HYDERABAD CAMPUS

ISRA UNIVERSITY

PROSPECTUS
2019 - 2020

OUR MISSION

Our mission at Isra University is to provide our students with education of the highest quality, groom their personality, inculcate in them a sense of responsibility, confidence, commitment and dedication towards their profession, society and the country.
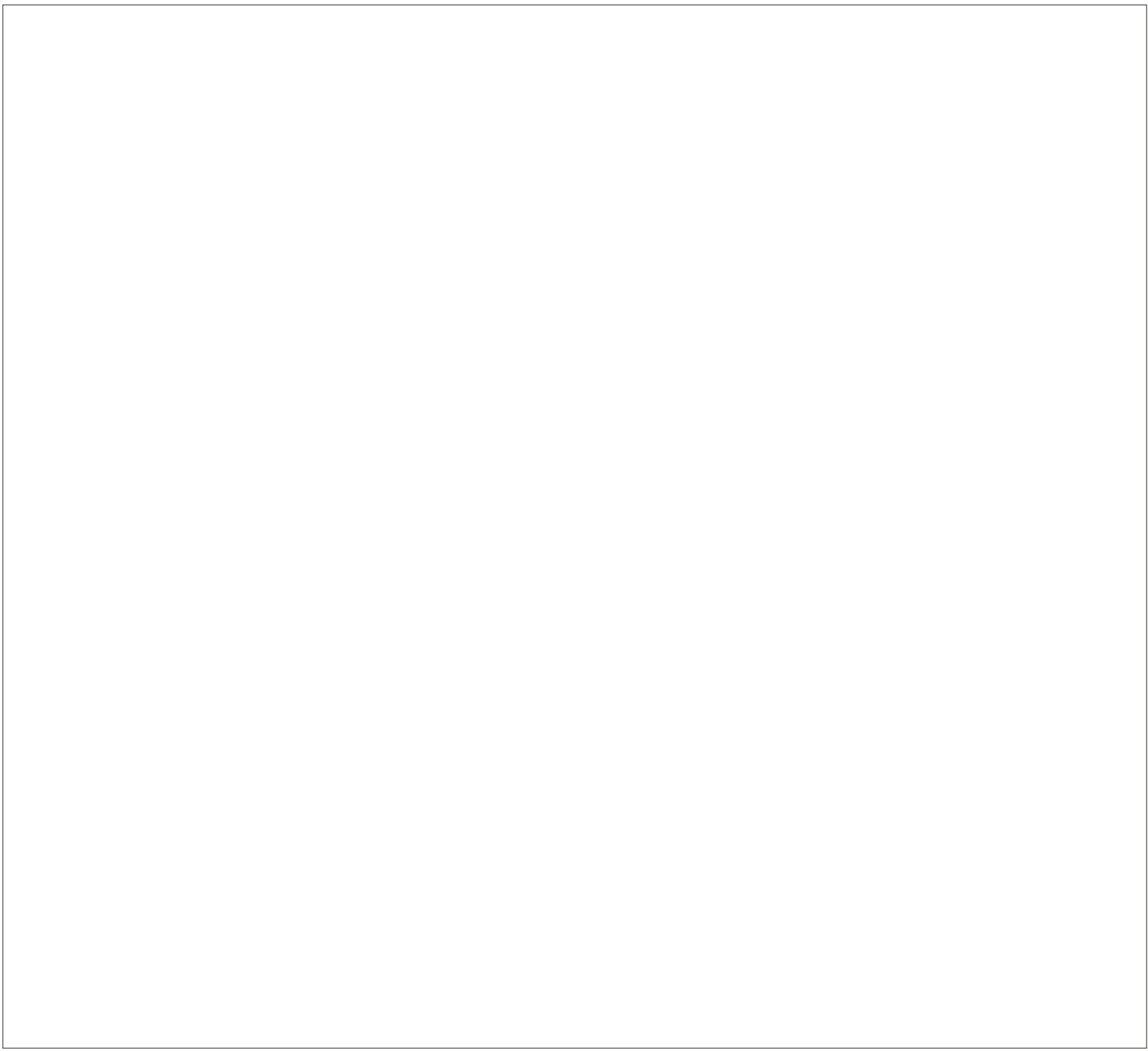
TABLE OF CONTENTS

The Campus is located 5 kilometers away from the city center, in the backdrop of agricultural land, on the national highway locally known as Hala Road. It is approachable by the fast moving Hyderabad by-pass, which is only 2 kilometers to the north of the Campus. Frequent public transport, operating along Hala Road, provides a regular access to the Campus from the city center, as well as nearby settlements on the outskirts of Hyderabad.

The Imam of Haram-al-Makki laid the foundation of the Campus in 1986, and the construction activities started in 1989. The four most distinctive buildings on the Campus are the Academic Block, the 300-bed Isra University Hospital, 300-bed Isra University Welfare Hospital and the Jamia Masjid.

These, together with newly built addition to Academic Block on its south side and several ancillary Buildings and elaborately laid down infrastructure spread over an area of 20 acres, give this purpose-built campus a touch of architectural beauty and splendor. The infrastructure incorporates water treatment and distribution installations, waste water collection and solid waste disposal facilities, ground and surface water collection and disposal systems, power, gas, and communication networks, radio based telecommunication link and standby power generation facility. Well-laid parking lots, roads, and trees and plantation of a wide variety of foliage and flowers contribute to the landscape.

Academic Block

This comprises of three buildings. Block A, houses the University Administration, the Basic Medical Sciences Division of the Faculty of Medicine & Allied Medical Sciences. Block B, houses the Faculty of Engineering, Science & Technology and Faculty of Commerce, Economics & Management Sciences. Block C houses the Isra School of Nursing & Isra Institute of Rehabilitation Sciences, skill lab, computer lab, classrooms, laboratories, lecture halls and the library, as well as offices of the teaching staff. All three blocks are well furnished with airconditioners, including classrooms.

Isra University Hospital (IUH)

The 300-bed unit integrates the modern facilities at general and sub-specialty levels under one-roof. It has well-equipped clinics in General Medicine, Surgery, Cardiology, Cardiac Surgery, Gastroenterology, ENT, Eye, Gynecology, Neurology, Neuro Surgery, Nephrology, Oncology, Orthopedics, Pediatrics, Psychiatry, Pulmonology, Skin, and Urology. The hospital is proud to have Highly Advance Diagnostic equipments, ISO certified Laboratory, Pharmacy with complete range of Drugs, fully furnished private AC/Non AC and deluxe rooms, general wards and daycare surgery facility. Isra University Hospital is also the pioneer in introducing services in Hyderabad and Interior Sindh like the Band Ligation Facility to control Gastric Bleeding, Removal of Gall Stones through Endoscopy, the Eye-Care services among others cover Botox, Bronchoscopy, EEG, EMG, Nerve Conduction Study, and Spirometry. Some of the services that are very specialized, include primary PCI (immediate angioplasty after heart attack) and open heart surgery. Renal Dialysis Unit with a facility of complete consultation and emergency dialysis is also available in the Hospital.The hospital has four operation theatres equipped with state of the art surgical and monitoring facilities. These are supported by a superb recovery room that has life saving monitors and machines, as well as special pain relief services, a separate maternity suite where epidural service for painless delivery is offered under international protocols.

Isra University Welfare Hospital

The Isra University Welfare Hospital has been

created to provide quality health care to the needy people on non-profit basis in all fields of medicine and surgery. This unit provides 300 bedded facility next to Isra University Hospital connected by bridge to allow free movement of patients, trolleys and medical staff between two units. A patient pays only rupees ten in Out Patient Department for registration, screening and examination by consultant if required, along with 3 days off the counter free medication. Highly subsidized packages are offered for admitted patient only consumables are charged from them. Patients who even can't afford subsidized package are partly or fully supported through available Zakat Fund after satisfying the committee members consisting of notable persons of repute and not belonging to staff of Isra University Hospital.

Isra Dental College

Isra Dental College (IDC) provides education in Dental Surgery at under- and post-graduate levels. The College is housed in purpose-built building and supported by hightech laboratories

and clinical equipment. The IDC Hospital is manned and equipped to provide tertiary level dental care.

Jamia Masjid

This elegantly built Masjid was the first building to be erected on the Campus. The Masjid has a capacity of 1000 worshippers.

Library

The library stocks more than 10,000 textbooks, reference works and local as well as international journals to meet the needs of the students and the faculty. Together with an on-line Internet facility, it has a growing collection of audio, video and multimedia resources that help the students and the faculty to explore information available worldwide. The library facilities are housed in three different buildings. Block A essentially contains books on basic medical sciences, physical therapy, nursing and some other subjects, while the books and periodicals on clinical sciences are housed in the hospital premises. The reading material pertaining to computer and management sciences is housed in Block B of the University. The University also has access to a vast collection of research journals accessible through the digital library program sponsored by the Higher Education Commission.

Canteen

The canteen offers regular meals and snacks at reasonable prices. It caters for the faculty, students, staff, patients and visitors. Various kiosks in student areas serve snacks and soft

drinks.

PERN Connection
High speed internet access is provided to the university community through Pakistan Education and Research Network (PERN), subsidized by the Higher Education Commission of Pakistan.

Computing Services
The computing services include a campus wide backbone that links all the computers with the central server. In addition to separate computer laboratories for post graduate students, several computer laboratories comprising high speed machines are open to students, teaching staff, and for general computing tasks. The laboratories are equipped with web cameras for conducting in-house video and audio conferencing and software development. The University has developed an integrated in-house system for complete automation of its functions and procedures, including finance and account, inventory, library services, personnel management, student activities, examination system, general and hospital administration.

Sports Complex
The multi-purpose sports complex provides facility for cricket, football, tennis, basketball, table tennis, badminton and athletics. The newly constructed ground is also equipped with modern floodlights to facilitate night tournaments.

**Faculty of Medicine &
Allied Medical Sciences**

Mortuary Ophthalmology Library
Paediatrics Anatomy Pathology
Surgery Physiology Gynaecology
Nursing Community Medicine
Forensic Medicine Otorhinolaryngology
Internal Medicine Bio Chemistry
Doctor of Physical Therapy

Faculty of Medicine & Allied Medical Sciences

The Faculty of Medicine & Allied Medical Sciences is committed to academic excellence in medical, rehabilitation sciences, vision sciences and nursing education. It caters for the urgent need for community oriented, competent, dedicated and above all caring medical doctors, vision scientists, physical therapists and nurses who through their comprehensive understanding and acquisition of relevant skills can deal with the health problems of the people.

The academic year runs from January to December (Classes of New Batch 2018-2019 will start from November 2018).
The Faculty of Medicine and Allied Medical Sciences is divided into four constituent divisions, namely

- Division of Basic Medical Sciences
- Division of Clinical Sciences
- Division of Allied Medical Sciences [Nursing, Physiotherapy, Paramedical Technologies]
- Division of Ophthalmic Sciences

The first two divisions, at undergraduate level, offer Bachelor of Medicine and Bachelor of Surgery (MBBS).

Furthermore, division of Basic Medical Sciences at postgraduate level offers M. Phil degrees in Pathology, Pharmacology, Physiology, Anatomy, Biochemistry, Hematology and Pathology.

The Division of Clinical Sciences offers MS degree in General Surgery, Gynecology & Obstetrics and Ophthalmology; MD degree in General Medicine and Pediatrics and MDS degree in Oral Pathology, Gynaecology and Cardiology.

The Division of Allied Medical Sciences offers Bachelor of Science in Nursing, Doctor of Physical Therapy and several other programs in paramedical technologies.

Besides these the Division conducts residency program for postgraduate degree from College of Physicians and Surgeons of Pakistan. The approved fields of residency are Ophthalmology, Pediatrics, General Surgery, Internal Medicine, Gastroenterology, Nephrology, Gynecology & Obstetrics and Anesthesiology.

BACHELOR OF MEDICINE & BACHELOR OF SURGERY

The MBBS degree is a five-year program of 236 credit hours. The first two years mostly cover the pre-clinical studies in basic medical sciences. The courses taught in the pre-clinical years deal with the normal structure and function of the organs of the body. The program also incorporates community-oriented medicine, biostatistics and preliminary clinical medicine.

In the subsequent years of clinical education and training, the students gain a broad systematic knowledge of para-clinical, medical and surgical subjects. The clinical teaching is mainly given in Isra University Hospital and Isra University Welfare Hospital. It prepares the students to learn how the disease process affects the body, and provides them necessary skills to examine, investigate and treat the patients.

During the clinical period, the students are also exposed to clinical laboratories and hospital wards where they get an opportunity to become familiar with the most commonly Encountered health problems. From time to time, the students are also required to participate in clinicopathological conferences to integrate various aspects of a particular disease.

Courses of Study

The curriculum conforms to the rules and regulations laid down by the Pakistan Medical and Dental Council (PM&DC). It aims at stimulating the cognitive, affective and psychomotor domains of learning. There are two broad categories of subjects covered in the MBBS program, namely basic medical sciences & para-clinical and clinical subjects. PM&DC now requires that throughout the tenure of MBBS program the courses are to be taught in integrated system-based modular form. During the first two years the major thrust [80%] will be on basic medical sciences and during the following years on the clinical sciences. Thus total period of training will be five years before a student qualifies to practice medicine.

Anatomy (Contact Hours 600)

The subject matter is structured to give an understanding of the cell biology, gross anatomy, microscopic anatomy (histology), neuroanatomy and embryology with emphasis on clinical implications. The subject is taught with the help of models, dissected cadavars, prosections, films, CD's, slides, and other audiovisual aids. MDAT 111, 212.

Physiology and Behavioral Sciences (Contact Hours 600)

The discipline of physiology includes the study of living systems from sub-cellular and cellular levels to organ function and whole body behavior. The topics covering the major organ systems of the body include cardiovascular, digestion, respiration, internal homeostasis, voluntary and involuntary motor control, energy balance and geriatic physiology. Experimental work in physiology is designed to include and illustrate important physiological concepts, and measurements. The use of advanced recording and monitoring equipment and techniques is

demonstrated, emphasizing the importance of precise recording and analysis of data in the solution of medical problems. MDPL 121, 222.

The discipline of behavioral sciences include the study of consciousness and its altered states; psychological development of learning, memory, personality and human motivation in health and illness. MDBS 223.

Biochemistry (Contact Hours 300)

The science of biochemistry is fundamental to the understanding of relationships between structure and function of biomolecules in the human body. Students are taught those areas of biochemistry that are important for the understanding of nutritional, metabolic and genetic disorders, relevant to common disturbances of body functions, gene structure and its function. The course is integrated with concomitant studies of the morphology and physiology of the human organ systems. Experimental work in biochemistry will highlight important clinical applications of biochemical tests. Methods of biochemical analysis by various techniques are used for separation, identification, and measurement of biomolecules relevant to clinical sciences. MDBC 131, 232.

Pharmacology & Therapeutics (Contact Hours 300)

The science of pharmacology is concerned with the effects of drugs on the cells, organs of human beings, influence of drugs on cellular mechanisms and the fate of drugs in the body. The teaching of pharmacology is limited to general principles of pharmacokinetics and pharmacodynamics of groups of commonly used drugs. The course also contributes to studies in the clinical disciplines in which the therapeutic uses of drugs and an appreciation of adverse drug reactions form an essential part of the preparation of clinical practice. Experimental work in pharmacology is aimed at the demonstration of actions of drugs on isolated tissues and living subjects. MDPM 351.

Pathology (Contact Hours 600)

This subject includes general and special pathology, clinical and chemical pathology, microbiology, hematology and immunology. The general pathology presents a scientific study of diseases, the genetic basis of some diseases, the body's normal responses to noxious environmental stimuli and the principles of homeostasis. Abnormal and deleterious effects of the immune responses, neoplasia, infection and metabolic derangement constitute an important part of the course. The course on microbiology consists of bacteriology, mycology, virology, immunology and parasitology. Emphasis in microbiology is given on the knowledge of various infections in humans and the application of this knowledge in the diagnosis and management of infectious diseases. Practical work in the laboratory complements instruction given in lectures and tutorials. Teaching of general principles is supplemented by experimental work. Students are trained in collection of various specimens for analysis, and performing commonly used tests. MDGP 341, MDMB 342, MDSP 343.

Forensic Medicine & Toxicology (Contact Hours 100)

Students are taught the legal aspects of medical practice and the legal implications of medical disorders, in collaboration with the departments of pathology, pharmacology, hospital casualty, and other clinical sciences. The emphasis is placed on those legal aspects of medicine that a young medical graduate may be expected to face in professional life. MDFM 344.

Community Medicine / Public Health Courses

M.Phil. Course
Community Medicine Major (Total Credit Hours 12)

Community Medicine is important field for Promotion of Health, Maintenance of optimal level of Health, Control of Communicable and Non-communicable Diseases, Prevention of diseases causing epidemics and Pandemic as well making health care system efficient and sensitive to Community needs. Primary Health Care Services as agreed Alma Ata Declaration to achieve Health for All and now Millennium Development Goals(MDGs)
The M.Phil course will train with latest evidence based interventions, Teaching skills and research techniques in solving community Health problems and developing teachers and researcher manpower for the current and future of country and the Region.
The courses are: MDCM 667, MDCM 668

Community Medicine Minor (Total Credit Hours 06)
The courses are:MDCM 669,MDCM, 670 .

Minor II (Compulsory) (Total Credit Hours 06)
MDMP 791

Synopsis Research Work and Writing Dissertation / Thesis (Total Credit Hours 12)

M.P.H (Master of Public Health) Course (Total Credit hrs. 36)
The aim of the programme is to produce Public health Specialist having sufficient knowledge and attitude to plan run and implement preventive services and programs with confidence, this is a two year programme with 30 credit hrs. of course and Dissertation 06 credit hrs.
The courses are : MDCM , 671,672,673 and 674.
FCPS Community Medicine 4 years course as per CPSP & Isra University admissions and training rules.

MCPS Community Medicine 2 years course as per CPSP & Isra University admissions and training rules.

Islamic and Pakistan Studies (Contact Hours 40)
These courses, though not falling under basic sciences curriculum, are important for a medical student in Pakistan. The causes of ailments of body go beyond the derangement of physiological systems of body. Its roots go deep down in the society and culture of a diseased person.
Pakistani culture and moral values are derived from its religion, Islam. The courses consist of an overview of Islam as a religion, its contribution to human civilization, its concepts of moral values, and the chief characteristics of an Islamic society. While emphasizing the moral, constructive and reformative values of Islam, the students are guided to evolve their own codes of behavior with respect to medical ethics and relationships with patients and society.
HMPS 113, HMIS 114.

Computer Applications (Contact Hours 40)
The subject involves rigorous training over 48 contact hours that enables students to use popular computer software packages and learn the course related subject matter through computer
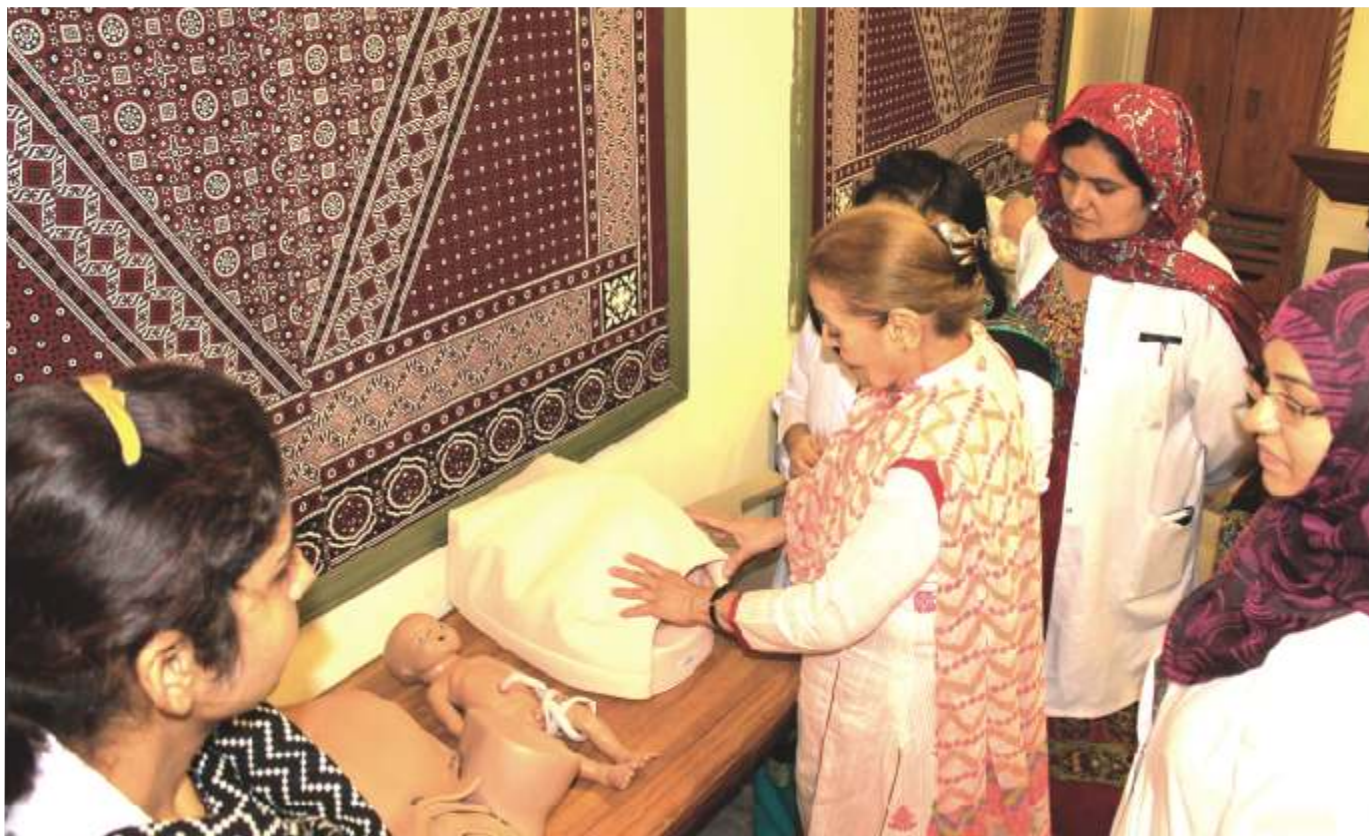
simulated educational programs that are available at the Isra University library and elsewhere. CSMO 115.

Professionalism & Communication Skills

In today's competitive world, effective communication skills training is more essential than ever before. It is the foundation on which careers are built and a crucial component of lasting success. The communication skill and professionalism courses help young doctors to develop a truly engaging and responsive communication style, leading to positive professional attitude.

Clinical Skill Lab

Medicine of present world demands high level of competency in both clinical examination and performing a procedure in patients. The traditional methods of bedside skill learning and teaching are supplemented by instruction in clinical skills lab is basic important method of teaching clinical skills.

Clinical Subjects

Clinical clerkships in various clinical disciplines are essential to develop basic clinical skills for accurate assessment, analysis, synthesis, and critical thinking, leading to appropriate diagnosis and management. Students are exposed to common health problems of the community. They spend much of their time in clinics, hospitals, and community health facilities, with less reliance on conventional classroom lectures. Students actively involve in the day-to-day management of patients in the wards, outpatient clinics, community health facilities, operation theaters, and so forth. They perform their duties under the supervision of their professors. Clinico-Pathological Conferences are held and a multidisciplinary, integrated approach is adopted to correlate clinical presentations with pathology, and include comprehensive management of health problems.

Obstetrics and Gynecology (Contact Hours 300)

These courses cover concepts of childbirth, reproductive health, family planning and aspects of diseases specific to women. Students are assigned to take part in maternity & child welfare clinics and other community health facilities. While on duty in obstetrics and gynecology unit, the residence of student in the hospital premises is made compulsory so that they take active part

in labor room procedures. MDOG 481.

Pediatrics (Contact Hours 300)

Teaching of pediatrics includes understanding of normal child growth and development, neonatology and theoretical as well as clinical aspects of diseases specific to children. The students are also familiarized with child health statistics and national health programs. MDPD 462.

Ophthalmology (Contact Hours 100)

This is a very advanced field of surgery beyond the scope of undergraduate students to diagnose and manage all the common problems of the eye. However, the students are taught and trained to diagnose and manage minor common eye problems. They are trained to recognize and refer complicated eye problems to concerned specialists. MDOP 472.

Otorhinolaryngology, ENT (Contact Hours 100)

This is a very advanced field of surgery beyond the scope of undergraduate students to diagnose and manage all the common problems of the ENT. However, the students are taught and trained to diagnose and manage minor common ENT problems. They are trained to recognize and refer complicated ENT problems to concerned specialists. MDOL 473.

Internal Medicine (Contact Hours 600)

This field of study deals with medical diagnosis, treatment and care of a diseased person. It introduces the students to the art of history taking, teaches them the basic skills in performing the physical examination of patients, trains them to prescribe appropriate investigations, interpret the results rationally, to formulate their findings orally and in writing, and provide them with the basic knowledge needed to stimulate them to reach a reasonable differential diagnosis. Internal Medicine and allied specialties include, among others, disciplines like cardiology, dermatology, psychiatry, and radiology. MDMD 561.

Surgery (Contact Hours 600)

Included under this broad heading are subjects of general surgery and allied specialties consisting of orthopedics, anesthesiology, radiotherapy and radiology. Students are taught the general principles, indication and contra-indication of common surgical procedures. Emphasis is laid on developing skills in aseptic techniques, dressing, and mastering of minor surgical procedures along with pre- and post-operative care of patients. Students are given the opportunity to observe the live operations of patients through closed circuit TV, and at times be physically present, to see the whole process from beginning to the end. In addition to this, training in the skills for giving local anesthesia, intubation and resuscitation is provided during clinical clerkship in anesthesia. MDSG 571.

Clinico-Pathological Conferences (Contact Hours 80)

Clinico-pathological conferences are held regularly in the fourth and final years. These conferences are held in rotation by the various units. The students are encouraged to use their knowledge and skills to gather relevant information, and present case studies employing an integrated approach involving concerned specialists. Students are encouraged to attend mortality and morbidity sessions in the hospital. Furthermore, the conferences provide a platform for discussion of topics of practical importance, as well as updating and reviewing of specific clinical issues. This process also improves the student's competence and skills of public speaking and communication, and boosts up their ability to carry out literature survey, review the subject and become familiar with the art of report writing. MDCP 541.

Electives (Contact Hours 150)

Students are encouraged to gain further experience in one or two clinical subjects or carry out research on some aspect of medical sciences during annual vacations. This requirement can be fulfilled by gaining the required experience either inside the Isra University or its Hospitals. In some instances, arrangements can also be made so that the same can be accomplished in accredited institutions in Pakistan or abroad. For outside work, students themselves will bear the financial burden.

Bachelor of Science (Nursing)

This program is offered by the School of Nursing. The objective of the program is to produce competent nurses to practice efficiently in the fields of patient care, nursing research, nursing administration and teaching. It will supplement needs of IUH and IUWH and the country at large.

Courses of Study: The BS (Nursing) is a 4 years program of 137 credits.
The first two semesters cover initial levels of Nursing, Biochemistry, Mathematics and English courses. Subsequently, the students are exposed to advanced studies in adult health, family health, and knowledge about various drugs. Clinical teaching is undertaken in the hospital setting from the very beginning through four years of studies.

Bachelor of Science (Nursing)

This program is offered by the School of Nursing. The objective of the program is to produce competent nurses to practice efficiently in the fields of patient care, nursing research, nursing administration and teaching. It will supplement needs of IUH and IUWH and the country at large.

Courses of Study

The BS (Nursing) is a 4 years program of 137 credits

The first two semesters cover initial levels of Nursing, Biochemistry, and Mathematics and English courses. Subsequently, the students are exposed to advanced studies in Adult Health, family health, and knowledge about various drugs. Clinical teaching is undertaken in the hospital setting from the very beginning through four years of studies.

Fundamentals of Nursing I & II (8 Credits)

This course introduces the students to nursing as professional discipline, It introduces basic concepts of Nursing as a profession, defines Nursing and Role of a Nurse in developing therapeutic relationship with clients using therapeutic communication techniques. It guides in identifying needs of clients using nursing process. Students learn nursing skills in the Skills lab and apply in the clinical settings. (NUFN-131&135)

Adult Health Nursing I & II (16 Credits).

This course furnishes learners with knowledge and skills to care for an adult patients admitted to the hospital with disease conditions. It emphasizes on effective utilization of nursing process to provide care to the client and facilitates them in restoration of optimum health. The Assessment tool is utilized for recognizing the responses towards disease process on individuals and their families and care is planned accordingly. Learners are exposed to the variety of clinical settings to integrate theory into practice under supervision. (NUAH-235 & 237)

Community Health Nursing I, II & III (13 Credits)

This course introduces students to the factors influencing on health of individual, family and community. Students develop knowledge about Pakistan's health care system, components of health education, community services and organization through field visits. This course will enhance the knowledge and skills required for advanced nursing practice in community setting it will help the learner to develop his/her ability to work with communities by utilizing nursing process and epidemiological concepts. (NUCH-132, 337 & 440)

Nursing Ethics (1 Credit)

This course is designed to provide the learners with an overview of basic concept of nursing ethics, theory, principles and norms. Nursing ethics will raise the awareness of factors that need consideration when dealing with decisions. It will also provide forum for learners to reflect upon issues or ethical dilemmas which they identify during their clinical practices. (NUNE-233)

Pediatric Health Nursing (8 Credits)

The focus of this course is to develop knowledge, skills and attitudes in the care of children in primary, secondary and tertiary settings. Learners will apply concepts related to growth and development and its deviation in all aspects of children's health. Emphasis is placed on common health problems occurring in Pakistan and in South Asian countries. (NUPH-338)

Nursing Leadership and Management (3 Credits)

This course provides learners basic the concepts and principles of leadership and management in a progressive health care system that fosters positive, creative and caring environment. (NULM-432)

Health Assessment I & II (4 Credits)

This course provides knowledge and skills necessary to perform Health Assessment of individual clients of all ages. This course emphasizes on taking a comprehensive Health History and use of appropriate nursing diagnosis. Opportunities are provided to apply assessment skills in variety of clinical settings. (NUHA-236, 238)

Mental Health Nursing (6 Credits)

This course introduces the learners the concepts of mental health and mental illness, various concepts of psychiatric nursing, its development in general and in Pakistan in particular. It further

develops understanding of holistic approach to mental health nursing by applying the nursing process for the patients and families in hospital setting. The course is also intended to explore personal and cultural perspectives, values and beliefs about mental health problems and the need and relevance of the community mental health care in Pakistan. (NUMH-333)

Critical Care Nursing (7 Credits)

The course builds on previous nursing courses (Health Assessment, Adult Health Nursing I, and II). It focuses on concepts of critical care, analyzing client's problems so that appropriate care could be planned with more advanced concepts. Learners are expected to apply critical care concepts, nursing process and implement evidence based care while integrating pathophysiological, pharmacological, psychological, spiritual and cultural concepts and theories within critical and emergency settings. (NUAC-431)

Anatomy & Physiology I & II (6 Credits)

This course introduces learners to the structures and functions of the human body. Knowledge of anatomy and physiology will provide better understanding and integration to theoretical and clinical practices in nursing care situations. (NSAP-141,142)

Pathophysiology I & II (5 Credits)

This course provides learners with the opportunities to build on the concepts and knowledge about the altered physiological mechanisms and their impact on the functional status of the body. It also deals with the responses of the body that participate in manifestation of disease. The usefulness of knowledge, skills and attitudes to the nurses in his/her problems solving in the hospital, school, community or home is the determining factor in the selection and integration of the content. (NSPP-245, 247)

Biochemistry (3 Credits)

This course is intended to provide the health professional with an understanding of the major organic substances of living organism and their functions (protein, carbohydrates and lipids). It also provides an introduction to the chemistry of biogenetics, metabolism, biosynthesis and molecular biology. (NSBC-144)

Microbiology (3 Credits)

This course is designed to furnish the learners with the knowledge of basic concepts and scientific principles of microbiology. It facilitates the learners to learn the application of principles of microbiology in hospital and community environment. (NSMB-143)

Nursing Research (3 Credits)

The course develops conceptual understanding of the research process and its application to nursing practice and helps students to become successful researchers. (NUNR-433)

Pharmacology I, II & Mathematics (5 Credits)

The course emphasizes on knowledge about drugs, their classification, therapeutic effects, anticipated reactions, toxic effects and abuse. The emphasis is on application of concepts to patient care situations, including patient assessment, drug doses calculations and administrations, patient and family teaching and documentation of patient responses to specific medications. Major emphasis will be placed on nursing management practice that minimizes adverse effects and maximizes therapeutic effects for patients, including the role of a nurse in pharmacological research. (NSPC-246, 248) & (SMMT-271)

Computer Skills (1 Credit)

The purpose of this course is to give learners a basic understanding of computers and describe the use of information technology in the modern world. Learners will learn how to use software programs which include Word, Excel, Power point and Outlook. Learners will study computer applications in nursing education and practice. (CSCS-151)

Applied Nutrition (1 Credit)

This course will cover basic concepts of nutrition and nutrional requirements for maintaining health. It discusses factors affecting eating habits and their relationship to individual's health. It emphasizes on the role of nutrition in prevention and treatment of diseases in hospital and in communities. (HMAN-161)

Developmental psychology (2 Credits)

This course facilitates learners to understand the general field of psychology in its initial stages and development of human behavior as a science. The course is further aimed to enhance learner's interpersonal skills and understanding of human behavior in order to enable them in providing care to clients with specific age groups. (SCDP-221)

Behavioral psychology (3 Credits)

This course will help learners to understand human behavior and provide insight into one's personal attitudes and responses in everyday situations and interactions. It will further assist learners to understand the way psychology can address issues concerning various spheres of life. (SCBP-323)

Biostatistics (3 Credits)

The course aims to polish students with knowledge and skills to present and analyze data in community and make inferences about population. (SMBS-372)

English I to VIII (16 Credits)

The English language course aims to develop and enhance the speaking, listening, reading and writing in general, academic and in nursing contexts. (HMEN-114, 115, 216, 217, 318, 319, 420 & 421)

Culture, Health and Society (02 Credits)

This course introduces human interaction and its impact on individual and group behavior. It also introduces learners to the field of socio-cultural anthropology. It focuses on the exploration of values, believes and practices related to health and illness between general and specific group of people in Pakistan. (SCCH-322)

Islamic Studies (2 Credits)

This course helps students to understand issues related to faith and religious life. It examines issues related to Islamic traditions and formulates key religious concepts. This course facilitates students in discussion of concepts that formulate Muslim philosophy in providing nursing care to individuals and families in a variety of clinical settings. (HMIS-111)

Teaching-Learning principles & Practices (3 Credits)

This course introduces basic concepts of adult learning in order to better understanding of one's individual learning process and strategies to facilitate the learning of others in various health care setting. (HMTL-316)

Pakistan Studies (2 Credits)

This course introduces the understanding of ideology and emergence of Islamic rule in Pakistan. Attention is given to the various developments leading to and following the creation of Pakistan as an Islamic state including study of the constitutional and political developments, social problems and foreign policies. (HMPS-112)

Nursing Theories (2 Credits)

This course focuses on understanding of different nursing theories and their applications in clinical practice. It emphasizes on practical applications of nursing theories with the help of simulations and clinical observations. (NUNT-434)

Advance Clinical Practice (5 Credits)

This elective course helps students to develop an ability to integrate the application of nursing concepts with clients' population of interest. Students work with preceptors in a variety of settings to formulate learning within the context of the course. (NUEL-439)

Nursing Seminar / Role Transition(2 Credits)

This course is designed provide learner an overview of critical professional and ethical issues confronting the learner and contemporary issues effecting profession practice, nursing care, education, and research. (NUNS-438)

Epidemiology (2 Credits)

This course provides knowledge and skills tolearners for using epidemiological concepts in assessing the contributing factors, diagnosing problems, planning interventions and evaluating results in the community. It helps learner to make inferences regarding impacts on populations' demographic, social and health status in Pakistan. Learners will also be able to correlate Epidemiological research findings to community health nursing practice. (SMEP-373)

INTERNATIONAL NURSES' DAY at ISRA SCHOOL OF NURSING 12th MAY 2016

A TYPICAL STUDY PLAN   **DURATION 4 YEARS**
BS Nursing

Minimum Degree Requirements: This program comprises on minimum of 137 credit hours.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NUFN-131	Fundamentals of Nursing-I	4 (2+6)	144
NSMB-143	Microbiology	3 (2.5+1.5)	68
NSAP-141	Anatomy &Physiology-I	3 (3+0)	54
HMIS-111	Islamiat	2 (2+0)	36
HMEN-114	English-I	2 (2+0)	36
CSCS-151	Computer Skills	1 (0+3)	54
	Total Credits	**15**	**432**

Second Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NFFU-135	Fundamentals of Nursing-II	4 (2+6)	144
NSBC-144	Biochemistry	3 (2+3)	90
NSAP-142	Anatomy &Physiology-II	3 (2+3)	90
NUCH-132	Community Health Nursing-I	2 (2+0)	36
HMEN-115	English-II	2 (2+0)	36
HMAN-161	Applied Nutrition	1 (1+0)	18
HMPS-112	Pakistan Studies	2 (2+0)	36
	Total Credits	**17**	**540**

YEAR 2
Third Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NUAH-235	Adult Health Nursing-I	8 (4+12)	288
NSPP-245	Pathophysiology-I	2 (1.75+0.25)	54
NUHA-236	Health Assessment -I	2 (1+3)	72
NSPC-246	Pharmacology-I	2 (2+0)	36
SMMT-271	Mathematics	1 (1+0)	18
HMEN-216	English-III	2 (2+0)	36
NUNE-233	Nursing Ethics	1 (1+0)	36
	Total Credits	**18**	**531**

Fourth Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NUAH-237	Adult Health Nursing-II	8 (4+12)	288
NSPP-247	Pathophysiology-II	3 (2.75+0.25)	68
NUHA-238	Health Assessment-II	2 (1+3)	72
NSPC-248	Pharmacology-II	2 (2+0)	36
HMEN-217	English-IV	2 (2+0)	36
SCDP-221	Developmental Psychology	2 (2+0)	36
	Total Credits	**19**	**531**

YEAR 3
Fifth Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NUPH-388	Pediatrics Health Nursing	8 (4+12)	288
NUCH-337	Community Health Nursing-II	6 (3+ 9)	216
HMTL-316	Teaching- Learning principles & practice	3 (3+0)	54
HMEN-318	English V	2 (2+0)	36
	Total Credits	**19**	**594**

Sixth Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NUMH-333	Mental Health Nursing	6 (3+9)	216
SMBS-372	Introduction to Biostatics	3 (2.50+0.50)	72
SCBP-323	Behavioral Psychology	3 (3+0)	54
SMEP-373	Epidemiology	2 (2+0)	36
HMEN-319	English-VI	2 (2+0)	36
SCCH-322	Culture, Health and Society	2 (2+0)	36
	Total Credits	**18**	**450**

YEAR 4
Seventh Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NUAC-431	Critical Care Nursing	7 (2.50+13.5)	288
NUNT-434	Introduction to Nursing Theories	2 (2+0)	36
NULM-432	Leadership & Management in Nursing	3 (2+3)	90
NUNR-433	Nursing Research	3 (3+0)	54
HMEN-420	English VII	2(2+0)	36
	Total Credits	**17**	**504**

Eighth Semester

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
NUCH-440	Community Health Nursing-III	5 (2+9)	198
NUNS-438	Nursing Seminar/Role transition	2 (2+0)	36
NUEL-439	Clinical Practicum	5 (0+15)	270
HMEN-421	English- VIII	2 (2+0)	36
	Total Credits	**14**	**540**

Isra School of Paramedics

Course Description:
One year diploma program in Health Care Assistant for male and female candidates is designed to provide the students with the knowledge and skills necessary to perform basic health care services. It prepares the students to function in the role of nurse assistant under the supervision of a staff nurse. Satisfactory completion of the course makes the students eligible for the diploma to practice as a nurse aide to provide basic health care to patients. Students must successfully complete specified hours of class room lectures, skills lab and clinical practice. Throughout this description the term Nursing Assistant and Health Care Assistant is used interchangeably with Nurse Aide.

Theory Subjects

Anatomy & Physiology (Credit hours 08)

This course introduces learners to the structures and functions of the human body. Knowledge of anatomy and physiology will provide better understanding and integration to theoretical practices in nurse care situations. (HCAP 141)

Fundamentals of Nursing (Credit hours 10)

This course introduces the students to nursing as professional discipline. It introduces basic concepts of Nursing as a profession, define Nursing and Role of Nurse in developing therapeutic relationship with clients using therapeutic communication techniques. It guides in identifying needs of clients using nursing process. Students learn nursing skills in the skills lab and apply in the clinical settings. (HCFN - 131)

Clinical Course

Basic Skills (Credit hours 06)

The objective of basic skills teaching is to make students to be able to receive and pass an accurate written and verbal information regarding patients and related work. (HCBS - 151)

Practical / Clinical Course

Specialty Skills (Credit hours 12)

Students will learn following specialized skills in their specialty areas. Knowledge application and hands on practice will be provided by the nurse incharge and ward doctors in their assigned clinical placements.

a. E.C.G
b. Cardiac Monitoring
c. Care of Body Drainage System
d. Care of Urinary Catheter
e. Specimen Collection
f. Surgical Dressing
g. Removing Sutures
h. Bandaging and Splinting
i. Care of IV Cannula
j. Oxygen Therapy
k. Nebulizing
l. Care of Endotracheal Tube
    (under supervision of trained staff)

Course Description

One year diploma program in Health Care Assistant for male and female candidatesis designed to provide the students with the knowledge and skills necessary to perform basic health care services. It prepares the students to function in the role of nurse assistant under the supervision of a staff nurse. Satisfactory completion of the course makes the students eligible for the diploma to practice as a nurse aide to provide basic health care to patients. Students must successfully complete specified hours of class room lectures, skills lab and clinical practice. Throughout this description the term Nursing Assistant and Health Care Assistant is used interchangeably with Nurse Aide.

Nature of Work

Nursing Assistant can perform routine duties for caring of patients. These duties might include bed making, bed bathing, oral hygiene, taking vital signs, feeding, helping patients to transfer in and out bed, maintaining safety and cleanliness in the patients' general surroundings. Hand washing is expected at all time in the clinical setting.

Course Objectives

Upon successful completion of this course the students will be able to:

1. Identify the role and responsibilities of a Nurse Aide.
2. Understand the basic knowledge necessary in providing basic health care services.
3. Demonstrate skills essential in providing basic health care services.
4. Communicate accurately and appropriately in the role of a Nurse Aide.

Doctor of Physical Therapy

Physical Therapy, also known as physiotherapy is a dynamic profession concerned with evaluation and rehabilitation of patient disabled by pain, disease, or injury and their treatment by physical therapeutic measures. The objective of the program is to produce a group of highly competent physiotherapists to fulfill the increasing demand at national and international level.

Course of Study

This is a five years under graduate program of full time study. Each year of study comprises of two semesters. The duration of each semester is 18 weeks. The first two years cover the basic medical sciences, communication skill and basic physiotherapy concepts. The last three years will cover clinical medical sciences along with practical physical therapy applications.

A TYPICAL STUDY PLAN
DOCTOR OF PHYSICAL THERAPY (DPT)

DURATION 5 YEARS

Minimum Degree Requirements: This program comprises a minimum of 200 credit hours.

YEAR 1
First Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Anatomy-I	4 (3+2)	90
Physiology-I	3 (2+2)	72
Kinesiology-I	3 (2+2)	72
English-I	3 (3+0)	54
Islamiat/Pakistan Studies	4 (4+0)	72
Mathematics	3 (3+6)	162
Total Credits	**20**	**522**

Second Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Anatomy-II	4 (3+2)	90
Physiology-II	3 (2+2)	72
Kinesiology-II	4 (3+2)	90
English-II	3 (3+0)	54
Physics	3 (2+2)	72
Bio Statistics	3 (3+0)	54
Total Credits	**20**	**432**

YEAR 2
First Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Anatomy-III	4 (3+2)	90
Physiology-III	3 (2+2)	72
Bio Mech. & Ergonomics-I	3 (2+2)	72
English-III	3 (3+0)	54
Computer	3 (2+2)	72
Chemistry	3 (2+2)	72
Sociology	2 (2+0)	36
Total Credits	**21**	**468**

Second Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Anatomy-IV	4 (3+2)	90
Exercise Physiology	3 (2+2)	72
Bio Mech. & Ergonomics-II	3 (2+2)	72
Biochemistry & Genetics	4 (3+2)	90
Therapeutic Exercise	3 (2+2)	72
Behavioral Science (Psychology & Psychiatry)	3 (3+6)	162
Total Credits	**20**	**558**

YEAR 3
First Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Pathology / Microbiology-I	3 (2+2)	72
Pharmacology & Therapeutics-I	3 (2+2)	72
Physical Agent & Electro-I	3 (2+2)	72
Manual Therapy	3 (2+2)	72
Community Medicine-I	3 (3+0)	54
Health Promotion & Wellness	3 (2+2)	72
Clinical Practice-I	3 (0+6)	108
Total Credits	**21**	**522**

Second Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Pathology / Microbiology-II	3 (2+2)	72
Pharmacology & Therapeutics-II	3 (2+2)	72
Physical Agent & Electro-II	3 (2+2)	72
Teaching Methodology	3 (2+2)	72
Medical Informatics	2 (2+0)	36
Human Development & Growth	2 (2+0)	36
Clinical Practice-II	3 (0+6)	108
Total Credits	**19**	**468**

YEAR 4
First Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Medicine-I	3 (3+0)	54
Surgery-I	3 (3+0)	54
Radiology & Imaging	4 (3+2)	90
Musculoskeletal Physical Therapy	3 (2+2)	72
Research Methodology-I	3 (3+0)	54
Community Based Rehab	2 (2+0)	36
Clinical Practice-III	3 (0+6)	108
Total Credits	**21**	**468**

Second Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Medicine-II	3 (3+0)	54
Surgery-II	3 (3+0)	54
Evidence Based Practice	3 (3+0)	54
Neuromuscular Physical Therapy	3 (2+2)	72
Orthotics & Prosthetics	3 (2+2)	72
Administration & Management	2 (2+0)	36
Clinical Practice-IV	3 (0+6)	108
Total Credits	**20**	**450**

YEAR 5
First Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Primary Care & Emergency Procedures in Physical Therapy	3 (2+2)	72
Cardio Pulmonary Physical Therapy	3 (2+2)	72
Clinical Decision Making and Differential Diagnosis	3 (2+2)	72
Integumentary Physical Therapy	3 (2+2)	72
Scientitic Inquiry	2 (2+0)	36
Professional Practice	2 (2+0)	36
Clinical Practice-V	4 (0+8)	144
Total Credits	**20**	**504**

Second Semester

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Obstetrics & Gynecological Physical Therapy	2 (2+0)	36
Paediatrics Physical Therapy	2 (2+0)	36
Geriatrics & Gerentological Physical Therapy	2 (2+0)	36
Metabolic Physical Therapy	2 (2+0)	36
Clinical Practice-VI	4 (0+8)	144
Project/Dissertation	6 (0+12)	216
Total Credits	**18**	**504**

SUMMARY OF M. Phil PROGRAMS

Scheme of Courses in Basic Medical Sciences	
M. Phil Program	
Minimum Qualifications & Entrance Requirements	Five years Bachelor's Degree (MBBS or equivalent) and One year house job in PM&DC recognized degree awarding institute
Duration Coursework Research	Minimum 2 years, Maximum 4 years 24 Credits 12 Credits
First Year [Two Semester Examinations + Internal Assessment]	
First Semester [9 Credits minimum]	Second Semester [9 Credits minimum]
Major in Discipline + Minor I	Major in Discipline + Minor I
Biostatistics	Research Methodology
	Research Synopsis
Second Year [Two Semester Examinations + Internal Assessment + Final Certifying Exam & Defence of Thesis]	
First Semester [9 Credits minimum]	Second Semester [9 Credits minimum]
Major Dicipline	Major Dicipline
Pedagogy	Research
Research	
Conduct of research and preparation of final draft of thesis	

Evaluation and Examination	
Internal Evaluation Continuous Assessment Tests (CATs)	**Semester Examinations in Theory and Practical in Major / Minor Subjects**
Weightage to Semester Examination 50%	Weightage of Semester Examination is 50%
A student is required to pass semesters examination	
Final Certifying Examination in Major	
A student is required to pass each component [Theory & Practical] separately and passing marks is 60%	
The details of course contents are available with the concerned department	

Thesis Defence Examination
It comprises Thesis defence, oral examination in Major subject with involvement of an External Examination and possible participation by PM&DC Supervisor

DESCRIPTION OF M. Phil PROGRAMS IN BASIC MEDICAL SCIENCES

The M.Phil programs are offered in the fields of Anatomy, Physiology, Biochemistry, Pharmacology, Pathology and Hematology. The goal of this program is to prepare future teachers and researchers with a background of higher learning. These professionals are trained in skills and techniques so that they can provide services in diagnostic laboratories and conduct research in the field of basic medical sciences.

The M.Phil coursework comprises of:

- Major in the disciplines of Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, and Hematology.
  [Courses of 12 credit hours in each discipline, compulsory requirement].

- Minor in any other than major disciplines. [Courses of 6 credit hours in a discipline, an interdisciplinary optional requirement].

- Research Methodology, Biostatistics and Pedagogy.
  [Courses of 06 credit hours, compulsory requirement for all disciplines].

- Research component of 12 credit hours thesis.

M.Phil Courses
Anatomy (Total Credit Hours 36)

This course is designed to provide an in depth knowledge of medically oriented anatomical sciences with the perspective structural and functional correlation. Experimental work includes cadaver dissection, preparation of specimens, slide preparations from human and animal tissues, routine and special microscopic techniques and preparation of chick embryo. Clinical sessions for practical application of knowledge especially in neuroanatomy.

M.Phil Courses
Physiology (Total Credit Hours 36)

Physiology seeks to explain living phenomena in terms of physics and chemistry. The course work provides an opportunity to extend studies in a specific area of interest within the broad fields of physiology and demonstrates in-depth knowledge of all disciplines. The research interests of the department provide a wide selection of possible research opportunities to prepare students for a research career in basic and applied physiology. Experimental physiology includes blood, muscle, ECG, respiratory, GIT, renal, endocrine and reproductive physiology, and nervous system, experiments by advanced technological equipments and methods.

M.Phil Courses
Biochemistry (Total Credit Hours 36)

The science of biochemistry is fundamental to the understanding of the structure, organization,

and functions of living matter in molecular terms. The courses are designed to impart advanced knowledge of the subject and to enable the students to conduct independent research and apply the knowledge in teaching and practice of medicine.

M.Phil Courses
Pharmacology (Total Credit Hours 36)

The science of Pharmacology is concerned with effects of drug on the cell and organs of living beings. The courses are designed to impart advance knowledge of basic, systemic and clinical pharmacology, and to enable the students to conduct, experiments on isolated tissue and independent research and to become competent teacher at medical institution.

M. Phil Courses
Pathology (Total Credit Hours 36)

Pathology deals with scientific study of disease process. The course work is designed to train a student to adequately deal with diagnostic work in all disciplines of pathological investigations and to become a competent teacher at medial institutions.

M. Phil Courses
Hematology (Total Credit Hours 36)

Hematology deals with diagnosis, treatment, prevention and investigation of disorders of the hemopoietic, haemostatic, and lymphatic system and disorders of the interaction between blood and blood vessel wall. The course work is designed to train a student to adequately deal with diagnostic work in hematological disorders and to become a competent teacher at a medical institution.

Scheme of Diploma [Total of 41 Credit-Hours]
First Year [Two Semester Examinations; Minimum of 9 Credits Each Semester]
Second Year [Two Semester Examinations; Minimum of 9 Credits Each Semester]

Evaluation and Examination	
Internal Evaluation (50%)	Semester Examinations in Theory and Practical (50%)
A student is required to pass each component [Theory & Practical] separately and minimum passing marks in each component is 60%	
The details of course contents are available with the concerned departments	

Final Certifying Examination
The student is required to appear in Final Certifying Examination at the end of Second Year. The examination comprises theory and practical from the whole program.

Scheme of MS/MD Programs in Clinical Sciences [Total of 89 Credit-Hours] 4 Years Program
First Year [Two Semester Examinations; Minimum of 9 Credits Each Semester] + Research Methodology & Biostatics 5 Credits Hours
Second Year [Two Semester Examinations; Minimum of 9 Credits Each Semester]
Third Year [Two Semester Examinations; Minimum of 9 Credits Each Semester]
Fourth Year [Two Semester Examinations; Minimum of 9 Credits Each Semester]
Write dissertation [that earns him 12 credit hours]

Scheme of MS/MD Programs in Clinical Sciences [Total of 107 Credit-Hours] 5 Year Program
Write dissertation [that earns him 12 credit hours]

Evaluation and Examination	
Internal Evaluation	**Semester Examinations in Theory and Practical**
Contribution to Semester Examination 50%	Contribution to Semester Examination 50%
A student is required to pass each component [Theory & Practical] separately and minimum passing marks in each component is 60%	
The details of course contents are available with the concerned departments	

Final Certifying Examination
The student is required to appear in Final Certifying Examination at the end of Fourth & Fifth Year. The examination comprises theory and practical from the whole program AND Defense of dissertation

DESCRIPTION OF POSTGRADUATE PROGRAMS IN CLINICAL SCIENCES

MD, MS and Diploma programs are offered in various fields of clinical sciences, as stated under.

MD in Cardiology

The aim of the training program is to advance clinical and theoretical knowledge of clinical cardiology by promoting the exploration of the current evidence for diagnosis and treatment, and to educate post graduate students to use this evidence towards good clinical practice at consultant level.

This is a four years program with 90 credit hours of clinical and practical training in the field of Cardiology.

MD in Internal Medicine

The aim of the training program is to produce a General Physician in Internal Medicine having sufficient knowledge, skill and attitude to provide care at the consultant level with confidence.

This is a four-year program with 78 credit hours of clinical training in the field of Internal Medicine and dissertation of 12 credit hours.

MD in Paediatrics

The aim of the training program is to produce a Paediatrician having sufficient knowledge, skill and attitude to provide care at the consultant level with confidence.

This is a four-year program with 78 credit hours of clinical training in the field of Paediatrics and dissertation of 12 credit hours

MS in Ophthalmology

The aim of the training program is to produce an Ophthalmologist having sufficient knowledge, skill and attitude to provide care at the consultant level with confidence.

This is a four-year program with 78 credit hours of clinical and surgical training in the field of Ophthalmology and dissertation of 12 credit hours.

MS in Gynaecology & Obstetrics

The aim of the training program is to produce a Gynaecologist & Obstetrician having sufficient knowledge, skill and attitude to provide care at the consultant level with confidence.

This is a four-year program with 78 credit hours of clinical and surgical training in the field of Gynaecology & Obstetrics and dissertation of 12 credit hours.

MS in General Surgery

The aim of the training program is to produce a General Surgeon having sufficient knowledge, skill and attitude toprovide care at the consultant level with confidence.

This is a four-year program with 90 credit hours of clinical and surgical training in the field of General Surgery.

Diploma in Otorhinolaryngology (DLO)

The aim of the training program is to produce an specialist having sufficient knowledge, skill and attitude to provide care at the specialist level with confidence.

This is a two-year program with 42 credit hours of clinical and surgical training in the field of ENT.

Diploma in Gynaecology & Obstetrics (DGO)

The aim of the training program is to produce a Gynaecologist & Obstetrician having sufficient knowledge, skill and attitude to provide care at the specialist level with confidence.

This is a two-year program with 42 credit hours of clinical and surgical training in the field of Gynaecology & Obstetrics.

Diploma in Cardiology (DIP-CARD)

The aim of the training program is to produce a Cardiologist having sufficient knowledge, skill and attitude to provide care at the specialist level with confidence.

This is a two-year program with 42 credit hours of clinical and surgical training in the field of Cardiology.

Faculty of Dentistry & Allied Sciences

Dental Materials Prosthodontics
Orthodontics Oral Medicine
Maxillofacial Surgery Oral Biology
Operative Dentistry Oral Pathology
Dental Surgery Periodontology
Master of Philosophy Master of Science
Community & Preventive Dentistry

Faculty of Dentistry & Allied Sciences

The Faculty of Dentistry is committed to academic excellence in dental education. It caters for the urgent need for community oriented, competent, dedicated and above all caring dental professionals who through their comprehensive understanding and acquisition of relevant skills can deal with the oral problems of the people.

The academic year runs from January to December (Classes of New Batch 2018-2019 will start from November 2018). Isra Dental College (IDC) offers a four year bachelor's program in Dental Surgery which is recognized by PM&DC. The program aims at training highly competent dental surgeons in order to bridge the gap between demand and supply at national and international levels.

The four year Bachelor of Dental Surgery program is spread over a minimum of 154 credit hours of coursework and practical training. The first two years cover the basic medical subjects (Physiology, Anatomy, Biochemistry, Pharmacology & Pathology), basic dental science subjects (Science of Dental Material, Oral Pathology & Community Dentistry) and Islamic Studies, Pakistan Studies & IT. The following two years cover clinical Medical Sciences like General Medicine and General Surgery, and clinical dental surgery subjects (Orthodontics, Operative Dentistry, Periodontology, Prosthodontics, Oral Maxilofacial Surgery).

The fifth year (foundation year) is compulsory, which covers the clinical skills. It is also equivalent to the one year House Job. A separate certificate will be issued by the University after qualifying the exam at the end of one year training.

BACHELOR OF DENTAL SURGERY
Science of Dental Materials (Credit Hours 7)

The following topics will be covered: Introduction to Dental Materials, Classification, Physical, Thermal, Electrical, and Mechanical Properties of Dental Materials. Theoretical concepts and practical application of impression material, Gypsum products. Dental waxes, polymers, dental cements, composite, metals and separating media used in dentistry.

Overview and basic concepts of investment and duplicating materials and dental casting Gold and Wrought alloys Ceramics Finishing and Polishing materials (BDDM 181 & 182).

Oral Biology and Tooth Morphology (Credit Hours 6)

The following topics are covered: Introduction of embryology of head, face and oral cavity. Focus on the concepts of Developmental Histology and function of bone / cartilage, enamel, dentine pulp complex, periodontium, oral mucosa, Salivary glands, Tooth eruption and shedding, Tempro-mandibular joint and Oral Physiology. Focus on the Tooth Morphology and Occlusion. Preparation of slides with different staining techniques and Histological Practical use of Microscope, Microtome and preparation of ground section of teeth. (BDOB 283 & 282).

Community and Preventive Dentistry (Credit Hours 6)

The following topics are covered: Introduction to Community Dentistry and Dental Public Health. Concepts of health; disease and illness and factors affecting these states; activities carried in the field of community dentistry. Focus on Oral epidemiology; research designs; dental surveys; clinical trails; screening; oral health assessment indices; current concepts about etiology, natural history and epidemiology of oral diseases and conditions having public health implications. Assessment of disease risk and predictive tests. Introduction of Preventive Behavioral Sciences, Introduction of Bio statistics: (BDCD 285 & 286).

Oral Pathology (Credit Hours 10)

The following topics are covered: Theoretically focused on the developmental disturbances of teeth, Pre Malignant, Benign and Malignant Lesions, Salivary gland tumors and diseases, Odontogenic & non-Odontogenic tumors, Tooth wear, Caries, diseases of pulp and periapical tissues, Spread of Infections, Wound Healing, Diseases of bones and joints, Cysts of jaws and Oral cavity and Immunology. Practically focused on Study of Histopathological slides, Radiographs and Histochemical Techniques (BDOP 343).

Oral Medicine (Credit Hours 06)

The following topics will be covered: Introduction to oral medicine, oral examination, examination of temperomandible joint, roentgenological examination, laboratories aids, analysis, treatment planning and patient management. Oral bacterial, fungal, viral infection, white lesions, pigmented lesions, ulceration vesiculo-ballous lesions, oral aspects

of systemic disease and their dental management. Oral malignancies diagnosis and management, i-e patients on radiotherapy patients on chemotherapy, Diseases of salivary glands, xenostamic, clinical features diagnosis and management.

Periodontology (Credit Hours 6)

The following topics will be covered: Introduction to Periodontology, Acute Gingivitis, Chronic Gingivitis, Desquamative Gingivitis, Periodontal Pocket, Periodontitis, Tumour and Tumour like lesion of the periodontium, Periodontal abscess and treatment, Periodontium and AIDS, GTR (Guided Tissue Regeneration), Periodontal dressing, Periodontal Suturing, Periodontal treatment of medically compromised patients and Occlusal Analysis. (BDPR 392).

Operative Dentistry (Credit Hours 12)

The following topics will be covered: Introduction to the Concept of Dental Caries, examination, diagnosis and treatment planning. Principles of cavity design and preparation, sterilization and cross infection control, isolation. Inlays and onlays, restoration of pulpless teeth, pin retained restorations, Management of medically compromised patients with special reference to HIV and Hepatitis. Providing basic concept of paedodontics and emphasis on the child management on dental practice.The Acid etch techniques in caries prevention, Pit & Fissure sealants & preventive resin. Periodontal disease in children, Injury to the primary & permanent teeth, Pulp therapy for the primary & young permanent teeth and Restorative dentistry for the primary dentition. Introduction to the crowns and emphasis on the terminology, types, impressions, clinical procedures and CAD-CAM. Providing basic concepts on the geriodontology. (BDOD 371 & 475).

Endodontics

1. Access cavity preparation & teeth morphology.
2. Working length determination.
3. Endodontic instruments.
4. Biomechanical preparation.
5. Radiograph in Endodontic.
6. Dental Truma.

Oral and Maxillofacial Surgery (Credit Hours 15)

The following topics will be covered: Providing knowledge and skills necessary to perform the Dento alveolar Surgery, Surgical aid to Orthodontics, Maxillary Antrum (Oro-antral fistula, foreign body), Oro-facial infection, Begin and malignant tumors of oral cavity, jaws and associated tissue, Principles of different treatment modalities (including Surgery, Radiotherapy, Chemotherapy Cryotherapy, lasers), Salivary Glands (Including tumors, sialadenitis, sialithiases, means of investigation, management), Tempro-mandibular joint (Diseases and Disorders), Classification and management of Fibro-osseous lesion, Types and management of Giant cell lesion, Developmental anomalies (Introduction and management of cleft lip and palate), Maxillofacial injuries, first aid treatment of soft tissue injuries of head and neck, Dento-alveolar injuries, fractures of mandible fractures of mid-face Orthognathic

Surgery, Management of medically compromised patients and Implantology. (BDMS 373 & 474).

Orthodontics (Credit Hours 8)

The following topics will be covered: Introduction of Orthodontics and focus on basic concepts of the growth and development, occlusion, diagnostics aids in orthodontics including history, clinical evaluation, radiographs, tooth mass and size analysis and formulation of problem list, development of dentition and occlusion, malocclusion, preventive and interceptive orthodontics, bone metabolism, biomechanics, retention and relapse, removable and fixed appliances, treatment planning, surgical orthodontics and cleft lip and palate. Practical and clinical orthodontics including wire bending exercises, making removable and fix appliances, cast analysis, ceph analysis and a comprehensive orthodontic case presentation of a non skeletal malocclusion (BDOR 475).

Prosthodontics (Credit Hours 15)

The following topics will be covered: Providing knowledge and skills necessary to make artificial substitutes of naturally missing or lost natural teeth and adjoining structures i.e. Partial dentures, complete dentures, Crowns, Bridges and Maxillofacial Prosthesis.

Definitions, Oral manifestation of local and systemic disorders, History and general oral examination, Evaluation, Diagnosis and Treatment planning, Prognosis, Classification, Components, Surveying, Design of Partial dentures, Impression techniques, Trial, Maxillo mandibular relationship, Selection of teeth, Arrangement of teeth, Processing and finishing, Insertion of Partial dentures.

Bridges, Crowns, Over dentures, Precision retained dentures, Relining, Rebasing and repairs, Maxillo Facial Prosthesis.

Along with above subjects specific to the Dental Surgery, following subjects of the Basic Sciences, Clinical Sciences, Computer Sciences and Humanities are covered:

Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, General Medicine, General Surgery, Information Technology, English, Pakistan Studies.

DESCRIPTION OF POSTGRADUATE PROGRAMS IN DENTISTRY

M.Sc, M.Phil and MDS programs are offered in various fields of dentistry, as stated under.

Master of Dental Surgery (MDS)

The aim of the training program is to produce a Dental Surgeon in the relevant field having sufficient knowledge, skill and attitude to provide care at the consultant level with confidence. This is a four year program with 90 credit hours of clinical and surgical training. The program is offered in the areas of Oral Pathology, Oral & Maxillofacial Surgery and Operative Dentistry.

Master of Science (M.Sc.)

The aim of the training program is to produce a Dental Surgeon in the relevant field having sufficient knowledge, skill and attitude to provide care at the consultant level with confidence. This is a two year program with 48 credit hours of clinical and surgical training. The program is offered in the areas of Periodontology.

Master of Philosophy (M.Phil)

The aim of the training program is to produce a Basic Subject Dental Teacher & Researcher in the relevant field having sufficient knowledge, skill and attitude to provide care and education at the consultant level with confidence. This is a two year program with 48 credit hours of training. The program is offered in the areas of Oral Anatomy/Oral Biology, Community Dentistry and Science of Dental Material.

Fellowship of the College of Physicians & Surgeons (FCPS)

The aim of the training program is to produce a Dental Surgeon in the relevant field having sufficient knowledge, skill and attitude to provide care at the consultant level with confidence. This is a four year program and is offered in the fields of Oral & Maxillofacial Surgery and Operative Dentistry. These programs are recognized by the College of Physicians & Surgeons Pakistan (CPSP).

Faculty of Engineering, Science & Technology

C--+Data Structure
VLSI Design Calculus Digital Logic
Internet & IP Telephony Optical Fiber
Distributed Programming Soil Machines
Construction Management Automobile
Control System Artificial Intelligence
Thermodynamics Machine Design

Faculty of Engineering, Science & Technology

The Faculty of Engineering, Science & Technology aims to foster an academic environment of learning and research that can inspire the next generation of creators and innovators in the fields of civil engineering, electrical engineering & computer science. Its programs are designed to enrich students with basic knowledge of their respective fields and accommodate the rapid changes of the modern world. Of far greater importance is the reality that these changes have created enormous opportunities for engineering and computer related expertise in the world. The students are equipped with the necessary background and skills to excel in the job market in spite of the growing competition.

The faculty offers the following undergraduate and postgraduate degree programs, the details of which are presented in the accompanying tables giving an overview of typical study plans.

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

This is a four year, full-time program of 136 credits. It offers courses covering the core areas of computer science along with technology oriented courses. The graduates of this program will be well equipped to meet the challenges posed by the dynamic needs of the software industry.

The BS(CS) program is accredited by the National Computing Education Accreditation Council (NCEAC).

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

This is a four year, full-time program of 136 credits. It offers a mixed blend of computer science, management and communication. The program is designed to produce graduates who can utilize their technical expertise and interpersonal skills to meet the job requirements of the information technology industry and play a vital role in the growing entrepreneurship in these areas.

BACHELOR OF SCIENCE (SOFTWARE ENGINEERING)

This is a four year, full-time program of 136 credits. It offers courses covering core areas in computing along with courses in software design, development, maintenance and project management.

The graduates of this program will be equipped with the skills required to meet the mounting challenges in the field of software engineering.

The BS(SE) program is accredited by the National Computing Education Accreditation Council (NCEAC).

BACHELOR OF SCIENCE (TELECOMMUNICATION)

This is a four year, full-time program of 136 credits. It offers courses covering a broad spectrum ranging from basic telecommunication systems to modern mobile wireless communication systems. The program is designed to produce graduates who can meet the growing demand of the emerging telecom industry and can play an active role in enhancing the telecommunication infrastructure in the country.

BACHELOR OF SCIENCE (ELECTRONICS)

This is a four year, full-time program of 136 credits. It offers courses covering a broad spectrum ranging from basic circuit systems to advanced integrated circuits. The program is designed to produce graduates who can meet the growing industrial demand of qualified personnel in design, manufacturing and maintenance of electronic systems.

BACHELOR OF ENGINEERING (ELECTRICAL)

This is a four year, full-time program of 136 credits. It offers a degree in the parent discipline of Electrical Engineering, along with specialization in the four streams of Electronics, Telecommunication, Electrical Power and Computer Systems. The program is designed to produce engineering graduates who have sufficient breadth in the field of electrical engineering to meet the diverse demands of the industry. The program has been designed in accordance with HEC guidelines and has been approved by the Pakistan Engineering Council.

BACHELOR OF ENGINEERING (CIVIL)

This is a four year, full-time program of 136 credits. The program is designed to produce engineering graduates who have sufficient breadth in the field of civil engineering to meet the diverse demands of the industry. The program has been designed in accordance with HEC guidelines and has been approved by the Pakistan Engineering Council.

BACHELOR OF ENGINEERING (MECHANICAL)

This is a four year, full-time program of 136 credits. The program is designed to produce engineering graduates who have sufficient breadth in the field of mechanical engineering to meet the diverse demands of the industry. The program has been designed in accordance with HEC guidelines and has been approved by the Pakistan Engineering Council.

MS / M. Phil & PhD PROGRAMS

The Faculty of Engineering, Science & Technology also offers degree programs in MS / M. Phil and PhD. The MS program is offered in the fields of computer science, telecommunication and information technology.

It is a two year, full-time program of 36 credits based on 24 credits of coursework and 12 credits of research. The program also offers a variety of elective courses in novel technologies and emerging trends which help broaden the student's field of expertise. The M. Phil program on the other hand is a two year, full time commitment of 36 credits based on 24 credits of coursework and 12 credits of research. The PhD program is a three years, full time commitment of 84 credits based on 18 credits of coursework and 66 credits of research.

A TYPICAL STUDY PLAN
BACHELOR OF SCIENCE (COMPUTER SCIENCE), BS (CS)   **DURATION 4 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of coursework that includes a final year project of 6 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSIT 111	Introduction to Information and Communication Technology	3 (2+3)
CSPF 112	Programming Fundamentals	4 (3+3)
MTCA 113	Calculus and Analytical Geometry	3 (3+0)
HSEN 114	English Composition and Comprehension	3 (3+0)
HSPS 115	Pakistan Studies	2 (2+0)
	University Elective-I	3 (3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTDS 121	Discrete Structures	3 (3+0)
ESBE 122	Basic Electronics	3 (2+3)
CSOP 123	Object Oriented Programming	4 (3+3)
HSEN 124	Communication Skills	3 (3+0)
HSIS 125	Islamic Studies / Ethics	2 (2+0)
MTES 126	Probability and Statistics	3 (3+0)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTLA 211	Linear Alebra	3 (3+0)
CSDL 212	Digital Logic and Design	4 (3+3)
CSDS 213	Data Structures and Algorithms	4 (3+3)
CSDN 214	Data Communication and Computer Networks	4 (3+3)
	University Elective-II	3 (3+0)
	Total Credits	18

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSSE 221	Software Engineering	4 (3+3)
CSDA 222	Design and Analysis of Algorithms	3 (2+3)
CSST 223	Operating Systems	4 (3+3)
CSDB 224	Database Systems	4 (3+3)
	Supporting Science Elective-I	3(3+0)
	Total Credits	18

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSMA 311	Microprocessor & Assembly Language	3 (2+3)
	CS-Elective-I	3 (3+0)
	CS-Elective-II	3 (3+0)
	University Elective-III	3 (3+0)
	Supporting Science Elective-II	3 (3+0)
	Total Credits	**15**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSHC 321	Human Computer Interaction	3 (2+3)
CSCA 322	Computer Architecture and Organization	3 (3+0)
CSIS 323	Information Security	3 (3+0)
HSEN 324	Technical Report Writing	3 (3+0)
	University Elective-IV	3 (3+0)
	CS-Elective-III	3 (3+0)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSTA 411	Theory of Automata	3 (3+0)
CSAI 412	Artifical Intelligence	3 (2+3)
	CS-Elective-IV	3 (3+ 0)
BSCS 499-A	BSCS Project I	3 (0+9)
	Supporting Science Elective-III	3(3+0)
		15
	Total Credits	

Second Semester

Course Code	Course Title	Credit (Contact) Hours
HSPP 421	Professional Practices	3 (3+0)
CSCC 422	Compiler Construction	4 (3+3)
	CS-Elective-V	3 (3+0)
	CS-Elective-VI	3 (3+0)
CSCS 499-B	BSCS Project II	3 (0+9)
	Total Credits	**16**

Computer Science Electives

Course Code	Course Title	Credit (Contact) Hours
CSVP 312	Visual Programming	3(2+3)
CSIP 326	Internet Programming & Web Development	3(2+3)
CSMC 313	Mobile and Pervasive Computing	3(3+0)
CSIN 413	Internship	3 (0+9)
CSCG 423	Computer Graphics	3(2+3)
SEQA 314	Software Quality Assurance	3 (2+3)
CSSA 322	Software Architecture & Design	3(3+0)
CSSP 412	Software Project Management	3(3+0)
CSFM 422	Formal Methods in Software Engineering	3(3+0)
SESR 311	Software Requirement & Specification	3(3+0)
ITTM 211	Technology Management	3(3+0)
CSDS 424	Data Science	3 (3+0)
CSML 316	Machine Learning	3 (2+3)
CSNL 325	Natural Language Processing	3 (2+3)
CSCC 315	Cloud Computing	3 (2+3)
CSDP 414	Distributed Programming	3 (2+3)
CSPP 415	Python Programming	3(2+3)
ITMI 326	Network Management & Security	3 (2+3)
ITIA 413	Information System Audit	3(3+0)
CSPL 425	Programming Language Concepts	3(3+0)
ITSA 422	System & Network Administration	3 (2+3)
ITBT 414	Blockchain Technology	3 (3+0)
ITIT 415	Internet of Things	3 (3+0)
CSES 416	Enterprise Software Development	3 (3+0)
CSMD 324	Mobile Application Development	3(2+3)

A TYPICAL STUDY PLAN
BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY), BS (IT)   **DURATION 4 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of course work that includes a final year project of 6 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSIT 111	Introduction to Information and Communication Technology	3(2+3)
CSPF 112	Programming Fundamentals	4(3+3)
MTCA 113	Calculus and Analytical Geometry	3(3+0)
HSEN 114	English Composition and Comprehension	3(3+0)
HSPS 115	Pakistan Studies	2(2+0)
	University Elective I	3(3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTDS 121	Discrete Structures	3(3+0)
ESBE 122	Basic Electronics	3(2+3)
CSOP 123	Object Oriented Programming	4(3+3)
HSEN 124	Communication Skills	3(3+0)
HSIS 125	Islamic Studies / Ethics	2(2+0)
MTES 126	Probability and Statistics	3(3+0)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
ITTM 211	Technology Management	3(3+0)
CSDL 212	Digital Logic and Design	4(3+3)
CSDS 213	Data Structures and Algorithms	4(3+3)
CSDC 214	Data Communication and Computer Networks	3(3+0)
	University Elective - II	3(3+0)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSSE 221	Software Engineering	4(3+3)
ITIS 222	Information Systems	3(3+0)
CSOS 223	Operating Systems	3(3+0)
CSDB 224	Database Systems	4(3+3)
ITMD 225	Multimedia Systems and Design	3(2+3)
	Total Credits	**17**

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
ITOD 311	Object Oriented Analysis and Design	3(2+3)
ITDA 312	Database Administration	3(2+3)
ITWT 313	Web Systems and Technologies	3(2+3)
	IT Elective - I	3(3+0)
	University Elective - III	3(3+0)
	Total Credits	**15**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSHC 321	Human Computer Interaction	3(2+3)
ITIP 322	Internet Architecture and Protocols	3(3+0)
ITDS 323	Data and Network Security	3(3+0)
HSEN 324	Technical Report Writing	3(3+0)
	IT Elective - II	3(3+0)
	IT Elective - III	3(2+3)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
ITSA 411	System Integration and Architecture	3(3+0)
ITPM 412	IT Project Management	3(3+0)
	IT Elective - IV	3(3+0)
	IT Elective - V	3(3+0)
ITIT 499-A	BSIT Project - I	3(0+9)
	Total Credits	**15**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
HSPP 421	Professional Practices	3(3+0)
ITSA 422	Systems and Network Administration	3(2+3)
ITCC 423	Cloud Computing	3(3+0)
	IT Elective - VI	3(3+0)
	IT Elective - VII	3(3+0)
ITIT 499-B	BSIT Project - II	3(0+9)
	Total Credits	**18**

BS(IT) Electives

Course Code	Course Title	Credit (Contact) Hours
CSDA 222	Design & Analysis of Algorithms	3(2+3)
CSVP 312	Visual Programming	3(2+3)
CSIP 326	Internet Programming & Web Development	3(2+3)
CSMC 313	Mobile and Pervasive Computing	3(3+0)
CSIN 413	Internship	3 (0+9)
CSCG 423	Computer Graphics	3(2+3)
CSAI 412	Artificial Intelligence	3(2+3)
TCDS 321	Digital Signal Processing	3 (2+3)
TCOF 412	Optical Fiber Communication	3 (2+3)
SEQA 314	Software Quality Assurance	3 (2+3)
CSSA 322	Software Architecture & Design	3(3+0)
CSSP 412	Software Project Management	3(3+0)
CSFM 422	Formal Methods in Software Engineering	3(3+0)
SESR 311	Software Requirement & Specification	3(3+0)
CSTA 411	Theory of Automata	3(3+0)
CSCC 422	Compiler Construction	3 (2+3)
CSDS 424	Data Science	3 (2+3)
MSEC 484	E-Commerce	3(3+0)
CSMI 327	Management Information System	3(3+0)
CSML 316	Machine Learning	3 (2+3)
CSCV 314	Computer Vision	3 (2+3)
CSBC 315	Broadband Communications	3 (3+0)
CSDP 414	Distributed Programming	3 (2+3)
CSPP 415	Python Programming	3(2+3)
ITMI 314	Multimedia Information Networking	3(3+0)
ITMI 326	Network Management & Security	3 (2+3)
ITIA 413	Information System Audit	3(3+0)
ITBA 424	Business Process Automation	3(3+0)
ESME 313	Microprocessor & Embedded Systems	3 (2+3)
CSPL 425	Programming Language Concepts	3(3+0)
CSMD 324	Mobile Application Development	3(2+3)

A TYPICAL STUDY PLAN
BACHELOR OF SCIENCE (SOFTWARE ENGINEERING), BS (SE)   **DURATION 4 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of coursework that includes a final year project of 6 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSIT 111	Introduction To Information and Communication Technology	3 (2+3)
CSFP 112	Programming Fundamentals	4 (3+3)
MTCA 113	Calculus and Analytical Geometry	3 (3+0)
HSEN 114	English Composition and Comprehension	3 (3+0)
HSPS 115	Pakistan Studies	2 (2+0)
	University Elective-l	3 (3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTDS 121	Discrete Structures	3 (3+0)
	Supporting Science Elective-l	3 (2+0)
CSOP 123	Object Oriented Programming	4 (3+3)
HSEN 124	Communication Skills	3 (3+0)
HSIS 125	Islamic Studies/ Ethics	2 (2+0)
MTES 126	Probability and Statistics	3 (3+0)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTLA 211	Linear Algebra	3 (3+0)
CSDL 212	Digital Logic and Design	4 (3+3)
CSDS 213	Data Structures and Algorithms	4 (3+3)
CSDN 214	Data Communications and Computer Networks	4 (3+3)
	University Elective-ll	3 (3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSSE 221	Software Engineering	4 (3+3)
CSST 223	Operating Systems	4 (3+3)
CSDB 224	Database Systems	4 (3+3)
	SE Elective-l	3 (3+0)
	Supporting Science Elective-lI	3 (3+0)
	Total Credits	**18**

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
SESR 311	Software Requirements and Specification	3 (3+0)
CSOS 312	Object Oriented Software Engineering	3 (2+3)
	University Elective-lll	3 (3+0)
	SE-Elective-ll	3 (3+0)
	Supporting Science Elective-lll	3 (3+0)
	Total Credits	**15**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSHC 321	Human Computer Interaction	3 (2+3)
CSSA 322	Software Architechure and Design	3 (3+0)
CSDC 323	Distributed Computing	3 (3+0)
HSEN 324	Technical Report Writing	3 (3+0)
	SE- Elective-lll	3 (3+0)
	University Elective-IV	3 (3+0)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSSV 411	Software Verification and Validation	4 (3+3)
CSSP 412	Software Project Management	3 (3+ 0)
	SE-Elective-IV	3 (3+0)
	SE-Elective-V	3 (3+0)
CSCS 499A	BSSE Project l	2 (0+9)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
HSPP 421	Professional Practices	3 (3+0)
CSFM 422	Formal Methods in Software Engineering	3 (3+0)
	SE- Elective-VI	3 (3+0)
	SE- Elective-VII	3 (3+0)
CSCS 499B	BSSE Project II	3 (0+19)
	Total Credits	**15**

Software Engineering Electives

Course Code	Course Title	Credit (Contact) Hours
CSDA 222	Design & Analysis of Algorithms	3(2+3)
CSVP 312	Visual Programming	3(2+3)
CSIP 326	Internet Programming & Web Development	3(2+3)
CSMC 313	Mobile and Pervasive Computing	3(3+0)
CSIN 413	Internship	3 (0+9)
CSCG 423	Computer Graphics	3(2+3)
CSAI 412	Artificial Intelligence	3(2+3)
SEQA 314	Software Quality Assurance	3 (2+3)
CSTA 411	Theory of Automata	3(3+0)
CSCC 422	Compiler Construction	3 (2+3)
CSDS 424	Data Science	3 (2+3)
ITTM 211	Technology Management	3(3+0)
ITSA 422	System & Network Administration	3 (2+3)
CSML 316	Machine Learning	3 (2+3)
CSNL 325	Natural Language Processing	3 (2+3)
CSCC 315	Cloud Computing	3 (2+3)
CSDP 414	Distributed Programming	3 (2+3)
CSCD 415	Cryptography & Data Security	3(3+0)
CSPP 312	Python Programming	3(2+3)
ITMI 326	Network Management & Security	3 (2+3)
CSCA 322	Computer Architecture and Organization	3(3+0)
ITIA 413	Information System Audit	3(3+0)
CSPL 425	Programming Language Concepts	3(3+0)
CSES 416	Enterprise Software Development	3 (3+0)
CSMD 324	Mobile Application Development	3(2+3)

Supporting Science Electives for BS (CS, IT & SE)

Course Code	Course Title	Credit (Contact) Hours
MTMC 224	Multivariable Calculus	3(3+0)
MTDE 315	Differential Equations	3(3+0)
MTNS 414	Numerical and Symbolic Computing	3(3+0)
ESBE 122	Basic Electronics	3 (2+3)

University Electives for BS (CS, IT & SE)

Course Code	Course Title	Credit (Contact) Hours
MSHB 112	Human Behavior & Psychology	3 (3+0)
MSMG 125	Principles of Management	3 (3+0)
HMSC 231	Sociology	3 (3+0)
MSHR 233	Human Resource Management	3 (3+0)
MSFA 235	Financial Accounting	3 (3+0)
MSMK 245	Principles of Marketing	3 (3+0)
MSOB 364	Organizational Behavior	3 (3+0)
MSET 473	Entrepreneurship	3 (3+0)

A TYPICAL STUDY PLAN
BACHELOR OF SCIENCE (TELECOMMUNICATION), BS (TC)

DURATION 4 YEARS

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of coursework that includes a final year project of 6 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSIC-111	Introduction to Computing	3 (2+3)
GSPS-112	Physics	3 (2+3)
MTCA-113	Calculus and Analytical Geometry	3 (3+0)
HSEN-114	English Composition and Comprehension	3 (3+0)
HSPS-115	Pakistan Studies	2 (2+0)
MSMG-116	Principles of Management	3 (3+0)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTLA-121	Linear Algebra	3 (3+0)
ESBE-122	Basic Electronics	4 (3+3)
CSOP-123	Object Oriented Programming	4 (3+3)
HSEN-124	Communication Skills	3 (3+0)
HSIS- 125	Islamic Studies / Ethics	2 (2+0)
	Total Credits	**16**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
ESEC-211	Electrical Circuits	4 (3+3)
CSDL-212	Digital Logic and Design	4 (3+3)
TCSS-213	Signals and Systems	3 (3+0)
CSDC-214	Data Communication and Computer Networks	4 (3+3)
TCIT-215	Introduction to Telecommunication Systems	3 (3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
ESDC-221	Electronic Devices and Circuits	4 (3+3)
MTDE-222	Differential Equations	3 (3+0)
ESMA-223	Microprocessor and Assembly Language	4 (3+3)
TCAD-224	Analog and Digital Communication Systems	4 (3+3)
MSMK-225	Principles of Marketing	3 (3+0)
	Total Credits	**18**

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTCV-311	Complex Variables and Transforms	3 (3+0)
MSOB-312	Organizational Behavior	3 (3+0)
ESME-313	Microcontroller and Embedded Systems	4 (3+3)
ESEF-314	Electromagnetic Field Theory	3 (3+0)
MTPS-315	Random Variables and Probability Distributions	3 (3+0)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSIS-321	Information Security	3(3+0)
HSPP-322	Professional Practices	3(3+0)
MTNA-323	Numerical Analysis	3 (3+0)
HSEN-324	Technical Report Writing	3 (3+0)
TCWP-325	Antenna and Wave Propagation	3 (2+3)
ITPM-326	Project Management	3 (3+0)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
TCPR-411	Telecommunication Policies and Regulations	3 (3+0)
TCOF-412	Optical Fiber Communicaiton	4 (3+3)
TCTS-413	Transmission and Switching Systems	3 (3+ 0)
TCNM-414	Telecommunication Network Management	3 (3+0)
	TC Elective-I	3 (3+0)
TCTC-499A	BSTC Project-I	2 (0+6)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
TCMW-421	Mobile and Wireless Communication	3 (3+0)
TCRS-422	Radar Systems	2 (2+0)
	TC Elective-II	3 (3+0)
	TC Elective-III	3 (3+0)
TCTC-499B	BSTC Project-II	4 (0+12)
	Total Credits	**15**

TC Electives

Course Code	Course Title	Credit (Contact) Hours
TCSC 414	Satellite Communication	3 (3+0)
TCIC 415	Information & coding Theory	3 (3+ 0)
TCBD 426	Broadband Digital Networks	3 (3+0)
ESRT 424	Radio & TV Receivers	3 (3+0)
TCCS 417	Communication Systems	3 (3+0)
TCSP 511	Stochastic Processes	3 (3+ 0)
CSDI 321	Digital signal Processing	3 (3+0)
TCIN 414	Internship	3 (3+ 0)

A TYPICAL STUDY PLAN
BACHELOR OF SCIENCE (ELECTRONICS), BS (ES)   **DURATION 4 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of coursework that includes a final year project of 6 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSIC-111	Introduction to Computing	3 (2+3)
GSPS-112	Physics	3 (2+3)
MTCA-113	Calculus and Analytical Geometry	3 (3+0)
HSEN-114	English Composition and Comprehension	3 (3+0)
HSPS-115	Pakistan Studies	2 (2+0)
MSMG-116	Principles of Management	3 (3+0)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTLA-121	Linear Algebra	3 (3+0)
ESBE-122	Basic Electronics	4 (3+3)
CSOP-123	Object Oriented Programming	4 (3+3)
HSEN-124	Communication Skills	3 (3+0)
HSIS-125	Islamic Studies / Ethics	2 (2+0)
ESED-126	Computer Aided Engineering Design	1(0+3)
	Total Credits	**17**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
ESEC-211	Electrical Circuits	4 (3+3)
CSDL-212	Digital Logic and Design	4 (3+3)
TCSS-213	Signals and Systems	3 (3+0)
CSDC-214	Data Communication and Computer Networks	4 (3+3)
ESOE-215	Opto Electronics	3 (3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
ESDC-221	Electronic Devices & Circuits	4 (3+3)
MTDE-222	Differential Equations	3 (3+0)
ESMM 223	Microprocessor and Microcontroller	4 (3+3)
TCAD-224	Analog and Digital Communication Systems	4 (3+3)
MSMK-225	Principles of Marketing	3 (3+0)
	Total Credits	18

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTCV-311	Complex Variables and Transforms	3 (3+0)
MSOB-312	Organizational Behavior	3 (3+0)
ESED 313	Embedded Systems Design	4 (3+3)
ESEF-314	Electromagnetic Field Theory	3 (3+0)
MTPS-315	Random Variables and Probability Distributions	3 (3+0)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
ESVL-321	VLSI Design	3 (3+0)
HSPP-322	Professional Practices	3(3+0)
MTNA-323	Numerical Analysis	3 (3+0)
HSEN-324	Technical Report Writing	3 (3+0)
TCWP-325	Antenna and Wave Propagation	3 (2+3)
ITPM-326	Project Management	3 (3+0)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
ESCS-411	Control Systems	3 (2+3)
TCOF-412	Optical Fiber Communicaiton	4 (3+3)
ESIM-413	Instrumentation and Measurements	4 (3+ 3)
	ES Elective-I	3 (3+0)
ESES-499A	BSES Project Part-I	3 (0+9)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
ESFP-421	FPGA Based System Design	4 (3+3)
ESRB 422	Introduction to Robotics	2 (2+3)
	ES Elective-II	3 (3+0)
	ES Elective-III	3 (3+0)
ESES-499B	BSES Project Part-II	3 (0+9)
	Total Credits	**15**

ES Electives

Course Code	Course Title	Credit (Contact) Hours
TCSC 414	Satellite Communication	3(3+0)
ESPE 415	Power Electronics	3(3+ 0)
TCBD 426	Broadband Digital Networks	3(3+0)
ESRT 424	Radio & TV Receivers	3(3+0)
ESNT 411	Nonotechnology	3(3+0)
ESBI 412	Biomedical Instrumentation	3(3+0)
ESRE 422	Renewable Energy	3(3+0)
CSCA 322	Computer Architecture and Organization	3(3+0)
ESFL 415	Fuzzy Logic	3(3+0)
ESMA 421	Mechatronics Applications	3(3+ 0)
CSDI 321	Digital Signal Processing	3(3+0)
TCIN 414	Internship	3(3+ 0)

Department of Electrical Engineering

Vision
Fostering excellence in electrical engineering education for sustainable development and industrial growth at the regional level.

Mission
To provide students of electricalengineering with sound technical knowledge and practical skills of relevance to the contemporary industry, together with the spirit of teamwork, ability to communicate effectively and inculcating professional ethics leading to a successful career with lifelong learning

Program Educational Objectives (PEOs)

The Program Educational Objectives (PEOs) given below, form the basis of the Bachelor of Engineering (Electrical) Degree Program at Isra University. Within a few years of graduation, the students are expected to attain the following:

PEO 1: Strong competence in Electrical Engineering resulting in successful careers

PEO 2: Ability to pursue innovation and be able to provide industrial solutions for engineering and technical problems

PEO 3: Interpersonal skills & professional ethics to perform and grow effectively in their career

PEO 4: Aptitude to enhance their professional development and technical knowledge through continuing education

Program Learning Outcomes (PLOs)

Program outcomes are the narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills and attitude that the students acquire while progressing through the program.

PLO-01: Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO-04: Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO-05: Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO-07: Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO-09: Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO-10: Communication: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO-12: Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

A TYPICAL STUDY PLAN
BACHELOR OF ENGINEERING (ELECTRICAL), BE (EE)   **DURATION 4 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of course work that includes a final year project of 06 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTCA-111	Calculus & Analytical Geometry	3(3+0)
CEEM-112	Engineering Mechanics	3(3+0)
CSIC-113	Introduction to Computing	2(1+1)
HSFE-114	Functional English	3(3+0)
HSIS-115	Islamic Studies	2(2+0)
NSAP-116	Applied Physics	4(3+1)
EEWP-117	Workshop Practice	1(0+1)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTLA-121	Linear Algebra	3(3+0)
METD-122	Applied Thermodynamics	4(3+1)
EEED-123	Electronic Devices & Circuits	4(3+1)
EECA-124	Computer Aided Engineering Drawing	1(0+1)
HSPS-125	Pakistan Studies	2(2+0)
EELC-126	Linear Circuit Analysis	4(3+1)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTDE-211	Differential Equations	3(3+0)
HSCS-212	Communication Skills	2(1+1)
EEDL-213	Digital Logic Design	4(3+1)
EEEN-214	Electrical Network Analysis	4(3+1)
CSPF-215	Programing Fundamentals	3(2+1)
SSSC-216	Sociology	2(2+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTCV-221	Complex Variables and Transforms	3(3+0)
MSEE-222	Engineering Ethics	3(3+0)
EEEM-223	Electrical Machines	4(3+1)
EEET-224	Electromagnetic Field Theory	3(3+0)
EEIM-225	Instrumentation and Measurements	4(3+1)
	Total Credits	**17**

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
EEPM-311	Probability Methods in Engineering	3(3+0)
EESS-312	Signal and Systems	4(3+1)
EEMS-313	Microprocessor Systems	4(3+1)
MSEE-314	Engineering Entrepreneurship	2(2+0)
XXXX-XX	Breadth Core-I	4(3+1)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTNA-321	Numerical Analysis	3(3+0)
EELC-322	Linear Control Systems	4(3+1)
EECS-323	Communication Systems	4(3+1)
CSDA-324	Data Structures & Algorithms	3(2+1)
XXXX-XX	Breadth Core-II	4(3+1)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
EEFY-411A	Final Year Project-I	3(3+0)
HSTR-412	Technical Report Writing	2(2+0)
MSEP-413	Engineering Project Management	3(3+0)
XXXX-XXX	Depth Elective-I	4(3+1)
XXXX-XXX	Depth Elective-II	4(3+1)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
EEFY-411B	Final Year Project-II	3(3+0)
XXXX-XXX	Depth Elective -III	4(3+1)
XXXX-XXX	Depth Elective-IV	4(3+1)
XXXX-XXX	Depth Elective-V	4(3+1)
	Total Credits	**15**

Electrical Power Engineering Breadth-Core Courses (Prospective Stream)

Course Code	Course Title	Credit (Contact) Hours
EEPG-315	Electrical Power Generation	4(3+1)
EEPE-325	Power Electronics	4(3+1)

Electrical Power Engineering Depth Elective Courses (Prospective Stream)

Course Code	Course Title	Credit (Contact) Hours
EEPT-415	Electrical Power Transmission	3(3+0)
EEPD-416	Electrical Power Distribution & Utilization	4(3+1)
EEPP-417	Power System Protection	4(3+1)
EEPA-422	Power System Analysis	4(3+1)
EEPC-423	Power System Operation & Control	4(3+1)
EEHV-418	High Voltage Engineering	4(3+1)
EEPS-425	Power System Stability & Control	4(3+1)
EEAE-424	Advanced Electrical Machines & Drives	4(3+1)
EEDS-411	Digital Signal Processing	4(3+1)
EEAI-415	Artificial Intelligence	4(3+1)

Electronics Engineering Breadth-Core Courses (Current Stream)

Course Code	Course Title	Credit (Contact) Hours
EEEC-315	Electronic Circuit Design	4(3+1)
EE9E-325	Power Electronics	4(3+1)

Electronics Engineering Depth Elective Courses (Current Stream)

Course Code	Course Title	Credit (Contact) Hours
EEPT-415	VLSI Design	4(3+1)
EEDE-416	Digital Electronics	4(3+1)
EEPE-414	Power Electronics	4(3+1)
EERA-423	Robotics & Automation	4(3+1)
EEDS-421	Digital Signal Processing	4(3+1)
EEME-417	Microwave Engineering	4(3+1)
EEDS-418	Digital System Design	4(3+1)
EEDE-425	Optoelectronics	4(3+1)
EEDC-415	Digital Control Systems	3(3+0)
EEES-424	Embedded Systems	4(3+1)
EEAI-415	Artificial Intelligence	4(3+1)

Telecommunication Engineering Breadth-Core Courses (Prospective Stream)

Course Code	Course Title	Credit (Contact) Hours
EEEC-315	Electronic Circuit Design	4 (3+1)
EEME-325	Microwaves Engineering	4 (3+1)

Telecommunication Engineering Depth Elective Courses (Prospective Stream)

Course Code	Course Title	Credit (Contact) Hours
EEOF-416	Optical Fiber Communication	4(3+1)
EERS-425	Radar Systems	4(3+1)
EEWP-422	Wave Propagation & Antennas	4(3+1)
EEDS-417	Digital System Design	4(3+1)
EEOE-418	Optoelectronics	4(3+1)
EEDC-415	Digital Control Systems	3(3+0)
EEES-424	Embedded Systems	4(3+1)
EEDE-414	Digital Electronics	4(3+1)
EEDS-411	Digital Signal Processing	4(3+1)
EEDC-426	Digital Communication	3(3+0)
EEIC-427	Information & Coding Theory	3(3+0)
EEAI-415	Artificial Intelligence	4(3+1)

Computer Systems Engineering Breadth-Core Courses (Prospective Stream)

Course Code	Course Title	Credit (Contact) Hours
CSDC-325	Data Communication & Computer Networking	4 (3+1)
CSOS-315	Operating Systems	4 (3+1)

Computer Systems Engineering Depth Elective Courses (Prospective Stream)

Course Code	Course Title	Credit (Contact) Hours
CSCA-419	Computer Architecture	3(3+0)
EEES-424	Embedded Systems	4(3+1)
CSDS-422	Data Structures & Algorithms	4(3+1)
CSDD-423	Database Design & Management Systems	4(3+1)
CSMS-425	Multimedia System	4(3+1)
CSSE-426	Software Engineering	4(3+1)
CSAI-415	Artificial Intelligence	4(3+1)
CSCD-419	Computer Graphics	4(3+1)
CSDI-416	Digital Image Processing	4(3+1)
CSCC-417	Compiler Construction	4(3+1)
CSBI-418	Bioinformatics	4(3+1)
EESP-411	Digital Signal Processing	4(3+1)

Department of Civil Engineering

Vision
Fostering excellence in civil engineering education for sustainable development and industrial growth at the regional level.

Mission
To provide students of civil engineering with sound technical knowledge and practical skills of relevance to the contemporary industry, together with the spirit of teamwork, ability to communicate effectively and inculcating professional ethics leading to a successful career with lifelong learning

Program Educational Objectives (PEOs)

The Program Educational Objectives (PEOs) given below, form the basis of the Bachelor of Engineering (Civil) Degree Program at Isra University. Within a few years of graduation, the students are expected to attain the following:

PEO 1: Strong competence in Civil Engineering resulting in successful careers

PEO 2: Ability to pursue innovation and be able to provide industrial solutions for engineering and technical problems

PEO 3: Interpersonal skills & professional ethics to perform and grow effectively in their career

PEO 4: Aptitude to enhance their professional development and technical knowledge through continuing education

Program Learning Outcomes (PLOs)

Program outcomes are the narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills and attitude that the students acquire while progressing through the program.

PLO-01: Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO-04: Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO-05: Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO-07: Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO-09: Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO-10: Communication: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO-12: Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

A TYPICAL STUDY PLAN
BACHELOR OF ENGINEERING (CIVIL), BE(CE)   **DURATION 4 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of course work that includes a final year project of 06 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
CEED-111	Engineering Drawing	4 (2+6)
MTCA-112	Calculus & Analytical Geometry	3 (3+0)
HSFE-113	Functional English	2 (2+0)
HSIS-114	Islamic Studies	2 (2+0)
CEEM-115	Civil Engineering Materials	3 (2+3)
CSIC-116	Introduction to Computing	3 (2+3)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
HSEM-121	Engineering Economics & Management	2 (2+0)
HSPS-122	Pakistan Studies	2 (2+0)
CEEM-123	Engineering Mechanics	4 (3+3)
HSCS-124	English (Communication Skills)	2 (2+0)
CEES-125	Surveying - I	4 (3+3)
MTDE-126	Differentioal Equations	3 (3+0)
	Total Credits	**17**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
CEED-211	Civil Engineering Drawing	3 (2+3)
CEES-212	Surveying - II	4 (3+3)
HSSC-213	Sociology	2 (2+0)
MTNA-214	Numerical Analysis	3 (3+0)
CECE-215	Construction Engineering	3 (3+0)
CESM-216	Strength of Materials	3 (3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTSP-221	Statistic & Probability	3 (3+0)
CESA-222	Structural Analysis -I	3 (3+0)
CEMS-223	Mechanics of Solids	3 (3+0)
CEFM-224	Fluid Mechanics	4 (3+3)
CEEG-225	Engineering Geology	3 (3+0)
	Total Credits	**16**

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
CEQS-311	Quantity Surveying & Estimation	3 (2+3)
CEPR-312	Plain & Reinforced Concrete	4 (3+3)
CECM-313	Construction Management	3 (3+0)
CESA-314	Structural Analysis-II	3 (3+0)
CESM-315	Soil Mechanics	4 (3+3)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CEFM-321	Advanced Fluid Mechanics	4 (3+3)
CEAT-322	Architecture & Town Planning	2 (2+0)
CETE-323	Transportation Engineering	3 (3+0)
CEEE-324	Environmental Engineering-I	3 (2+3)
CEGF-325	Geotechnical & Foundation Engineering	4 (3+3)
	Total Credits	**16**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
CEEP-411	Civil Engineering Project-I	3 (0+9)
CEHW-412	Hydrology & Water Resource Management	4 (3+3)
CEAR-413	Advanced Reinforced Concrete Design	4 (3+3)
HMTR-414	Technical Report Writing	2 (2+0)
CEHT-415	Highway & Traffic Engineering	4 (3+3)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CEEP-421	Civil Engineering Project II	3 (0+9)
CEEE-422	Environmental Engineering -II	2 (2+0)
CESS-423	Steel Structure	4 (3+3)
CEHI-424	Hydraulic & Irrigation Engineering	4 (3+3)
CEHD-425	Hazards & Disaster Management	2 (2+0)
CEGI-426	Geoinformatics	3 (2+3)
	Total Credits	**18**

Department of Mechanical Engineering

Vision
Fostering excellence in mechanical engineering education for sustainable development and industrial growth at the regional level.

Mission
To provide students of mechanical engineering with sound technical knowledge and practical skills of relevance to the contemporary industry, together with the spirit of teamwork, ability to communicate effectively and inculcating professional ethics leading to a successful career with lifelong learning.

Program Educational Objectives (PEOs)

The Program Educational Objectives (PEOs) given below, form the basis of the Bachelor of Engineering (Mechanical) Degree Program at Isra University. Within a few years of graduation, the students are expected to attain the following:

PEO 1: Strong competence in Mechanical Engineering resulting in successful careers

PEO 2: Ability to pursue innovation and be able to provide industrial solutions for engineering and technical problems

PEO 3: Interpersonal skills & professional ethics to perform and grow effectively in their career

PEO 4: Aptitude to enhance their professional development and technical knowledge through continuing education

Program Learning Outcomes (PLOs)

Program outcomes are the narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills and attitude that the students acquire while progressing through the program.

PLO-01: Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO-04: Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO-05: Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO-07: Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO-09: Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO-10: Communication: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO-12: Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

A TYPICAL STUDY PLAN
BACHELOR OF ENGINEERING (MECHANICAL), BE(MECHANICAL)   **DURATION 4 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 136 credit hours of course work that includes a final year project of 06 credits.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTCA-111	Calculus and Analytical Geometry	3(3+0)
MEED-112	Engineering Drawing and Graphics	3(2+1)
CSIC-113	Introduction to Computers and Programing	3(2+1)
HSFE-114	Functional English	2(2+0)
HSIS-115	Islamic Studies / Ethics	2(2+0)
GSAP-116	Applied Physics	3(2+1)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTLA-121	Linear Algebra	3(3+0)
MEEM-122	Engineering Statics	3(2+1)
METD-123	Thermodynamics-1	4(3+1)
HSCS-124	Communication Skills	2(2+0)
MEWP-125	Workshop Practice	2(0+2)
MEEM-126	Engineering Materials	2(2+0)
	Total Credits	**16**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
MEEM-211	Engineering Dynamics	3(3+0)
MTDE-212	Differential Equations	3(3+0)
METD-213	Thermodynamics-II	4(3+1)
EEBE-214	Basic Electronics	3(2+1)
MESM-215	Strength of Materials-I	3(3+0)
HSPS-216	Pakistan Studies	2(2+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MTCV-221	Complex Variables and Transforms	3(3+0)
MESM-222	Strength of Materials-II	4(3+1)
HSSC-223	Sociology	2(2+0)
MEMM-224	Mechanics of Machines-1	2(2+0)
MEFM-225	Fluid Mechanics-1	3(2+1)
EEET-226	Electrical Technology	3(2+1)
	Total Credits	**17**

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTNA-311	Numerical Analysis	3(3+0)
MEHT-312	Heat and Mass Transfer	3(2+1)
MEAA-313	Applied Aerodynamics	3(2+1)
MEFM-314	Fluid Mechanics-II	3(2+1)
MEMD-315	Machine Design & CAD-I	3(3+0)
MEMM-316	Mechanics of Machines-II	3(2+1)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MEAE-321	Automobile Engineering	3(2+1)
MTSP-322	Statistics & Probability	2(2+0)
MEMD-323	Machine Design & CAD-II	3(2+1)
MEAC-324	Heating, ventilation and Air Conditioning	4(3+1)
MEIC-325	Instrumentation and Control	3(2+1)
MEMV-326	Mechanical Vibrations	3(2+1)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
MESE-411	Safety, Health and Environment	2(2+0)
MEMP-412	Manufacturing Process-I	3(2+1)
MEPP-413	Thermal Power Plant	4(3+1)
MSEM-414	Engineering Economics and Management	2(2+0)
MERE-415	Renewable and Emerging Energy Technologies	3(2+1)
MEEP-416	Mechanical Engineering Project-I	3(0+3)
	Total Credits	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MEMP-421	Manufacturing Process-II	4(3+1)
MEME-422	Maintenance Engineering	2(2+0)
MEMT-423	Mechatronics	3(2+1)
MSPM-424	Project Management	2(2+0)
HSTR-425	Technical Report Writing	2(2+0)
MEEP-426	Mechanical Engineering Project-II	3(0+3)
	Total Credits	**16**

A TYPICAL STUDY PLAN
ASSOCIATE OF APPLIED SCIENCE (SOFTWARE ENGINEERING)   **DURATION 2 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 66 credit hours of coursework.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
HMLG 111	English Composition & Comprehension	3(3+0)
HMPS 112	Pakistan Studies	2(2+0)
MTCA 111	Calculus & Analytical Geometry	3(3+0)
CSIC 101	Introduction to Computers	3(2+3)
CSWD 153	Web Development	4(3+3)
HMIS 113	Islamic Studies	1(1+0)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSOP 152	Object Oriented Programming	4(3+3)
MTDM 114	Discrete Mathematics	3(3+0)
CSDL 241	Digital Logic Design	4(3+3)
MSBC 213	Business Communication	3(3+0)
CSDS 252	Database Design & Management	4(3+3)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
CSDS 252	Data Structures	4(3+3)
HMTR 211	Technical Report Writing	3(3+0)
CSSE 321	Software Engineering	4(3+3)
CSVP 253	Visual Programming	4(3+3)
	Total Credits	**15**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
CSJP 354	Java Programming	4(3+3)
CSIP 352	Internet Programming & Management	4(3+3)
	Elective I	3(3+0)
	Elective II	3(3+0)
CSCS 499	Project	3(0+9)
	Total Credits	**17**

Associate of Applied Science (Software Engineering)
Electives

Course Code	Course Title	Credit (Contact) Hours
CSSA 421	System Analysis & Design	3(3+0)
CSDP 452	Distributed Programming	3(3+0)
CSPL 462	Programming Language Concepts	3(3+0)
CSTA 461	Theory of Automata	3(3+0)
CSNM 437	Network Management & Security	3(3+0)
CSHC 425	Human Computer Interaction	3(3+0)

A TYPICAL STUDY PLAN
ASSOCIATE OF APPLIED SCIENCE (ELECTRONICS)   **DURATION 2 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 66 credit hours of coursework.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
HMLG 111	English Composition & Comprehension	3(3+0)
HMPS 112	Pakistan Studies	2(2+0)
MTCA 111	Calculus & Analytical Geometry	3(3+0)
CSIC 101	Introduction to Computers	3(2+3)
TCAP 102	Applied Physics	4(3+3)
HMIS 113	Islamic Studies	1(1+0)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
HMTR 211	Technical Report Writing	3(3+0)
MTCV 112	Complex Variable & Transforms	3(3+0)
CSDL 241	Digital Logic Design	4(3+3)
TCAC 103	Circuit Analysis	4(3+3)
ESBE 102	Basic Electronics	4(3+3)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
TCET 362	Power & Industrial Electronics	3(2+3)
ESAD 201	Analog & Digital communication	4(3+3)
ESCA 210	Computer-Aided Engineering	1(0+3)
ESEC 202	Electronic Circuit Design	4(3+3)
	Elective I	3(3+0)
	Total Credits	**15**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
ESMI 341	Microprocessor & Interfacing Techniques	3(2+3)
ESFC 332	Feedback Control Systems	4(3+3)
ESIM 111	Instrumentation & Measurement	4(3+3)
	Elective II	3(3+0)
ESES 499	Project	3(0+9)
	Total Credits	**17**

Associate of Applied Science (Electronics)
Electives

Course Code	Course Title	Credit (Contact) Hours
ESFL 468	Fuzzy Logic & Simulation	3(3+0)
TCET 362	Electromagnetic Field Theory	3(3+0)
ESMA 491	Mechatronics Applications	3(3+0)
ESOE 380	Opto Electronics	4(3+3)
ESRA 405	Robotics & Automation	3(2+3)

A TYPICAL STUDY PLAN
ASSOCIATE DEGREE PROGRAM (TELECOMMUNICATION)

DURATION 2 YEARS

Minimum Degree Requirements: This program comprises a minimum of 66 credit hours of coursework.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
HMLG 111	English Composition & Comprehension	3(3+0)
HMPS 112	Pakistan Studies	1(1+0)
MTCA 111	Calculus & Analytical Geometry	3(3+0)
CSIC 101	Introduction to Computers	3(2+3)
TCAP 102	Applied Physics	4(3+3)
HMIS 113	Islamic Studies	2(2+0)
	Total Credits	**16**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
HMTR 211	Technical Report Writing	3(3+0)
MTCV 112	Complex Variable & Transforms	3(3+0)
CSDC 236	Data & Computer Communication	4(3+3)
CSDL 241	Digital Logic Design	4(3+3)
ESBE 102	Basic Electronics	4(3+3)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
TCOF 451	Optical Fiber Communication	4(3+3)
TCDE 201	Digital Electronics	3(2+3)
TCSS 211	Signal and Systems Electromagnetic Field Theory	3(3+0)
TCET 362	Analog & Digital communication	4(3+3)
ESAD 201	Broadband Digital Networks	3(3+0)
TCBD 444	**Total Credits**	**17**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
TCMW 441	Mobile & Wireless Communication	3(3+0)
TCWP 461	Wave Propagation & Antennas	4(3+3)
	Elective I	3(3+0)
	Elective II	3(3+0)
TCTC 499	Project	3(0+9)
	Total Credits	**16**

Associate of Applied Science (Telecommunication)
Electives

Course Code	Course Title	Credit (Contact) Hours
ESRE 322	Radio & TV Engineering	3(3+0)
TCSC 442	Satellite Communication	3(3+0)
CSNM 437	Network Management & Security	3(3+0)
TCTS 322	Transmission & Switching Systems	3(3+0)
TCET 362	Electromagnetic Field Theory	3(3+0)
TCIT 414	Information & Coding Theory	3(3+0)

SUMMARY OF MS, M. Phil AND PhD PROGRAMS

Faculty of Engineering, Science & Technology	
MS Program	
Minimum Qualifications Duration Coursework Credits Research Credits	4 years Bachelor Degree Minimum 2 years 24 Credits 12 Credits
M. Phil Program	
Minimum Qualifications Duration Coursework Credits Research Credits	Master or 4 years Bachelor Degree Minimum 2 years 24 Credits 12 Credits
PhD Program	
Minimum Qualifications Duration Coursework Credits Research Credits	M Phil or 18 years Education Minimum 3 years 18 Credits 66 Credits

STUDY PLAN
MASTER OF SCIENCE (COMPUTER SCIENCE), MS (CS)   **DURATION 2 YEARS**

Minimum Degree Requirements: This program comprises of a minimum of 36 credits including 9 credits for the 3 core courses that cover the major areas of computer science, 3 credits for a special study related to the area of specialization, 12 credits from the area of specialization and elective courses and 12 credits for the dissertation which forms the major research component of this program.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Dissertation	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
CSCS 599	Dissertation	12(0+36)
CSSS 598	Special Study	3(0+9)

STUDY PLAN
MASTER OF PHILOSOPHY (COMPUTER SCIENCE), M. PHIL (CS)

DURATION 2 YEARS

Minimum Degree Requirements: This program comprises of a minimum of 36 credits including 9 credits for the 3 core courses that cover the major areas of computer science, 3 credits for a special study related to the area of specialization, 12 credits from the area of specialization and elective courses and 12 credits for the dissertation which forms the major research component of this program.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Thesis	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
CSCS 699	Thesis	12 (0+36)
CSSS 598	Special Study	3 (0+9)

STUDY PLAN
DOCTOR OF PHILOSOPHY, PhD (COMPUTER SCIENCE)

DURATION 3 YEARS

Minimum Degree Requirements: The program comprises of a minimum of 66 credits for thesis and 18 credits of coursework. The minimum qualification for entering this program is an M. Phil degree or 18 years of education in a related area.

MS / M. Phil & PhD COURSES IN COMPUTER SCIENCE

The courses offered in these programs comprise of core courses together with courses in areas of specialization and some courses from a set of specified computer science electives.

Core Courses

Course Code	Course Title	Credit (Contact) Hours
CSAA 563	Algorithm Analysis & Design	3(3+0)
CSAD 511	Advanced Database Systems	3(3+0)
CSCA 542	Advanced Computer Architecture	3(3+0)
CSOS 531	Advanced Operating Systems	3(3+0)
CSAR 501	Advanced Research Methods	3(3+0)

Area of Specialization

Software Engineering

Course Code	Course Title	Credit (Contact) Hours
CSAS 622	Advanced Topics in Software Engineering	3(3+0)
CSOO 528	Object Oriented Software Engineering	3(3+0)
CSSD 524	Software Design Patterns	3(3+0)
CSSV 523	Software Verification & Validation	3(3+0)

Database Systems

Course Code	Course Title	Credit (Contact) Hours
CSAD 614	Advanced Topics in Databases	3(3+0)
CSDD 513	Distributed Database Systems	3(3+0)
CSDM 512	Data Mining and Warehousing	3(3+0)
CSOD 515	Object Oriented Databases	3(3+0)

Computer Networks

Course Code	Course Title	Credit (Contact) Hours
CSAN 635	Advanced Topics in Computer Networks	3(3+0)
CSDS 538	Distributed Systems	3(3+0)
CSNP 537	Network Performance Evaluation	3(3+0)
CSNS 536	Network Security	3(3+0)

Multimedia & Graphics

Course Code	Course Title	Credit (Contact) Hours
CSCA 574	Computer Animation	3(3+0)
CSCG 672	Advanced Topics in Computer Graphics	3(3+0)
CSMC 573	Multimedia Compression Techniques	3(3+0)
CSMS 571	Multimedia Systems	3(3+0)

CS Electives

Course Code	Course Title	Credit (Contact) Hours
CSAD 614	Advanced Topics in Databases	3(3+0)
CSAI 621	Advanced Topics in Information Systems	3(3+0)
CSAN 635	Advanced Topics in Computer Networks	3(3+0)
CSAS 622	Advanced Topics in Software Engineering	3(3+0)
CSCA 574	Computer Animation	3(3+0)
CSCG 672	Advanced Topics in Computer Graphics	3(3+0)
CSDD 513	Distributed Database Systems	3(3+0)
CSDM 512	Data Mining and Warehousing	3(3+0)
CSDS 538	Distributed Systems	4(3+3)
CSKB 567	Knowledge Based Systems	3(3+0)
CSCC 636	Cloud Computing	3(3+0)
CSMS 571	Multimedia Systems	3(3+0)
CSNP 537	Network Performance Evaluation	3(3+0)
CSNS 536	Network Security	3(3+0)
CSOD 515	Object Oriented Databases	3(3+0)
CSOO 528	Object Oriented Software Engineering	3(3+0)
CSSD 524	Software Design Patterns	3(3+0)
CSSV 523	Software Verification & Validation	3(3+0)
CSRT 697	Research Topics in Computer Science	3(3+0)

STUDY PLAN
MASTER OF SCIENCE (INFORMATION TECHNOLOGY), MS (IT)

DURATION 2 YEARS

Minimum Degree Requirements: The program comprises of a minimum of 36 credits including 9 credits for the 3 core courses that cover the major areas of information technology, 3 credits for a special study related to the area of specialization, 12 credits from the area of specialization and elective courses and 12 credits for the dissertation which forms the major research component of this program.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Dissertation	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
CSIT 599	Dissertation	12 (0+36)
CSSS 598	Special Study	3 (0+9)

STUDY PLAN
MASTER OF PHILOSOPHY (INFORMATION TECHNOLOGY), M. Phil (IT)

DURATION 2 YEARS

Minimum Degree Requirements: The program comprises of a minimum of 36 credits including 9 credits for core courses that cover the major areas of information technology, 3 credits for a special study related to the area of specialization, 12 credits from the area of specialization and elective courses and 12 credits for the dissertation which forms the major research component of this program. The minimum qualification for entering this program is a four year bachelor degree or 16 years of education in a related area.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Thesis	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
CSIT 699	Thesis	12 (0+36)
CSSS 598	Special Study	3 (0+9)

STUDY PLAN
DOCTOR OF PHILOSOPHY, PhD (INFORMATION TECHNOLOGY)　　　　　　　　**DURATION 3 YEARS**

Minimum Degree Requirements: The program comprises of a minimum of 66 credits for thesis and 18 credits of coursework. The minimum qualification for entering this program is an M. Phil degree or 18 years of education in a related area.

MS / M. Phil & PhD COURSES IN INFORMATION TECHNOLOGY

The courses offered in these programs comprise of core courses together with courses in areas of specialization and some courses from a set of specified information technology electives.

Core Courses

Course Code	Course Title	Credit (Contact) Hours
CSAN 534	Advanced Computer Networks	3(3+0)
CSAS 521	Advanced Software Engineering	3(3+0)
CSEI 526	Enterprise Information Systems & Technology	3(3+0)
CSSI 527	Strategic IT Planning & Administration	3(3+0)
CSAR 501	Advanced Research Methods	3(3+0)

Area of Specialization

Software Engineering

Course Code	Course Title	Credit (Contact) Hours
CSAS 622	Advanced Topics in Software Engineering	3(3+0)
CSOO 528	Object Oriented Software Engineering	3(3+0)
CSSD 524	Software Design Patterns	3(3+0)
CSSV 523	Software Verification & Validation	3(3+0)

Database Systems

Course Code	Course Title	Credit (Contact) Hours
CSAD 614	Advanced Topics in Databases	3(3+0)
CSDD 513	Distributed Database Systems	3(3+0)
CSDM 512	Data Mining and Warehousing	3(3+0)
CSOD 515	Object Oriented Databases	3(3+0)

Information Systems

Course Code	Course Title	Credit (Contact) Hours
CSAI 621	Advanced Topics in Information Systems	3(3+0)
CSKB 567	Knowledge Based Systems	3(3+0)
MSIM 553	International Marketing	3(3+0)
MSMM 512	Multinational Management	3(3+0)

IT Electives

Course Code	Course Title	Credit (Contact) Hours
CSAD 614	Advanced Topics in Databases	3(3+0)
CSAI 621	Advanced Topics in Information Systems	3(3+0)
CSAN 635	Advanced Topics in Computer Networks	3(3+0)
CSAS 622	Advanced Topics in Software Engineering	3(3+0)
CSCA 574	Computer Animation	3(3+0)
CSCG 672	Advanced Topics in Computer Graphics	3(3+0)
CSDD 513	Distributed Database Systems	3(3+0)
CSDM 512	Data Mining and Warehousing	3(3+0)
CSDS 538	Distributed Systems	3(3+0)
CSMC 573	Multimedia Comprehension Techniques	4(3+3)
CSMS 571	Multimedia Systems	3(3+0)
CSNP 537	Network Performance Evaluation	3(3+0)
CSNS 536	Network Security	3(3+0)
CSOD 515	Object Oriented Databases	3(3+0)
CSOO 528	Object Oriented Software Engineering	3(3+0)
CSSD 524	Software Design Patterns	3(3+0)
CSSV 523	Software Verification & Validation	3(3+0)
CSES 567	Expert Systems in Information Technology	3(3+0)
CSRT 697	Research Topics in Information Technology	3(3+0)

STUDY PLAN
MASTER OF SCIENCE (TELECOMMUNICATION), MS (TC)   **DURATION 2 YEARS**

Minimum Degree Requirements: This program comprises of a minimum of 36 credits including 9 credits for the 3 core courses that cover the major areas of telecommunication, 3 credits for a special study related to the area of specialization, 12 credits from the area of specialization and elective courses and 12 credits for the dissertation which forms the major research component of this program.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Dissertation	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
CSCS 599	Dissertation	12 (0+36)
CSSS 598	Special Study	3 (0+9)

STUDY PLAN
MASTER OF PHILOSOPHY (TELECOMMUNICATION), M. PHIL (TC)

DURATION 2 YEARS

Minimum Degree Requirements: The program comprises of a minimum of 36 credits including 9 credits for core courses that cover the major areas of telecommunication, 3 credits for a special study related to the area of specialization, 12 credits from the area of specialization and elective courses and 12 credits for the dissertation which forms the major research component of this program. The minimum qualification for entering this program is a four year bachelor degree or 16 years of education in a related area.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Thesis	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
CSCS 699	Thesis	12 (0+36)
CSSS 598	Special Study	3 (0+9)

STUDY PLAN
DOCTOR OF PHILOSOPHY, PhD (TELECOMMUNICATION)

DURATION 3 YEARS

Minimum Degree Requirements: The program comprises of a minimum of 66 credits for thesis and 18 credits of coursework. The minimum qualification for entering this program is an M. Phil degree or 18 years of education in a related area.

MS / M. Phil & PhD COURSES IN TELECOMMUNICATION

The courses offered in these programs comprise of core courses together with courses in areas of specialization and some courses from a set of specified telecommunication electives.

Core Courses

Course Title	Credit (Contact) Hours
Stochastic Processes	3(3+0)
Advanced Digital Communication	3(3+0)
Advanced Research Methods	3(3+0)
Telecommunication Networks	3(3+0)

Area of Specialization

Optical Fiber Communication

Course Title	Credit (Contact) Hours
Optical Fiber Communication	3(3+0)
Optical Communication Networks	3(3+0)
Optical Amplification and Integrated Optics	3(3+0)
Optical Fiber Systems	3(3+0)

Radar System Engineering

Course Title	Credit (Contact) Hours
Radar System Engineering	3(3+0)
Radar Signal Processing	3(3+0)
Propagation of Radar Waves	3(3+0)
Radar Detection and Estimation Theory	3(3+0)

Wireless Communication and Networks

Course Title	Credit (Contact) Hours
Wireless Communication and Networks	3(3+0)
Mobile Applications and Systems	3(3+0)
Next Generation Networks	3(3+0)
Wireless Broadband Technologies	3(3+0)

Antenna and Microwave Engineering

Course Title	Credit (Contact) Hours
Antenna and Microwave Engineering	3(3+0)
Advanced Electromagnetic Field Theory	3(3+0)
Advanced Microwave Engineering	3(3+0)
Advanced Antenna Design	3(3+0)

Telecommunication Systems

Course Title	Credit (Contact) Hours
Telecommunication Systems	3(3+0)
Advanced Information and Coding Theory	3(3+0)
Wireless Communication	3(3+0)
Advanced Topics in Telecommunication	3(3+0)

TC Electives

Course Title	Credit (Contact) Hours
Speech Processing	3(3+0)
Digital Signal Processing	3(3+0)
Advanced Switching Theory	3(3+0)
QoS in Telecommunication	3(3+0)
RF Engineering	3(3+0)
Satellite Communication	3(3+0)
Mobile and Ad-hoc Networks	3(3+0)
Wireless Navigation Systems	3(3+0)
Network Management	3(3+0)
Research Topics in Telecommunication	3(3+0)

STUDY PLAN
M.S. Program in Computational Mathematics

DURATION 2 YEARS

Minimum Degree Requirements: This program comprises of a minimum of 36 credits including 9 credits for the 3 core courses that cover the major areas of computational mathematics, 3 credits for a special study related to the area of specialization, 12 credits from the area of specialization and elective courses and 12 credits for the dissertation which forms the major research component of this program.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Thesis	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
CSCS 699	Thesis	12 (0+36)
CSSS 598	Special Study	3 (0+9)

MS COURSES IN COMPUTATIONAL MATHEMATICS

The courses offered in these programs comprise of core courses together with courses in areas of specialization and some courses from a set of specified computational mathematics electives.

Core Courses

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Algorithm Analysis & Design	3(3+0)	48
Advanced Research Methods	3(3+0)	48
Mathematical Modeling and Simulation	3(3+0)	48

Area of Specialization & Electives Courses

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Statistical Methods and Estimation	3(3+0)	48
Operation Research and Optimization Technique	3(3+0)	48
Computational Fluid Dynamics and Computational Rheology	3(3+0)	48
Advance Differential Equations and Boundary Value Problems	3(3+0)	48
Advance Numerical Analysis	3(3+0)	48
Applied Functional Analysis	3(3+0)	48
Advance Heat and Mass Transfer	3(3+0)	48
Finite Element Methods	3(3+0)	48
Numerical Solutions of Partial Differential Equations	3(3+0)	48

Faculty of Commerce, Economics & Management Sciences

Marketing Insurance
Strategic Management Auditing
Microeconomics Business Taxation
Decision Making Management
Money Banking Project Management
System Dynamics Business Mathematics
Human Resource Management
Development Economics Cost Accounting

Faculty of Commerce, Economics & Management Sciences

The Faculty of Commerce, Economics & Management Sciences aims to inspire its students with an aptitude for business entrepreneurship and leadership to help drive the economic development of the society. Its programs are designed to enrich students with basic knowledge of their respective fields, the current business trends and managerial practices in the industry. The faculty maintains active liaison with business enterprises to offer greater career opportunities for its graduates. Students are groomed to acquire the interpersonal skills and work ethic required to meet the dynamic needs of the job market.

The faculty offers the following undergraduate and postgraduate degree programs, the details of which are presented in the accompanying tables giving an overview of typical study plans.

BACHELOR OF BUSINESS ADMINISTRATION

This is a four-year, full-time degree program of 138 credits. It imparts essential knowledge in various domains of business administration, economics, accounting, finance and marketing, and gives an introduction to computer applications in business and trends in information technology.

The program offers electives in a variety of specialization areas.

The BBA program is accredited by the National Business Education Accreditation Council (NBEAC).

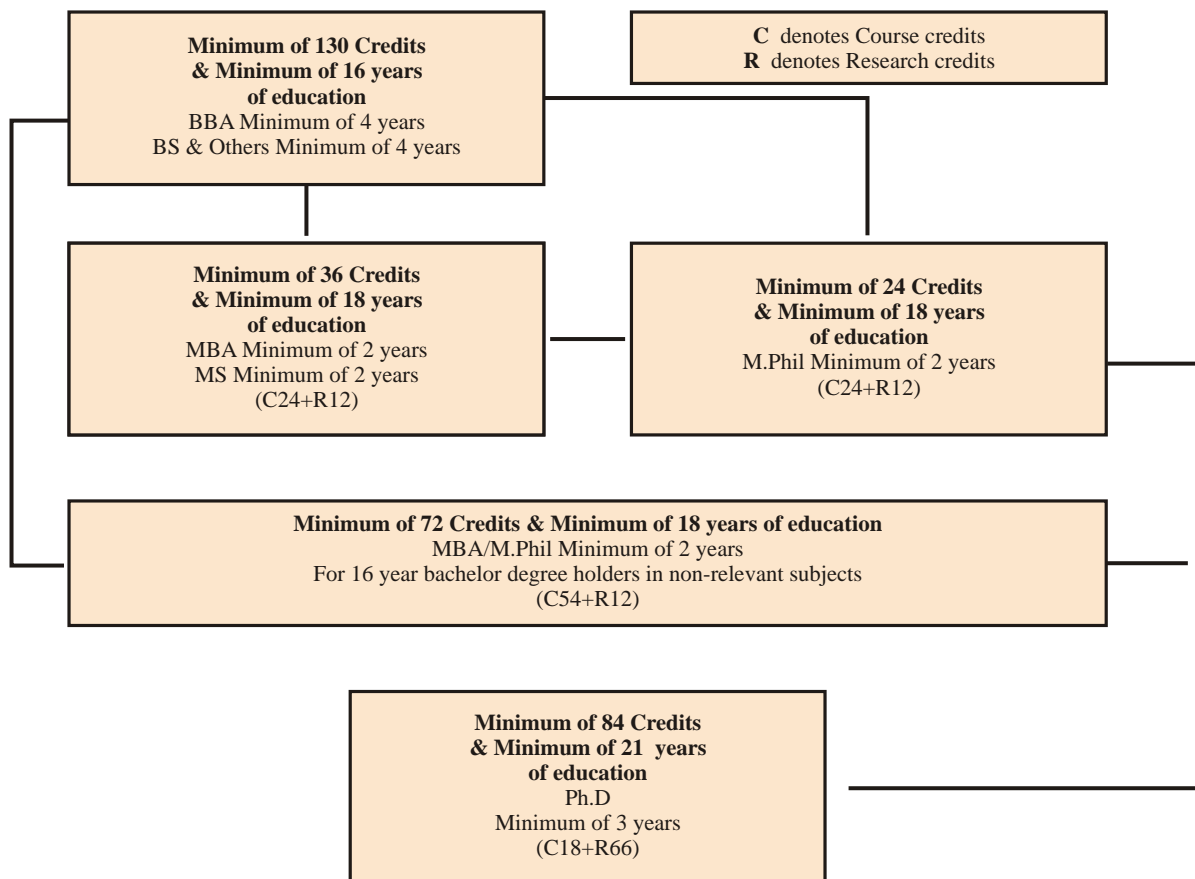## MASTER OF BUSINESS ADMINISTRATION

This is a two-year, full-time, program of 36 credit hours. The core curriculum covers advanced level courses with emphasis on financial management, international business management, managerial economics, and statistical analysis for management, managerial policy, and marketing management. Six areas of major concentration, namely Marketing, Banking & Finance, Management, Hotel Management, Health Care & Hospital Management and Human Resource Management are offered. Students who wish to enter this program with a two year business related bachelors degree or a four years non-business degree will be required to take additional credits as per HEC regulations.

The MBA program is accredited by the National Business Education Accreditation Council (NBEAC).

Duration and Credits of Postgraduate Programs of Study

Minimum of 130 Credits
& Minimum of 16 years
of education
BBA Minimum of 4 years
BS & Others Minimum of 4 years

C denotes Course credits
R denotes Research credits

Minimum of 36 Credits
& Minimum of 18 years
of education
MBA Minimum of 2 years
MS Minimum of 2 years
(C24+R12)

Minimum of 24 Credits
& Minimum of 18 years
of education
M.Phil Minimum of 2 years
(C24+R12)

Minimum of 72 Credits & Minimum of 18 years of education
MBA/M.Phil Minimum of 2 years
For 16 year bachelor degree holders in non-relevant subjects
(C54+R12)

Minimum of 84 Credits
& Minimum of 21 years
of education
Ph.D
Minimum of 3 years
(C18+R66)

A TYPICAL STUDY PLAN
BACHELOR OF BUSINESS ADMINISTRATION   DURATION 4 YEARS

Minimum Degree Requirements: This program comprises a minimum of 138 credit hours of coursework that includes 114 credits of required courses, a final year project of 6 credits, a 6-8 weeks internship and 12 credits of electives courses.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
HSEN 114	English-I (Composition and Comprehension-I)	3 (3+0)
MSHB 112	Human Psychology & Behavior	3 (3+0)
MSIB 114	Introduction to Business	3 (3+0)
CSIC 111	Introduction to Computing	3 (3+0)
MTBM 113	Business Mathematics	3 (3+0)
HSPS116	Pakistan Studies	3(3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
HSEN 124	Communication Skills (English II)	3 (3+0)
HMPT 123	Personal and Time Management	3 (3+0)
MSBS 121	Business Statistics	3 (3+0)
MSMG 125	Principle of Management	3 (3+0)
MSEC 126	Microeconomics	3 (3+0)
HSIS 122	Islamic Studies	3 (3+0)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
HMSC 231	Sociology	3 (3+0)
MSOC 232	Business Oral Communication	3 (3+0)
MSHR 233	Human Resource Management	3 (3+0)
MSFA 235	Financial Accounting	3 (3+0)
MSEC 234	Macroeconomics	3 (3+0)
MSAD 323	Auditing	3 (3+0)
	Total Credits	18

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MSCA 352	Cost Accounting	3 (3+0)
HMB 243	Business Ethics	3 (3+0)
MSBC 243	Business Communication	3 (3+0)
MSBF 244	Business Finance	3 (3+0)
MSMK 245	Principle of Marketing	3 (3+0)
HMLO 246	Logic	3 (3+0)
	Total Credits	**18**

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
HMPE 241	Pakistan Economy	3 (3+0)
MSMM 351	Marketing Management	3 (3+0)
MSFM 353	Financial Management	3 (3+0)
MSBL 354	Business & Corporate Law	3 (3+0)
MSTQ 356	Total Quality Management	3 (3+0)
	Elective I	3(3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MSMI 362	Management Information System	3 (3+0)
MSCB 363	Consumer Behavior	3 (3+0)
MSOB 364	Organizational Behavior	3 (3+0)
HMSD 361	System Dynamics	3 (3+0)
MSPM 365	Project Management	3 (3+0)
	Elective II	3(3+0)
	Total Credits	**18**

YEAR 4
First Semester

Course Code	Course Title	Credit (Contact) Hours
MSBR 471	Business Research & Report Writing	3 (3+0)
MSET 473	Entrepreneurship	3 (3+0)
MSBM 474	Money and Banking	3 (3+0)
HMIR 475	International Relations and Current Affairs	3 (3+0)
MSPM 472	Production & Operations Management	3 (3+0)
	Elective-III	3 (3+0)
MSBA 482	Business Research Project Part One	
	Total Credits	

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MSIB 481	International Business Management	3 (3+0)
MSBP 483	Business Policy	3 (3+0)
MSEC 484	E-Commerce	3 (3+0)
MSBA 482	Business Research Project Part Two	3 (3+0)
	Elective-IV	3 (3+0)
MSIP 400	Internship	
	Total Credits	**15**

BBA Electives
Marketing

Course Code	Course Title	Credit (Contact) Hours
MSMR 454	Marketing Research	3(3+0)
MSIM 452	International Marketing	3(3+0)
MSIM 453	Industrial Marketing	3(3+0)
MSAM 455	Advertisement Management	3(3+0)
MSPS 456	Personal Selling and Sales Management	3(3+0)

Human Resources Management

Course Code	Course Title	Credit (Contact) Hours
MSTD 483	Training and Development	3(3+0)
MSMA 484	Motivation and its Applications	3(3+0)
MSLL 488	Labor Laws in Pakistan	3(3+0)
MSCM 487	Compensation Management	3(3+0)
MSRS 486	Recruitment and Selection	3(3+0)

Management

Course Code	Course Title	Credit (Contact) Hours
MSKM 416	Knowledge Management	3(3+0)
MSSM 417	Small and Medium enterprise management	3(3+0)
MSMS 419	Managing Services Business	3(3+0)
MSOD 413	Organization Development	3(3+0)
MSSC 415	Supply Chain Management	3(3+0)

Entrepreneurship

Course Code	Course Title	Credit (Contact) Hours
MSEC 461	Entrepreneurship, Creativity and Innovation	3(3+0)
MSED 462	Entrepreneurial Decision Making	3(3+0)
MSIP 463	Intrapreneurship	3(3+0)
MSVF 464	Venture Financing	3(3+0)
MSEO 465	Entrepreneurship Opportunity Identification	3(3+0)

Finance

Course Code	Course Title	Credit (Contact) Hours
MSSA 441	Security Analysis	3(3+0)
MSIP 442	Investment and Portfolio Management	3(3+0)
MSAF 443	Analysis of Financial Statement	3(3+0)
MSCM 445	Capital Markets	3(3+0)
MSIB 446	Islamic Banking and Finance	3(3+0)

Information Technology

Course Code	Course Title	Credit (Contact) Hours
CSSA 421	System Analysis and Design	3(3+0)
CSCN 435	Computer networking	3(3+0)
CSAI 466	Expert System and Artificial Intelligence	3(3+0)
CSOS 331	Operating System	3(3+0)
CSWD 456	Web Designing	3(3+0)

A TYPICAL STUDY PLAN
BACHELOR OF BUSINESS ADMINISTRATION **DURATION 2 YEARS**

Minimum Degree Requirements: The students with 14 years of education will be required to complete 60 to 66 credit hours of business courses and earn a BBA (named as BBS in HEC guidelines page number 15) degree. In essence this is similar to old MBA (16 years) program and is a subset of BBA 4-year program.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTBM 113	Business Mathematics	3 (3+0)
MSEC 126	Micro Economics	3 (3+0)
MSMG 125	Principles of Management	3 (3+0)
MTBM 113	Business Statistics	3 (3+0)
MSHR 233	Human Resources Management	3 (3+0)
MSFA 235	Financial Accounting	3(3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MSEC 234	Macro Economics	3 (3+0)
MSMK 245	Principles of Marketing	3 (3+0)
MSBF 244	Business Finance	3 (3+0)
MSBC 243	Business Communication	3 (3+0)
MSCA352	Cost Accounting	3 (3+0)
MSMM 351	Marketing Management	3(3+0)
	Total Credits	**18**

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
MSCB 363	Consumer Behavior	3 (3+0)
MSFM 353	Financial Management	3 (3+0)
MSOB 364	Organizational Behavior	3 (3+0)
MSMI 362	Management information System	3 (3+0)
MSBL 354	Business and Corporate Law	3 (3+0)
	Elective 1	3(3+0)
MSBA 482	Business Research Part one	
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MSET 473	Entrepreneurship	3 (3+0)
MSBR 471	Business Research and report Writing	3 (3+0)
MSBA 482	Business Research Part Two	3 (3+0)
	Elective 2	3 (3+0)
MSIP 400	Internship	
	Total Credits	**12**

A TYPICAL STUDY PLAN
ASSOCIATE OF APPLIED SCIENCE (BUSINESS ADMINISTRATION)   **DURATION 2 YEARS**

Minimum Degree Requirements: This program comprises a minimum of 66 credit hours of coursework.

YEAR 1
First Semester

Course Title	Credit (Contact) Hours
Introduction to Computers	3(3+0)
English-I& II	3(3+0)
Fundamentals of Accounting	3(3+0)
Statistics	3(3+0)
Pakistan Studies/ Islamic Studies	3(3+0)
Leadership Skills	3(3+0)
Total Credits	**18**

Second Semester

Course Title	Credit (Contact) Hours
Business Communications	3(3+0)
Introduction to Business	3(3+0)
Principles of Marketing	3(3+0)
Principles of Management	3(3+0)
Business Mathematics	3(3+0)
Total Credits	**15**

YEAR 2
First Semester

Course Title	Credit (Contact) Hours
Microeconomics	3(3+0)
Technical Report Writing	3(3+0)
Financial Accounting	3(3+0)
Introduction to Business Finance	3(3+0)
Elective-I	3(3+0)
Total Credits	**15**

Second Semester

Course Title	Credit (Contact) Hours
Macroeconomics	3(3+0)
Human Resource Management	3(3+0)
Money & Banking	3(3+0)
Organization Development	3(3+0)
Internship	3(3+0)
Elective-II	3(3+0)
Total Credits	**18**

Associate of Applied Science (Business Administration) Electives
Banking

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Banking Law and Practice	3 (3+0)	48
International Banking	3 (3+0)	48
Consumer Banking	3 (3+0)	48
Credit Analysis & Investment Banking	3 (3+0)	48

Management

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Organizational Development	3 (3+0)	48
Change Management	3 (3+0)	48
Total Quality Management	3 (3+0)	48
Crises Management	3 (3+0)	48
Comparative Management	3 (3+0)	48
Knowledge Management	3 (3+0)	48
Project Management	3 (3+0)	48

Human Resources Management

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Recruitment and Selection	3 (3+0)	48
Training and Development	3 (3+0)	48
Personal Management	3 (3+0)	48
Managerial Skills	3 (3+0)	48
Compensation Management	3 (3+0)	48
Leadership and Team Management	3 (3+0)	48

Finance

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Financial Statement Analysis	3 (3+0)	48
Investment and Portfolio Management	3 (3+0)	48
Insurance Management	3 (3+0)	48
Risk Management	3 (3+0)	48
Islamic Banking & Finance	3 (3+0)	48
Financial Products in Islamic Banking	3 (3+0)	48

Marketing

Course Title	Credit (Contact) Hours	Contact Hrs per Semester
Sales Management	3 (3+0)	48
International Marketing	3 (3+0)	48
Brand Management	3 (3+0)	48
Cyber Marketing	3 (3+0)	48
Services Marketing	3 (3+0)	48
Retail Management	3 (3+0)	48

SUMMARY OF MBA, M. Phil AND PhD PROGRAMS

Department of Management Sciences	
MBA Program	
Minimum Qualifications Duration	4 years Business Related Bachelor Degree Minimum 2 years
Coursework Credits Research Credits	24 Credits 12 Credits
OR	
Coursework Credits Internship Credits	33 Credits 03 Credits
M. Phil Program	
Minimum Qualifications Duration Coursework Credits Research Credits	Master or 4 years Bachelor Degree Minimum 2 years 24 Credits 12 Credits
PhD Program	
Minimum Qualifications Duration Coursework Credits Research Credits	M Phil or 18 years Education Minimum 3 years 18 Credits 66 Credits

STUDY PLAN
MASTER OF BUSINESS ADMINISTRATION (2 Year MBA Program)

Minimum Degree Requirements: This program comprises a minimum of 36 credit hours given in 6 core courses together with 2 specialization courses from any of the areas of concentration namely Marketing, Hotel Management, Health Care & Hospital Management, Management Information System, Banking & Finance, Management and Human Resource Management. Students may choose to undertake research in the form of a 12 credit dissertation of a 3 credit internship along with an additional 9 credit of elective courses. The combined list of courses in the various areas of specialization forms the pool of elective courses.

Course Work Category	Credit (Contact) Hours
Core	18
Area of Specialization & Electives	6
Dissertation	12
Total	36

OR

Course Code	Course Work Category	Credit (Contact) Hours
	Core	18
	Area of Specialization & Electives	15
MSIP 600	Internship	3
	Total	36

Course Code	Course Title	Credit (Contact) Hours
MSMD 599	Dissertation	12(0+36)

MBA COURSES IN MANAGEMENT SCIENCES

The courses offered in this program comprise of core courses together with courses in areas of specialization.

Core Courses

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSFM 547	Advance Financial Management	3(3+0)	48
MSSM 551	Strategic Marketing Management	3(3+0)	48
MSSM 573	Strategic Management	3(3+0)	48
MSAR 501	Advanced Research Methods	3(3+0)	48
MSME 534	Managerial Economics	3(3+0)	48
MSOD 511	Advance Organization Development	3(3+0)	48

Areas of Specialization

Marketing

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSMR 559	Marketing Research	3(3+0)	48
MSIE 557	International Marketing	3(3+0)	48
MSID 555	Industrial Marketing	3(3+0)	48
MSBM 552	Brand Management	3(3+0)	48
MSAM 553	Advertisement Management	3(3+0)	48
MSPS 554	Personal Selling and Sales Management	3(3+0)	48

Finance

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSSA 546	Security Analysis	3(3+0)	48
MSIP 541	Investment and Portfolio Management	3(3+0)	48
MSFS 542	Financial Statement Analysis	3(3+0)	48
MSCM 540	Capital Markets	3(3+0)	48
MSIF 543	International Financial Management	3(3+0)	48
MSIB 555	Islamic Banking and Finance	3(3+0)	48

Management Information Systems (MIS)

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSSD 561	Systems Dynamics	3(3+0)	48
MSSD 562	Database Management	3(3+0)	48
MSSD 563	System Analysis and Design	3(3+0)	48
MSSD 564	E-Business	3(3+0)	48
MSCN 565	Computer networking	3(3+0)	48
MSAI 566	Expert System and Artificial Intelligence	3(3+0)	48

Human Resource Management

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSTD 583	Training and Development	3(3+0)	48
MSMA 581	Motivation and its Applications	3(3+0)	48
MSLL 582	Labor Laws in Pakistan	3(3+0)	48
MSPM 587	Performance Management	3(3+0)	48
MSCM 586	Compensation Management	3(3+0)	48
MSLT 584	Leadership and Team Management	3(3+0)	48

Management

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSCM 513	Comparative Management	3(3+0)	48
MSCM 514	Change Management	3(3+0)	48
MSKM 515	Knowledge Management	3(3+0)	48
MSSM 516	Small and Medium enterprise management	3(3+0)	48
MSSM 519	Services Management	3(3+0)	48
MSPO 518	Production & Operations Management	3(3+0)	48

Hotel Management

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSFO 531	Front Office Management	3(3+0)	48
MSHM 532	Hotel Marketing Management	3(3+0)	48
MSFB 533	Food Beverage Management	3(3+0)	48
MSAL 535	Accommodation & Leisure Management	3(3+0)	48
MSFP 536	Food Production & Management	3(3+0)	48
MSHF 537	Hospitality Financial Managment	3(3+0)	48

Health Care and Hospital Management

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSPH 571	Public Health Management	3(3+0)	48
MSEH 572	Economics of Health Care Industry	3(3+0)	48
MSPH 573	Professional Health Care Management	3(3+0)	48
MSPH 574	Population and Health Care Management	3(3+0)	48
MSEH 575	Environmental Health Management	3(3+0)	48
MSLF 576	Legal Framework of Health Care Industry	3(3+0)	48

Entrepreneurship

Course Code	Course Title	Credit (Contact) Hours	Contact Hrs per Semester
MSST 521	Entrepreneurship for Science and Technology	3(3+0)	48
MSCN 522	Entrepreneurial Consulting	3(3+0)	48
MSPD 523	Product and Service Design	3(3+0)	48
MSMG 524	Business Model Generation	3(3+0)	48
MSVC 525	New Venture Creation	3(3+0)	48
MSDE 526	Entrepreneurial Decision Making	3(3+0)	48

STUDY PLAN
MASTER OF BUSINESS ADMINISTRATION (2.5 Years MBA Program)   **DURATION 2.5 YEARS**

Minimum Degree Requirements: Student with non-business bachelor degree of four years need to complete MBA Foundation courses as deficiency course before starting regular MBA. They need to complete additional 30-36 credit with regular MBA Study Plan. E.g. BE, BS (honors). (Reference of HEC Guideline page number 21). If you exclude 36 credit of 2- year regular MBA, you completed 36 credit which required.

YEAR 1
First Semester

Course Code	Course Title	Credit (Contact) Hours
MTBM 113	Business Mathematics	3 (3+0)
MSEC 126	Micro Economics	3 (3+0)
MSMG 125	Principles of Management	3 (3+0)
MSFM 241	Financial Management	3 (3+0)
MSHR 233	Human Resources Management	3 (3+0)
MSFA 235	Financial Accounting	3(3+0)
	Total Credits	**18**

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MSEC 234	Macro Economics	3 (3+0)
MSMK 245	Principles of Marketing	3 (3+0)
MSOD 511	Advance Organizational Development	3 (3+0)
MSFM 547	Advance Financial Management	3 (3+0)
MSAR 501	Advance Research Methods	3 (3+0)
	Elective I	3(3+0)
	Total Credits	18

YEAR 2
First Semester

Course Code	Course Title	Credit (Contact) Hours
MSBF 244	Business Finance	3 (3+0)
MSMM 351	Marketing Management	3 (3+0)
MSME 534	Managerial Economics	3 (3+0)
MSSM 573	Strategic Management	3 (3+0)
MSSM 551	Strategic Marketing Management	3 (3+0)
	Elective II	3(3+0)
	Total Credits	18

Second Semester

Course Code	Course Title	Credit (Contact) Hours
MSCA 352	Cost Accounting	3 (3+0)
MTBM 113	Business Statistics	3 (3+0)
	Elective III	3 (3+0)
	Elective IV	3 (3+0)
	Elective V	3 (3+0)
	Total Credits	15

YEAR 3
First Semester

Course Code	Course Title	Credit (Contact) Hours
MSIP 600	Internship (3 Months)	3 (3+0)
		03

STUDY PLAN
MASTER OF PHILOSOPHY (MANAGEMENT SCIENCES)   **DURATION 2 YEARS**

Minimum Degree Requirements: The program comprises of a minimum of 36 credits including 9 credits for core courses that cover the major areas of management sciences, 12 credits from a chosen area of specialization and electives, 3 credits for a special study related to the area of specialization and 12 credits for the thesis which forms the major research component of this program. The minimum qualification for entering this program is a four year bachelor degree or 16 years of education in a related area.

Course Work Category	Credit (Contact) Hours
Core	9
Area of Specialization & Electives	12
Special Study	3
Thesis	12
Total	36

Course Code	Course Title	Credit (Contact) Hours
MSMS 699	Thesis	12 (0+36)
MSSS 698	Special Study	3 (0+9)

STUDY PLAN
DOCTOR OF PHILOSOPHY, PhD (MANAGEMENT SCIENCES)

DURATION 3 YEARS

Minimum Degree Requirements: The program comprises of a minimum of 66 credits for thesis and 18 credits of coursework. The minimum qualification for entering this program is an M. Phil degree or 18 years of education in a related area.

M. Phil & PhD COURSES IN MANAGEMENT SCIENCES

The courses offered in these programs comprise of core courses together with courses in areas of specialization.

Core Courses

Course Code	Course Title	Credit (Contact) Hours
MSFA 641	Financial Analysis	3(3+0)
MSIM 612	International Management	3(3+0)
MSME 633	Advanced Macro Economics	3(3+0)
MSRM 614	Research Methodology	3(3+0)

Areas of Specialization

Marketing

Course Code	Course Title	Credit (Contact) Hours
MSCB 504	Consumer Behavior	3(3+0)
MSID 555	Industrial Marketing	3(3+0)
MSIE 557	International Marketing & Export Management	3(3+0)
MSMC 558	Marketing Communications	3(3+0)
MSMR 559	Marketing Research	3(3+0)
MSEM 550	E- Marketing	3(3+0)
MSPS 505	Personal Selling	3(3+0)

Banking & Finance

Course Code	Course Title	Credit (Contact) Hours
MSCB 593	Commercial Banking	3(3+0)
MSSA 546	Security Analysis	3(3+0)
MSIF 548	International Finance	3(3+0)
MSIV 594	Investment Banking	3(3+0)
MSPE 549	Project Evaluation	3(3+0)
MSBP 595	Banking Practices in Pakistan	3(3+0)
MSCM 540	Capital Markets	3(3+0)

Management

Course Code	Course Title	Credit (Contact) Hours
MSHM 564	Hospital and Healthcare Management	3(3+0)
MSHT 563	Hospitality and Tourism Management	3(3+0)
MSCM 577	Comparative Management	3(3+0)
MSKM 578	Knowledge Management	3(3+0)
MSTM 579	Technology Management	3(3+0)
MSIM 570	Industrial Management	3(3+0)
MSRE 565	Real Estate Management	3(3+0)

Human Resource Management

Course Code	Course Title	Credit (Contact) Hours
MSTD 583	Training and Development	3(3+0)
MSPL 503	People Organization and Leadership	3(3+0)
MSCM 586	Compensation Management	3(3+0)
MSPM 587	Performance Management	3(3+0)
MSRP 588	Corporate Reputation & Managing People	3(3+0)
MSIH 589	International HRM	3(3+0)
MSPC 580	Managing People in Changing Context	3(3+0)

Admissions

MBBS DPT Entry Test
Masters Ph.D Applications
Policy PPDPT Financial Assistance
Selection Criteria Admission Plan
Rehabilitation Sciences Foreign Students
Short List Nursing Scholarships
Interviews Foreign Students

Admissions

The University invites applications for various degree programs, where admissions are granted based on academic competence and an entry test that ensures the high quality of student entrants. The affordable and convenient fee packages offer young students a viable opportunity for career advancement and higher learning. Selected students are also awarded financial assistance based on need and merit.

The following programs are offered at Isra University, Hyderabad:

Faculty of Medicine & Allied Medical Sciences

Degree Program		Year(s)
Bachelor of Medicine & Bachelor of Surgery	MBBS	05
Doctor of Physical Therapy	DPT	05
Bachelor of Science (Nursing)	BS (Nursing)	04
Diploma in Healthcare Assistant	DHCA	01
M. Phil	Anatomy, Biochemistry, Physiology, Pharmacology, Histopathology, Hematology. Community Medicine	02
Doctor of Medicine	Internal Medicine, Paediatrics, Cardiology. Dermatology Nephrology Radiology	04
Master of Surgery	General Surgery, Ophthalmology, Gynae & Obs. ENT Orthopedics	04

Diploma Program		Year(s)
Diploma	Cardiology, Gynae & Obs. DMRD Laryngology Orology, Ophthalmology & DMJ	02

FCPS/MCPS Residency Training Program		Year(s)
FCPS	Ophthalmology, Pediatrics, General Surgery, Internal Medicine, Gastroenterology, Nephrology, Gynae & Obs Community Medicine	04
MCPS	Anesthesiology Community Medicine	02

Faculty of Dentistry & Allied Sciences

Degree Program		Year(s)
Bachelor of Dental Surgery	BDS	04
Master of Dental Surgery	Oral & Maxillofacial Surgery, Oral Pathology, Operative Dentistry	04
M.Sc	Periodontology	02
M. Phil	Oral Biology, Community Dentistry, Science of Dental Material	02

FCPS Training Program		Year(s)
FCPS	Operative Dentistry, Oral & Maxillofacial Surgery	04

Faculty of Engineering, Science & Technology

Degree Program		Year(s)
Bachelor of Engineering (Electrical)	BE (EE)	04
Bachelor of Engineering (Civil)	BE (CE)	04
Bachelor of Engineering (Mechanical)	BE (ME)	04
Bachelor of Science (Computer Science)	BS (CS)	04
Bachelor of Science (Information Technology)	BS (IT)	04
Bachelor of Science (Software Engineering)	BS (SE)	04
Bachelor of Science (Telecommunication)	BS (TC)	04
Bachelor of Science (Electronics)	BS (ES)	04
Associate of Applied Science	Software Engineering, Electronics,	02
Master of Science	Computer Science, Information Technology, Computational Mathematics	02
Master of Philosophy		02
Doctor of Philosophy		03

Faculty of Commerce, Economics & Management Sciences

Degree Program		Year(s)
Bachelor of Business Administration	BBA	04
Associate of Applied Science	Business Administration	02
MBA	Healthcare & Hospital Management, Hotel Management, Management, Marketing, Banking & Finance, or Human Resource Management	02
M. Phil		02
PhD		03

Students from anywhere in Pakistan or overseas may apply for admission to the above degree programs.

A step-by-step guideline for making an application is available on our website. This information is particularly useful for overseas and foreign students.

DRESS CODE
The female students are required to dress modestly and to wear long-sleeve shirts apron (white) and use scarves to cover their heads. There is a separate female common room and other facilities, which suit special needs of female students. Male students are also required to maintain a neat & professional attire to promote a pleasant environment for learning.

MINIMUM QUALIFICATIONS FOR ENTRY
The Admissions Committee formulates the admission policy in accordance with the rules laid down by the University. To apply for admission, the student should have the needed minimum qualifications set forth for each program. In view of inconsistency in schedules of examinations conducted by various bodies in Pakistan and overseas, applications for entry from students waiting for the results will also be entertained. Such applicants, if selected in the admission process, will be granted provisional admissions. These admissions will automatically stand cancelled if such candidates fail to attain the required minimum qualifications.

Minimum Entrance Qualifications for Bachelor Degree Programs

Candidates who have passed the Higher Secondary Certificates (HSC) / Intermediate Examinations from any Board of Intermediate and Secondary Education in Pakistan or an equivalent examination recognized by the University are eligible to seek admission to the relevant Bachelor's Program of this University. The eligibility requirements for the programs are listed below:

Degree Program	Eligibility
MBBS& BDS	HSC (Pre-Medical, 70% minimum marks) OR SAT-II (550 minimum: Biology & Chemistry, any science subject) & TOEFL (500 or equivalent)/IELTS (5.5), if subjects are taught in other than English
DPT	HSC (Pre-Medical, 60% minimum marks)
BS (Nursing), DHCA	HSC (Pre-Medical, 50% minimum marks)
BS (CS), BS (IT), BS (TC), BS (SE), BS (ES)	HSC (Pre-Engineering, Pre-Medical, Computers, Commerce and Economics), minimum 45% marks
BBA	HSC (Any subject), minimum 45% marks
B.E	HSC (Pre-Engineering), minimum 60% marks

The Government of Pakistan evaluates all the overseas Higher Secondary Certificates for their equivalence. More information is available on the university website. However, the concerned students may directly write to the following address to have their certificates evaluated:

Inter Board Committee of Chairmen,
Government of Pakistan,
Plot No 25, Street No 39,G-10/4? Islamabad, Pakistan.
Link to download application form /http://www.ibec.edu.pk/attestatian.asp

Minimum Entrance Qualifications for Postgraduate Degree Programs

Candidates, who hold Bachelor Degree or its equivalent in an appropriate field of study, from a University / Institution of good standing recognized by this University, are eligible to seek admission to the relevant Postgraduate Degree of this University if they have the required qualifications listed below:

Postgraduate Degree Programs	Eligibility: Bachelor degree in the relevant group
Master of Science	BE; BS; BSc with Physics or Mathematics (Minimum of 16 years education)
MBA	BE; BBA; BS; MBBS; etc. (Minimum of 16 years education)
M. Phil	Please refer to relevant sections of the Faculty of Medicine & Allied Medical Sciences, Faculty of Basic Medical Sciences, Faculty of Clinical Sciences, Faculty of Dentistry & Allied Sciences, Faculty of Engineering, Science & Technology or Faculty of Commerce, Economics & Management Sciences as the case may be
PhD	
MD, MS, MDS, M.Sc	

ISRA UNIVERSITY ADMISSION TEST (IUAT)

Applicants for admission to all the Bachelor and Master Degree programs are required to take the Isra University Admission Test (IUAT). The admission is purely on merit attained in this test. The test consists of two parts with an intermediate phase of short listing for personal interviews. **It may, however, be noted that overseas Pakistani and foreign students are exempted from taking the Isra University Admission Test unless it is the requirement of the regularity body for the desired program of admission.**

Applicants for M Phil, PhD or postgraduate degree programs in clinical sciences, who fulfill the requisite conditions for admissions, will be called for a comprehensive interview or subject Graduate Records Examination or both.

IUAT Part-1

This is a written test. Sample test papers are available for each program of study, and are provided to those candidates who complete the prescribed application form and register themselves for taking the admission test.

The test will be conducted at the Isra University Campuses or other venues, as announced through news media. The time and date of the test will be communicated to the applicants individually by post or e-mail and through announcements in the news media.

Short Listing of Candidates

Short listing will purely depend upon the scores achieved by students in IUAT Part - 1. Only the short-listed students will qualify for IUAT Part - 2 and will be individually called for the interview.

IUAT Part-2

This part of the test is a personal interview of the applicants to assess their communication skills, aptitude, integrity, motivation, maturity and interest in the selected degree program. An applicant will meet interviewers. The interviews will be held at Isra University Campuses or other venues, as announced through news media. The date and time of the interview will be communicated separately to each short listed applicant.

SELECTION FOR ADMISSION

The results of IUAT (both parts) are compiled and reviewed by Isra University Admissions Committee. The Committee recommends only those students for admission who are considered academically outstanding and have special aptitude for serving the community and the country of their permanent residence. The decision of the Committee will be final 3 days after the announcement of the result which cannot be challenged. During this period, any candidate dissatisfied with their result can file a complaint with the admission committee which shall be addressed. Selected candidates will be informed individual/website. The results of the IUAT will neither be communicated on telephone nor will be revealed to sympathizers and friends. Selection of the candidates for the M Phil and PhD programs is based on correspondence in the case of foreign students and interviews of the candidates residing in Pakistan.

PROFICIENCY IN ENGLISH

All programs are conducted in the English language, the official medium of communication of the University. Students are required to demonstrate reasonably good proficiency in this language. However, those who are admitted because of excellent performance in the test but are not up to the required standard in English will be offered an intensive, non-credit course in Special English aimed at improving their proficiency in written and oral communication skills. The students attending this course must take a test at the completion of this course and achieve a satisfactory test score.

WHERE AND HOW TO APPLY?

An admission kit containing the application form, prospectus and the necessary information, can be obtained from:

Hyderabad Campus:
Isra University
Hala Road, Hyderabad-Sindh, Pakistan.
Tel: (+92 22) 2030181-4
Fax (+92 22) 2030180 & 2030185
URL: http://www.isra.edu.pk

Email: admissions@isra.edu.pk

Karachi Campus:
Al Tibri Medical College & Hospital
Near Al-Ibrahim Eye Hospital, Old Thana, Gadap Town, Karachi, Pakistan.
Tel: (+92 21) 34561711-20
Fax: (+92 21) 34561816
URL: http://www.isra.edu.pk
Email: iu.altibri@isra.edu.pk

Isra Institute of Rehabilitation Sciences
Street 7/A, Block-5, Gulshan-e-Iqbal, Karachi
Tel: (+92 21) 34664002
Fax: (+92 21) 34664001
URL: http://www.isra.edu.pk
Email: iirs.khi@isra.edu.pk

Islamabad Campus:
Al Nafees Medical College & Hospital
Lehtrar Road, Frash Town, Phase - II, Islamabad, Pakistan.
Tel: (+92 51) 8439901-10
Fax: (+92 51) 8439900
URL: http://www.isra.edu.pk
Email: info.isb@isra.edu.pk

School of Engineering & Applied Sciences
Plot No. 176, Sohni Road, I-10/3, Islamabad.
Tel: (+92 51) 8358360-61
Fax: (+92 51) 8358362
URL: http://www.isra.edu.pk
Email: info.isb@isra.edu.pk

The admission kit may be obtained from various branches of Soneri Bank, Pakistan or any campus of Isra University.

The fee for admission kit is Rs. 1500 (US$ 30 for overseas applicants). Add Rs. 200 for delivery by courier service in Pakistan and US$ 30 for overseas destinations.

Fees for admission kit can be paid in cash if the kit is collected in person or through a bank draft / pay order in the name of Isra University. The completed application forms together with the required supporting documents and a non-refundable application processing fee of Rs. 2000 (US$ 60 for overseas applicants),

should reach the Admissions Office on or before the closing date announced by the University. The applications received without fees will not be processed. Once acknowledged, an application cannot be withdrawn. It is the sole responsibility of the candidates to comply with all the instructions given on the application form and submit it before the due date. Incomplete applications will not be processed. Applications received after the due date will not be entertained.

In order to meet the deadline, the application form may be downloaded from our website and the same may be submitted along with the fee for admission kit and application processing dues. Prior to entry into Pakistan, the foreign students seeking admission in the University should first obtain an official clearance from the Government of Pakistan. For this purpose, they may approach the Pakistan Mission in their country of residence. Further information on admission of foreign nationals to educational institutions in Pakistan is available on our website.

Applicants who have failed IUAT can apply afresh in subsequent year(s). A fresh application is a must for admission in the ensuing academic year. The merit of the applicant taking repeat test(s) will be evaluated on the basis of the best score in the current or previous tests taken in the last two years.

Finalization of Admission
The admission, to all the academic programs under all the categories, will remain incomplete and unconfirmed until the following documents are not submitted and duly verified by the competent authority:

Duly completed admission form.
All the dues paid in full through a bank draft
- or challan duly signed by a bank.
- Exact spelling of the name and other antecedents verified from the academic
- certificates specified on the admission form. Duly signed and notarized affidavit specific to a particular program / faculty.

FEE PACKAGE AND OTHER DUES
The fee packages and schedule of payment of various degree programs are listed faculty-wise according to the nationality and resident status of the concerned students. The fee packages

exclude hostel fees, transportation, Government taxes and other dues that may be modified from time to time.
1. The Government of Pakistan has made it compulsory to collect in addition to cumulative aggregate fees, a 5% advance income tax, where the annual aggregate fees exceeds Rs. 200,000/=
2. All dues levied by the government in lieu of taxes or other charges will be payable by the student/parent/guardian.
3. The university reserves the right to increase the fees if required according to the recommendation of the Governing bodies.

Forfeiting of Fee: Students must note that if, for any reason, they discontinue the studies or if their admission is cancelled for any reason, the deposited fees will be forfeited.

Continuous and Uninterrupted Payment of Fee: A student has to pay full fee package, uninterruptedly over his / her full tenure of studentship in the program registered. This would be the case, irrespective of the fact that he / she fails in an examination, repeats a semester / year or interrupts his / her study that results in extension of the tenure. However, for a student of FES&T and FCE&MS in case of extension of period beyond the tenure, he / she will be required to pay the normal semester fee, while students of FM&AMS will make annual payment. Students who fail to deposit the fees in due time may be disallowed from attending classes and appearing in examination. He may be even debarred from college (Heavy late fee will be always applied after the last date).

Examination Fee: The students of all the Faculties are required to pay fees for each semester examination. In case of the examinations that are conducted under the regulatory control of professional bodies like the Pakistan Medical and Dental Council, a separate fee is chargeable per examination, irrespective of the number of subjects in which the student may wish to appear in a regular or supplementary examination conducted in a particular academic year. There is separate examination fee schedule for postgraduate examinations in each course and discipline. The fee schedule for examinations can be obtained from the

Admissions Office.

Refund and Penalty: A student must note that the fees once deposited, in any account, cannot be refunded for any reason. Requests for refund of fees will be subject to HEC and PM&DC regulations. Furthermore a student is liable to pay the cost of damage or loss of University property caused by him/her.

Student Categories: A regular Pakistani student, who acquired the entrance qualification while residing in Pakistan, falls in Regular category (Category A). On the other hand a Pakistani student, who acquired the entrance qualification while residing in an overseas country, irrespective of the fact that he/she is presently, living in Pakistan, falls in Overseas Pakistani category (Category B). An overseas (foreign) student, irrespective of where he/she acquired the entrance qualification, falls in the Foreign Student category (Category C).

FEE PACKAGES
Faculty of Medicine & Allied Medical Sciences

MBBS & BDS Programs

Fee Items	Category A (Regular)	Category B (Overseas)
Admission Fee (One Time)		
University Fee (Annual)	As Per PM&DC Policy	As Per PM&DC Policy
Tuition Fee (Annual)		
1. Tuition Fee will be charged on annual basis from new and existing students as per PM&DC Policy.. 2. Refund will be as per PM&DC Policy.		

Nursing Program

Fee Items	Category A (Regular) No Bond	Category B (4 Years Service Bond)
Admission Fee (One Time)	PKR 25,000	Free + Monthly Stipend + Hostel
University Fee (Annual)	PKR 20,000	Free + Monthly Stipend + Hostel
Tuition Fee (Annual)	PKR 125,000	Free + Monthly Stipend + Hostel

Diploma in Health Care Assistant (DHCA) Program

Fee Items	Category A (No Bond)	Category B (4 Months Service Bond/Internship)
Admission Fee (One Time)	PKR 5,000	Free + Monthly Stipend
Tuition Fee (Annual)	PKR 30,000	Free + Monthly Stipend

Doctor of Physical Therapy Program

Fee Items	Category A (Regular)	Category B (Overseas)	Category C (Foreigner)
Admission Fee (One Time)	PKR 50,000	USD 750	USD 1000
University Fee (Annual)	PKR 20,000	USD 400	USD 500
Tuition Fee (Annual)	PKR 250,000	USD 3,500	USD 4,500
Security Deposit	PKR 50,000	USD 1,000	USD 1,500

M.Phil, M.Sc & Diploma Programs in FM&AMS (2 Years Program)

Fee Items	Category A (Paid + Full time Bond)	Category B (Unpaid)	Category C (Unpaid)
Admission Fee (One Time)	PKR 100,000	PKR 100,000	PKR 100,000
University Fee (Annual)	PKR 50,000	PKR 50,000	PKR 50,000
Tuition Fee (Annual)	No Tuition Fee and Service Bond	No Tuition Fee and Service Bond	PKR 400,000
Security Deposit	PKR 50,000	PKR 50,000	PKR 50,000

M.Phil, M.Sc & Diploma Programs in FD&AS (2 Years Program)

Fee Items	Category A (Paid + Full time Bond)	Category B (Unpaid)	Category C (Unpaid)
Admission Fee (One Time)	PKR 100,000	PKR 100,000	PKR 100,000
University Fee (Annual)	PKR 50,000	PKR 50,000	PKR 50,000
Tuition Fee (Annual)	No Tuition Fee and Service Bond	No Tuition Fee and Service Bond	PKR 400,000
Security Deposit	PKR 50,000	PKR 50,000	PKR 50,000

MS, MD & PhD Programs in FM&AMS (4 Years Program)

Fee Items	Category A (Paid + Full time Bond)	Category B (Unpaid)	Category C (Unpaid)
Admission Fee (One Time)	PKR 100,000	PKR 100,000	PKR 100,000
University Fee (Annual)	PKR 50,000	PKR 50,000	PKR 50,000
Tuition Fee (Annual)	No Tuition Fee and Service Bond	No Tuition Fee and Service Bond	PKR 450,000

MDS in FD&AS (4 Years Program)

Fee Items	Category A (Paid + Full time Bond)	Category B (Unpaid)	Category C (Unpaid)
Admission Fee (One Time)	PKR 100,000	PKR 100,000	PKR 100,000
University Fee (Annual)	PKR 50,000	PKR 50,000	PKR 50,000
Tuition Fee (Annual)	No Tuition Fee and Service Bond	No Tuition Fee and Service Bond	PKR 450,000

BS(CS), BS(IT), BS(SE), BS(TC), BS(ES), BBA & Associate Degree

Fee Items	Category A (Regular)	Category B (Overseas)	Category C (Foreigner)
Admission Fee (One Time)	PKR 10,000	PKR 30,000	PKR 50,000
University Fee (Every Semester)	PKR 10,000	PKR 15,000	PKR 20,000
Tuition Fee (Every Semester)	PKR 80,000	PKR 100,000	PKR 110,000

BE (Civil)

Fee Items	Category A (Regular)	Category B (Overseas)	Category C (Foreigner)
Admission Fee (One Time)	PKR 50,000	PKR 75,000	PKR 120,000
University Fee (Every Semester)	PKR 10,000	PKR 20,000	PKR 25,000
Tuition Fee (Every Semester)	PKR 200,000	PKR 300,000	PKR 400,000

BE (Electrical, Mechanical)

Fee Items	Category A (Regular)	Category B (Overseas)	Category C (Foreigner)
Admission Fee (One Time)	PKR 50,000	PKR 75,000	PKR 120,000
University Fee (Every Semester)	PKR 10,000	PKR 20,000	PKR 25,000
Tuition Fee (Every Semester)	PKR 150,000	PKR 200,000	PKR 300,000

MBA, MS, M.Phil & PhD Programs in FCE&MS & FES&T

Fee Items	Category A, B & C
Admission Fee (One Time)	PKR 10,000
University Fee (Every Semester)	PKR 10,000
Tuition Fee (Every Semester)	PKR 80,000

FEE FOR REPEATING / REAPPEARING COURSE(S)

FES&T and FCE&MS: A student repeating course(s) has to pay tuition fee on the basis of Rs. 4,500 per credit hour per course or the semester fee, whichever is less. In case of summer session, the student has to pay Rs. 4,500 per credit hour per course for repeating or reappearing in a course.

PAYMENT OF FEES

The fee installments of packages and dues are payable by a bank draft in the name of Isra University drawn on a bank in Hyderabad.

Late Fee: The students, who fail to pay the installments of fee package within the prescribed period, will be required to pay penalty as per the current university late fee policy. The dues inclusive of the penalty is payable until two weeks before the ensuing examination failing which the concerned students will not be allowed to sit in the examinations; and their admission may be cancelled.

FINANCIAL ASSISTANCE

Isra Islamic Foundation and other philanthropic organizations / individuals provide a limited number of full and partial free-ships, scholarships and other forms of financial assistance that are available to the needy and meritorious students in selected programs.

Isra University is listed in the roster of institutions where the poor and meritorious students, seeking admissions, are eligible to apply for the award of scholarships from an endowment fund created by the Government of Sindh. For more information, the interested students should contact the Secretary, Board of Trustees for Endowment Fund, Education Department, Government of Sindh, Karachi.

Teaching Staff

Dean Teaching Staff Department
Lecturer Registrar Chairperson
Medical Officer Instructor
Associate Demonstrator
Assistant Skills Knowledge
Professor Coordination Administrator
Visiting Faculty Highly Qualified

Teaching Staff

A highly qualified and dedicated teaching staff caters for the academic needs of the students, enabling them to acquire the knowledge and skills, required to compete in the growing economy and serve the society at large.

FACULTY OF MEDICINE & ALLIED MEDICAL SCIENCES
Nazir A. Laghari, Pro-Vice Chancellor (Academics and Dental Sciences)
MBBS (Sindh), DO, FCPS, FRCS (Ireland), FRCS Opth (UK)

Faculty of Basic Medical Sciences
Hussain Bux Kolachi, Dean
MBBS (Sindh), FCPS
Professor

Salman Ahmed Farsi Kazi,
Vice Dean, Basic Medical Sciences
MBBS (Isra), DMJ (Punjab), M.Phil (Isra)
Associate Professor

Department of Anatomy
Zaheer Ahmed Memon, Chairperson
MBBS (Sindh), M.Phil (Isra)
Professor

Capt. Shoukat Ali Memon
M.Phil (Isra)
Associate Professor

Syna Amir
MBBS (Isra), M.Phil (Isra)
Associate Professor

Dr. AftabAbbasi
MBBS, M.Phil
Assistant Professor

Piriha Abbasi
MBBS (Isra), M.Phil (Isra)
Senior Lecturer

Jahanzeb Khan
M.Phil (Isra)
Senior Lecturer

Sana Kashif
MBBS (LUMHS), M.Phil (Isra)
Senior Lecturer

Muhammad Shahab Hanif
MBBS (Muhammad Medical College), M.Phil (Isra)
Senior Lecturer

Muhammad Saqib Baloch
MBBS (Muhammad Medical College), M.Phil (Isra)
Senior Lecturer

Sehar Khowaja
MBBS (LUMHS), M.Phil (Isra)
Senior Lecturer

Mansoor Mukhtar Qazi
MBBS (Isra)
Lecturer

Rida Qureshi
MBBS (LUHMS)
Lecturer

Department of Physiology
Navaid Kazi, Chairperson
MBBS (Isra), M.Phil (Isra), PhD (Isra)
Professor

Din Muhammad Shaikh
M.Sc (Sindh), Ph. D (UK)
Professor

Samia Siddiqi
MBBS (Isra), M.Phil (Isra)
Associate Professor

Haji Khan Khoharo
MBBS (Sindh), FCPS, M.Phil (Isra)
Associate Professor

Abroo Qazi
MBBS (LUMHS), M.Phil (Isra)
Associate Professor

Yar Mohammad Nizamani
MBBS (Isra), M.Phil (Isra)
Assistant Professor

ArsalanUqaili
MBBS (LUMHS), Mphill (Isra)
Assistant Professor

Roomi Memon
MBBS, M.Phil (Isra)
Assistant Professor

Naila Noor
MBBS (LUMHS)
Lecturer

Kumayl Abbas Meghji
MBBS (LUMHS), MPhil (Isra)
Senior Lecturer

Rizwan Ali Talpur
MBBS (LUMHS), MPhil (Isra)
Senior Lecturer

Farzana Rahim Memon
MBBS (Sindh University), MPhil (Isra)
Senior Lecturer

Salahuddin
MBBS (LUMHS), MPhil (Isra)
Senior Lecturer

Department of Biochemistry
Maria Kazi, Chairperson
MBBS, MPhil, P.hD (Isra)
Professor

Mumtaz Ali Qureshi
M.Sc (Sindh) Ph.D (Glasgow, UK)
Professor

Sumayya Kazi
MBBS (Isra) M Phil (Isra)
Assistant Professor

Hina Nazeer
M.Phil (Isra)
Assistant Professor

Sheeraz Ansari
MBBS (Isra), M.Phil (Isra)
Senior Lecturer

Mehak Memon
MBBS (LUMHS), M.Phil (Isra)
Senior Lecturer

Ruby Shahzad
MBBS (DOW), M.Phil (Isra)
Senior Lecturer

Kazbano Ramsha Surahio
MBBS (Isra)
Lecturer

Sadia Khan
MBBS (Isra)
Lecturer

Department of Pathology
Rashid Ahmed Memon, Chairperson
MBBS (Sindh), M.Phil (Punjab)
Professor

Shankar Lal Rathi
MBBS (Sindh), MCPS, M.Phil (JPMC)
Professor

Farkhunda Nadeem
MBBS (Punjab), M. Phil (Isra) PhD (Isra)
Professor

Ghulam Shah Nizamani
MBBS (Isra), M.Phil (Isra) PhD (Isra)
Professor

Azra Hassan Memon
MBBS (Sindh), M. Phil (JPMC)
Professor

Amin Faheem
MBBS, MPhil, PHD
Professor

Abdul Majid Shaikh
MBBS, M.Phil (Isra)
Assistant Professor

Raima Kalhoro
MBBS (Isra), MPhil (isra)
Assistant Professor

Shumaila Khowaja
MBBS, MPhil (isra)
Senior Lecturer

Bushra Sajid
MBBS (LUMHS), MPhil (isra)
Senior Lecturer

Kiran Shaikh
FCPS (LUMHS), MPhil (isra)
Lecturer

Nabeela Zeeshan
MBBS (Peoples Medical College)
Lecturer

Kiran Zal Ur Rehman Khan
MBBS (LUMHS)
Lecturer

Bibi Maria Shah
MBBS (ISRA)
Lecturer

Department of Pharmacology
Prof: Dr. Aftab Ahmed, Chairperson
MBBS, Dip: Diab: (Diploma in Diabetology)
M.Phil (Pharmacology)
Professor

Ashfaque Rahim Memon
MBBS, MPhil
Professor

Aftab Ahmed Shaikh
MBBS, MPhil
Professor

Mozna Talpur
MBBS (Isra), M.Phil (Isra)
Associate Professor

Sadia Kazi
MBBS (Isra) M.Phil (Isra)
Assistant Professor

Samreen Ali Pandhiani
M.Phil (Isra)
Assistant Professor

Shahnaz Bano
M.Phil (Isra)
Assistant Professor

Shujaullah
MBBS (LUMHS), M.Phil (Isra)
Assistant Professor

Sheeza Majeed
MBBS (Isra)
Lecturer

Ali Abbas
MBBS (Chandka Medical College), M.Phil (Isra)
Senior Lecturer

Shazia Perveen
MBBS (LUMHS), M.Phil (Isra)
Senior Lecturer

Farheen Malik
MBBS (LUMHS), M.Phil (Isra)
Senior Lecturer

Rizwan Ahmed Memon
MBBS (LUMHS)
Lecturer

Department of Forensic Medicine
Salman Ahmed Farsi Kazi, Chairperson,
MBBS (Isra), DMJ (Punjab), M.Phil (Isra)
Associate Professor

Naveed Ali Qadri
MBBS / DMJ (DOW)
Assistant Professor

Rafia Arain
MBBS (Isra), DMJ
Senior Lecturer

Amna Mangi
MBBS (Isra)
Lecturer

Department of Community Medicine
Hussain Bux Kolachi, Chairperson
MBBS (Sindh), FCPS
Professor

Sajjad Kazi
MBBS (Isra), DCPS (Healthcare System Management), MBA (DUHS),
M.Phil (Community Medicine)
Assistant Professor

Ghulam Hussain Baloch
MBBS, MPH (LUMHS)
Assistant Professor

Ambreen Sahito
MBBS, FCPS
Assistant Professor

Tariq Feroz Memon
M.Sc. (UMEA University, UMEA, Sweden)
Assistant Professor

Abdul Wadood Shah
MBBS (LUMHS), M.Phil (Isra)
Senior Lecturer

Iram Jamil
MBBS (LUMHS)
Lecturer

Department of Medical Education
Kabir Dherwani
Assistant Director, Medical Education
MBBS (Isra), Dip. in Medical Education (UK),
Masters in Medical Education, Dundee (UK)
Assistant Professor

FACULTY OF MEDICINE & ALLIED SCIENCES
Department of Medicine
Ali Akbar Siddiqui, Chairperson (Unit-II)
MBBS , FCPS (Med), FCPS (Gastro)
Professor

Asif Ali Burney, Chairperson (Unit-I)
MBBS , FCPS, MACP
Professor

Fida Hussain Shaikh, Unit-II
MBBS , FCPS
Professor

Rasheed Ahmed Shaikh
MBBS , FCPS (Nephrology)
Professor

Uzma Rajar
MBBS ,DDSc (UWCM, UK)
MSc Dermatology (CUWCM, UK)
Associate Professor

Muhammad Aamir Ghori
MBBS , FCPS (Med), FCPS (Gastro)
Assistant Professor

Mohammad Adnan Bawani
MBBS , FCPS
Associate Professor

Ali Hassan
MBBS, FCPS
Associate Professor

Shaista Zeb
MBBS , FCPS
Assistant Professor

Ehsan Rahim Memon
MBBS FCPS
Assistant Professor

Muhammad Kashif
MCPS, FCPS
Assistant Professor

Manzoor Ali
FCPS
Assistant Professor

Saima Siraj Jatoi
FCPS
Assistant Professor

Shabana Lakho
FCPS, MCPS, MBBS
Assistant Professor

Shazia Kazi
FCPS
Assistant Professor

Prem Kumar
FCPS
Assistant Professor

Kiran Hafeez
MBBS, FCPS
Assistant Professor

Dr. Ghulam Mujtuba Shah
MBBS, FCPS
Senior Registrar

Dr .Sunil Dat Maheshwari
MBBS , MD
Senior Registrar

Naeem Laghari
MBBS
Consultant Oncologist

Kishore Kumar Maheshwari
MBBS
Clinical Instructor

Kamran Baig Memon
MBBS
Resident Medical Officer

Owais Shams
MBBS
Resident Medical Officer

Shamsher Madan Mari
MBBS
Resident Medical Officer

Gotam Das
MBBS
Resident Medical Officer

Osama Ahmed Soomro
MBBS
Resident Medical Officer

Salman Maqsood
MBBS
Resident Medical Officer

Mohammad Amin
MBBS
Resident Medical Officer

Tanveerul Haq
MBBS
Resident Medical Officer

Salma Ghumman
MBBS
Resident Medical Officer

Hakro Naveed Ahmed
MBBS
Resident Medical Officer

Anum
MBBS
Resident Medical Officer

Hafiz Wajid
MBBS
Resident Medical Officer

Sarwat Siddiqui
MBBS
Resident Medical Officer

Saneea Khadim Jalalani
MBBS
Resident Medical Officer

Uzma Qureshi
MBBS
Resident Medical Officer

Adil Azim
MBBS
Resident Medical Officer

Aqsa Soomro
MBBS
FCPS-I
Resident Medical Officer

Ghulam Rabani
MBBS
FCPS-I
Resident Medical Officer

Khalilullah Ujjan
MBBS
Resident Medical Officer

Rehman Nawab
MBBS
Resident Medical Officer

Muhibullah
MBBS
Resident Medical Officer

Naeem
MBBS
Resident Medical Officer

Mansha Maheshwari
MBBS
Resident Medical Officer

Nazish Memon
MBBS
Resident Medical Officer

Iqra Jawed
MBBS
Resident Medical Officer

Naresh Kumar
MBBS
Resident Medical Officer

Department of Pediatrics
Muhammad Aslam Memon, Chairperson
MBBS, MCPS, DCH, FCPS
Professor

Dr. Yasmeen Memon
MBBS, FCPS
Professor

Muhammad Aamir Memon
MBBS, DCH (Sindh), MD
Assistant Professor

Shahzad Imam Qureshi
MBBS, DCH
Instructor

Tufail Qureshi
MBBS, DCH
Registrar

Atiqa Khalil
MBBS
Resident Medical Officer

Maheen
MBBS
Resident Medical Officer

Sobia Memon
MBBS
Resident Medical Officer

Sehrish Khushboo
MBBS
Resident Medical Officer

Asma Ahmed Maher
MBBS
Resident Medical Officer

Ayesha Salahuddin
MBBS
Resident Medical Officer

Maria Jehan
MBBS
Resident Medical Officer

Jia Pradha
MBBS
Resident Medical Officer

Muhammad Uzair Memon
MBBS
Resident Medical Officer

Department of Radiology
Almas Memon, Chairperson
MBBS , DMRD
Associate Professor

Fakhrunisa
FCPS
Assistant Professor

Rafique Ahmed Memon
MBBS, DMRD
Assistant Professor

Kashif Mughal
MBBS, FCPS, MCPS
Assistant Professor

FACULTY OF SURGICAL & ALLIED SCIENCES
Department of Surgery
Prof. Abdul Sattar Memon
Dean Clinical Sciences
MBBS, MCPS, FCPS (PAK) FCPS (BD) ,FICS, FACS FASI
Professor

Prof. Khaleeque Ahmed Siddiqui,
MBBS , FRCS (UK)
Professor

Prof. Muhammad Hussain Laghari
MBBS , FRCS (UK)
Professor

Prof. Abdul Aziz Laghari
MBBS , FCPS , FRCS
Professor

Abdul Munam
MBBS, FCPS
Professor

Pir Abdul Latif Qureshi
MBBS , FCPS
Professor

Tekchand Maheshwari
MBBS , FCPS
Professor

Mohammad Khan Jarwar
MBBS , MS
Associate Professor

Rizwanullah Junaid Bhanbhro
MBBS , MS
Associate Professor

Suhail Ahmed Soomro
MBBS , MS
Assistant Professor

Javeria Farid
MBBS, MS
Assistant Professor

Ambreen Manan
MBBS , FCPS
Assistant Professor

Khalil Ahmed Almani
MBBS, MCPS, FCPS
Assistant Professor

Muhammad Shahid Khan
FCPS
Assistant Professor

Rajab Ali
MBBS, FCPS
Assistant Professor

Iftikhar Rahoojo
MBBS, MS (Ortho)
Assistant Professor

Imdad Khokhar
MBBS
Resident Medical Officer

Muhammad Shoaib Alam
MBBS
Resident Medical Officer

Ali Shamshad
MBBS
Resident Medical Officer

Rukhsar Chandio
MBBS
Resident Medical Officer

Juwereya Memon
Senior Registrar
MBBS, MS

Sana Maria
Resident Medical Officer
MBBS

Junaid Anwar Jokhio
MBBS
Resident Medical Officer

Sumaira
MBBS
Resident Medical Officer

Maria Jehan
MBBS
Resident Medical Officer

Imran Arshad
MBBS , FCPS
Senior Registrar

Karishma Kumari Maheshwari
MBBS
Resident Medical Officer

Department of Obstetrics & Gynecology

Aftab A. Munir
MBBS , FRCOG (UK), FCPS (PAK), FCPS (Bangladesh) DTM & H
Professor Emeritus

Syeda Nishat Zohra, Chairperson (Unit I)
MBBS , MCPS, FCPS, Fellowship in Fetal Medicine
Professor

Pushpa Srichand Chairperson (Unit II)
MBBS , DGO, MCPS, FCPS
Professor

Gulfareen Arain
MBBS , FCPS, MCPS, MS
Associate Professor

Farhana Anjum Rajput
MBBS , MCPS, FCPS
Associate Professor

Sarwat Memon
MBBS FCPS
Assistant Professor

Uzma Parveen Brohi
MBBS , FCPS
Assistant Professor

Nida Zaki
MBBS , MS
Assistant Professor

Fouzia Rahim Memon
MBBS , MS
Assistant Professor

Nisa Mohsin Memon
MBBS , FCPS-II
Senior Registrar

Rashida Memon
MBBS, MS
Registrar

Farzana Junaid Bhanbrro
MBBS , D.G.O
Instructor

Salochna Devi
MBBS
Resident Medical Officer

Khushboo Jawed
MBBS
Resident Medical Officer

Amna Aslam Arain
MBBS
Resident Medical Officer

Jamila Siyal
MBBS
Resident Medical Officer

Saba Maqbool
MBBS
Resident Medical Officer

Faiza Farooque
MBBS
Resident Medical Officer

Maliha Aneeq Pathan
MBBS
Resident Medical Officer

Hina Samoo
MBBS
Resident Medical Officer

Shua Bano
MBBS
Resident Medical Officer

Allah Bachai Patoli
MBBS
Resident Medical Officer

Saira Hassan Soomro
MBBS
Resident Medical Officer

Amna Faisal
MBBS
Resident Medical Officer

Pulwisha
MBBS
Resident Medical Officer

Rashda Abbas
MBBS
Resident Medical Officer

Saba Bashir
MBBS
Resident Medical Officer

Department of Ophthalmology

Fahad Feroze Shaikh , Chairperson
MBBS, FCPS (Ophth), FCPS (Retina)
Associate Professor

Shafi Mohammad Jatoi
Associate Dean, Clinical Science, for Undergraduate (MBBS) Studies
MBBS, FCPS (Ophth)

Syed Jamil Ahmed
MBBS, FCPS
Professor

Prof. Nazir A. Laghari
MBBS, DO, FCPS
FRCS (Ireland), FRCS Ophth (UK)
Pro Vice Chancellor, Academics and Dental Sciences

Naimatullah Siyal
MBBS, MCPS, MS
Professor

Izhar Parakh
MBBS, MS
Senior Medical Officer

Yarukh Sami
MBBS
Resident Medical Officer

Department of E.N.T

Muhammad Rafique, Chairperson
MBBS,M.S
Associate Professor

Amrat Kumar
MBBS / MS ENT
Senior Registrar

Izhar
MBBS
Resident Medical Officer

Department of Anaesthesiology
Jamil Ahmed Khanzada, Chairperson
MBBS , FCPS
Associate Professor

Mukhtiar Ahmed Vakassi
MBBS , MCPS
Associate Professor

Ghulam Mustafa Kazi
MBBS , MCPS
Associate Professor

Abdul Ghani Kazi
MBBS , DA (UK), PhD (Singapore)
Assistant Professor

Srichand
MBBS , MCPS
Assistant Professor

Irfan Ali Kadri
MBBS, DA
Senior Registrar

Asia Jamil
MBBS ,MCPS
Senior Instructor

Mukhtiar Ali Bozdar
MBBS
Instructor

Jai Kumar
MBBS
Resident Medical Officer

Department of Nursing
Rebecca Wilson-John
M. Sc. Nursing (Fresno State, U.S.A)
B. Sc. Nursing, (McMaster University, Canada)
RN, (JPMC SON Karachi Pakistan)
Dip. WA & TA (JPMC CON Karachi Pakistan)
RM, (LDH Karachi Pakistan)
Principal, Assistant Professor

Sualeheen Sheikh
M.Sc. Microbiology (Sindh University)
B.Sc. (Hons.), (Sindh University)
Lecturer

Alice Gerard
B.Sc. Nursing, (LUMHS)
Midwifery (LUMHS)
Nursing Tutor

Zafarullah Junejo
B.Sc. Nursing (LUMHS)
Nursing Instructor

Muhammad Zakarya
B.Sc. Nursing (Aga Khan University)
Nursing Instructor

Suhail Ahmed Soomro
M.A (Hons), English (Sindh University)
B.A (Hons), English (Sindh University)
Tutor (Part Time)

Bisharat Ali
B.Sc. Nursing (DOW University)
Nursing Instructor

Sumia Jutt
B.Sc. Nursing (Isra)
Nursing Instructor

Zahida Khawaja
B.Sc. Nursing (Isra)
RM, (AKMCCC Hyderabad)
LHV (Public Health School Hyderabad)
Nursing Instructor

Verda Jamshed
B.Sc. Nursing (Isra)
Preceptor

ISRA SCHOOL OF PARAMEDICS
Iftikhar Hasan TI(M)
M.B.B.S, MSc Advance Medical Administration
Principal / Administrator

Muhammad Saleh Buriro
B.B.A (S.U. Jamshoro), D.C.B.M
Computer Instructor / Course Coordinator

Dr. Asia
Senior Instructor
MBBS, DA, MCPS Anesthesiology

Noshee Solangi
BS Nursing (Isra)
Clinical Instructor

Sohni Bijoro
BS Nursing (Isra)
Clinical Instructor

Rehana Rajput
BS Nursing (Isra)
Clinical Instructor

Ms. Samina
BS Nursing (Isra)
Clinical Instructor 5

Kanwal
BS Nursing (Isra)
Clinical Instructor

Medona
BS Nursing (Isra)
Clinical Instructor

Jannat
BS Nursing (Isra)
Clinical Instructor

Dilbar
BS Nursing (Isra)
Clinical Instructor

Mr. Azhar Hussain
BS Nursing (Isra)
Clinical Instructor

ISRA INSTITUTE OF REHABILITATION SCIENCES (IIRS)
Abdul Ghani Kazi
Director, IIRS

Sajjad Kazi
MBBS (Isra), DCPS (Healthcare System Management), MBA (DUHS)
M.Phil (Community Medicine)
Vice Dean, FM&AMS

Mohammad Zubair Khan, Principal
B.S.P.T (JPMC), P.P.D.P.T (Isra), MPPS, MPPTA
Assistant Professor
Erum Sundas
B.S.P.T (Z.U), P.P.D.P.T (Isra),
Assistant Professor

Iqra Naseem
D.P.T (Isra University)
Lecturer

Muhammad Hussain Nagori
D.P.T (Isra University), MPHIL (ISRA)
Lecturer

Sadqain Ashraf
B.S (DOW) , MPHILL (ISRA)
Lecturer

Tania
D.P.T (Isra University)
Lecturer

Kanwal Lalwani
D.P.T (Isra University)
Lecturer

Shamsa
D.P.T (Isra University)
Lecturer

Muhammad Ahmed Qureshi
D.P.T (Isra University), MPPTA
Lecturer

Saba Mengal
B.S.P.T (LUMHS) M.PHIL (ISRA)
Lecturer

Saba Memon
D.P.T (Isra University)
Demonstrator

Marvi Kazi
D.P.T (Isra University)
Demonstrator

Saba Siyal
D.P.T (Isra University)
Demonstrator

Shahmeer Khan
D.P.T (Isra University)
Demonstrator

Moomal Memon
D.P.T (Isra University)
Demonstrator

Samia Makhdoom
D.P.T (Isra University)
Demonstrator

Naveed Ahmed Khanzada
Assistant Professor
B.S.P.T (Zia Uddin) M.S (Isra)

Sindhu
D.P.T (Isra University)
Demonstrator

ISRA DENTAL COLLEGE
Syed Mumtaz Ali, Principal
BDS (LUMHS)
MPH (University of Karachi)
Professor

Maqsood Ahmed Soomro
BDS (Sindh), MCPS
Associate Professor

Zahid Iqbal
BDS (Karachi), FCPS
Associate Professor

Salman Shafique
BDS (LUMHS), FCPS
Associate Professor

Hassan Shahid
BDS (Karachi), MDPH (Sheffield, UK)
Associate Professor

Mowaffaq Abdul Momin Abdullah Saif Al-Absi
BDS (LUMHS), M.Sc (LUMHS)
Assistant Professor

Farzana Memon
BDS (Sindh), M.Sc (LUMHS)
Assistant Professor

Madiha Zaigham
BDS (LCMD), MSC (Isra)
Assistant Professor

Waqas Iqbal
BDS (Karachi), MDS (Isra)
Assistant Professor

Khurram Anwar
BDS, MSC
Assistant Professor

Ashar Hussain
BDS (LUMHS)
Assistant Professor

Syeda Sadia Hassan
BDS (FJDC), M.Phil (Isra)
Assistant Professor

Naveed Irfan
BDS (LUMHS), MSc (LUMHS)
Assistant Professor

Uzma Tarique
BDS (LUMHS)
Assistant Professor

Shafqat Hussain
MSc. (LUMHS)
Senior Lecturer

Aswad Ahmed
MDS (Karachi)
Senior Lecturer

Muhammad Siddique Qazi
BDS (Isra)
Lecturer

Sanam Memon
BDS (LUMHS)
Lecturer

Humera Niyaz
BDS (LUMHS)
Lecturer

Asad Hussain Baloch
BDS (LUMHS)
Lecturer

Alvina Shaikh
MSc. (Isra)
Lecturer

Aasiya Kazi
BDS
Lecturer

Rabia Anis
BDS
Lecturer

Faizan Alam Syed
BDS (Baqai Medical University)
Lecturer

Mehak Imtiaz
BDS (Isra University)
Lecturer

Nayab Mannan Shaikh
BDS (Isra University)
Lecturer

Rafique Ahmed Memon
BDS (LUMHS)
Lecturer

Surwaich Ali Channa
MSc (Isra University)
Senior Lecturer

Aisha Hannan
BDS (Isra)
Lecturer

Ghulam Hussain Dal
BDS (Isra)
Lecturer

Nayab Fatima Mangi
BDS (Isra)
Lecturer

Ali Imran Najmi
BDS (Hamdard)
Lecturer

Maria Korejo
BDS (LUMHS)
Lecturer

Kanza Qureshi
BDS (LUMHS)
Lecturer

Ateeqa Bhatti
BDS (Isra)
Lecturer

Muhammad Irfan Rajput
BDS (LUMHS)
Lecturer

Mahnoor Butt
BDS (Isra)
Lecturer

Madiha Khalid
BDS (Isra) Mphill. (LUMHS)
Lecturer

Tasmina Jameel
BDS (ISRA)
Lecturer

FACULTY OF ENGINEERING, SCIENCE & TECHNOLOGY
Mohammad Iqbal Bhatti, Dean
B.Sc. (Hons), Electronics (Sindh)
M.Sc. Electronics & Radio Engineering (Sindh)
PhD Digital Electronic Communications
Engineering (London, UK), DIEP (Electrical)
Professor

Hameedullah Kazi, Pro-Vice Chancellor (Engineering and Management Sciences)
B.E Electronic Engineering (MUET)
MS. Electrical & Computer Engineering (Purdue, Indiana, USA)
PhD Computer Science, School of Engg& Technology (AIT, Thailand)
Professor

Department of Electrical Engineering
Noor Muhammad, Chairperson
PhD (Muhammad Ali Jinnah University)
Associate Professor

M. Zahid Khanzada
PhD (South Korea), B.E (MUET)
Assistant Professor

Aijaz Akhtar
B.E (MUET), M.E (Thailand), PhD (AIT, Thailand)
Assistant Professor

Saad Khan Baloch
BE Electrical (MUET), ME (MUET)
Assistant Professor

Mumtaz Aziz Kazi
B.E Electrical (NED), ME (MUET)
Senior Lecturer

Irshad Memon
B.E Electronics (MUET), ME (MUET)
Lecturer

Shoaib Ahmed Dayo
M.E (MUET), B.E (QUEST)
Lecturer

Muhammad Farrukh
M.E. (MUET), B.E (QUET)
Lecturer

Salman Ahmed
B.E (Dawood University)
Lab Engineer

Amir Ahmed
B.E (Isra University)
Lab Engineer

Sugandh Memon
M.E. (MUET), B.E (MUET)
Lab. Engineer

Taha Majeed
B.E (Isra)
Lab. Engineer

Shoaib Raza Gopang
B.E (Isra)
Lab. Engineer

Department of Civil Engineering
Ghous Bux Khaskheli, Chairperson
B.E Civil Engineering (MUET)
M.E Transportation & Traffic Engineering
(University of Sheffield, England, UK)
Ph.D Concrete Structure (University of Glasgow, Scotland, UK)
Professor

Uroosa Memon
B.E (QUEST) M.E (MUET)
Lecturer

Hafiz Usama Imad
B.S (University of Engineering & Technology, Peshawar),
M.S (MUET)
Lecturer

Muhammad AkramAkhund
BE (QUEST), M.E (MUET)
Lecturer

Shabana Ghanghro
B.E (MUET), M.E (MUET)
Lab Engineer

Aftab Ahmed
B.E (MUET), M.S (MUET)
Lab Engineer

Saif-ur-Rehman
B.E. (MUET)
Lab Engineer

Department of Mechanical Engineering
Muhammad Ibrahim Panhwar, Chairperson
B.E (Sindh University Engineering College)
PhD (Sheffield University)
Professor

Suhail Kazi
B.E (MUET)
MCS (ISRA)
PhD (UTM, Malaysia)
Associate Professor

Shoukat Ali Noonari
M.E (MUET)
Lecturer

Mansaf Ali Abro
B.E(Mechnical) MUET Jamshoro
M.E (Mechatronics) MUET Jamshoro
Lecturer

Ameen Khan
B.E (MUET)
Lab Engineer

Qurrban Ali Qambrani
DAE- (Govt. Poly-Technic, Hyderabad)
Workshop Superintendent

Department of Computer Science
Mutee-u-Rahman, Chairperson
B.Sc (Hons), M.Sc Computer Science
M. Phil (Sindh), PhD Computer Science (Isra)
Associate Professor

Ahsanullah Baloch
M.Sc (Sindh), PhD (UK), Post Doc (UK)
Professor

Ahmed Waliullah Kazi
BCS (Hons), MCS (Isra)
MS Computer Science (AIT, Thailand)
PhD Computer Science (SUNY Stony Brook, USA)
Associate Professor

Kamran Karim Bukhsh
Ph.D (University of Malaya)
Associate Professor

Mohammad Arshad Shaikh
BCS (Karachi), MS Computer Science (USA)
Assistant Professor

Amber Baig
B.Sc (Hons), M.Sc Computer Science (Sindh)
Assistant Professor

Sehrish Niaz Abrejo
BCS (Hons) (Isra), MCS (Isra)
Assistant Professor

Adnan Asghar Ali
BS Electronics (Sindh)
Senior Lecturer

Shadia Khatri
BS (Telecommunication) (Sindh)
Senior Lecturer

Imtiaz Koondhar
BS (IT) Hons, SAU Tando Jam
MS Computer Science (Isra)
Lecturer

Muhammad Nabeel Khan
MS (Electronics)
Lecturer

FACULTY OF COMMERCE, ECONOMICS & MANAGEMENT SCIENCES
Abdul Subhan Kazi, Dean FCE&MS
B.Com (Sindh), MBA Marketing (Isra), PhD (Isra)
Professor

Department of Management Sciences
Qamaruddin Mahar, Chairperson
DVM (SAU, Tandojam)
MBA (London, UK)
MA (Economics), (Sindh), PhD (Isra)
Associate Professor

Mohammad Nadeem Qureshi
M.Com (Sindh), Ph.D (B.Z.U Multan)
Assistant Professor

Najeeb Hassan Brohi
BBA (Hons), (EMU, Cyprus)
MBA (University of Leicester, UK)
Adjunct Assistant Professor

Shabina Shaikh
BCS, MBA (Sindh), M. Phil (Isra)
Assistant Professor

Zafar A. Siddiqi
M.A Economics (Karachi), MBA (Preston)
Assistant Professor

Yasra Aslam
MBA Marketing (Sindh)
Assistant Professor

Shazia Kazi
P.hD (Universiti Teknologi Malaysia)
Assistant Professor

Vivake Anand
Ph.D. (Huazhong University of Science & Technology, China)
Assistant Professor

Kinza Yousfani
MBA Finance (Isra), M. Phil (Isra)
Assistant Professor

Mansoor Ahmed Golo
M.Phil (Isra)
Lecturer

Annam Inayat
MBA (Isra University)
Lecturer

Naina Qadri
MS (Mehran University)
Lecturer

INTER-FACULTY TEACHING STAFF
Mir Afzal Ahmed Talpur
B. Sc (Hons), M. Sc Mathematics (Sindh)
Assistant Professor

Jahanzeb Rana
Ph.D (JamiaIslamia, Clifton, Karachi)
Ph.D (Federal Urdu University, Karachi)
Assistant Professor

Rabia Siddiqui
BS (Mathematics) (Sindh)
Lecturer

Inayat Ali Dal
M.A (Eng) (NUML)
Lecturer

Wafa Pathan
BS English, MPhil (Linguistics) (Sindh)
Lecturer