vocational institutions. They will also be prepared to design new curricula and refine the existing one.

Prospective candidates in this program include principals, viceprincipals, heads of department, and teachers of technical and vocational institutions along with fresh graduates wishing to have a career in technical and vocational education.

Structure

The program gives a solid foundation in research, policy, pedagogy and management topics and issues, and develops a practical understanding and relevant skills required for professionals in technology education.

Program Summary

Duration	02 years
Credit hours	
Coursework	24
Research	06
Total	30

Requirements

- MA Technology Education/ Education or relevant BS Engineering or B. Tech, MA/MEd Industrial Arts 2.5/4.0 CGPA in semester system or 50% marks in annual system
- 3 years teaching experience
- GAT General 50%/UMT Entry Test
- Interview

MPhil Educational Leadership and Management (MPhil ELM)

MPhil in Educational Leadership and Management is designed with the purpose of preparing competent human resources in the field of educational leadership. Graduates of the program will be knowledgeable about situations in educational leadership and their dimensions in local and international perspectives. they will be capable to contribute to knowledge building through academic and professional engagements and research.

The program is of relevance and interest to teachers, middle leaders, head teachers/principals, advisers and others as well as to graduate students interested in the area of leadership and school improvement, school inspection and evaluation or quality assurance.

The program offers challenging curricula, a variety of teaching-learning methodologies and a supportive academic environment to meet its objectives. The large pool of in-house PhDs in various schools of UMT, including the School of Social Sciences and Humanities, provides interdisciplinary discussion in the areas of common interest, whilst widening the learning horizons of the students.

Eligibility

- 16 years of education
- Preference for
 - MA ELM
 - MA Education
 - Med
- Candidates having 16 years of education in other disciplines may apply. They will have to take some additional pre-requisite courses.

Program Requirements

Duration 02 years
Total Credit Hours 30

Course Work 24 credit hours
Research 06 credit hours

Eligibility 50% in annual system or 2.5/4.0

CGPA in semester system in

previous degree

Interview

GAT General 50%/UMT Entry Test

MA Educational Leadership and Management (MA ELM)

Master of Arts in Educational Leadership and Management (MA ELM) is an innovative degree program that provides an opportunity to practitioners who are aspiring to take leading academic or managerial roles in schools, NGOs and related organizations. Modules are designed to support participants wishing to improve their personal and professional leadership skills. Grounded in the rich educational leadership literature supplemented by extensive faculty expertise and experience, the program provides a balance of research, policy and practice for specialization in areas such as Instructional Supervision, Quality Management, Principalship and Entrepreneurship, etc. Graduates will have demonstrated the knowledge, skills and attitudes of successful leaders ready to serve in national and international organizations.

Program Requirements

Eligibility 14 years of education

50% in annual system or 2.0/4.0

CGPA in semester system in

previous degree

Interview

Duration 02 years

Total 72 Credit Hours

Course Work 66 credit hours Research 06 credit hours

BS Honors in Science Education (BSSED)

The Department of Education at the School of Social Sciences and Humanities is offering 4-year BS Honors degree program in Science Education. This program hopes to bring students in the streamline of modern education through rigorous training and skill building.

It will enable the graduates to enter the profession or pursue further higher education MS/MPhil leading to PhD in Science Education. Following its tradition, UMT aims to fulfill the promise of quality education, ethical and moral training and secure future for its graduates.

A key feature of this course is the equal emphasis given to both the theoretical groundings of science education and the practical application of knowledge and skills in a wide range of science settings.

Conducted as a coordinated program of professional expertise. the experiences allow the pre-service teachers to make the connection between theory and practice at all important junctures, while building both professional and employability skills in a caring education environment. In addition, pre-service teachers enjoy the opportunity to tailor their learning experience by specializing in their preferred areas of interest.

Key Features

- **Double Honors** (Science and Teaching of Science)
- **Equal Emphasis** on education in Science Subjects. i.e., Mathematics, Physics, Biology and Chemistry
- Skills Based enriched with employability skills. IT. professional communication and pedagogy, research and problem solving skills.

Entry Requirement

12 years of education (FA/FSc/ICS/ICom/A Levels) for 4 years with 50% Marks in Matric + 50% Marks in Intermediate with Equivalence Certificates

BA Honors in Early Childhood Education (BAECE)

The 4-year BA Honors in Early Childhood Education degree hopes to bring students in a streamline of modern education through rigorous training and skill building. It will enable the graduates to enter the profession or pursue further higher education MS/MPhil leading to PhD in the desired field of Education. Following its tradition, UMT aims to fulfill the promise of quality education, ethical/moral training and secure future to its graduates. A key feature of this course is the equal emphasis given to both the theoretical groundings of Early Childhood Education and the practical application of knowledge and skills in a wide range of early childhood settings. A coordinated program of professional practice experiences at key points throughout the course allow pre-service teachers to make the connection between theory and practice, while building both professional and generic employability skills in a caring education environments. In addition, pre-service teachers have an opportunity to tailor their learning experience by specializing in their preferred areas of interest.

Key Features

Skills Based - enriched with employability skills, IT, professional communication and pedagogy, research and problem solving skills.

Entry Requirement

- 12 years of education (FA/FSc/ICS/ICom/A Levels) for 4 years with 50% Marks in Matric + 50% Marks in Intermediate with Equivalence Certificates
- * Internal and external credit hour transfer is also applicable

Career Opportunities

Graduates have career opportunities in preschool and/or primary school teaching, establishing one's own day care or Montessori, as subject coordinator, and in curriculum planning and evaluation.

Department of Special Needs Education

PhD Special Education

PhD in Special Education is specially developed in accordance with national needs and changing international challenges. It aims to produce leaders in the field to explore the knowledge frontiers. Another purpose of the program is to promote research on disability and its pedagogy.

The course work of this program is grounded in research across a variety of methodological traditions and theoretical orientations

Structure

The program gives a solid foundation in research, policy, pedagogy, and develops a practical understanding and relevant

skills required for professionals in Special Education. Four core courses are aimed to develop understanding of philosophical and psychological foundations of education.

Current research trends in education and educational approaches to accommodate human diversity in the classroom are discussed during the course. Two courses are included to strengthen the knowledge of special education. Inclusive education policy and its legal and ethical issues are discussed as well.

Program Summary

Duration 3 years

Entry Requirements

Entry to the program is managed in a case to case basis. In broad terms, admission is available to those who have 3.00/4.00 CGPA in MPhil Special Education or Education

- GAT Subject with 60% score
- UMT Entry Test
- Interview

Credit Hours

The program has 45 credit hours. Coursework comprises of 18 credit hours and research 27 credit hours.

MPhil Special Education

Mphil Special Education is uniquely designed to cater for the needs of consultants, researchers and academic leaders in the field of Special Education.

This program mounts a strong commitment to excellence in teacher education and professional development. The curriculum and instructional methodology are benchmarked to international standards. Current lines of research in the field of Special Needs Education are explored and participants of the program are

encouraged to develop both vision and capacity to undertake emerging issues and problems to work out indigenous solutions.

Foreign trained faculty is hired to transform the program into an exemplary seat of learning.

Structure

The program gives a solid foundation in research, policy, pedagogy and develops a practical understanding and relevant skills required for professionals in special education. Four general courses develop research expertise and critical thinking to review education practices at macro level, such as educational policies. funding and quality assurance in education. Four courses are offered to enrich theoretical as well as practical knowledge in special education. This stream includes comparative Special Education, differentiated curriculum and instruction, current lines of research in special needs education and advanced studies of any one disability ranging from intellectual impairments, visual impairments, hearing impairments to physical impairment.

Program Summary

Duration 2 years

Entry Requirements

Entry to the program is managed in a case to case basis. In broad terms, admission is available to those who meet the following requirements.

- Master degree in Special Education
- Master degree in Psychology
- Master degree in Education
- 2.5/4.0 CGPA or 50% in annual system
- GAT General 50%/UMT Entry Test
- Interview

Program Credit Hours

The program has 30 credit hours. Coursework comprises of 24 credit hours whereas research carries 6 credit hours

MA Special Education

The MA Special Education has been launched at UMT to prepare teachers to provide most appropriate learning environment to the children with special needs. The curriculum and instructional methodology are benchmarked to international standards. The participants are able to pursue higher studies anywhere in the world after completing this program. The program is especially tailored in line with the International Movement for Inclusive Education and UNCRPD.

It enables students to understand general principles and practices in the education of students with special needs and acquire specialist knowledge and skills in one area of specialization. The areas of specialization offered include hearing impairment, intellectual impairment and visual impairment. The program is a blend of theory and practice. The option of internship is available for those who intend to join teaching as a profession.

Career Prospects

The Department, through its placement cell, helps its graduates in their placement in various public and private institutions.

The graduates are eligible to apply for positions as junior / senior special education teachers in Government of the Punjab, educators, lecturers in teacher education institutions, and research officers in various departments.

Program Summary

Duration 02 years

Total credit hours 72

Requirements

BA/BSc/BCom 50% Marks in previous degrees or 2.0 CGPA

BS Honors in Special Needs Education (BSSNE)

The degree in BS Honors Special Needs Education (4-year degree program) has been launched at UMT to prepare professionals to provide most appropriate learning support to the children with special needs. The curriculum and instructional methodology has been properly supported by sign interpreters and benchmarked to international standards. The participants will be able to pursue higher studies anywhere in the world after completing this program. The program is in conformity with the International Movement for Inclusive Education and The UN Convention on the Rights of Persons with Disabilities (UNCRPD).

It enables students to understand general principles and practices in the education of students with special needs and acquire specialist knowledge and skills in one area of specialization. The areas of specialization offered include hearing impairment, intellectual impairment, physical handicap and visual impairment. The program is a blend of theory and practice. The option of internship is available for those who intend to join teaching as a profession.

Admission Criteria

- 12 years of formal education
- Marks in Matric 50% or Equivalence Certificate
- Marks in Intermediate 50% or Equivalence Certificate

Program Duration

4 years (8 Semesters)

Job Opportunities

The graduates are eligible to apply for the following positions.

- Junior/senior special education teachers-Government of the Punjab (BPS-16 and BPS-17)
- Lecturers in special education institutions (both government and private)
- Research officers in various departments Career counseling facility is also available for the students and graduates in the Department.

Department of English Language and Literature

Introduction

Department of English Language and Literature (DELL) aims to embrace the critical significance of two parallel, yet at the same time inseparable disciplines: Linguistics and Literatures in English. In line with the overall academic spirit of UMT, DELL is committed to promote a research-based pedagogic compound involving both synchronic and diachronic perspectives on language. Similarly, it aims to foster the aesthetic reception of Literature through an extensive study of texts from all over the world.

Our ultimate goal is to create an interactive academic environment cultivating in students an appreciation of those modes of language learning that explore the relationship between our mind and the world, our individual and social identities, our past and present realities, and last but not least, between fact and imagination. The Department offers students a vast array of opportunities to delve into the complexity of linguistic and literary studies and their inherent connection to various other academic

domains such as Cultural Studies, Philosophy, Social Psychology, Sociology, History, Human Rights, and Gender Studies.

Academic Programs

DELL offers a variety of competitive research-based postgraduate degree programs. Through an exhaustive coursework, students are prepared to undertake the rigors of research and step up to the demands and challenges of national and international academia.

The students are encouraged to complete their research thesis in their chosen fields that represent original contribution to the existing scholarship in Linguistics and English Literature. DELL is keen on developing the scholars' critical and analytical reading and writing skills, through research-based seminars, workshops and conferences. The programs are designed to cover a variety of communication, interpersonal, academic, and research skills, enabling the students to fare well in the professional job market and future higher studies.

The Department offers experienced and foreign qualified faculty competent in a wide range of linguistic and literary fields. The library accommodates latest resources and critical material to facilitate students in their learning activities. In order to adhere to the international standards of English studies, the programs are made flexible in terms of course selection, devising of assessment criteria, and planning of courses content.

The Department offers the following postgraduate degree programs.

- PhD Linguistics/ English Literature
- MPhil Applied Linguistics
- MPhil English Literature
- MA English

PhD Linguistics/English Literature

The Department offers PhD Linguistics and PhD English Literature programs under the umbrella term PhD English. PhD Linguistics offers the students the opportunity to develop an indepth insight into the theoretical and scientific study of language and to pursue their research under the supervision of highly qualified and experienced academics. PhD English Literature allows the students to explore the complex (re)-presentations of life and existence through different theoretical and generic perspectives. The program also enables them to hone their appreciation of aesthetic and literary fields of study by acquainting themselves with influential classical and contemporary body of work

PhD students are required to study six courses, three courses in each semester. They must complete two core courses; Specialist Module I and Specialist Module II, one in each semester. Keeping in mind the academic and professional needs of the students, the content of each module is determined by the assigned resource person. They are also required to choose two elective courses each semester from the course list offered to them by the Department, which earns them a total of 18 credit hours. They are advised to select elective courses pertaining to their individual research interest which can be later developed into research thesis. Each course holds the same weightage and earns them 3 credit hours. A comprehensive examination is conducted at the end of PhD coursework in order to assess the level and quality of their knowledge and research skills acquired during their academic semesters.

The successful students are then allocated supervisors in their field of interest to pursue their research. The thesis carries a weightage of 18 credit hours. It should make an original and epistemologically significant contribution to the existing body of knowledge.

Core Courses

- Specialist Module I
- Specialist module II

Elective Courses

- Applied Linguistics
- Phonetics and Phonology
- Critical Discourse Analysis
- Sociolinguistics
- Multiculturalism
- Translation Studies
- Screen Literature
- Philosophy of Language
- Applied Lexicology
- Advancement in Second Language Acquisition
- Developments in Syntactic Theory
- Postcolonial Literature
- Literary Criticism and Theory
- Pakistani Literature in English

Thesis (compulsory)

Thesis (minimum 80,000 words)

Admission Criterion

- MPhil Linguistics / Applied Linguistics (minimum CGPA 3.0) or MPhil English Literature (minimum CGPA 3.0) or any other equivalent degree
- GAT Subject 60%/UMT Entry Test
- Interview

Program Summary

Duration	3 years (Minimum)
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Credit Hours 36
Coursework 18
Thesis 18

MPhil Applied Linguistics

MPhil Applied Linguistics program is one of the most successful research programs of the university and a large number of students have successfully completed their MPhil program from DELL.

MPhil scholars are required to study eight courses, over a period of three semesters. They study a core course each on Qualitative and Quantitative Research Methods to prepare to do research and writing thesis. Other core courses include General Linguistics, Phonetics and Phonology, Syntactic Theory, Semantics and Pragmatics and Sociolinguistics. These courses are designed to cover the basic levels of linguistic analysis and explore the functions of language in society.

The eight courses earn them a total number of 24 credit hours; each course earns them 3 credit hours individually. After accumulating 24 credit hours through coursework, they are required to write a thesis of minimum 20,000 words, on a topic of their own choosing, which is original and relevant to their intellectual and social context. The thesis earns them a total of 6 credit hours and its completion is a prerequisite for the completion of MPhil degree. The research work in thesis is conducted under the supervision of an officially nominated supervisor.

Core Courses

- Qualitative Research Methods
- Quantitative Research Methods

- **General Linguistics**
- Phonetics and Phonology
- Syntactic Theory
- Semantics and Pragmatics
- Sociolinguistics

Elective Courses

- **Applied Linguistics**
- Approaches to Language Acquisition
- Critical Discourse Analysis
- **ELT Management**
- Pakistani Literature in English
- Language Pedagogy
- Multiculturalism
- Technology in Language Teaching
- Translation Studies
- Screen Literature
- Emerging Issues in ELT
- Philosophy of Language
- Applied Lexicology
- Advancement in Second Language Acquisition
- Developments in Syntactic Theory

Thesis (compulsory)

Thesis (minimum 20,000 words)

Admission Criterion

- BS English (minimum CGPA 2.5) or MA English (minimum 50%) or any other equivalent degree
- GAT General 50%/UMT Entry Test
- Interview

Program Summary

Duration	2 years
Credit Hours	30
Coursework	24
Thesis	6

MPhil English Literature

Keeping in view the importance of Literature and demand in the academia, the Department offers a comprehensive and competitive MPhil English Literature program. This program is designed to provide the students with a comprehensive overview of all the major dimensions / genres of English Literature, as well as a focused, intensive approach to certain specific areas of specialization.

Another very important purpose is to introduce the students to the historical /evolutionary developments in English Literature that have occurred through the ages with a special focus on the various dimensions of modern and contemporary literature. Mphil English Literature program consists of coursework extending to three semesters. The students take eight courses, each of 3 credit hours and accumulate 24 credit hours in total by the end of their coursework. Five of these courses are compulsory, including Research Methods, Literary Criticism and Theory, Semantics and Pragmatics, Classical Greek and English Renaissance Drama and Postcolonial Literature. In addition to compulsory courses, they are required to take three optional ones. After finishing their coursework, they write a compulsory dissertation on a topic of their own choice. They should choose a topic which makes a significant contribution to the field. The thesis earns them 6 credit hours; equivalent to two courses. The research work in thesis is conducted under the supervision of an officially nominated supervisor.

Core Courses

- Literary Criticism and Theory
- Research Methods
- Semantics and Pragmatics
- Classical Greek and English Renaissance Drama
- Postcolonial Literature

Elective Courses

- Modern Literature
- American Literature
- Feminism: Theory and Literature
- African Literature in English
- Crime Fiction
- General Linguistics
- · Critical Discourse Analysis

Thesis (Compulsory)

Thesis (minimum 25,000 words)

Admission Criterion

- BS English (minimum CGPA 2.5) or MA English (minimum 50%) or any other equivalent degree
- Interview
- GAT General 50%/UMT Entry Test

Program Summary

Duration	2 years
Credit Hours	30
Coursework	24
Thesis	6

MA English

MA English program at DELL derives its uniqueness from being a merger of three distinct but related fields which are Literature, Linguistics and English Language Teaching (ELT). The focus remains on literature; however, the ultimate goal is to lay down a solid foundation on which the students can build later on, in the field(s) of their own choice.

This program is designed to allow the students to go through comprehensive and rigorous coursework simultaneously in Literature and Linguistics. They can also acquaint themselves with the basic theories and practices of ELT, by taking a couple of introductory courses in this field. Hence, the literary, scientific, theoretical and pedagogical skills of the student are sharpened at the same time.

The program extends up to 4 semesters over the period of two years and students have to take 6 courses each semester. Each course earns the student 3 credit hours which enables them to accumulate 72 credit hours in total. It is not obligatory for them to write a thesis at the end of their coursework.

Core Courses

- History of English Literature
- · 18th and 19th Century Novel
- Classical Poetry
- Non-Fiction Prose (Renaissance, Victorian, Twentieth Century)
- Short Story
- Classical Drama
- Romantic and Modern Poetry
- 20th Century Novel
- Modern Drama
- Postcolonial Literature

- Literary Criticism
- Stylistics and Literary Discourse
- Language Learning; Theories and Practice
- Introduction to Linguistics
- Phonetics and Phonology
- Morphology and Syntax
- Research Methodology
- Psychology and Sociology of Language
- Semantics and Pragmatics
- Teaching Literature
- Postmodern Literature
- Critical Theory

Elective Courses

- Twentieth Century Literature
- Translation Studies
- European Literature
- Literature Written in Non English Cultures
- Literary Discourse
- Creative Writing
- Language and Literacy
- Language and Gender
- Language, Culture and Identity
- World Englishes
- Continental Literature
- Pakistani Literature in English
- Lexical Studies
- American Literature

Admission Criterion

- BA English 50% Marks or any other relevant degree
- Interview

Program Summary

Duration	2 years
Semesters	4
Courses	24
Credit Hours	72

Department of Media and Communication

Introduction

Media is becoming one of the fastest growing industries in our country. In the last decade (2000-10), mass media has emerged as a new socio-political and socio-economic force which is supporting the process of change in society. Media is enhancing its role tremendously to promote democracy, ensure good governance and monitor malpractices. A large number of media organizations have been established and plans for more are in the pipeline. Other dimensions of mass communication like advertising, public relations and development communication are rising rapidly as growing job-oriented avenues in the communication sector.

The enhancement of media industry and communication sector demands strong academic support in the shape of fresh graduates of the discipline. Keeping in view the increasing media and market needs of society, UMT's School of Social Sciences and Humanities has set up the Department of Media and Communication. The Department has already chalked out a plan to create practical environment for students' proper training.

Professional Linkage

The Faculty of the Media and Communication Department emphasizes close interaction with individuals working in all communication fields, professional news organizations and other educational institutions.

Professional reporters, editors, photographers, advertising practitioners and public relations specialists are associated with the faculty through part-time teaching assignments and an extensive internship program.

Career Opportunities

After graduating from UMT, you are likely to find employment opportunities in editorial positions at press, broadcast and web media outlets, managerial positions in media, public relations firms or PR departments of corporations, advertising agencies, establishing new businesses, teaching or researching mass communication.

MPhil in Media and Communication

The MPhil degree program which witnessed its commencement at UMT in the Spring Semester 2013, envisages the provision of comprehensive grounding in mass media research necessary for studying, analyzing and understanding media and communication process and its effects in social, cultural, economic and political context. The course is also designed to equip the fledgling media scholars with the knowledge about the application of statistical tools for the purpose of data collection, analysis, and interpretation. The program provides a unique blend of practical skills with critical analysis.

The courses have been designed to meet existing professional standards as well as exploring ways in which creative ideas and new technologies can be combined, enhanced and redefined. The program's prominent aspect is its focusing on the media

professionals and graduates seeking careers in media industry. Fundamental managerial and strategic skills courses are also designed to help students cope with the rapidly evolving and complex world of international media enabling them to derive solutions to a wide range of commercial and organizational problems.

The courses are based on integrated lectures with seminar and presentations to prepare the students for transition from study to work. The MPhil program in Media and Communication, comprising two years' academic work, is based on total 30 credit hours, which include 24 credit hours for course work and 06 credit hours for thesis.

Program Summary

Duration 02 years
Credit Hours 30

Requirements

- Qualification: MA/MSc/BS(H) or equivalent in relevant discipline
- 2.5/4.0 CGPA or 60% Marks in previous degree
- GAT General 50%/UMT Entry Test
- Subject based UMT Entry Test
- Interview

MA Media and Communication

The Curriculum

The curriculum of MA Media and Communication aims at educating students to support and serve the fast growing media industry and communication sector. While some specialized skills are essential to enable students to meet current standards, the goal of the curriculum is to produce graduates who are

independent professionals capable of growing and changing with the times.

This program has been designed to meet the requirement of the fast expanding media. It is based on theoretical as well as practical emphasis on the print and broadcast media including web publishing. The program envisages to create awareness among the students about the structure, policies and contents besides developing their journalistic skills.

Program Summary

Duration: 02 years

Credit Hours: 66

Criteria

2.0 CGPA or 50% in previous degree

Interview

BS Media and Communication

Overview

Media and communication is one of the fastest growing disciplines of social sciences with extremely vast scope in the job market. In the presence of media, right to know and access to information has become an essential need for socio-political and social-economic stability of any nation. The media fulfills this requirement.

While chalking out BS 4-year undergraduate program, UMT has adopted wise approach to fulfill existing and emerging communication demands of Pakistani society. UMT is committed to provide a platform to its students who have the potential to cope with the challenges of media job markets, industry and emerging horizon of communication sector.

Course Division

Keeping in mind HEC's policy and all requirements for offering BS Social Sciences programs, courses of BS program have been divided into the following five categories:

- Compulsory
- Foundation
- Interdisciplinary
- Major and Specializations

Program Summary

Program Duration 04 years **Total Credit Hours** 132 08 Semesters

Requirements

- Marks in Matric 50% or Equivalence Certificate
- Marks in Intermediate 50% or Equivalence Certificate
- **IJMT Entrance Test**

Department of Sociology

Introduction

The Department of Social Sciences was established in 2008 in the School of Social Sciences and Humanities (SSS&H), which was bifurcated into several departments through the years since then. The Department of Sociology as an independent entity was inaugurated in 2015. This discipline focuses on social relations and group life. Sociology aims to impart training for critical analysis of social issues. This discipline promotes the understanding about the emerging social environment on account of technology, internet and automation. Sociology provides highly

useful and diverse subject matter to understand current sociopolitical issues. Furthermore, this discipline genuinely equips its graduates to deal with personal issues rather effectively.

MPhil Sociology

Sociology is the investigation of human behavior in the social context. It studies the composition, organization, culture, norms and development of societies. It integrates knowledge from Economics, Political Science, Psychology, History and Art to understand human social existence from the scientific and humanistic perspective.

Societies are living organisms, constantly experiencing and adapting to technological, atmospheric, economic, demographic and dogmatic changes, and sociologists are at the heart of this process of human evolution, making sense of the past and directing the future.

Program Structure

The program offers three core courses in research methodology and data analysis. The program offers majors in sociology of development and education, two areas of paramount significance in the current situation of Pakistan.

The program offers two clusters of electives. Students are required to take three elective courses from either cluster A or B. Cluster A was specifically designed for criminal justice and security professionals, and students with a research interest in the areas of crime and crime prevention.

Cluster B offers courses in specific areas of specialization within the field of Sociology that were chosen after a careful study of the current job market trends. These include gender, health and illness, political and post-colonial sociology, sociology of technology and migration. Research thesis is a compulsory requirement for the fulfillment of MPhil Sociology degree.

Career Prospects

Linking theoretical knowledge to its application in the field is a significant feature of this program. All courses include a two-week seminar in which eminent professionals from the government and non-government sector will be invited to deliver lectures and share their experiences from the field with our students. These seminars will allow students to gain from the knowledge and experience of field experts enhancing both their compatibility in the job market and capacity to navigate successful careers in their field of choice.

Admission Requirements

At least 16 years of education (Masters or 4 years of BS Degree) or equivalent qualifications, with at least 2nd division, from a recognized university is required to be eligible for the admission to this program. Final admission will be granted on the basis of interview conducted by the program admission committee.

- 2.5 CGPA or 50% Marks
- GAT General 50% or UMT Entry Test
- Interview

BS Sociology

Introduction

BS Sociology at UMT is a dynamic program that explores social, cultural, economic and political processes which shape human experience. It offers a wide range of courses including Philosophy, Psychology, Life and Learning, Economics, Religion, and Literature. Sociology students develop an aptitude for critical thinking, improve their writing ability and gaining competence with statistical computing skills that will enhance their future career options. Research thesis and internship are compulsory for degree completion. Sociology provides students with both intellectual growth and marketable technical skills.

Career Prospects

An understanding of Sociology can be a useful tool for many wide-ranging career options in diverse fields, such as work in sociological research, education, social work, law, medicine, and counseling. It also prepares undergraduates for direct entry into positions in business, social service and government.

Program Summary

Duration 04 years Credit hours 132

Requirements

- Marks in Matric 50% or Equivalence Certificate
- Marks in Intermediate 50% or Equivalence Certificate
- **UMT Entrance Test**

Department of Psychology

MPhil Psychology

Mphil Psychology is a 2-year graduate Psychology program with 33 credit hours of work. There are 6 courses which are compulsory for all students; Quantitative Research Methods, Contemporary Perspectives in Psychology, Psychological Assessment, Qualitative Research Methods, Advance Statistics and Psychology in Pakistan. Besides, there are 2 higher courses: Counseling Psychology, Industrial-Organizational Psychology. Finally, all students complete internship and write thesis.

Eliaibility

- Must have 16 years of education: MSc in Psychology or BS (Honors) in Psychology
- 2.5 CGPA or 50% Marks

- GAT General 50%/UMT Entry Test
- Must pass admission test and interview to assess their understanding of Psychology

Course Instructions

Taught courses comprise lectures, in-class discussions and assignments. There are about 10 -12 assessments in a course including labs, practicum and field projects. For some of the courses, workshops, seminars, and special lectures by guest speakers are also arranged. Internship is graded towards CGPA.

Research Work / Thesis

Students who pass prescribed courses will take up research work in the 3rd and 4th semesters.

Career Prospects

The MPhil program is employment oriented. The graduates would have a fair chance to be employed as lecturers, school psychologists, probation officers, psychologists in special education, personnel psychologists in military and civilian recruitment agencies, i.e., ISSB, PSC, etc. There are a variety of jobs for psychologists in social sector NGOs and advocacy groups. You can also work in universities, research organizations, hospitals, and counseling and rehabilitation settings.

Program Summary

Program Duration 02 years Credit Hours 33

MSc Psychology

The degree in Master of Science in Psychology is a 2-year, 70 credit hours program. It caters for needs of higher education in Psychology for those students who have 2 years BA/ BSc degree and want to get a master degree in Psychology. MSc in

Psychology, being equal to BS Psychology in terms of years of education in Psychology, follow a curriculum similar to that of the latter in an inclusive education framework. All students write a Masters Thesis at the end.

The instructional methodology is aligned with the nature of the subject and expertise of the relevant faculty. The graduates of both programs are eligible to apply for higher education; MPhil Psychology or equivalent. The program is a blend of theory and practicum. Students take up thesis in the last two semesters.

Career Prospects

The Psychology graduates find job as college lecturer in the public and private institutions. They are also eligible to work as psychologists in ISSB and the Public Service Commission. A number of graduates find jobs in the social sector NGOs. Many students would go for a higher degree MS / MPhil to work as university faculty or researcher in applied settings.

Program Summary

Program Duration 02 years
Credit Hours 70

Requirements

- BA/BSc/BCom 50% Marks in previous degrees
- Interview

BS Psychology

BS Psychology is a 4-year program that focuses on the behavior of people in the perspective of Social Sciences. It introduces students to the fundamental principles of Psychology and their applications in fields of Psychology. As a field, Psychology studies areas as diverse as behavior problems, child development, workplace violence, self-esteem, racial prejudice, memory, decision making, mental illness, cognition, counseling,

interpersonal relationships, peace and conflicts and biological basis of behavior. Psychologists also learn to critically evaluate 'common sense' knowledge about how people function. Education in Psychology, by its subject matter and method of study, develops and promotes the following skills and insights in learners:

- 1. Critical and creative thinking skills
- 2. One-to-one and small group communication dynamics
- Understanding of individual, group and organizational behavior

Students write the research project in the last two semesters to earn BS (Hons) degree.

Career Prospects

While completing 4-year degree in Psychology, one can work in health centers, special education schools, labor relations and training development related jobs. More specifically, one can be employed as lecturer, school psychologist, probation officer, and psychologist in special education. There are a variety of jobs for psychologists in social sector NGOs.

Program Summary

Duration 04 years Credit hours 132

Requirements

- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- UMT Entrance Test

Department of Islamic Thought and Civilization

The Department of Islamic Thought and Civilization (DITC) was established in January 2008. As the nomenclature of the Department signifies that it is different from routine Departments of Islamic Studies that are in vogue. DITC offers MS/MPhil in Islamic Thought and Civilization followed by a PhD program.

The unique feature of this MPhil program is that it is opening its doors to all those who have completed 16 years of education in any discipline ranging from Social or Natural Sciences to Engineering, Medicine, Commerce, Islamic Studies, Languages, etc.

The program aims to attract students from an inter-disciplinary background distinct in diversity and richness. The purpose is to attract a better mix of students for cross-fertilization of ideas, as opposed to the routine policy of allowing admission to only those who hold master degree in Islamic Studies. In this context, DITC has planned two semesters' vigorous coursework of 12 credit hours each and a thesis of six credit hours. DITC is concerned with character building and personality development of faculty, staff and students in the Islamic perspective.

MPhil and PhD in Islamic Thought and Civilization

Merits of the Programs

High quality research and advanced courses are the strength of these programs, which are supported by professional and dedicated faculty, excellent library facilities. The programs are research based and latest research methods and techniques in voque in Western world will be introduced to participants so that they may be able to conduct effective qualitative and quantitative research.

Career Opportunities

- MPhil/PhD degree in Islamic Thought and Civilization will widen career options including existing opportunities in public and private sector educational institutions.
- The world's interest in Islam has increased manifold and consequently, most of the world / Western universities have introduced courses on the study of Muslim civilization. These universities are looking for highly qualified and skilled teachers. Our program is designed to produce such teachers.
- Debate on Islam has also increased in print and electronic media and policy making institutions nationally and internationally. This program would prepare scholars to initiate dialogue in the Islamic perspective in these organizations.
- Research on Islam has also increased in public and private sector universities and research institutions. This program would prepare researchers who are able to conduct research in these institutions in the Islamic perspective.

Program Summary MPhil ITC

Duration	02 years
Coursework	24
Thesis	06
Total	30

Requirements

- 16 years of education (MA/MSc in Natural / Social Sciences Humanities/Arts with minimum 2.5 CGPA or 50% marks in previous degree
- HEC equivalence and graduation degree with English is compulsory in case of Dars-e-Nizami
- GAT of NTS or GAT of UMT would be compulsory to qualify within two academic years apart from entry test and interview

Program Summary PhD ITC

Duration 03 years

Coursework 18 credit hrs + PhD thesis

PhD Requirements

- MPhil/MS in Islamic Thought and Civilization/ MPhil Islamic Studies
- 3 CGPA
- GAT NTS/UMT 60%/UMT Entry Test
- Interview

Department of Political Science

Introduction

The Political Science and International Relations programs at UMT provide cutting-edge skills, knowledge and professional understanding of these disciplines. The main objective of these programs is to develop an exciting and supportive learning environment that is conducive to high quality research and related learning activities, including debates, seminars and lectures.

The learning community thus formed will engage in a systematic study of both theoretical and practical aspects of Political Science and International Relations. In addition to providing basic knowledge of these disciplines, the programs will focus on developing critical thinking, analytical reasoning, and communication and collaboration skills in its participants. Moreover, special emphasis will be placed on building individuals capable of meeting challenges of contemporary professional life. Keeping in view the public and private sector demands, particularly the needs of students determined to excel in competitive exams such as CSS, FPSC, PPSC and also broadening their scope internationally by joining various international and national think tanks, the Department of Political

Science at UMT has launched the following three degree programs:

- BS International Relations
- BS Political Science
- MPhil Political Science

BS International Relations

The Bachelor of International Relations is a 4-year degree program designed to help students comprehend the complex, dynamic, interdependent and interconnected world around them. BS International Relations at UMT aims to provide students the insight and the confidence to view the world and its history from a fresh perspective. It will provide a broader perspective and theoretical foundation to its students so that they can analyze contemporary and future international issues and be able to offer innovative solutions for global peace, harmony and cooperation. Keeping in view the dynamics of the contemporary world and Pakistan's key role in the fight against terrorism, this program especially focuses on Peace and Conflict Studies, International Terrorism and International Economic Issues.

Career Prospects

A degree in International Relations can lead to exciting careers in the Civil Service, especially Foreign Service, International Organizations, e.g., UN and its Agencies, print and electronic media, Pakistan Military and Air Force, NGOs, government and private think tanks, and educational and research institutions. Recently, the government has offered jobs as Young Parliamentary Associates (YPA) to IR graduates providing them an opportunity to become a part of government's policy making process.

Program Summary

Duration 4 years
Credit Hours 132

Requirements

- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- **UMT Entrance Test**

BS Political Science

The 4-year integrated program of BS in Political Science is designed to streamline the education of Political Science in Pakistan and bring it in line with international standards. The course seeks to broaden the knowledge of graduates in diverse fields of Political Science. For this purpose, different streams of specialization have been provided to be opted by students in the last two semesters.

The program aims at the development of an educated community which is equipped with the potentials to cope effectively with the challenges of the modern world. BS Political Science at UMT aims to provide students the insight and the confidence to view the world and its history from a fresh perspective. It will provide a broader perspective and theoretical foundations to its students so that they can analyze contemporary and future international issues and be able to offer innovative solutions for global peace, harmony and cooperation.

Career Prospects

A degree in Political Science can lead to exciting careers in Civil Service especially Foreign Service, International Organizations e.g. UN and its Agencies, print and electronic media, Pakistan Military and Air Force, NGOs, government and private think tanks, and educational and research institutions.

Recently, the government has offered jobs as Young Parliamentary Associates (YPA) to Political Science graduates providing them an opportunity to become a part of the government's policy making process.

Program Summary

Duration 4 years Credit Hours 132

Requirements

- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- **UMT Entrance Test**

MPhil Political Science

MPhil Political Science program aims at developing knowledge and providing research and learning opportunities in the field of Political Science. This program will specifically focus on providing strong theoretical and methodological base to its participants. Students of this program will be able to enhance their critical thinking and analytical skills that will help them become confident researchers and knowledgeable observers of political phenomena and policymaking procedures. Equipped with strong methodological training, students are expected to produce high quality research and become lifelong learners. Research thesis is an obligatory requirement for the fulfillment of MPhil degree.

Graduates of the program will not only be ethical researchers, they will also be able to demonstrate autonomy in their learning. Those who already are or choose to become practitioners in policymaking, policy evaluation or related fields will also find this program very helpful as it seeks to develop critical thinking and analytical skills of its participants, in addition to providing them with advanced knowledge of policy-oriented areas.

Career Prospects

MPhil Political Science program will prepare its participants for a broad spectrum of careers spanning academic, public, private, and non-profit institutions and organizations. Even though this program is primarily geared towards those who are pursuing research and teaching careers, it is also designed to expand career prospects of practitioners in the fields of policymaking, development, and mass communication (including print and electronic media). Because of their thorough knowledge, sound theoretical grounding, and rigorous methodological training, graduates of this program will be pioneers in their chosen fields. The MPhil in Political Science has special relevance for those aspiring to take the CSS exams for joining the Civil Service of Pakistan.

Program Summary

Duration 2 years

30 Credit Hours

Requirements

- 2.5/4.0 CGPA or 50% Marks in relevant degree
- GAT General 50%/UMT GAT Test 50%
- Written test (subject) by the department
- Interview

School of **Systems and Technology (SST)**

Our vision of being recognized as a world leader for excellence and innovation in computer science, technology, research and education is evident in our efforts to provide our students a dynamic experience in the fields of IT, SE and other sub-disciplines of Computing as well as Informatics and promote a culture of innovation. Our offered programs equip School of Systems and Technology (SST) students with the latest technical knowledge, a profound training to set up technology-based businesses in highly competitive market, as well as skills for global leadership. Our alumni are developing modern solutions that are changing lives and inspiring the next generation of graduates to consider Computer Science or Informatics as a career choice.

We aim to address the versatile needs in ever growing and challenging areas of Computing and Informatics. It primarily emphasizes on the technical and professional growth of the graduates, which dynamically equips them with much needed competence and skills for ruling in the job market. Therefore, I invite you all to join School of Systems and Technology (SST) at UMT, a far reaching institution that values the effort of our students and polishes them to become emerging researchers and skilled professionals in their respective fields.

Dr N D Gohar

Professor and Dean SST PhD Electrical Engineering, DIC (CAD) Imperial College, University of London, UK

School of Systems and **Technology** (SST)

Mission

Build up the institution to offer outstanding teaching and research atmosphere to the students who distinguish themselves by their professional competence, innovation, entrepreneurship, ethical morality, realistic approach to problem solving, managerial skills and ability to respond to the current challenges of socioeconomic development of the society.

Vision

The School of Systems and Technology (SST) endeavors to emerge as an inclusive school responsive to technological changes, devoted to distinction and committed to educational and research desires of the nation. The School will continue to win a belief of eminent teaching, research and service through emergent undergraduate, postgraduate and doctoral level programs of study in a variety of disciplines in collaboration with distinguished institutions inside the country and overseas. The School aspires for the leadership role in guest of brilliance in Computing, Informatics, Systems and Technology.

Besides established fields of Computer Science and Information Technology, the School envisions exploring and initiating the emerging disciplines. The School is delegated with the responsibility of producing culturally progressive, technologically educated, academically competent and research-oriented graduates who are prepared to lead, motivate and maintain our enormous traditions.

Nurturing Technology Leaders

The School of Systems and Technology (SST) at UMT aims to generate a continuous stream of new scientific and technical knowledge, and to attract young, talented men and women and transform them into the leaders of tomorrow's technology

organizations. In order to fulfill its mission, the School strives to create a culture that attracts, develops, and retains the best available scientific and technical minds. The School of Systems and Technology (SST) encourages the faculty members and participants to undertake research and development, and engage in collaborative work with industry. This provides them insight into the real-world problems and they strive to find out integrated solutions for industry.

The SST is continuously improving the quality of its teaching by having a sharp focus on faculty development and infrastructure enhancement.

It improves the faculty members by encouraging them to utilize the School's training facilities for self-development and by undertaking research and consultancy projects. The laboratory facilities offered are excellent and are being rapidly expanded according to the pre-set five-year development plan. Similarly, the School is continuously updating the library collection in the area of computing system and technology to meet the current market requirements.

Currently, SST consists of two departments; namely Computer Science and Information Systems. The School offers the degree programs at the Bachelor, Master and Doctoral levels.

Curricula

The curriculum for each program has its own distinguishable features. However, common threads of design and problem solving have been woven into the fabric of the curricula to ensure that each participant receives the very best education tailored to the needs of the industry and academia. The programs are intended to prepare graduates for regional as well as global practices. The programs are designed to satisfy the general university requirements as well as to meet the criteria adopted by the Higher Education Commission (HEC) of Pakistan and the related accreditation agencies such as NCEAC of Computer Science(CS), Software Engineering(SE) and Information Technology(IT). The degree programs emphasize learning the effective use of technology, information resources and

communication methods, as well as inculcate in them leadership qualities anchored in ethical and moral principles.

SST graduates may work in an international environment. Therefore, class instructions and interaction between students and faculty members are conducted in English to ensure that graduates possess written and spoken fluency in English. This is accomplished foremost in the required laboratories, term reports, senior design projects and internships. Well-equipped Information Processing Center (IPC) as well as other laboratories having abundant computer resources are available for students during and after classes.

A variety of software are available for design and analysis tasks in classes, laboratories, senior design projects and courses on campus intranet. This exercise supplements participants' comprehension of what has been taught by faculty members in their courses. Each student must complete a team-based extensive senior design project under close supervision of a faculty advisor, focused on a real-world problem that requires specification, design, analysis and synthesis as the problem-solving process is utilized. Additionally, each student must complete a summer internship of at least five weeks in order to graduate.

Web Link

For details please visit http://sst.umt.edu.pk/

Eligibility Criteria

BS Programs

- Matriculation 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate

MS Programs

- · 4 years Bachelor degree in relevant discipline
- 2.5/4.0 CGPA in semester system or 50% in annual system
- GAT 60%
- Interview

PhD Programs

- MS/MPhil of relevant qualification
- 3.0/4.0 CGPA
- GAT with 60% score

1- BS in Computer Science

Overview

The field of Computer Science includes designing and developing hardware and software systems for a range of applied areas including effective information processing, scientific applications, communications and entertainment, computational intelligence, optimal decision-making, computer based control and so on. The Computer Science program at UMT covers a variety of topics including theoretical computer science, developments in robotics, computer vision, intelligent systems, bioinformatics, data mining, virtual reality, computer networks, operating systems and many other exciting areas.

The BS program in Computer Science focuses on developing graduates with solid theoretical and practical basis and covers a wide range of topics. It provides a unique breadth to participants that is necessary for a comprehensive foundation needed by a computer scientist.

Career Opportunities

Successful graduates of the Computer Science program have the knowledge and skills needed for a broad range of jobs both in the industry and academia. Depending on the area of specialization, the graduates of this program may play a variety of roles such as software engineers, software developers, research scholars, information technologists, systems analysts and educationists.

2- BS in Software Engineering

Overview

Software Engineering (SE) is concerned with developing and maintaining software systems that behave reliably and efficiently, are affordable to develop and maintain, and satisfy all the requirements that customers have defined for them. It is important because of the impact of large, expensive software systems and the role of software in safety-critical applications. It integrates significant mathematics, computer science and practices whose origins are in engineering. Software Engineering focuses on software development and goes beyond programming to include such things as eliciting customers' requirements, and designing and testing software. SE students learn how to assess customer needs and develop usable software that meets those needs.

The BS Software Engineering program in the Computer Science Department focuses on a range of topics that are essential to the SE agenda (i.e., problem modeling and analysis, software design, software verification and validation, software quality, software process, software management, etc.). The program has been designed with an emphasis on hands-on experience of all the stages for effective software design and development.

Career Opportunities

Graduates from the course will have the knowledge and skills needed to apply software engineering practices effectively. The breadth and strong practical emphasis of the course will prepare graduates for careers in a wide range of positions in business, government and industry, both local and international. Graduates may enter a variety of roles such as software engineers, software/web developers, software design engineers, software architects, software quality engineers, software requirements engineers, system/business analysts, software project managers, mobile application developers, and game developers.

3- BS in Information Technology

Overview

We are living in an information age. For many segments of society, the Internet has already changed how people work, think, communicate, or even socialize. Many of the changes can be attributed to information systems that now operate very widely over the Internet and Intranets. With the widespread commercial availability of computing technologies and machinery, information systems have been the dominant application area of computing.

All present day organizations have come to rely on information systems for their day-to-day operation, planning, and decision making. Effective use of information technologies has become a critical success factor in modern society.

BS-IT degree is a unique blend of information systems and information technology in one program. The program is focused more on practical applications of technology and information systems to support organizations while adding value to their products and offerings. The degree offers courses across the complete spectrum of IT, ranging from non-technical areas such as the nature of information and organizational needs for IT. through the hardware, software, network and multimedia technologies which are used to satisfy these needs, to the development and management skills needed to create and implement computer-based information systems.

Career Opportunities

Graduates from the course will have the knowledge and skills needed to use IT effectively and to use, develop and manage ITbased systems. The breadth and strong practical emphasis of the course prepares graduates for careers working with information and IT in a wide range of positions in business. government and industry, both local and international.

Graduates may enter a variety of roles such as Manager Information Systems, Systems Analyst, Database Administrator, Network Administrator, IT Consultant, Enterprise-wide Solution Developer and Enterprise-wide Information System Architect.

4- BS in Telecommunication and Networks

Overview

Engineering and Applied Sciences play an important role in the overall development of a nation. Pakistan needs to strengthen its technological base, especially in the areas of telecommunications and networks technologies. Pakistan's telecom industry has seen tremendous growth in the last few years. The industry is looking for individuals who have in-depth theoretical knowledge and are skillful and competent in running the operations and new developments.

This has opened the doors of various opportunities for the network and telecommunication professionals. BSTN focuses on Network and Telecom service sector, their management and security issues. The program focuses on the most popular telecommunication networks of the present. Emphasis is on wireless communications, telecommunication architecture evolution, digital communication and radio technology. Key subject areas in mobile networks are wireless communication, quality of service, mobility and security. Students have the opportunity to take courses in general telecommunications and specialized mobile communication. This program is a unique undergraduate degree program designed to prepare students to be agents of change in the undergoing transition to a completely new networking paradigm that is emerging from competing technologies, standards and business models.

Career Opportunities

In an increasingly interconnected world, the role of telecommunications and networking infrastructure continues to grow. New information services and network systems for their distribution will continue to emerge. This industry is one of the most rapidly growing and changing industries in the economy.

Clearly this industry will continue to change, and powerfully impact the way we conduct our lives. Typically, telecommunications jobs entail designing, installing, and testing/fixing telecommunications systems and equipment. A career in telecommunications is a promising one, since communication options are constantly changing and growing. In this diverse field, career options are available in Computer Applications and Software, Transmission and Switching Systems, Performance and Optimization, Telecommunication Policy, Electronic Systems, Network Operations, and Wireless Systems.

5- BS in Electric Power and Energy

Overview

The new BS in Electric Power and Energy Systems program is designed to provide skills in interlocking energy disciplines. It is particularly appropriate for students who want to work in power and energy-related areas, or those who want to refocus their careers or gain more in-depth understanding of the technical and societal drivers in electric power and energy technology development and realization. Students are encouraged to participate in research projects, and are provided with all possible facilities and guidance.

Career Opportunities

Typically, jobs after acquiring degree in BS Electric Power and Energy entail designing, installing, and testing/fixing electrical systems and equipment. The degree prepares students for professional careers in a range of industries that encompass power plants in WAPDA, NTDC, PIA, Railway, PTCL, PLC design and implementation, and teaching positions in various universities across the country.

This combination of knowledge and skills leads to careers as professional chartered engineers in a range of sectors, including power electronics, power supply and distribution, instrumentation and control, construction, plus numerous manufacturing

industries. Electrical and electronic engineers are also valued in business and commerce, where their numeracy, team working, analytical and project management skills can be put to good use. Career options are available in power transmission and switching systems, power generation and distribution, microprocessor based power protection, computer aided design and monitoring. data acquisition and supervisory control, industrial control of plants, renewable energy systems, and nuclear power plants.

6- BS Computer Systems Engineering

Overview

BS Computer Systems Engineering is a 4-year degree program. Computer engineering is a steadily growing field, and the world needs skilled professionals who can work comfortably on both the software and hardware aspects of a computer system. Computer Systems Engineering students deal with the fundamental nature of computation, what can and cannot be computed, and how efficiently a computation can be accomplished by a machine. They study how to build computer systems (computer architecture), how to make machines think (artificial intelligence), how to build computers that can see (computer vision), how to design software that works seamlessly from different locations (computer networks and distributed systems), how to model complex problems (modeling and simulation) and how to design more efficient computing algorithms (theory of computation).

The Department's highly research-active faculty encourages undergraduate students to be involved in their research work. Research opportunities focus both on fundamental research in theory of computation, embedded systems, VLSI, computer networks, computer vision, machine learning, artificial intelligence and robotics, as well as on projects of practical socio-economic significance.

Eligibility Criteria

60% Marks in Intermediate and Matriculation or Equivalence Certificate

Career Prospectus

Computer Systems Engineering graduates should be able to meet the highest standards of training for leadership in leading fields of computer science and computer engineering profession. including research, higher education, teaching and R&D organizations at the national and international level. Computer systems engineers work for computer companies such as Intel, HP, and Texas Instruments, and also in industries that build or use computer-based systems, such as telecommunications, automotive, aerospace, etc. Many computer systems engineers also get jobs as programmers.

MS/PhD Programs 7- MS/PhD in Computer Science

Program Overview

The MS Computer Science is an intensive program which is intended for people who wish to broaden and deepen their understanding of computer science. UMT provides a unique opportunity to develop leading-edge in-depth knowledge of specific computer science disciplines and prepares students 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, while simultaneously allowing for emphasis in desired areas of specialization.

Career Opportunities

Computing and information technology are the fastest growing occupations in the world. Students with a degree in computer science are qualified to pursue a career in a wide variety of computing careers, dealing with software development or system design and analysis. Software architects have been one of the most heavily paid professionals in recent years. Database administrators and information systems security engineers are equally more likely to grab excellent career prospects.

8- MS/PhD in Software Engineering

Program Overview

The Master of Science (MS) degree program prepares students for a professional career in Software Development. The program exposes students to the complete life-cycle of computer application development including abstraction, modeling and algorithm development, leveraging computer systems, programming languages and development frameworks, and software development techniques and processes. Students also have the opportunity to study and develop applications in diverse applied areas. The program is designed to develop knowledge and skills in specialized technical areas.

The thesis component of this program provides the participant with an opportunity to apply the skills and knowledge acquired through the coursework in solving complex problems. Graduates of this program are employed by organizations developing advanced technical products or services.

Career Opportunities

MS degree programs at UMT provide students with the comprehensive skills and knowledge they need to pursue the best career option in one of the most dynamic areas of modern technology. The programs prepare students with a broad scientific knowledge, an aptitude in a variety of mathematical techniques and the ability to synthesize. The exponential growth of technology and computing over the last decade has led to a growing demand for professionals in the field. The program offers the opportunity for professional careers in the aviation and aircraft industry. It prepares them to amicably apply software engineering principles, processes and practices to maintain, analyze, design and develop software systems.

The growth of Software Engineering industry in Pakistan offers numerous opportunities in high paying positions for software engineers. They also have the opportunity to study and develop applications in diverse applied areas. The program is designed to

develop knowledge and skills in specialized technical areas. The thesis component of this program provides the participant with an opportunity to apply the skills and knowledge acquired through the coursework in solving complex problems. Graduates of this program are employed by organizations developing advanced technical products or services.

9- MS/PhD in Information **Technology**

Program Overview

The Master of Science in Information Technology focuses on training students in the core concepts of computing and business so graduates can develop successful careers in management positions that require deep technical skills. The coursework is designed to meet the needs of students who want to build a strong background in information systems and the application of information and communications technology in business.

Given today's ubiquitous computing, organizations have a critical need for people who understand, in-depth, both computers and business. The program is intended to produce successful technology leaders who possess deep expertise in technology and business strategy.

Information Systems (IS) are a multi-faceted field and require multi-disciplinary perspectives. In order to apply technology effectively, a broad range of subjects are covered, such as web technologies, multimedia and database systems, business management technology, data communication and networking, software design, and enterprise-wide solution development. The practice-based curriculum of the program prepares graduates to work in IT departments of corporate and manufacturing sector entities. Their role is to conceive, design and implement IT solutions to business and management problems. The program is highly demanding and prepares students to take any challenging role as IT professionals or information systems experts.

Career Opportunities

Over the last few decades, there has been a tremendous growth in IT, which has almost revolutionized the very outlook of the world. The projected demand for trained IT professionals indicates a clear imbalance between the demand and supply of IT professionals with the result that this sector offers one of the highest remuneration packages. The various types of job functions available in a typical net-based environment would be content development, graphic designing, e-commerce, strategic planning, business development, and so on.

10- MS in Electric Power and Energy **Systems**

Program Overview

Electric Power and Energy Systems is gaining importance as the society realizes that to maintain our standard of living, energy solutions must be found. The aim of this program is to bring out the importance of generation and efficient use of electric power and energy. This MS degree program has been developed to prepare individuals to design and implement energy systems for innovative applications. The program aims to attract students who are ready to accept the grand challenge of energy in all its diverse forms and applications. It aims to produce graduates of intellectual standard and caliber who are equipped to meet the current and future needs in the field of energy and power, both in Pakistan and internationally, by contributing in theoretical foundations and critical analysis of application areas within the power and energy sector. The program provides the students with a solid and applied knowledge of basic sciences. mathematics and engineering. The program is based on the fundamentals of electrical engineering with additional courses in energy resources.

Career Opportunities

Many opportunities exist in the power sector that targets a wide

scope of marketable skills, experience and training. Career paths in policy making, policy analysis, and policy research often do not require technical background, but knowledge of the energy field and an understanding of finance, development, and the environment can increase competitiveness. This MS course has been established in response to the needs of society and industry for engineers qualified to deal with the many issues surrounding the supply of electrical energy and the applications of electrical power. Studying electrical energy systems opens up a wide range of exciting and rewarding career options, allowing graduates to help solve some fundamental local and global challenges. The development and increasing use of renewable energy sources needs engineers with skills in advanced electrical technologies.

This requires innovative engineering for research and development involving fuel cells, solar, wind, wave and tidal technologies. Graduate engineers will need to use their skills. knowledge and creativity to satisfy the need for reliable energy supplies with minimum of impact on the environment. There is a recognizable shortage of specialist engineers to meet the needs of industry in this field.

11- MS Telecommunication and **Networks Systems**

Overview

The MS in Telecommunication and Networks Systems focuses on the most popular telecommunication networks of the present time. Emphasis of the program is on wireless communications, telecommunication architecture evolution, digital communication and radio technology.

Key subject areas in mobile networks are wireless communication, quality of service, mobility and security. Students have the opportunity to take courses in general telecommunications and specialized mobile communication. This program is a unique graduate degree program designed to prepare students to be agents of change in the undergoing

transition to a completely new networking paradigm that is emerging from competing technologies, standards and business models.

Aim of the Program

The specific objectives of this program are to:

- Provide a foundation for the student to develop an appreciation and an understanding of the principles of telecommunication engineering
- Inculcate knowledge of design, construction and operation of communications systems and software applications necessary for telecommunication systems
- Develop the skills in the planning, design and management of telecommunication infrastructure in the local and international settings
- Train students to appreciate professional obligations, responsibilities and ethics in relation to the needs of society
- Provide a sound academic base to embark on lifelong learning and research for personal grooming

Career Prospects

Telecommunications graduates find their extensive demand in a number of industries, including internet and computing technologies, networking and telecommunications and radio. This field offers both applications of technical knowledge as well as managerial activities. Many specialists in this field find elements of both managerial and technical responsibilities. The technical aspect of the role includes using specialist knowledge to design and deliver solutions, as well as providing technical guidance to others within the organization. Managerial responsibilities involve planning and managing projects within time and budget and to the agreed standards of quality. Telecommunications technical staff typically works in telecommunication carriers and large business enterprises.

School of **Textile and Design (STD)**

Welcome to the School of Textile and Design (STD) at the University of Management and Technology, Lahore. The School consists of two departments namely; Department of Textile Engineering and Department of Design. STD offers a number of degree programs at the undergraduate and postgraduate levels including PhD program. All the programs being offered by the School are highly creative, innovative and focus on research, industry and entrepreneurship with the potential to contribute in a big way to the economic development of the country. STD provides competitive, challenging and conducive environment to its faculty and students. The faculty members are well qualified, dedicated and hardworking, and most of them have vast industrial and/or professional experience in their respective areas of education and specialization.

Since textile is the largest industry of Pakistan with a potential for growth, it needs a large number of well trained, talented and competent textile engineers, fashion and textile designers and marketing graduates to remain competitive not only in the country but also in the international market. It also needs to enhance its share in the world trade by offering cost effective value-added conventional textiles and by introducing technical textile products which have enormous growth rate in the international market. As the average household income in Pakistan is gradually increasing, the emphasis on aesthetics of daily use items in offices, homes, etc., is also on the rise. This demand creates more opportunities for designers, resulting in the brighter future for our prospective students of graphic and interior designs.

The School of Textile and Design is recently in the process of expanding its existing teaching and research facilities by constructing a new building which will be equipped with state-of-the-art laboratories and well furnished classrooms. The new infrastructure will enable us to provide our students even better academic facilities and further enable us to enhance students' intake and launch much needed new postgraduate programs. However, more than 1600 graduates of STD are presently pursuing their professions in various organizations in the country and abroad and their services are well acknowledged. At STD, we are committed to harness the talent of our existing and prospective students for leadership and equip them with the knowledge that is required to succeed in their respective professions.

I and my faculty look forward to welcoming you at the School of Textile and Design and assure you that you will have a great learning experience here.

Dr Mumtaz Hasan Malik PhD Textile Engineering

TU. Chemnitz. Germany

School of Textile and Design

(STD)

Vision

To become a leading school of textile and design education and research in Pakistan by the year 2020.

Mission

To generate, disseminate and preserve knowledge in the areas of science, engineering and design and to provide its undergraduate and postgraduate students with the education that combines academic excellence and rigorous research work, so that they best serve the nation and the world in a professional and responsible way.

Introduction

The School of Textile and Design (STD) at the University of Management and Technology (UMT) offers BS/ Bachelor programs in Textile Engineering, Textile Marketing and Management, Fashion and Textile Design, Graphic Design, Interior Design, and MS degree programs in Textiles, and Graphic Design, and PhD program in Textiles. The faculty members possess educational experience that is equivalent to leading international universities.

The curriculum for each program has its own distinct features. However, common threads of design and problem solving have been woven into the fabric of the curricula to ensure that each participant receives the very best education tailored to the needs of the industry and academia.

The programs offered by STD are aimed at preparing graduates for regional as well as global job places. The degree programs emphasize learning the effective use of technology, information resources and communication methods, along with inculcation of leadership qualities anchored in ethical and moral principles.

The medium of instruction and communication between students and faculty members is English to ensure that graduates possess written and spoken fluency in English. The programs are designed to satisfy both the general university criteria as well as the criteria laid down by the Higher Education Commission (HEC) of Pakistan.

Web Link

For complete details, please visit http://std.umt.edu.pk

Research Culture at UMT-STD

STD plays a significant role in promoting research culture in order to explore talent and to encourage innovation. It provides a platform for exchange of ideas by conducting international conferences in which experts from round the globe contribute and share both knowledge and expertise in relevant areas.

International Conferences on Textile and Clothing (ICTC)

STD has successfully organized four International Conferences on Textile and Clothing (ICTC). These have been a regular platform for research promotion in the area of Textiles in Pakistan. Top notch delegates from over 13 countries including United Kingdom, Germany, Czech Republic, Hong Kong, Malaysia, Iran and India have participated in these conferences.

School of Textile and Design - STD

ICTC-1 (2006)

Theme: Productivity and Innovation

ICTC-2 (2009)

Theme: Technical Textiles

ICTC-3 (2011)

Theme: Advancement in Management in Textiles

ICTC-4 (2013)

Theme: Sustainable Textiles

Corporate Relations

STD has always been in connection with other academic institutions, industry and corporate sector. The objective is to fulfill practical requirements of the field to gain competitive advantage and nurture students to become worthwhile professionals of the industry. STD is in collaboration with the following international and local organizations.

International Organizations

- Textile Institute, UK (Corporate Member)
- Society of Dyers and Colorists (SDC)
- Association to Advance Collegiate School of Business (AACSB) International, USA
- European Foundation for Management Development (EFMD), Belgium
- Association of Management Development Institutions in South Asia (AMDISA), India

 Association of Management Development Institutions in Pakistan (AMDIP), Pakistan

Local Organizations

- All Pakistan Textile Mills Association (APTMA)
- Pakistan Council of Scientific and Industrial Research (PCSIR)
- Pakistan Hosiery Manufacturers Association (PHMA)
- Pakistan Readymade Garments Manufacturers & Exporters Association (PREGMEA)
- Technical Education & Vocational Training Authority (TEVTA), Punjab

MoUs

The School has developed MoUs with the following professional bodies:

- National Productivity Organization (NPO)
- Pakistan Industrial Technical Assistance Centre (PITAC)
- · Shahraj Industries
- Shafi Group
- Noon International
- Small and Medium Enterprises Development Authority (SMEDA)
- Pakistan Readymade Garment Technical Training Institute (PRGTTI)
- · Pakistan Institute of Fashion and Design (PIFD)

- Lahore Chamber for Commerce and Industry (LCCI)
- Puniab Skill Development Fund (PSDF) with UK Aid

Laboratory Facilities

Excellent laboratory facilities are available in the School of Textile and Design (STD) to assist the textile students. Laboratories are available for conducting BS level experiments in different areas. Plans are in process for establishing new laboratories for postgraduate research work in the near future. Current laboratories are also being expanded according to an approved development plan. Presently, the following laboratories are available:

- Drawing
- Pattern Making
- Draping
- Chemistry/ and Wet Processing
- Physics and Electronics
- Digital Lab
- Software Usability
- Garment Sewing, Weaving and Knitting

Department of Textile Engineering

The Department of Textile Engineering offers the following undergraduate, postgraduate and doctoral programs.

1. Bachelor of Science in Textile **Engineering (BSTE)**

Program Overview

Historically, cotton textiles have been the focus of the textile industry in Pakistan, mainly because of the large amount of cotton produced in the country. In fact, Pakistan currently ranks fourth among the world's cotton producers and third among the world's cotton consumers. In addition to cotton, the industry also consumes a considerable amount of man-made fibers and other natural fibers like wool, silk, and linen.

The textile industry of Pakistan mainly consists of man-made fibers producing plants, short- and long-staple spinning mills, weaving mills, knitting units, dyeing and printing mills, garments and home textiles manufacturing units, gloves and socks making units, etc. Recently, the industry has also started manufacturing a few products of technical textiles; a new sub-sector of textile industry with promising growth worldwide. The textile industry, being the largest industrial sector, plays a vital role in the economic prosperity of Pakistan.

BS Textile Engineering has evolved over the years into a highly competitive program not only in Pakistan but also in the whole South Asian region. The main focus is on imparting such

knowledge and skills to the participants which are necessary for successful careers in the textile industry as well as in research organizations. Availability of qualified faculty along with well-equipped laboratories covering all subjects of textile and apparel manufacturing ensure that all graduates will be capable of delivering in all situations evolving out of everyday work in textile mills and research organizations.

Program Objectives

The program focuses on making the textile graduate a creative problem-solver, using the latest tools and techniques of textile engineering for designing functional as well as novel textile products and processes. The emphasis is on product development and manufacturing process enhancement, using knowledge and skills acquired during the course of study.

Career Paths

As a graduate of the BSTE program, you can opt for career paths as production and quality control manager and technical director in fiber producing plants, spinning, weaving, knitting, textile wet processing, and garment manufacturing units of the textile industry. You can also work as technical expert in non-woven, textiles composites and technical textiles manufacturing units, researcher in organizations for development of future textiles, technical expert in buying houses, compliance expert in certification bodies and audit companies, and technical expert in different government and non-governmental organizations.

Admission Criteria

- FSc Pre-Engineering with minimum 1st division (60% marks) or equivalent qualification + 50% in Matric or Equivalence Certificate
- NTS-NAT/UMT admission test with minimum 50% marks

Program Summary

Minimum/Maximum Duration 4/6 years
Credit Hours 139

2. Bachelor of Textile Marketing and Management (BTMM)

Program Overview

Textile and clothing sector is the biggest contributor in the national economy of Pakistan. It contributes 9% to the GDP and 55% in the total export of the country. In addition to employment in production and quality control areas of textile and clothing industry, there is a vast scope in the marketing of textile products. It has been observed that marketing, merchandising, sourcing and general management personnel serving in textile industry lack basic technical knowledge of textile manufacturing processes and products, thus leaving a big gap in quality of marketing and management. This program is focused on producing graduates with a blend of technical, marketing and management knowledge related to textile industry which will perform better than the personnel working in the fields with simple business education. It will also help in bridging the gap and hence enhance the performance of the industry in the competent world market.

Program Objectives

The core objective of the program is to produce graduates with a blend of knowledge related to textile materials, manufacturing techniques, quality assurance, management and marketing of textile products to a variety of customers in the world. Another objective is to fill the gap in provision of skilled and qualified

merchandisers in garment and fashion industries. This will be achieved by imparting knowledge about norms and practices of dealing with customers in these areas.

Career Paths

The graduates of BTMM program will be able to join textile and fashion industries as merchandisers in garment manufacturing industry, merchandisers in textile and fashion industry, marketing managers in all fields of textile and fashion industry, sourcing managers in all fields of textile and fashion industry, and supply chain managers in all departments of textile and fashion industry.

Admission Criteria

- FA/FSc with minimum 50% or equivalent qualification
- NTS-NAT/UMT admission test with minimum 50% marks

Program Summary

Minimum/Maximum Duration 4/6 years Credit Hours 134

MS TEXTILES (MSTX)

Program Overview

The textile industry of Pakistan is in dire need of competent human resources equipped with a strong technical background and a vision for developing new products and services. In order to address this need, the University of Management and Technology (UMT) has launched the Master of Science in Textiles (MSTX) program in the field of textiles. The Master of Science in Textiles (MSTX) is a two-year program that has five unique specializations catering for the requirements of the Pakistani textile market. Classes are normally scheduled in the evening for the benefit of the employed participants.

Program Objectives

The core objective of the program is to produce graduates with a strong technical knowledge of textiles which are able to critically analyze problems of the textile industry of Pakistan. In addition, they will be able to conduct research both in industry, and in research institutions for finding innovative solutions to newer problems.

Career Paths

The graduates of MSTX program will be able to join textile industry and research institutions as technical experts and research scholars. They can also join the academia in faculty positions.

Admission Criteria

- Sixteen years education in Textile Engineering or an allied line, with minimum CGPA 2.50 out of 4.00 or equivalent in semester system or 50% in annual system
- NTS-GAT 50% (General) test with a valid result at the time of admission

Program Summary

Minimum/Maximum Duration 2/3 years

33 including research Credit Hours

Thesis of 6 credit hours

PhD Textile (PhD TX)

Program Overview

The PhD Textile is a full time 4-year program which includes course work comprising of 18 credit hours. Students will have to take three core courses including a course on research

methodology, and select three more courses according to their specialization. During the first two years, students will complete the required coursework including 9 credit hours of core subjects (3 courses) and additional courses of 9 credit hours (3 courses) from elective subjects to enhance the students' research. The passing criterion for PhD level subjects is minimum 70%. The maximum number of two subjects is allowed to study in a semester which is equivalent to 6 credit hours.

In case of deficiency coursework, the participant will have to complete deficiency coursework (of 600 level subjects) before taking PhD courses (of 700 levels or above).

Students will then be required to pass a comprehensive (qualifying) examination in the field of textile. The structure of the examination will be in accordance with the prevailing guidelines of UMT. The students who pass the qualifying examination will be required to conduct research in the specified area and to submit a written thesis of their research to complete their PhD. The PhD candidates will have to defend their research work in front of a panel of experts in order to complete their degree requirements.

Program Objectives

The core objective of the program is to enable the PhD candidates in conducting research for inventing and innovating solutions for ever-increasing problems of textile industry, as well as invent newer products and methods for the future.

Career Paths

The graduates of PhD Textile program will be able to join textile industry, research institutions and government and non-

governmental organizations as technical experts and advisors, and research scientists. They can also join the academia in faculty positions.

Admission Criteria

Eighteen years education in Textile Engineering or an allied line, with minimum CGPA 3.00 out of 4.00 or equivalent in semester system or 60% in annual system, along with NTS-GAT (Subject) with minimum 60% marks with a valid result at the time of admission.

Program Summary

Minimum/Maximum Duration 4/8 years

Credit Hours 18 along with doctoral research

Department of Design

The Department of Design offers four undergraduate and two postgraduate programs.

1. Bachelor of Fashion Design (BFD)

Program Overview

Fashion design industry, over the years, has grown into a profitable profession. The degree program focuses on the balance between the conceptual and industry related fashion design through research and development of innovative and creative fashion design practices. The challenging and engaging studio based projects help participants to explore and gain multilayered global experience with academics and key industry figures. The creative studio environment will encourage the students to think critically and develop their own design signature style.

Program Objectives

The program focuses on core objectives of providing the students with an integrated understanding and specialist perspective on the application of culture and professional practice in the fashion design industry. Throughout the degree course, the students are challenged to test their abilities from concept development to final execution of their design. Subjects like fashion illustrations, pattern making and cutting, sewing and stitching help participants to learn creative ways of developing their unique style in the field of fashion design. We aim to produce graduates who are creative, imaginative, innovative, versatile and competitive. This aim is achieved by:

- Producing graduates who have acquired theoretical and practical knowledge of the fashion industry
- Producing graduates with critical and analytical problem-solving skills for the fashion design industry
- Preparing students for a broad range of related employment opportunities
- Preparing students to show aesthetics and functionality at every phase of design sampling, marketing and merchandizing
- Preparing students for quality research for advanced study in fashion design discipline
- Preparing students to handle and run a fashion brand

Career Paths

As a graduate of the Bachelor of Fashion Design, you can opt for career paths as fashion designer, product developer, fashion manager, design manager, fashion merchandiser, and fashion brand owner.

Admission Criteria

- FA/FSc with minimum 50% marks or Equivalence Certificate
- 50% in Matric or Equivalence Certificate
- **UMT Drawing Test**

Program Summary

Minimum/Maximum Duration 4/6 years 129 Credit Hours

2. Bachelor of Textile Design (BTD)

Program Overview

Textile industry is a leading industry that contributes to the economic growth of Pakistan. The program provides students with an in-depth understanding of creation and functional utilization of various textiles. The courses of the program offer detailed and in-depth knowledge of design developing textile sculptures, surface textile design, mixed media textiles and constructed textiles fulfilling the demands of home and fashion design industries. The students complete hands-on work with various materials to make textiles such as knits, weaves, prints and color dyes. Students showcase their final thesis work through an exhibition creating environment to attract the attention of respective industries.

Program Objectives

The key focus of the program is to produce quality resource persons to meet the ever changing demands of the industry. Participants learn surface design techniques and their applications for home textile industry, fashion apparel fabrics and mixed media textile art. They equip themselves through extensive learning processes in studio sessions and theoretical conceptual clarity and development. The aim is achieved by:

- Providing knowledge and skill required for working in various textile design related fields
- Developing a strong visualization power and conceptual clarity through different theoretical and practical studio based projects
- Preparing individuals to meet the ever changing competitive and technology driven work environment
- Enabling to run and manage a textile design house business
- Enabling to run and manage a retail textile business

Career Paths

As a graduate of the Bachelor of Textile Design, you can opt for career paths as textile designer, trend and forecasting analyst, textile design house owner, textile design brand owner, textile design retailer and textile design manufacturer.

Program Summary

Minimum/Maximum Duration 4/6 years 127 Credit Hours

Admission Criteria

- FA/FSc with minimum 50% marks or Equivalence Certificate
- 50% Matric or Equivalence Certificate
- **UMT Drawing Test**

3. Bachelor of Interior Design (BID)

Program Overview

Interior Design is one of the many professional fields which have made their way strongly over a period of a few years. Many renowned universities around the world have launched the bachelor degree programs in this discipline. The program typically teaches students to creatively design and handle residential and commercial spaces.

Throughout the course of studies, students participate in studio sessions, learning to solve design issues for a variety of settings. An environment is created at the studio where individuals can develop their ability to apply design thinking resulting in a creative and purposeful interior environment.

Program Objectives

The program is designed to give participants the knowledge and skill set to display their abilities as a competent space planner and decorator. During their stay of 4 years at Interior Design Department, they extensively expose themselves to latest concepts and new technological approaches to interior design. They study ongoing trends and learn to develop their individual identity as interior designers. The key objectives of the program cover the following:

- Ability to rapidly visualize concepts through sketching
- Ability to plan a space and create an ambiance
- Ability to understand and present interior design concept in 2D and 3D formats
- Complete interior design project in a professional manner using all the tools required

- Understand sustainability issues
- Understand the building and architectural codes and language

Career Paths

As a graduate of Bachelor of Interior Design, you can opt for career paths as interior designer, interior architect, concept visualizer, interior design course instructor and set designer.

Program Summary

Minimum/Maximum Duration 4/6 years Credit Hours 126

Admission Criteria

- FA/FSc with minimum 50% marks or Equivalence Certificate
- 50% in Matric or Equivalence Certificate
- **UMT Drawing Test**

4. Bachelor of Graphic Design (BGD)

Program Overview

The program focuses on learning the communication skills through the relationship text and images. A vast range of subjects from the history of design to the modern typography equips students to creatively manage a design campaign with a signature style. Learning the modern digital tools also makes them communicate better. The program focuses on concept development and application.

Program Objectives

The Graphic Design degree program prepares the students to compete internationally while displaying their knowledge and skills of communication. They learn through various subjects

about the growing graphic design industry. The key objectives of the program cover the ability to:

- Demonstrate competency in technical skills applicable to graphic design
- Communicate concepts, design solutions, and arguments clearly and concisely through visual, verbal and written means
- Demonstrate the ability to use design thinking strategies in an interactive design process
- Work in different industries displaying their skills as graphic concept artist
- Gain functional competence with principles of visual organization, including the ability to work with visual elements in two and three dimensions

Career Paths

As a graduate of the Bachelor of Graphic Design, you can opt for career paths as graphic designer, game concept designer, visual artist, art director, creative head, mobile phone graphic designer and web graphics designer.

Program Summary

Minimum/Maximum Duration	4/6 years
Credit Hours	129

Admission Criteria

- FA/FSc with minimum 50% marks or Equivalence Certificate
- 50% in Matric or Equivalence Certificate
- UMT drawing test

5. MS in Graphic Design (MSGD)

Program Overview

The is an advanced level program which exposes participants to new level of thinking, approach and concepts for execution with the help of advanced technologies and software.

The students put their knowledge and understanding of the subject to test. They master the art of research and learn the methodologies to excel their crafts to new horizons of creativity and innovations.

Program Objectives

Worldwide graphic design industry seeks individuals with extraordinary conceptual approach to solving problems, managing solutions and making decisions for a profitable design campaign.

The Master in Graphic Design program covers masterfully all the areas of theoretical and technical subject industries ranging from advertising and gaming to movies, academics, fashion industry and the list is increasing. This aim is achieved by:

- Producing graduates who have acquired theoretical and practical knowledge of the graphic design industry
- Producing graduates with critical and analytical problem solving skills acquired by the graphic design
- ndustry
- Gaining thorough knowledge of composition, color and combination of type face and imagery
- Gaining experience to organize, prepare and work in a graphic design corporate culture

Career Paths

As a graduate of the Master in Graphic Design, you can opt for career paths in animation industry, advertising agency, gaming industry, film making, story board artist, mobile phone applications, book illustrations, editorials and publications.

Program Summary

Minimum/Maximum Duration 2/3 years Credit Hours 30

Admission Criteria

- Bachelor in graphic design/ fine arts with minimum CGPA 2.50/4.00 or equivalent in semester system or 50% in annual system
- NTS-GAT/UMT admission test with minimum 50% marks

Institute of **Aviation Studies** (IAS)

Pakistan's economy is in a take-off phase and heading towards prosperity. In fact, the once stagnant economy of Pakistan has now started to grow. Resultantly, we all are witnessing an apparent surge in terms of foreign investment. This economic turnaround has made a lucrative impact on business and economic activities in almost every industry of this country. Similarly, the aviation sector in Pakistan has also geared up considerably. Airports are being renovated with new and latest terminal buildings and facilities, both for passengers and operations. More airlines are being launched under friendly business environment, whereas existing airlines are expanding their fleet of aircrafts with latest versions for speedy and long-haul flights with passengers' comfort. The load of passengers and cargo transportation has gained a momentum to compete with international airlines as well.

Keeping in view the healthy signs of business promotions in aviation industry, worldwide and in Pakistan as well, we are striving hard to fulfil the present and future needs of every department in aviation industry by providing quality human resource in term of aviation managers and aircraft maintenance engineers. In the Institute of Aviation Studies at UMT, the students are acquainted with the best theoretical and practical knowledge to enhance their professional skills and capabilities to meet emerging trends of aviation industry.

Availing this opportunity. I would like to assure you that at the UMT Institutes of Aviation Studies, every student will be groomed into one of the finest aviation professionals equipped to perform impressively anywhere in the world.

I Saeed

Principal Institute of Aviation Studies

Institute of Aviation Studies (IAS)

Vision

Institute of Aviation Studies is committed to prove itself one of the world's premier aviation institutions for learning civil aviation.

Mission

To manage and provide highest quality of professional training and sharing of knowledge for the advancement of international civil aviation in the country and internationally.

Introduction

Technology is changing at a rapid pace and there is an immense demand for professionals who have the right combination of business and technology skill in emerging interdisciplinary fields like Aviation. IAS was established to fulfill the demands of such professionals. The programs offered by the IAS are technologybased and as such require state-of-the-art facilities. UMT is equipped with both Mac and Windows-based computers for different aviation software and simulators. It offers aircraft flying and maintenance licenses for its programs.

UMT has already established a world class flight simulation setup. UMT is the first university in Pakistan to have a fully functional flight simulator. The flight simulation course on this setup will include a 02 hours basic training of flying and Air Traffic Control.

IAS values corporate and government liaisons and has already established links with PCAA and various international airlines. It has strong links with leading software houses in Pakistan and its supervisory academic council members hail from prestigious national and international academic and professional institutions. **UMT** as an Approved Training Organization (ATO) by Civil Aviation Authority. Pakistan Under the authority of CAA, UMT is empowered to hold and conduct the following ground courses for subsequent appearance in the examination of HQs CAA for relevant licenses:

- Flight Operation Officer/Flight Dispatcher (FOO/FD)
- Private Pilot License (PPL)
- Commercial Pilot License (CPL)
- Instrument Rating for pilots (IR)

The ground training for Flight Operation Officer /Flight Dispatcher (FOO/FD) licenses to be issued by CAA is imparted to every student of BS Aviation Management absolutely free of cost.

Academic Programs

The Institute's goal is to provide top notch programs in emerging technologies. Academic programs offer state-of-the-art courses and learning.

Research Initiatives

The Aviation Department has designed six new courses with proper research and academic material to lay a firm foundation of our programs. The Department is now working on Flight Simulator Specifications and Virtual ATC techniques to enhance knowledge of the students regarding these technologies.

UMT Aviation Club

This club is promoting extra and co-curricular activities for the students of Aviation Management and Aircraft Maintenance Engineers Technology BS degree programs.

Web Link

For complete details, please visit

http://umt.edu.pk/IAS/home.aspx

BS Aviation Management

Mission

To meet the needs of the continually adapting educational and business environment with emphasis on aviation management skills for the fastest growing industry in the world.

Rationale

Air travel is a form of transportation in vehicles (such as airplanes and helicopters) that can sustain flight. It provides safety, comfort and the most convenient means of reaching the required destination in the shortest possible time in an affordable manner.

The growth of the aviation business worldwide has provided a quantum jump in all aviation related fields ranging from manufacturing of aircraft to the development of related infrastructure and management of various aviation activities. To run the aviation systems efficiently and effectively, human resource development has become a deciding factor. Due to the advanced growth in commercial aviation, the demand for people having the required professional knowledge and skills has risen. At present, very few universities are offering aviation courses in the fields of aviation management.

Program Description

The Aviation Department offers the four-year BS Aviation Management program that provides the necessary educational background for aviation industry professionals to solve problems within the field of aviation including airlines, corporate aviation, general aviation, and airport management.

Aviation graduates gain an understanding of the various complexities facing the industry through a breadth of aviation industry-related courses. They also gain an understanding of statistics and research methods, and how they may be applied in

research to solve problems within the aviation industry. The program provides graduates with the knowledge and skills that prepare them for the aviation industry, aviation related government jobs, research and development in the field of aviation.

Program Summary

Academic Stream

This covers the 4-year degree program which has 08 semesters with 132 credit hours of 43 courses and additional one research projects. The roadmap is a blend of modern and latest core subjects which are the need of today's modern aviation industry. It also fences the academic requirements of the world's top ranked educational institutes for further enhancement of students' academic career. The program covers almost every level of aviation sector, i.e., introduction to aviation industry aircraft performance and flight simulations, airport planning and management, aviation safety management, aviation entrepreneurship and a lot of other industry and compulsory courses to fulfill the requirements of the aviation market.

Skill Development Stream

These are short courses offered by the world's highest ranked aviation industry experts and institutions like International Air Transport Association (IATA), Pakistan Civil Aviation Authority (PCAA) and the world's leading ground handling agencies. All modules in both streams cover the complete circumference of aviation needs and not only prepare the student to become an expert in a very short period of time but also provides a chance to get an immediate response from the world's famous aviation companies.

Note

- All streams require a work experience of 06-08 months with different airlines and aviation companies at airport.
- 2. Skill development stream has additional fee to be paid.

Admission Prerequisites

- Higher Secondary School Certificate or Equivalent.
- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate

Program Fee

a. Rs 1250000/- for 08 semesters (04 years Academic Stream)

Training on Flight Simulator Aircraft

(Cessna -172)

The Department of Aviation has established a full-fledged Flight Simulator Aircraft (Cessna -172) and Air Traffic Control (ATC) System within the premises of the university. Training of this flight simulator is compulsory for every student. This training will enable the students to understand entire operation of a flight from the departing airport to its destination.

BS Aircraft Maintenance Engineers Technology (AMET)

(With EASA Part-66 License)

Mission

On September 28, 2003, European Aviation Safety Agency (EASA) took over the responsibility for the airworthiness and environmental certification of all the aeronautical products, parts and appliances designed, manufactured, maintained or used by persons under EU-state members and around the world.

In order to meet the requirements and standards of EASA which have been regularized world-wide in the aviation industry, the UMT has designed a 4-year degree program. This BS AMET is a composition of degree and EASA PART-66 courses, which

compliments both the theoretical knowledge and the requirements of EASA-Aircraft Maintenance Licence (AML).

Rationale

A single word which can best describe aircraft maintenance is called 'Safety.' There is a long chain of safety right from the manufacturer to the operator. The protection of this chain is called aviation safety protection, which is directly in the hands of maintenance engineers. Due to the rapid increase in air traffic in the last few decades, the need of aeroplanes, their systems knowledge and proper maintenance has risen to a very high level.

On the other hand, the need for qualified maintenance engineers is still gaining altitude with a very high rate of climb. Different monitoring agencies from the aviation sector have very strict check and balance on the training of maintenance engineers and the airlines maintenance standards through their governing bodies like European Aviation Safety Agency (EASA).

Program Description

The 4-year BS Aircraft Maintenance Engineers Technology program covers all the needs of academics through its wide range of core subjects of aircraft systems and operations. To maintain the standards of international level of aviation industry. UMT has gone through very high standards of maintenance practices by signing a MoU with her German Partner.

All the course work and examination system will be provided by the German institute for the issuance of EASA part-66 license through German Civil Aviation Authority (LBA). Remaining courses for the issuance of the degree will be offered by UMT to get a 4-year BS degree.

The program provides majors in Airframe and Power Plant (A&P) and Avionics Systems. AMET graduates may become aircraft maintenance specialists and safety researchers in higher

education. Another unique feature of this program is the provision of 3-year work experience on operating civil aircrafts under the umbrella of Civil Aviation Authority Pakistan. This experience will be recorded in the prescribed engineers log books issued by CAA Pakistan and will be taken as work experience as an engineer. The student will pass out from the university with 3-year work experience in hand.

Program Summary

- A. Program Duration: 4-Years
- 8 Semesters at UMT Campus
- 3-years of work experience in parallel to university studies with partner MRO's (B1.2, B3) in Lahore
- Work experience will be provided from 2nd semester on wards
- B. EASA Modules: 14 (for B1.1) in 4-years
- C. EASA Exams: Once a yearE. Total Credit Hours: 134

Note: We are working for semester wise EASA examination.

Admission Prerequisites

- FSc (Pre Eng.) or ICS. Any combination with Math and/or Physics
- Matric 50% or Equivalence Certificate
- Intermediate 50% or Equivalence Certificate
- DAE with 50% marks

Program Fee

- 1,200,000 Tuition Fee (For regular eight semesters at UMT)
- 1500 Euros for EASA (Part-66 license) modular examination

- registration, payable to EASA (Part-147 approved MTO). In our case it is Aero-Bildung.
- Note: This fee includes examination of all 17 modules for B1.1 category and EASA license processing fee. Further, it is once payable at the time of admission and non-refundable too.
- 180,000 training fee at the MRO (payable in 3 years by student himself)

Note

- This program is being offered on a very calculated price in comparison with any institution of the world with the assurance that quality standards would exceed your expectations.
- For further details regarding EASA Part-66 License, please coordinate with Department of Aviation directly.

Institute of Clinical Psychology (ICP)

Our mission, that we had held so close to our hearts since 2005, was to raise the standard of training of clinical psychologists in Pakistan. We were the first to introduce a few new ideas. We started a two-year postgraduate degree in Clinical Psychology instead of the one-year Diploma. We were the first to introduce a dynamic-functional approach in Clinical Psychology and scientist-practitioner model as a basis of our training.

One of the major innovations which we have introduced in our work is, that in order to understand an individual's behavior we look for the unique configuration of the bio-psycho-social factors and the nature of their interaction to answer the key question "why does one behave in the way one does?" This approach obviates the need for having to have a diagnosis for every case. This is a significant departure from the traditional structural approach in Clinical Psychology. With the advent of the two-year postgraduate course, research has now become an integral part of the MS Clinical Program. We prefer researchers to look into problems that we face in our culture and develop appropriate instruments designed for studying indigenous problems.

We have also introduced School Psychology in our program. It is a combination of Educational Psychology and Clinical Psychology. We are beginning to realize, with the wealth of evidence we have gathered, that School Psychology deserved to be treated as an independent discipline in its own right. Special education holds an integral position in our clinical training program. We have made significant contributions to the centers for the disabled children in terms of assessment based integrated training. Among other things, we are the first to investigate emotional, behavioural, and social problems experienced by those with hearing and visual impairment. We have recently introduced MS in Counselling Psychology as a new two-year degree program. Couselling is one of the most rapidly expanding professions in psychological health. I am very pleased to inform that we have opened MS Clinical Psychology Program at UMT Sialkot Campus. At present, we are focusing on developing a Doctorate in Clinical Psychology, a four-year postgraduate program that will bring our training of Clinical Psychologists in line with the rest of the developed world.

Currently, we have about 125 students in the MS program and about 15 PhD scholars working at different levels. Ours is a very labor-intensive program; every student's work- clinical or research- is closely supervised throughout by a qualified and experienced clinical psychologist. Over the last three years we have produced more than 700 case studies, and completed more than 50 research projects and 6 publications. Our first PhD has successfully defended her thesis and the second one is soon to follow.

Prof Dr Zahid Mahmood

Director

Institute of Clinical Psychology (ICP)

Mission

"We will endeavor to raise the standards of teaching, training and expertise of clinical psychologists to international levels, to meet mental health needs of the people and serve the community at large with professionalism, dedication and commitment through scientific methods and procedures developed and validated indigenously."

Introduction

The Department of Clinical Psychology at UMT has been upgraded into an Institute of Clinical Psychology in the 18th Meeting of the Academic Council held on March 03, 2015 to provide a whole range of Clinical Specializations that culminate in professional qualification at Doctorate Level. Such a move has provided an impetus for widening the scope of Clinical Psychology but also improved the depth of understanding of human nature in important areas of life of the individuals as well as the community.

- We have developed a variety of programs to provide continuous and contiguous teaching and training leading to a professional qualification
- However, there are opportunities for the student to choose from a number of different areas of specializations mentioned before
- Also, research in any of the above areas helped us develop
- ndigenous body of knowledge and expertise. So, empirical and clinical research is an integral part of each program
- We have started a professional journal of Clinical Psychology tilted 'Clinical and Counselling Psychology Review'

Furthermore, in time we shall be able to offer specializations in each program at the Professional Doctorate Level

Proposal Statement

To establish an Institute of Professional Psychology at UMT with comprehensive, complementary and cohesive programs in different but related branches of Psychology leading to applied disciplines which culminate in professional qualifications and expertise.

Rationale

Different branches of Psychology have developed into independent disciplines. While belonging to the same family, they focus on different aspects of human behavior. Present day scientific psychology is a very young science. The generic term psychologist was used to identify anyone who has studied Psychology. As our knowledge of human behavior increased, like in any other science, specialisms grew in Psychology, providing cutting-edge and standardized services to the community. We now have Clinical Psychology as the most popular professional psychology and there are many other specializations that draw heavily on the methods and techniques used by Clinical Psychology, for example, Developmental Psychology, Educational Psychology, School Psychology, Forensic Psychology, Counselling psychology and so on.

There are many other avenues hitherto not explored in Pakistan. Clinical Psychology, the most popular and developed branch, has led the way by having a wide knowledge but also comprising of a unique configuration of three components, i.e., psychological assessment of human behavior through standardized and scientific techniques and procedures providing a clear explanation of behavior based on valid and scientific theories. thus paying the way for changing behavior through well tried and tested methods for the betterment of humanity. The approach is applicable to all modes and forms of human behavior in

hospitals, industry, business, education, management, governance and on individual, as well as social institutions. The Institute provided a solid platform to launch professional courses as well as research in key areas of human functioning. Applied Psychology, with its theoretical bases and research acumen, complement the development of a wide range of applications and expertise.

Aims and Objectives

The Institute has developed a variety of programs that provide a continuous and contiguous teaching and training leading to a professional qualification. However, there are opportunities for the students to choose from a number of different areas of specializations, e.g., School Psychology, Counselling Psychology, Health Psychology, Sport Psychology and so on.

Also, research in any of the above areas helped shore up the indigenous body of knowledge and expertise in each of these areas. So, empirical and clinical researches are an integral part of each program. Furthermore in time we shall be able to offer specialization in each program at Doctoral Level.

Description and Justification

Many departments of Psychology emphasize on mainly the academic and theoretical side of the discipline. This is mainly due to the way they still view Psychology. The establishment of an Institute of Professional Psychology not only announced a public commitment to professionalism and specialism but also paved the way for new developments and new applications of human behavior.

Benefits

The Institute established along the above lines no doubt improved the quality and the number of professional produced at UMT. It has developed a culture of specialism and research in different areas. We have new normative standards for organizing and functioning academic disciplines.

Professional Training to Pakistan Air Force

We hold a training workshop for the personnel of Pak Air Force every year. We give training in 'Counseling and Guidance Skills,' which helps them in their recruitment process and professional work.

MoU signed with the NGO Mind Cure

We have signed an MoU with Mind Cure with Col. Jahanzeb Khan, CEO, Eastern Educational Product and Services, Pakistan, to open Professional Clinical Counselling and Guidance Services to the public based on UMT Campus, Lahore. Dr Hasan Sohaib Murad, Rector UMT, approved the proposal on December 18, 2014.

Student Counselling Service

The ICP is also offering Clinical Counselling Service to all students and staff of UMT. This service is free and it is provided on demand. In a short time, demand for service has increased.

Currently, the SCS deals with those problems that often affect the student population. The structure of the service is based on research which we carried out about two years ago.

Problems like anxiety, mood changes, problems with study skills, overcoming relationship difficulties, dealing with personal and social management skills and so on, are among the most common issues that bring students to the service. We are hoping that with appropriate accommodation and more staff, this service will expand further.

Those who wish to know more about the SCS, please contact this number 04235212801-10 Ext 3549.

Future Developments

It is intended that as and when the conditions and resources permit, each new professional course will be introduced as MS level to a Doctoral degree. The areas for 2-year MS will include:

School Psychology

- Neuro Psychology
- Health Psychology
- Forensic Psychology
- Sports Psychology

Similar courses may be offered as full time/part time/evening courses according to demand.

Web Link

For complete details, please visit

http://umt.edu.pk/icp/home.aspx

Professional Academic Programs of the Institute of Clinical Psychology-UMT, Lahore.

Fall 2016 Courses

- MS in Clinical Psychology- Two Years
- MS in Counselling Psychology- Two Years
- PhD in Clinical Psychology

1- MS in Clinical Psychology

This program is the flagship of clinical training, based on nearly 50 years of experience in teaching, training and practicing clinical psychology at home and in UK.

Through a cumulated experience of the last eight years, a substantial amount of culture specific knowledge-base has been created and a number of indigenous tests and assessment procedures for children, adolescents, adults and the elderly have been developed. This will be the fifth intake since September 2012 in UMT.

Program Structure

This is a two-year full time course comprising of 48 credit hours, spanning over four semesters: Foundations of Clinical

Psychology, Child Clinical Psychology, Adulthood Disorders, School Psychology and Research.

Evaluation

40% of evaluation is based on written exam and 60% of evaluation is based on assessment of quizzes, assignments, class participation and presentations.

Research

This is an integral part of any course on Psychology, A professionally trained counselling psychologist should be able to undertake research to a new phenomenon or develop indigenous techniques and ascertain their effectiveness. Psychology is embedded in the culture it exists. A substantial part of the training is assigned to learning research techniques and methods used in the counselling field and undertake an original research project.

The importance given to the acquisition of practical counselling skills is reflected in the proportion of time allocated to Counselling Case Studies throughout the two-year period.

Eligibility Criteria

- BS (Hon) in Psychology with CGPA of 2.5/4.00 or M.Sc Psychology with 1st Division, 60% marks from a reputable and HEC recognized University.
- 2-The candidate is selected on the basis of performance on the admission test and interview.
- 3-Personal suitability to become a Clinical Psychologist is essential.
- All those candidates who have completed Diploma in Clinical from HEC recognized University can apply and may be considered for credit transfer. The equivalence committee will make the final decision.

2- MS in Counselling Psychology

Course Detail

This professional program of training in Counselling Psychology has been introduced. MS Counselling Psychology is theoretical as well as applied. The professional counselling psychologist should ensure to achieve professional excellence and mastery in their field and continue to improve their standards by keeping abreast with the new developments.

Eligibility Criteria

- BS (Hon) in Psychology with CGPA of 2.5/4.00 or M.Sc Psychology with 1st Divsion, 60% marks from a reputable and HEC recognized University.
- 2-The candidate is selected on the basis of performance in the admission test and interview.
- 3-Personal suitability to become a Counselling Psychologist is essential.
- All those candidates who have completed Diploma in Counselling from HEC recognized University can apply and may be considered for credit transfer. The equivalence committee will make the final decision.

Structure of the Course

This is a two-year professional degree training program leading to a recognized qualification as a Counselling Psychologist. The program is both theory and practice orientated. In the first semester, the trainees will be introduced to the basic counselling skills, theories of counselling and counselling techniques. There will be opportunities to practice such skills under supervision. The second semester will introduce counselling with adults with supervised case studies and research methods in Counselling Psychology. The third semester is related to Child Psychology along with case studies and statistics. The final semester mainly deal with thesis and ethical issues in counseling psychology. Research is an integral part of any course of Psychology. A professionally trained counselling psychologist should be able to undertake research on a new phenomenon or develop indigenous techniques and ascertain their effectiveness. Psychology is embedded in the culture it exists. The experience, manifestation and expression of a phenomenon can vary from culture to culture and it should be studied in the context in which it is found. A substantial part of the training is assigned to learning research techniques and methods used in counselling field and undertake an original research project. The importance given to the acquisition of practical counselling skills is reflected in the proportion of time allocated to Counselling Case Studies throughout the 2-year period.

Standard of Training

In the West, the minimum training qualifications for Counselling Psychologists is a doctoral training program, which in UK, is three years and four in USA. In Pakistan, the equivalent program currently takes two years but it is hoped that in future it will be a four-year doctor program.

3-PhD in Clinical Psychology

Eligibility Criteria

- MS or MPhil in Psychology with CGPA of 3.0/4.00 or 1st Division 60% marks from a reputable and HEC recognized university
- GAT (subject) is compulsory to pass
- Candidates having professional experience will be preferred
- The candidate is selected on the basis of performance in the admission test and interview
- Personal suitability is essential

Institute of Communication and Cultural Studies (ICCS)

In the present era which is a hallmark of electronic media, social media and internet, and where knowledge and ideas are transferred in a blink, it is vital to develop such a mechanism which should peep into this amazing and robust transformation by the wings of research and teaching methods. In order to study this rapid change, transition and novelty in the set of beliefs, social norms and cultural identity, which is a growing tradition of the 21st century, Institute of Communication and Cultural studies (ICCS) is a unique entry into the dynamics of UMT.

To meet with new challenges, ICCS is working in two different capacities with the same pedagogical parameters. The very first challenge since its inception as Center for English Language (CEL) was to cater for UMT students' English language proficiency with the help of contextualized teaching materials. Keeping this in view, ICCS has cemented a strong bond between the students and the contemporary social and electronic media. To make this effort livelier, three different books have also been introduced with the name of Reader 1, Reader 2 and Reader 3. By doing so, ICCS is using integrated pedagogical strategies in order to immerse the very soul of our students in the contextualized English literature.

In the second capacity, ICCS introduces its master degree programs; MA TESOL (Teaching of English to the Speakers of Others Languages) with the slogan; From Theory to Practice. The well established degree program BS (Honors) in English Literature in its true spirit has accepted the challenge to preserve and promote the national and international literature written in English. To promote this very vision; seminars, talks and English language workshops are an incessant and permanent entry into ICCS.

Dr Arshad Ali Khan

PhD Linguistics University of Azad Jamu & Kashmir Pakistan

Institute of Communication and Cultural Studies (ICCS)

History Since its Inception (2010) and its Contribution to UMT

Institute of Communication and Cultural Studies (ICCS) was established under the name of Center for English Language (CEL) initially. It successfully catered to above six thousand (6000+) students since its inception in Fall 2010 across the university.

We strive to provide our students with:

- Skilled and professional instructors with an experience of teaching English as a Second Language (ESL)
- Use of Computer Assisted Learning (CAL) with supporting supplemental materials for the curriculum, specialized software (Moodle)
- Flexible schedule including morning, afternoon, and evening classes
- Performance-based assessments, evaluations, and classroom activities to measure student's progress
- Workshop on creative writing, photography and on curriculum development
- Specialized classes for specific purposes, i.e., Business English, Business Writing, Inter-personal Communication, Conversation, etc.

Center designed English language proficiency courses keeping in view the requirements of students' respective departments and their language learning needs.

CEL English Courses to University

ICCS provides following English Language courses to all undergraduate students university-wide:

- English Grammar and Comprehension (English 1)
- Composition and Communication (English 2)
- Communication and Technical Writing (English 3)

Web Link

For complete details, please visit http://umt.edu.pk/iccs/home.aspx

BS (Hons.) in English Literature

BS (Hons.) in English Literature degree program is a unique contribution and a novel touch to the vision of ICCS. BS in English Literature will nourish the students with a solid background shrouded in the culture and social norms of Pakistan. This program provides an opportunity to the students to ponder and peep into the pages of history with the wings of literature.

The students will have an opportunity to study English literature in a global and diverse cultural perspective. It will enhance their personal and interpersonal skills and will make them equipped with analytical and argumentative skills.

This degree covers a wide range of literary genres, topics and specialized modules (postcolonial literature and comparative literature) which make it relevant to the indigenous culture and literary history of Pakistan.

ICCS is concerned about the loss of precious literary heritage of Pakistan where some of the ancient oral literature is fading away. For instance, colonial travelogues could be pursued both as a literary excurses and an expose on regional heritage.

Program Objectives

The students will be able to:

- Develop their interest in an extensive range of literary, social and cultural text written by the indigenous literary scholars
- Develop their skills in evaluating and bridging literature with a wide range of discipline from their daily life

- Develop their communication skills in an innovative and creative way as a literary critic
- Understand the importance of culture and society in the world of literature
- Understand how the critical and theoretical approaches have been implemented in the literature
- Compare and contrast the literary work composed in different settings and different times in history
- Know the symbolic role of meaning and form in the work of literature
- Develop written projects and undertake any kind of analytical work
- Evaluate the text in its different interpretation

Credit Hours

Each course is worth 3 credit hours except for Islamic Studies and Pakistan Studies.

Note: Students will study trans-disciplinary courses along with literature courses

Requirements

- 50% in Matric or Equivalence Certificate
- 50% in Intermediate or Equivalence Certificate
- UMT Entrance Test

MA Teaching of English to Speakers of Others Languages (TESOL)

MA Teaching of English to the Speakers of Others Languages (TESOL) is a 2-year degree program, which is designed to cater for the growing need of English language teachers. The courses are planned according to the latest researches in the field of English language teaching and linguistics for the speakers of other languages to cope up with the emerging challenges of teaching. This research based degree program equips the

teachers to teach through multiple methods and strategies at several levels according to the needs of the students.

The syllabus is composed on the practical and theoretical aspects of English language teaching, which includes; ELT methods of teaching and assessing four (reading, writing, speaking and listening) skills, pedagogical grammar, language and society, ELT classroom management and resource development, curriculum development and teaching practice, in major. These modules investigate the current issues prevailing with the learners and teachers in the field of English language teaching. The program places a strong emphasis on a distinctive blend of theory and practice that leads the students to an experimental and practical learning based on the modern research in second language acquisition.

Objectives

The students will be able to;

- Teach their students with different language teaching methodologies
- · Design syllabus for English language teaching
- Analyze different current and challenges prevailing in language teaching
- Plan different activities for teaching language skills and foundations
- · Write short essays, poems and stories
- Criticize on different modes assessment
- Develop ELT resources
- Execute latest researches in practical classroom teaching
- Assess the learners' needs and adapt syllabus accordingly
- Design strategies for self-evaluation, reflective teaching and action research to improve the quality of teaching and learning

Requirements

14 years of education with 50% Marks

Institute of **Islamic Banking** (IIB)

Over the last few decades, Islamic Banking has made significant advances on the global scene with its market share likely to rise to \$7.78 trillion over the next 3-4 years. In Pakistan too, Islamic Banking is making inroads into conventional banking as more Islamic banks become operational.

Recognizing the need for human resource development in the expanding field of Islamic Banking, University of Management and Technology has taken the lead in establishing the Institute of Islamic Banking (IIB) at its main campus. Under the patronage of Dr Hasan Sohaib Murad, Rector UMT, it is a pioneering initiative as the new Institute embarks on an ambitious multidimensional program. IIB is simultaneously engaged at three major fronts. Its activities and programs are geared towards becoming a leading source of education, research, and information in Islamic Banking. At the same time, IIB aims to become a self-sustaining arm of the University by generating substantial revenues through academic programs, consultancy and product sales.

In the area of academic training and research, IIB has started to offer MS Degree Program in Islamic Banking. We shall later expand to postgraduate degree and research programs in Islamic Finance and Islamic Economics. Moreover, with the participation of several reputed scholars from the Muslim world and elsewhere, IIB has launched a world-class refereed quarterly journal titled Islamic Banking and Finance Review. In order to fill the gap in trained manpower, IIB is launching a series of Executive Development Programs for the banking industry. These seminars will introduce the participants to the conceptual basis of Islamic Banking and how this can be translated into operational terms in this transition from conventional to *Shariah*-based financial practices.

Fully cognizant of the fact that HRD and R&D resources in Islamic Banking are in disarray due to lack of a systematic approach, IIB intends to become a world leader in providing one-stop access to academics, research, and human resources in Islamic Banking and Finance. To accomplish these goals, IIB has initiated several projects to develop a retrospective and current bibliography, multilingual glossary of Islamic Banking and Finance, research monographs, online databases, and a digital library on Islamic Banking and Finance.

Muhammad Mahmood Shah Khan

Director IIB-UMT

Institute of Islamic Banking

(IIB)

Vision

To be a premier leading institute of knowledge center for Islamic Banking and Finance in Pakistan for the development and promotion of Shariah compliant teachings as a medium for economic and financial growth, wealth and prosperity.

Mission

To arouse, inspire and deliver cutting-edge education, learning, research, capacity building and counseling services in the locale of Islamic Banking and Finance to uphold and prosper the Islamic teachings.

Background

The University of Management and Technology (UMT) is committed to the noble task of dissemination of knowledge for the development of human beings enabling them to undertake divine responsibilities ensuing from their distinguished position as vicegerents (Khalifah) of God on earth. Besides compulsory courses in Islamic Studies at the undergraduate level, UMT also offers graduate courses to students to infuse in them the spirit of dedication for Islamic norms and values so that they not only excel in their worldly profession but also become practicing Muslims. As such, the teaching of Islamic Studies has a special place in the scheme of studies at UMT. Even before getting the university charter, two courses of Islamic Studies (3 credit hours each) were being offered at the Institute of Leadership and Management (ILM) as it was known at the time. The first course titled 'Islam and Personality' focused on the basic teachings of Islam and its role in developing the Muslim personality. The second course called 'Islam, Society and Systems' looked at Islam as a system of social governance offering solutions to contemporary issues and challenges faced by Muslim societies.

Web Link

For details, please visit http://iib.umt.edu.pk/

PhD Islamic Banking and Finance

Keeping in view the increasing and growing demand of Islamic banking and finance industry. IIB planned to launch first ever program in Lahore dedicated to fulfill the demand of this increasing trend.

Growth of Islamic Banking in the country has been over 30% in the last few years, which is certainly above the average global growth rate of Islamic Banking and Finance. If this trend continues, then one should expect that in the next three years Islamic Banking assets will at least double from its current size of Rs 926 billion.

Mission

PhD in Islamic Banking and Finance is envisioned as a pioneering educational, research and training based degree program for participants to acquire knowledge and theoretical framework in the area of Islamic Banking and Finance to win a distinguished place in the emerging global market of Islamic Banking.

Aims and Objectives

PhD in Islamic Banking and Finance is aimed at providing relevant education and training in all aspects of the operations of Islamic Banking. The program's specific objectives are:

- To provide opportunity to participants with relevant experience to acquire knowledge and training for an advanced career in Islamic Banking and Finance.
- To train executives desiring research oriented specialization in Islamic Banking and Finance in expanding banking and financial institutions

Duration of the Program: 3-5 years

Requirements

3/4.0 CGPA in related field + GAT 60% / IIB GAT Test 50%

Career Opportunities

The participants after successfully completing the PhD program are expected to be competent for a wide variety of positions in Islamic Banking and Finance sector. They can be considered for jobs in both public and private educational institutions, research organizations, State Bank of Pakistan, and commercial banks. They can also expect to hold positions in various Federal and Provincial Ministries.

MS Islamic Banking and Finance

Mission

MS in Islamic Banking is envisioned as a pioneering educational and training program for participants to acquire both theoretical knowledge and practical skills to win a distinguished place in the emerging global market of Islamic Banking.

Aims and Objectives

MS in Islamic Banking is aimed at providing relevant education and training in all aspects of the operation of Islamic Banking. The program's specific objectives are:

- To provide opportunity to graduates with relevant experience to acquire knowledge and training for a career in Islamic Banking and Finance
- To train executives desiring specialization in Islamic Banking in expanding banking and financial institutions
- To provide opportunity for graduates in related disciplines to prepare them to enter the ever-expanding job market in Islamic Banking and Finance

Duration of the Program: 2 years

Requirements

2.5 CGPA or 50 Marks in annual system + Interview

Career Opportunities

The participants after successfully completing the MS program are expected to be competent for a wide variety of positions in Islamic Banking. They can be considered for jobs in both public and private educational institutions, research organizations, State Bank of Pakistan, and commercial banks. They can also expect to hold positions in various Federal and Provincial Ministries.

Master in Islamic Banking and Finance

Over the past two decades, Islamic Banking and Finance has emerged as another viable way of financial intermediation. It has gained credibility, spread worldwide and is the preferred way of banking for one fifth of the world's population. Our Master in Islamic Banking and Finance is one of the world's emerging degree programs in this fast-growing field. It provides rigorous training in specialized areas of Islamic finance, banking, investment, risk management and their relevant conventional counterparts. Studying for Master in Islamic Banking and Finance with us will give you advanced and structured insight into a wide range of subjects on which you can build your career in the Islamic Finance space. Alongside an in-depth understanding of current issues including moral and ethical perspectives, you will develop the analytical and research skills to work in a range of general and subject-specific Islamic finance areas. This program provides a unique perspective on banking, finance and investments, combining conventional and Islamic views, enabling students to compare, contrast and learn the best of both.

Mission

To produce scholars of international standing in Islamic Finance

- To further develop and enhance the theory and practice of Islamic Banking and Finance
- To meet the demand for experts in Islamic Banking and Finance industry in Pakistan and worldwide
- To help and facilitate the Islamization of Pakistani banking industry

Duration of the Program: 2 years

Requirements

- 2.0/4.0 CGPA or 50% Marks in annual system
- Interview

Career Prospects

The degree program will prepare you to manage and give advice on various value added financial products and services to customers in accordance with the Shariah principals. The range of careers encompassing Islamic based financial management include banking industry, accountancy, financial advisory, product development, investment management, merger and acquisitions, research, risk management and Islamic insurance.

IIB Center for Executive Development

Our world-class, industry-leading certifications are designed by industry experts and top thinkers in Islamic Finance. To help fuel growth in Islamic Finance, and to help the industry meet its shortage of qualified professionals, our certifications are designed to appeal to both those who are completely new to this area of finance, and those who are fully experienced and are keen to develop their expertise to a higher level. The IIB team has worked closely with the industry experts to develop these certified qualifications which will help to drive the world's Islamic Finance institutions.

Mission and Objectives

- To facilitate the riba free economic system in the Muslim world
- To provide the best quality of human resource for

- Islamic Finance industry
- To enhance the employment opportunities for young professionals through our customized certifications in Islamic Finance

Eligibility

There are no prerequisites for IIB certifications and if you have no prior knowledge of finance, you've come to the right place. We have designed the material specifically for newcomers seeking a high level of proficiency in the practical aspects of Islamic Finance in a very short space of time.

Certifications

Following certifications are being offered by IIB.

- 1- Certified Islamic Banker (CIB)
- 2- Certified Shariah Auditor (CSA)
- 3- Certified Takaful Professional (CTP)
- 4- Certified Islamic Micro Finance Professional (CIMFP)
- 5- Certified Islamic Financial Risk Analyst (CIFRA)
- 6- Certified Islamic Trade Finance Professional (CITFP)

IIB - Research Forum

Keeping in view the existing and future training requirements of the Islamic Finance Industry (IFIs) and management of financial institutions, Research Forum has engaged renowned Shariah scholars, academicians and representatives of reputed institutions in the training of bank officials and academia personnel of the country. The Research Forum conducts training courses and workshops for the officials of Islamic Banks and other financial institutions. The activities of IBRF cover both training and research on various aspects of Islamic Banking. Islamic capital markets. Takaful and research methods, etc. Employees of the bank, learners and researchers have been taking full advantage of this unique Forum. In addition to conducting regular training courses, it arranges seminars on Islamic Economics and Banking and such other related topics of current interest. IIB Research Forum comprises of PISIFAAB, RINA. IIB Journals and Centre for Shariah Governance as described here.

Pakistan International Society of Islamic Financial Analysts, **Academicians and Bankers** (PISIFAAB)

PISIFAAB is a non-profit research oriented international association and is a center for Islamic financial network. Established on a foundation of Islamic ethics, service and trust. it is committed to the extensive level of knowledge sharing of Islamic Economics, Finance and Banking. This Society is a forum for Islamic professionals from all facets of the international financial services community, and provides support to fill communication gaps and linkages between academia and industry under educational and research provisions.

Riba Identifier National Agency (RINA)

Riba is austerely prohibited in the philosophy of Islam. Principles and fundamentals of Shari'ah have been long absent and intentionally kept away. IIB takes upon itself as an obligation to introduce or to display an awareness to Muslim *Ummah*. The core objective of RINA is to identify the element of Riba or other Shariah compliant practices in the business so that it should eliminate the involvement or investment in these dealings and assure that it is avoided completely in the future. Our effort is to clarify the picture for men who boldly embark upon Islamic activities so that the Islamic movement may not be deflected in the middle of its progress or diverted from the right path.

IIB Journals

1. Islamic Banking and Finance Review (IBFR) ISSN 2221-5239

IBFR is an international content journal. In its annual issues, it reproduces table of contents from a wide variety of serials. periodicals and other recurring publications worldwide. These primary publications are selected for indexing by Islamic Banking and Finance Review on the basis of their relevance to religious, cultural, socioeconomic and political affairs of the Muslim world.

2. Journal of Figh in Islamic Finance

The Journal of Figh in Islamic Finance is a refereed international iournal that aims to be the leading channel for contemporary issues of Islamic financial sector in the guidance of Shariah. The papers published in the Journal will provide exhaustive approach and breakdown current *Figh* issues within Islamic business, trade, finance and bank management, attentive case studies, illustrating research and product developments, and instances of best practice. The journal is an e-publication and accessible online.

Center for Shariah Governance and Risk Management (CSGRM)

Over the last few decades, Islamic Banking has made significant inroads into the conventional banking system. Shariah Governance and Risk Management are the underlying foundations in the business practices of Islamic Finance. Recognizing the need for Shariah Governance practices and risk management tools and techniques, IIB- UMT has taken an initiative to establish a Center for Shariah Governance and Risk Management. The Center is fully cognizant of the fact that human resource development and R&D resources in Islamic Banking are lacking in current systematic approach. The Center aims to guide about the Shariah role in banking operations, terms and transition of financial practices under the umbrella of Shariah based risk management techniques. Based on national and international Shariah governance framework practices, the Center invites academicians, professionals, business community and practitioners for consultancy, trainings and capacity building of individuals in compliance with Shariah code of ethics.

Institute of **Trade and Competitiveness (ITC)**

The Institute of Trade and Competitiveness (ITC) is a project of the prestigious University of Management & Technology (UMT).

We are aware of how the WTO regime established new standards of economic prosperity. However, Pakistan has failed to respond to the challenges and opportunities of global free trade and investment policies because it lacks a think-tank that would collaborate with the private sector and engage in applied research to identify the loopholes in its prevalent policies and procedures. Thus, to promote specialization, competition, competitive advantage and national competitiveness as strategy to integrate into global trade, investments and technology transfer opportunities, ITC has undertook the vital task of preparing businessman, managers, engineers and economic planners, traders and commerce men to develop a critical insight into global system of production and value creation. It is thus a convergence of academia and industrial practices, to help build a prosperous Pakistan.

Change is not an overnight process at all but we, nevertheless, believe that revolutions occur only if passion meets vision!

Ibrahim Qureshi

CE0

The WTO regime created new structural dynamics of global competition and prosperity. In this view, Pakistan needs to respond to the challenges and opportunities of global free trade and investment policies. To promote specialization, competition, competitive advantage and national competitiveness as strategy to integrate into global trade, investments and technology transfer opportunities, UMT proposed the establishment of "Institute of Trade and Competitiveness" (ITC). ITC shall prepare businessmen, managers, engineers and economic planners. traders and commerce men to develop a critical insight into the global system of production and value creation. The ITC, through its cutting edge market surveys, innovative trade and competition research, local and global training and advocacy, can provide a real competitive advantage to our local traders and business leaders to increase profitability. It is thus also a convergence of academia and industry practices.

ITC's growth plan is divided into 3 stages; the 1st one involved Public Outreach, Information Gathering and Evaluation. The 2nd (currently in progress) is about the creation of a knowledge hub. The 3rd will consist of review and performance assessment. This project is going to be the benchmark for capacity building to enhance bilateral global trade and investment by strengthening the public, private and international linkages. The national industry and service sector capacity building is to positively influence the macro economic trends through facilitating specialization, entrepreneurship, technology transfer/innovations. FDIs to improve the overall drivers of growth and competitiveness for Pakistan's economy. Finally, to implement Pakistan Vision 2025, ITC wishes to fit Pakistan into the wave of economic development of what is known as Asian Century, of which it has so far remained on the margins. May Allah quide us all to achieve the vision of our founding father Muhammad Ali Jinnah, to build Pakistan as One of the Greatest Nations of the World.

Dr Khalid Mushtag Bhatti

DSc in Economics and Business Administration Hanken School of Economics, Finland Director Research, ITC

Institute of Trade and Competitiveness - a Hallmark for Promoting Global Trade

The Institute of Trade and Competiveness (ITC) was inaugurated in April 2016 at University of Management and Technology. ITC is a project of UMT that fosters global trade opportunities for stakeholders to bring economic prosperity. Dr Hasan Sohaib Murad, Rector UMT, was the chief guest of the ceremony.

Addressing the insuguration ceremony, During the inauguration, Dr Hasan Murad said, "There are areas such as service exports which are mainly untapped. The main reason for this is the lack of knowledge and awareness about the global knowledge-knowledge based economy and competitiveness. This lack of knowledge in our businessmen and economists is causing a huge loss of global trade opportunities and Institute of Trade and Competitiveness will serve as a mile stone to fill this gap."

Institute of Trade and Competitiveness aims to serve as a center of excellence, creating point of interaction between global and local stakeholders. ITC through its evidence based studies, trainings and advocacy will provide competitive advantage to local leaders and help to boost the market and ultimately bring profit and good name to Pakistan.

Research and Development

R&D became a major contributor for improving factor market efficiency. Firms could formulate superior corporate strategies for growth and sustainable competitive advantage in an improved knowledge intensive environment.

ITC has established specialized capabilities to provide advisory and consultancy services to all the stakeholders involved in trade, economic planning, business and management sectors in Pakistan and also in selected world regions and countries. It is to

identify relative competitive advantages of Pakistan domestic industry and service sectors in comparison to our trading partners.

International Linkages

The establishment of ITC shall prepare businessmen, managers, students, engineers and economic planners, traders and commerce men to meet the challenges of global knowledge economy and effectively take advantage of global knowledge based competitiveness shifting paradigm by developing a critical insight into global system of production and value creation.

The ITC shall serve as a regional and international center of excellence for creating points of interaction to develop partnerships among Pakistan's and international business community in selected countries.

Trade Opportunities

The WTO regime created new structural dynamics of global competition amongst the world economies. There is a growing census among global leaders, economists and industry to harmonize tariffs, customs across the globe and once implemented, it's in the benefits of both advanced and emerging markets. In this view, Pakistan needs to respond the challenges and opportunities of global free trade and investment policies. To promote specialization, competition, competitive advantage and national competitiveness as strategy to integrate into global trade, investments and technology transfer opportunities (ITC) is established in Pakistan.

Web Link

For complete details, please visit

http://itc.umt.edu.pk/