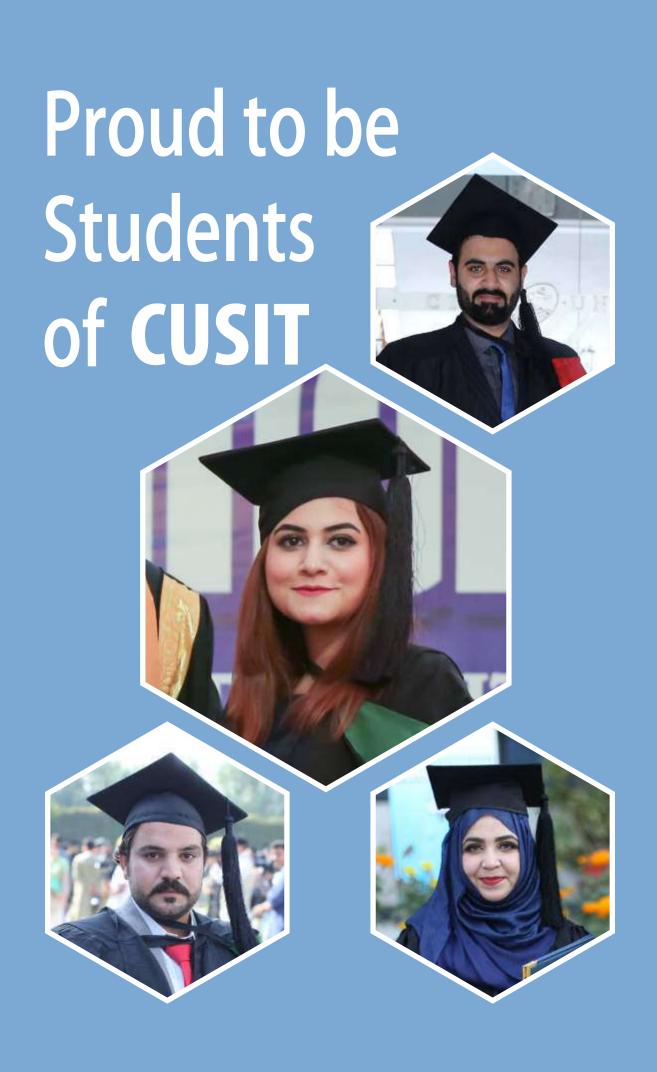


# FOUNDER OF THE NATION Quaid-i-Azam Muhammad Ali Jinnah

We have to build up the character of our future generations which means the highest sense of honour, integrity, selfless service to the nation and a sense of responsibility.

We have to see that they are fully qualified and equipped to play their part in the various branches of economic life in a manner which will do honour to Pakistan.

> Message to All Pakistan Educational Conference in Karachi, 27th November, 1947







Our Vision, Mission	12
Why City University?	15
ocation	17
ntroduction	18
Board of Governors	SI 20 ERSTIY
Management / Administration	21
mportant Information	26 The second se
Scholarships	30
Disciplinary Rules & Regulations	32
acilities	34
City University's Sports Initiativescity	40
Student Life in CUSIT	42
Convocation	44
City University of Science & IT. Alumni Association (CUSITAA	A) 46
Academic Programs	47
Department of Management Sciences	48
Department of Computer Science	65
Department of Electrical Engineering	77
Department of Civil Engineering	88
Department of Architecture	96
Department of English	103
Department of Mathematics	109
Department of Education	115
Department of Health Sciences	124
CU-CSR	132
	135
Office of Research Innovation & Commercialization (ORIC) Quality Enhancement Cell (QEC)	137





# Message

from the Founder / Chairman,
Peshawar Model Educational Institutes (PMEI)
Mohammad Zahoor Sethi

By the grace of Almighty Allah, we have entered the 20th year of establishing City University of Science & Information Technology (CUSIT), Peshawar. We had our difficult moments, but with the prayers of our well-wishers and hard work by all concerned, we managed to complete our initial 19 years successfully.

It has always been my desire to promote quality education in our province. I am inspired by my respectable cousin, (Late) Professor Muhammad Ismail Sethi, former Vice Chancellor, University of Peshawar and Gomal University, whose contributions to the academic field are known far and wide. Today, I can proudly claim that I have been sincerely engaged in contributing my share to this noble cause.

Newly established academic institutions take a long time before they become well-known and reputable for their academic achievements.

We have strived for excellence right from the beginning and our experiences with Peshawar Model Schools and Peshawar Model Degree Colleges for boys and girls have helped us to pursue high standards of academic excellence.

We have been vigorously pursuing our dream of achieving excellence in CUSIT by providing highly qualified faculty, a challenging curriculum and an efficient administrative team. We firmly believe in producing well-qualified and competent graduates. Therefore, we have high expectations from our students, administrative staff and faculty. I am sure that as we progress, Insha Allah, CUSIT will compete with the best universities of the country, and our graduates would always be in great demand to fulfil the challenging needs of our nation.

I wish you all the best for achieving your goals. May Allah bless us with His Divine Guidance to carry out this noble mission. Ameen!



# from the President, City University Mohammad Sabur Sethi

It is an established fact that education plays a vital role in the survival and success of individuals as well as nations. In this modern age, no nation can progress without education. It is necessary for us to produce graduates of the highest intellectual caliber, and thus to find a respectable place amongst the developed nations of the world. Islam, our source of inspiration, guides us towards the pursuit of knowledge and education. It is thus our duty to follow the golden principles of Islam and excel in both the religious and the modern education.

Its is a source of great satisfaction that, by the grace of Almighty Allah, the university has progressed by gigantic and bounds. It has gained a coveted position among the private sector universities of Pakistan, and is enjoying the trust and confidence of students sand parents.

Here, at the City University of Science & Information Technology (CUSIT), Peshawar, we are striving for excellence through hard-work, dedication, devotion and sincerity towards our goals. Your confidence in the CUSIT motivates us to keep working hard, and to provide you with the best possible educational environment.

We have put all our efforts into providing a congenial environment to students for grooming them into capable professionals. The faculty, the administration and the management are committed to attain these goals. Now, it is genuinely expected that the students of the university shall work hard to prove their worth and promote the name of their alma-mater.



## from the Vice President, City University Prof. Dr. Mohammd Asrar Khattak

It is a matter of immense satisfaction that CUSIT has emerged as renowned seat of learning within a short span of 19 years. It has accomplished much and has been making all-round progress.

The university is committed to providing quality education and the qualification gained by our students is recognized and respected by the employers and academics. The programs of this university are accredited with bodies like Pakistan Engineering Council & National Computing Education Accreditation Council.

The pragmatic approach of this institution has developed a favorable system which is honored and followed by all concerned. Here, the motto is quality not quantity. The quality of the students is directly linked with the quality of the faculty. Our well qualified and talented faculty is playing a great role in bringing improvement both in academics and research.

This rising standard of academic grooming, quality of research, number of graduates produced and growing number of research publications have earned a higher category and ranking for the university at national and international level.

Student's welfare fund has been established to help deserving and needy students. In fact, students are the main focus of our hopes and efforts, and it is a pleasure for me that the students and parents understand our efforts & sincerity.



from the Vice Chancellor,
City University
Prof. Dr. Syed Minhaj-Ul-Hassan

Dear Students, Welcome to the City University of Science and Information Technology (CUSIT), Peshawar. I hope and wish you a very productive and peaceful stay in the University. Established in 2001 CUSIT is now one of the leading and pioneer private sector universities in Khyber Pakhtunkhwa. It has its own purpose-built campus which continues to grow according to its needs.

The University offers courses in engineering, health sciences, management sciences, architecture, social sciences, aArts and humanities at BS, MS and PhD level. The University is proud of its teaching faculty who are not only talented in their own fields but are very cooperative with the students as well. We have one of the best teaching faculty amongst the private sector universities. Along with the teaching faculty you shall also find the support staff, right from top to the lower cadre, supportive and friendly. CUSIT also provides opportunities to students to explore the avenues of learning in other well-known and reputed national and international academic institutions as it has signed a number of MoUs with them. The University endeavors to provide opportunities to its students to have practical knowledge in the corporate sector as well as other relevant industries. The CUSIT alumni working in different government and private institutions at very important positions testifies our claim of quality education as without advanced knowledge in their own field and polished personalities they would not have been able to compete in this very competitive world and won positions for themselves.

In this modern world of digital and information technologies no academic institution can groom its students without the provision of access to internet and other related facilities. The University has established well-equipped computer labs for this purpose where the students can do their research and complete their research tasks in a very conducive environment. To augment the students endeavors in search of knowledge the University has also established a well-furbished library, which constantly gets new titles in different fields of knowledge for the benefit of the students and staff. The qualified library staff is always ready to help the students in search of their related topics and other research projects.

CUSIT offers a number of scholarships, aid in grants, fee concessions and other kind of monetary concessions to the talented students. The University also offers some scholarships on need basis. Overall, the University spends 14 per cent of its total revenue for this purpose that makes millions of rupees available to the students each year in this category.

CUSIT provides to the students an environment of learning in the class rooms as well as outside the class rooms. To develop and polish the student's talent in diversified manner the University has established a number of Societies which the students can join and improve their talents. The University also provides opportunities to the students to show and develop their talents in the sports as well because the University believes that healthy body helps in the growth of mental capabilities.

I hope and wish you a very healthy, friendly, and fruitful time with us in CUSIT.

### **Our Vision** To be one of the leading Universities that generates, propagates and disseminates Knowledge in cutting edge Sciences, **Engineering & Technologies and Social** Sciences to provide solutions to the contemporary problems and directions for the future. **Our Mission** To deliver high quality academic programs in Sciences, Engineering Technologies, Social Sciences and Humanities, based on State of the Art Knowledge, Skills, Attitude. To attract and nurture quality minds, students and Faculty of high caliber who will contribute towards the national and global knowledge economy for the socioeconomic development at regional and global levels. To develop and nurture strong research culture & climate within a dynamic, efficient and effective team of academic and support staff.

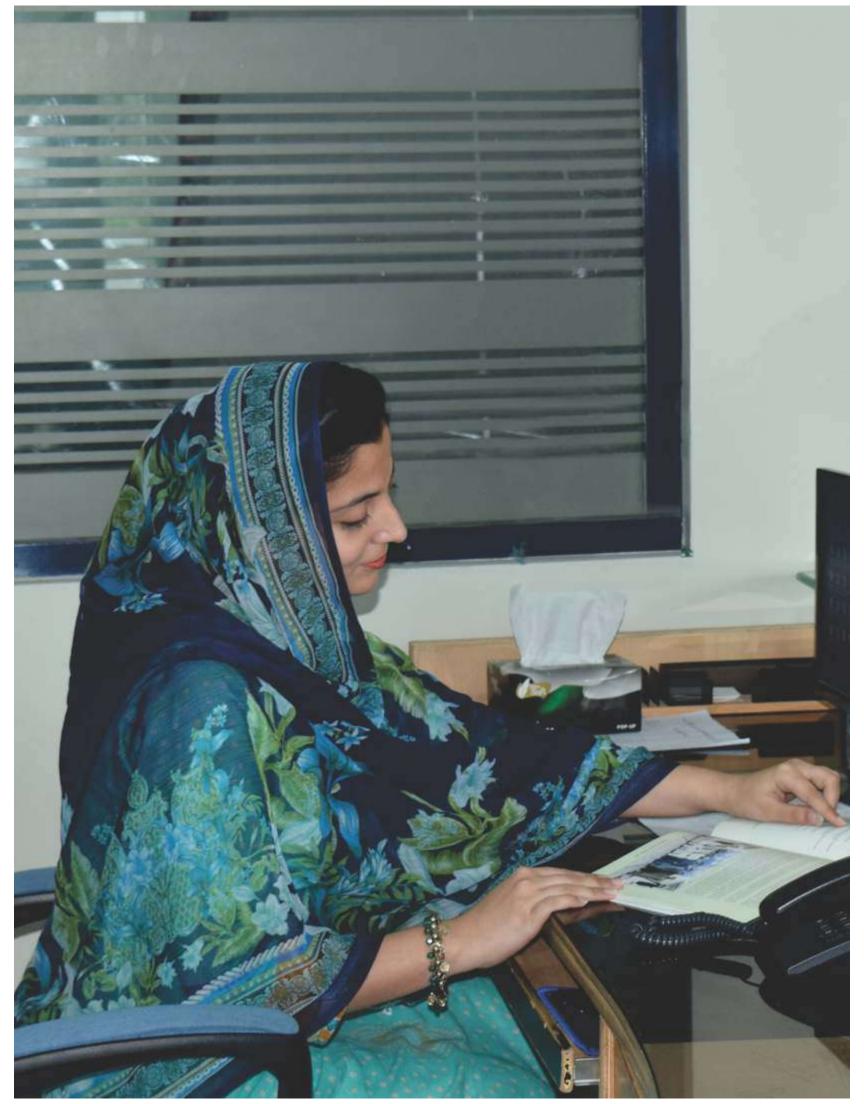
To be financially self-sustaining through

collaboration and commercialization of

high quality education, cutting edge research, national and international

R&D products and services.







# Why City University?

- Chartered by the Government of Khyber Pakhtunkhwa
- Recognized by the Higher Education Commission (HEC)
- Accredited by Pakistan Engineering Council (PEC)
- Accredited by National Computing Education Accreditation Council (NCEAC)
- Permitted by Pakistan Council of Architects and Town Planners (PCATP)
- Placed in the highest category "W" by the HEC
- Vast experience and excellent reputation of the institution in providing quality education at an affordable fee structure
- Emphasis on discipline and character-building
- Certified faculty and professional environment
- Job-oriented degree programmes
- Students counselling and job-placement services
- Full/partial scholarships to meritorious/needy students
- Purpose-built own campus, spread over an area of 90 kanals with a covered area of about 1,00,000 sq. ft. of main building and 25,000 sq. ft. of faculty of Architecture and Civil Engineering.
- Spacious library having quality books, magazines,
   CDs and Digital Library
- State-of-the-art Computer Labs and latest presentation equipment
- Centrally air-conditioned building
- For uninterrupted power supply to the whole campus, auto-start stand-by Diesel Electricity Generators & UPSs
- Pleasant learning and politics-fee environment
- Free internet facility with wi-fi services
- Free on-campus medical assistance
- Spacious parking for cars, motorcycles, cycles etc.
- Specious Lawns, Mosque and Bookshop facilities
- Transport facility for students and staff
- Cafeteria with refreshments at reasonable prices
- Recreational Centre for in-door games





## Location

City University of Science & Information Technology (CUSIT), Peshawar is located in the City of Peshawar, the capital of the Khyber Pakhtunkhwa, Pakistan.

Peshawar is one of the oldest living cities in South Asia. Lying at the foot of the world famous Khyber Pass, this historical city has been the gateway to Central Asia, providing a vital commercial, cultural and religious link. The mighty hordes of invaders including Aryans, Scythians, Persians, Bactrians, Kushans, Huns, Turks, Mongols and Mughals have passed through it before moving forward to India. In the past, the city has been mentioned by various names like "Pushpapura" meaning the "City of Flowers" but the present name Peshawar, meaning "The Place at the Frontier" was given by the Mughal Emperor Akbar.

Peshawar, inspite of great stresses, has retained its old complexion. A walk through the city blind alleys will tell you its centuries old grandeur and complexion. Remains of the old walled city and its gates tell the story of the good old days. It is undoubtedly a true metropolis of the Orient. Hospitality is never held back in this land of contrast and beauty. Some of the attractions at the city include Bala Hisar Fort, the 17th century Mahabat Khan Mosque, monuments of Buddhist era, Peshawar Museum, Qissa Khawani Bazar, city centre square-the Chowk Yadgar, reputed educational institutions and the like.

The city is linked with the world through an international airport. It has good network of roads and railways with other cities of Pakistan. Public transport, intra-city and inter-city, is available. Hotel accommodation is available from low to very expensive. Eating areas are available all over the town offering traditional and international cuisines. Shopping areas are generally located in the old city and cantonment area. Weather in Peshawar is extreme, both in summer and winter. Summer months are from April to September with temperature ranging from 25°C - 45°C and winter from November to March with temperature 5°C - 12°C.

AND DESCRIPTION OF THE PARTY AND PARTY.



#### Introduction

City University of Science & Information Technology, (CUSIT) Peshawar is one of the first private-sector universities, chartered by the government of Khyber Pakhtunkhwa, recognized by the Higher Education Commission (HEC), accredited by the Pakistan Engineering Council (PEC). The University is an extension of Peshawar Model Educational Institute (PMEI), founded in 1979 with an aim to impart quality education at an affordable cost.

Initially, a primary school was established by Muhammad Zahoor Sethi (Founder), comprising just one moderate campus with 300 students. But in due course of time the continuous efforts of our highly qualified faculty and dedicated management paid off and resulted in the establishment of nine separate school campuses, three degree college campuses for boys and two degree college campuses for girls, with a combined strength of over 23, 000 students.

Recognizing the extraordinary reputation of PMEI in providing quality education from primary to bachelor level, City University of Science & Information Technology, Peshawar was granted a charter as a university from the government of Khyber Pakhtunkhwa on 30th August, 2001.

The University was inaugurated by Lt. Gen. (R) Syed Iftikhar Hussain Shah, the then Governor, Khyber Pakhtunkhwa on October 06, 2001.

Dr. Abdul Qadeer Khan was also present at the inauguration. The foundation stone of the new campus at Dalazak Road was laid by the then Governor, Khyber Pakhutunkhwa, Mr. Khalil ur Rehman on 19th May, 2005. The new campus is spread at an area of over 90 kanals, with a covered area of 100,000 sq. ft. This campus started its full-fledged academic activities since 11th March, 2009.

IT was inaugurated by the then Speaker, Provincial Assembly, Mr. Kiramat Ullah Khan Chagharmati on 12th March, 2011.

The University is managed through university bodies such as Board of Governors, Academic Council, Board of Advanced Studies & Research, Board of Faculties, Selection Board and Finance & Planning Committee. The day-to day affairs of the University are managed by the Vice Chancellor with the help of Deans and Heads of Departments.

All the efforts of City University's management, administration and faculty are directed to produce competent and efficient professionals who will effectively contribute in taking Pakistan to technological and economic glories.

## Academic Collaborations

#### **National / International Collaborations Academic Linkages:**

For collaboration in teaching and research, the university has established links with many educational institutions in UK and USA, such as:

- 1. Regents Business School, City University, London
- 2. Bournemouth University, (UK)
- 3. Department of Construction Management, East Carolina University, USA
- 4. McWhorter School of Building Science, Auburn University, USA

They accept our credit hours of first three years of bachelor's degree and give admission in the final year. One of our students Mr. Atiq-ur-Rehman has already earned a bachelor degree from Bournemouth University U.K through this arrangement.

#### University entered into MoU with the following institutes:

1. Sudan University of Science & IT	9. DICLE University, Turkey
2. Open University, Malaysia	10. Nile Valley University, Sudan
3. Sultan Idris Education University,	11. Bursa Technical University, Bursa, Turkey (BTU)
Tanjong Malim, Perak, Malaysia	12. Khushhali Bank / USAID
4. Islamic University, Uganda	13. Pembrokeshire College, Haverfordwest, UK.
5. Kandhar University, Afghanistan	14. Regent Business School, City University, London
6. Islamic School of Arts, Iran	15. Bournemouth University, UK
7. University of Kassala, Sudan	16. Ghulam Ishaq Khan Institute, Topi Swabi
8. University GAZINTEP Turkey	17. Indus University Karachi

#### **Collaborations with National / International Corporate Linkages:**

- 1. Ihsan Trust/ Meezan Bank
- 2. Pakistan Red Crescent Society (PRCS)
- 3. KPIT Board
- 4. Complete Human Resource Solutions (CHRS) Islamabad
- 5. Eastern Federal Union (EFU)
- 6. Momentum Ventures (Pvt) Ltd. Islamabad
- 7. SysComp International (Pvt Ltd. Islamabad
- 8. Women's Digital League F-30, Block-7, KDA Scheme-5, Kehkashan, Clifton, Karachi
- 9. ABE-The Association of Business Executives-UK
- 10. Nestle Pakistan Limited
- 11. Allworld Network Inc.
- 12. Securities & Exchange Commission of Pakistan (SECP)
- 13. Entrepreneurship Development Institute (Pvt.) Ltd. Islamabad
- 14. Khyber Pakhtunkhwa Chamber of Commerce & Industry (KPCCI)
- 15. Nishat Mills Ltd. Lahore.
- 16. Soft Skills Development Institute International (SSDII) USA
- 17. Khawateen Rozgar Services Pvt. Ltd.
- 18. C&W Department, Government of Khyber Pakhtunkhwa
- 19. Peshawar Electric Supply Company (PESCO)
- 20. Akhuwat Foundation

# **Board of Governors**

Chairman

Prof. Dr. Syed Minhaj-Ul-Hassan

Vice Chancellor, CUSIT

Secretary

**Higher Education Commission,** 

Khyber Pakhtunkhawa

Mr. Hifz ur Rehman

Former Secretary, SG&D

Khyber Pakhtunkhawa

Mr. Muhammad Azam Khan

Former Chief Secretary, Govt. of Khyber Pakhtunkhwa

Justice (Rtd) Mohammad Ghazanfar

Peshawar High Court

Prof. Dr. Syed Muhammad Hasan Zaidi

Dean SEECS, NUST Islamabad

**Prof. Dr. Nasir Jamal** 

Professor Department of English, University of Peshawar Dr. Farhad Ali

Dean of Faculty of Science & I.T, CUSIT

Mr. Zarak Khan Khattak

Chief Executive Officer, (CEO) FF Steel,

Peshawar

Mr. Khalid Sultan Khawaja

Former Managing Director, Frontier Education Foundation

CEO, Tariq Sultan & Co.

Prof. Dr. Nasser Ali Khan

Project Director, PAF-IAST, Haripur

Prof. Dr. Rasool Jan

Vice Chancellor,

University of Poonch

**Prof. Dr. Razia Sultana** 

Vice Chancellor,

Shaheed Benazir Bhutto Women University,

Peshawar

Mr. Amjad Ali

Secretary / Registrar, CUSIT



# **Management / Administration**



#### Patron

The Honourable Governor of KP

#### **President**

Mohammad Sabur Sethi

#### **Vice President**

Prof. Dr. Mohammad Asrar Khattak

#### **Vice Chancellor**

Prof. Dr. Syed Minhaj-Ul-Hassan

#### Registrar

Amjad Ali

#### **Controller of Examinations**

Zafar Ahmed

#### **Controller of Finance**

Shakeel Ahmed Sethi

### Director, Administration & Coordination

Amjad Ali





### **City University**

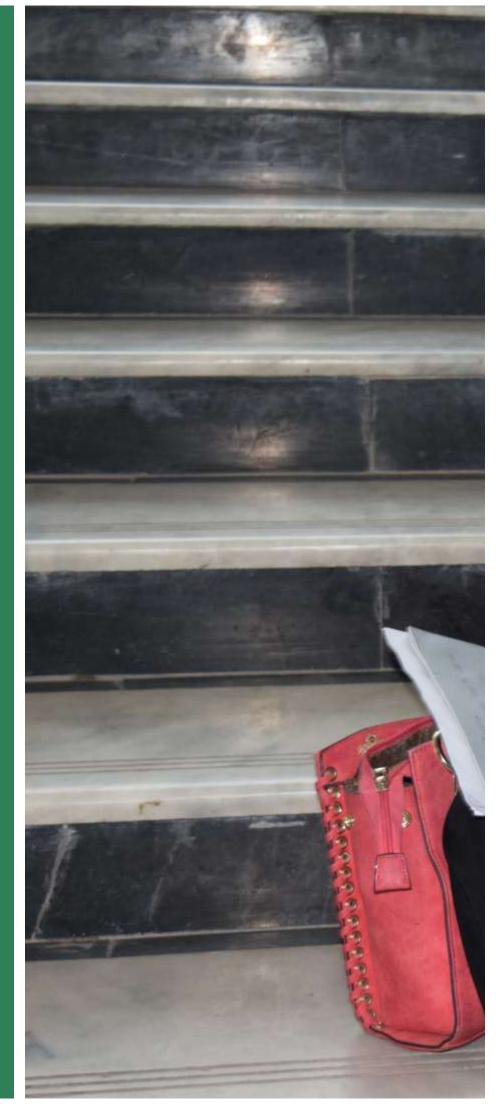
invites applications for admissions to its various programs twice a year, once in Spring and then in fall (for more detailed information see CUSIT website http://www.cup.edu.pk). However, faculty of computer science and faculty of engineering announce admissions in fall only. Students who are interested to apply are advised to visit the campus for getting more detailed information about admissions to their respective programs.

Applications, duly filled in, and supported by all required documents are accepted at the admission office within the announced deadline.

On acceptance of an application form bearing the reference number, admission test date , date of interview, merit list of the successful candidates is announced then.

On deposit of dues, within the dead line, students are issued their registration number and are given the courses to study in the first semester. Before commencement of classes, students are expected to attend an orientation session and collect their time table from the students' services office.

Every year, CUSIT attracts some of the most talented/gifted students. The network of our alumni is fast spreading in the corporate world and other fields. If you are looking for quality education and facilities, then CUSIT is the right choice for you. From classes to co-curriculars, volunteering and participating, you will be groomed to succeed at CUSIT and later in your practical life.





#### **Notes**

- Full information is set out in the ordinance, statutes, regulations, rules, policies and procedures of the university. Copies are available on request from the Registrar's office.
- Detailed information about the programmes offered and the courses referred to in this prospectus is available from the department concerned.
- The guidelines and instructions of the Higher Education Commission (HEC) regrading curricula development, credit hours, degree duration etc. for the award of degree are strictly implemented. Changes in the foregoing degree programmes may be implemented as and when directed by the HEC.
- In the event of circumstances beyond its control, the university cannot guarantee the provision of all the schemes and services, advertised in the prospectus, . Therefore, it reserves the right to cancel / make any change in the programme/ courses sequence & their credit hours without any notice, should become necessary.
- Alteration / addition in the rules and regulations may be made from time-to-time. It is the students' responsibility to incorporate and be aware of such amendments as will be promulgated in the form of notices etc.
- All students are expected to behave in an orderly and disciplined way. Ignorance of rules and regulations (academic / administrative) is no excuse for its violation.
- In accepting an offer to be a student of the university, he/she consents to incorporation of this notice as the term of contract between him/her and the university.
- Great care has been taken in compiling this prospectus. It is only for the general guidance of prospective students. For up-to-date information, please contact the Registrar's office.
- This prospectus refers to programmes and courses offered from August, 2020 & Onwards.

#### **Semester System**

There will be two semesters in a year, each spreading over 18 weeks. At the end of each semester, one to two weeks will be allowed for the examination and compilation of results. Students wishing to register in the next semester must complete their registration within one week of the declaration of results.

#### **Teaching Organization**

Various courses will be taught in the campus of the university and other approved centres through lectures, seminars, demonstrations, practical work in laboratories, group discussions, and other methods of instructions approved by the Academic Council.

Teaching in each Department / Institute / Centre will be conducted by the university lecturers or such other persons as may be declared so by the university regulations.

Teaching in each Department / Institute / Centre will be organized through courses specified for each programme and approved by the relevant university bodies.

No course offered unless there are at least 15 students enrolled for that course. In special cases, however, the competent authority may waive-off this requirement.

#### **Medium of Instruction**

English will be the medium of instruction and examination, except in case of Islamic Studies (compulsory) which may be in Urdu.

#### **Deficiency Make Up Course(s)**

If a candidate lacks the background knowledge for a specific programme of interest, he/she will have to make-up the deficiency by taking the additional course(s) as may be prescribed by the concerned university authority.

#### **Application Procedure**

Application for admission must be submitted on the form enclosed with this prospectus. Photocopy or computer print out of the form will not be accepted.

However, international students applying from outside Pakistan may print out the admission form from our website. Incomplete applications in any respect will not be considered.

Attested copies of certificates and testimonials should be submitted with the application form.

The applications for admission should reach the Admissions Office on or before the specified date.

For admission to a degree programme, applicants must qualify the entry test and interview to be conducted by the university or any other Agency authorised by it like ETEA, NTS etc.

The merit for admission will be determined on the basis of entry test, interview and academic record.

#### **Transfer of Credits**

Students desiring to transfer their credits, earned at other institutions, will be accepted under the following conditions:

- a. Credits have been earned from institutions recognized / accredited by HEC.
- b. Original transcript is produced along with photocopy.
- c. No credit hours of a course will be transferred if the grade is less than C for undergraduate and B for graduate.
- d. Credits from other institution will be evaluated by the equivalence / evaluation committee on course-to-course basis with courses offered by the University.
- e. Course outlines should match minimum 75% with that of the University.
- f. Maximum credit equivalent to 40% of the total credits of the degree programme of City University may be accepted.
- g. Grades points of the transferred courses will not be counted towards CGPA of courses of the University.
- h. The Transferred courses will appear in the full transcript of the University.
- i. Character certificate, from the previous institution is produced.
- J In case of acceptance and willingness of the student for admission, he/she will have to produce migration certificate from the previous institution.
- k. Student will pay credit transfer fee for each transferred credit

#### **Restrictions and Declarations**

All those candidates who were punished by their previous institutions or universities on account of indiscipline or undesirable activities will not be admitted in the university.

The authority concerned may refuse admission to a student who, in its opinion, has malafide intentions or undesirable background.

Students who are admitted to the university and their parents/guardians have to give an undertaking to abide by the rules and regulations of the university and other instructions as may be issued by the competent authority from time-to time.

#### **Admission Authority**

Admission to the programmes will be made by the Dean / Head of the department concerned on the recommendation of the Admission Committee.

The admission of a candidate to a programme will initially be provisional, and will be confirmed after verification of his / her testimonials and documents.

#### Registration

At the beginning of each semester, a student must register in the courses to be studied on the prescribed Course Registration Form.

Only the courses required to complete a specific degree programme, will be selected and offered by the appointed committee from the pool of courses given in this prospectus.

At the beginning of each semester, students will be offered full load of courses according to their degree programme, but they will have the choice to select fewer courses than the full load for any reason whatsoever. However, the maximum duration for completing a degree program should not exceed the limits given in the following table:

Programme	Years of Education	Duration		Total
		Minimum	Maximum	Semesters
BBA/BS-SE/BS-CS/BS- English/BS-Maths/ML	Г 16	4 years	5 years	8
B.Sc. (Electrical/Civil Engineering) Technolog	gy 16/17	4 years	5 years	8
B.Sc. (Elect/Civil Engineering)	16	4 years	7 years	8
B. Arch/DPT	17	5 years	6 years	10
Master	16	2 years	3 years	4
MBA 1 1/2 years	17 1/2	1 1/2 years	2 1/2 years	3
MS/M.Phil	18	2 years	3 years	4
Ph.D	21	3 years	8 years	6

If a student fails in any course in a semester, he/she will have to re-register and re-take the failed course (including classes) whenever the department concerned offers it.

Students will not be allowed to register for a course whose pre-requisite has either been failed or not taken yet.

The registration will not be complete unless a student makes the required initial payment and submits the required documents to the Admissions / Student Services Office.

Registration and required payment must be completed by the dates notified for this purpose, provided that the authority concerned may, in special circumstances, permit a student to register within two weeks after the commencement of a semester.

A student admitted to a programme must register himself/herself for each semester, failing which his/her admission will stand suspended. In case he/she does not register for two consecutive semesters, his/her admission will be cancelled. Readmission of such a student will be considered as a new admission case.

#### Withdrawal/Change of Course(s)

When a course, for which a student is registered, cannot be offered according to the announced programme, he / she may take an alternative course. However, this must be done not later than 2 weeks after the due date of registration.

A student, with the consent of the concerned Head of Department, may be allowed to: (1) Change a course within 1 week of the commencement of a semester, or (2) Withdraw from a course within 4 weeks of the commencement of a semester.

Withdrawn courses will appear on transcript with letter grade "W".

#### **Attendance Policy**

The educational process at City University comprises to a large extent, on regular classes, make-up classes, laboratory work, in-semester tests and examinations. Failure to attend any of these can influence academic record, lead to dropping from the course, award of "F" grade or expulsion from the university.

Students must meet the attendance criterion in every course. Students with less than 75% attendance, in theory and practical / laboratory work separately, of any course, will not be allowed to sit in the final examination of that particular course.

If a student remains absent for one week continuously from all classes without any intimation, his / her admission will be suspended.

Students must take the required number of quizzes /

tests / examinations / assignments / projects, and fulfill other evaluation criteria set by the faculty. In case a student joins a course after it has started, he / she will be responsible for any missed quizzes, assignments, and lectures. No marks will be given for missed quizzes while make-up tests, assignments, projects, and labs can be arranged in consultation with the teacher / Head of Department.

The Head of Department shall grant leave to a student on the recommendation of the concerned teacher(s). The production of a medical certificate in support of leave shall be compulsory for an ailing student.

#### Fee

Total semester fee is payable in three equal instalments before admission / Registration, Mid Term examination and Final Term examination on or before the notified dates. Failing to do so will restrict the students from appearing in the respective examinations.

Course fee will be calculated as follows:

Total no. of credit hours in a semester x Fee per credit hour.

Students, who apply for Exemption of Course(s) / Transfer of Credits under the university rules shall pay the relevant "processing fee" for each course.

The fee may be increased by a maximum of 20% annually due to inflation.

#### **Fee Refund Schedule**

Fee Deposited at the time of admission by fresh students or before the start of the semester, shall only be refunded according to the following criteria:

- Upto 7th day of convene of classes : 100%
- From 8th-15th day of convene of classes: 50%
- From 16th day of convene of classes: 0%

#### **Examination and Evaluation**

Each course shall carry 100 marks. Students will be assessed for 50% of the marks during the semester and 50% at the end of the semester.

The evaluation, in theory and laboratory work, during the semester shall be made by the teacher through tests, quizzes, time-constraint / group / major assignments, class participation & attendance, presentations, mid term examination etc.

There will be a final examination of the remaining 50% marks at the end of semester. For a course which has theory and laboratory work / practical, the student has to pass both separately. Failing in any one will result in 'F' grade and the course will have to be repeated. The university may engage external examiners for the final examination for quality control purposes. Each course offered at the university is allocated certain credit hours, which is the measure of the amount of work required for the course. For theory courses each credit hour means one contact hour of lecture while for laboratory courses each credit hour means three contact hours of practical work.

At the end of each semester, the students will be awarded letter grades and grade points according to percentage marks obtained in each course. Letter grades "W" (for withdrawn) "I" (for incomplete) and "EX" (for course exemption) will not count towards Semester Grade Point Average (SGPA)/Cumulative Grade Point Average (CGPA) computation. The letter grade "F" will be counted towards SGPA / CGPA computation. The grade points corresponding to the HEC grading system are as below:

<b>Percentage Marks</b>	<b>Grade Point</b>	<b>Letter Grade</b>
85 & above	4.00	Α
80 - 84	3.67	A-
75 - 79	3.33	B+
71 - 74	3.00	В
68 - 70	2.67	B-
64 - 67	2.33	C+
61 - 63	2.00	С
58 - 60	1.67	C-
54 - 57	1.30	D+
50 - 53	1.00	D
below 50	0.00	F

#### **Acceptable Grades and CGPA**

	Minimum Passing Grades			Minimum Degree	Improvement	
Programs	Percentage Marks	Grade Points	Letter Grade	Awarding Requirement in CGPA	Allowed on Grades	
Bachelor	50-53	1.00	D	2.00	C- D+ D	
Master	50-53	1.00	D	2.00	C- D+ D	
MS/M.Phil	61-63	2.00	С	2.50	C+ C	
Ph.D	68-70	2.67	В-	3	B-	

The Controller of Examinations shall issue transcripts to all students on completion of each semester examination and also on completion of a specific degree programme. Request for additional copy of transcript shall be entertained on payment of requisite charges.

Students must take their examinations in a disciplined manner. Instances of indiscipline and unfair means will be dealt with according to the Unfair Means (UFM) regulations.

#### Calculation of SGPA/CGPA

SGPA/CGPA is calculated at the end of each semester according to the following formula:

Sum over Courses in Semester (Course Credit Hours x Grade Point Earned)

**SGPA** 

**Total Semester Credit Hours** 

Sum over all taken Courses in all Semesters (Course Credit Hours x Grade Point Earned)

**CGPA** 

Total Credit Hours Taken in all Semesters

#### **Academic Progress**

Students wishing to improve their grade in a course shall be allowed to do so by re-taking the complete course according to the rules.

Normal academic progress of a student refers to maintenance of minimum CGPA required for award of the degree. A student who falls below the minimum CGPA will be placed on "First Academic Probation" for the next semester and served a written warning. If a student does not come out of probation by increasing his/her CGPA to the minimum desired CGPA, then again he/she will go on "Last Academic Probation". If the student does not come out in the "Last Academic Probation" by achieving the minimum desired CGPA, he/she shall be dropped out from the university.

# **Scholarships**

The University offers generous scholarships to meritorious students based on their academic achievements. For further information, please contact the Admissions Office:

#### 1. Open Merit Scholarship - I

- (i) Waiver: 100% Tuition Fee (from 1st semester & onwards)
- (ii) Eligibility: At least 75% marks or CGPA 3.33 / 4.00 in the preceding exam(Intermediate/Bachelor)
- (iii) Renewal: A minimum of CGPA 3.33 / 4.00 in the preceding semester with full load of courses passed
- (iv) No. of Scholarships: All eligible at the time of Admission. For BBA/BS A&F/BS-SE/BS-CS/BS-English/BS-MLT/BS-Mathematics/DPT/BS-Arch Programmes.

#### 2. Open Merit Scholarship - II

- (i) Waiver: 50% Tuition Fee (from 1st semester & onwards)
- (ii) Eligibility: At least 65% marks or CGPA 3.00 / 4.00 in the preceding exam(Intermediate/Bachelor)
- (iii) Renewal: A minimum of CGPA 3.00 / 4.00 in the preceding semester with full load of courses passed
- (iv) No. of Scholarships: All eligible at the time of Admission. For BBA/BS A&F/BS-SE/BS-CS/BS-English/BS-MLT/BS-Mathematics/DPT/BS-Arch Programmes.

#### 3. Merit Scholarship - I

- (i) Waiver: 100% Tuition Fee (from 2nd semester & onwards)
- (ii) Eligibility: A minimum of CGPA 3.33 / 4.00 in the preceding semester with full load of courses passed
- (iii) Renewal: A minimum of CGPA 3.33 / 4.0 in the preceding semester with full load of courses passed
- (iv) No. of Scholarships: 5% of students Merit wise of the Batch excluding the Open Merit Scholarship-I & II. One student per batch for B.Sc. Civil/Electrical Engineering.

#### 4. Merit Scholarship - II

- (i) Waiver: 50% Tuition Fee (from 2nd semester & onwards)
- (ii) Eligibility: A minimum of CGPA 3.00 / 4.00 in the preceding semester with full load of courses passed
- (iii) Renewal: A minimum of CGPA 3.00 / 4.00 in the preceding semester with full load of courses passed
- (iv) No. of Scholarships: 5% of students Merit wise of the Batch excluding the Open Merit Scholarship-I & II. One student per batch for B.Sc. Civil/Electrical Engineering.

#### 5. Goodwill Scholarship - I

- (i) Waiver: 30% Tuition Fee (from 1st semester & onwards)
- (ii) **Eligibility**: Ex-Students of Peshawar Model Educational Institutes (PMEI) / Serving employees of PMEI and their children
- (iii) Renewal: A minimum of 2.50 CGPA in the preceding semester with full load of courses passed
- **(iv) No. of Scholarships :** All eligible at the time of Admission

#### 6. Goodwill Scholarship - II

- (i) Waiver: 20% Tuition Fee (from 1st semester & onwards)
- (ii) **Eligibility**: Ex-Students of Government Schools or Colleges / Retired or Serving Government Employees and their children.
- (iii) Renewal: A minimum of 2.50 CGPA in the preceding semester with full load of courses passed
- **(iv) No. of Scholarships :** All eligible at the time of Admission

#### 7. Females Scholarship

- (i) Waiver: 25% Tuition Fee
- (ii) Eligibility: Females only
- (iii) Renewal: A minimum of 2.50 CGPA in the preceding semester with full load of courses passed
- **(iv) No. of Scholarships :** All eligible at the time of Admission

#### 8. PMEI Employee Scholarship (Weekend Programs)

- (i) Waiver: 100% Tuition Fee
- (ii) **Eligibility**: Staff members of PMS/PMDC/CUSIT who served for 2 years & above.
- (iii) Renewal: A minimum of 2.70 CGPA in the preceding semester with full load of courses passed
- **(iv) No. of Scholarships :** All eligible at the time of Admission

#### **Terms & Conditions Apply**

In all cases where regulations / Policies are silent or where there is difference of opinion about their interpretation, the decision of the committee appointed by the Vice Chancellor will be final, provided that it is not inconsistent with or repugnant to these regulations.



Students are required to have CGPA of at least 2.0 in the Bachelor/Master, 2.5 in M.Phil/MS and 3.0 in Ph.D programmes for award of the final degree.

Students are required to have GP of at least 1.00 in the Bachelor/Master, 2.33 in M.Phil/MS and 2.67 in Ph.D prgram to clear a course.

Students who fail to complete a course for reasons beyond their control may be granted grade incomplete "I". This course can be completed subsequently but before the end of the following semester by depositing the required fee. The grade "I" will then be replaced ty the earned grade.

#### Change of Degree Programme

At bachelor level where possible, students will have the option to change their degree programme before the completion of the first semester.

Students will be responsible to fulfill any deficiency which may occur due to this change.

## **Disciplinary Rules & Regulations**

Exemplary conduct and discipline is expected from CUSIT students. Any student found indulging in conduct unbecoming, in the classroom or on the campus, shall be administered a stern warning. If the defaulting student does not show improvement in behavior/conduct, his/her name will be struck off the University Rolls. Friends and relatives of students are discouraged to visit during the university hours. However, in case of emergency they may contact the Information Office. Visitors are not allowed to enter classrooms, the library or the computer labs.

#### I. D. Cards

All students are required to possess a valid I.D. Card. Students are strictly required to display their Cards before entering University Campus, Labs, and Classrooms. Students are bound to produce I.D. Cards on demand by any University Official.

#### **Dress Code**

For males: Formal pants, slacks, khakis, jeans. dress shirts (neatly tucked in), tee shirts (only Polo necks without offensive words/images painted). Leather Shoes, joggers. shalwar kameez (only on fridays) or by special permission.

For females: Shalwar Kameez with scarf/dupata, trousers with long shirt

scarf/dupata, modest make-up and jewellery, if worn. Each student, male or female, is expected to give a neat look.

Patchy, tattered and shabby looking Jeans, crew neck tee shirts, loafers, chappals are not allowed. Badly creased clothes or disheveled hair are not allowed. Students violating dress code can be fined Rs. 500 and will also not be allowed to attend classes.

#### **Smoking/Drinking/Eating**

CUSIT campus is a smoke free zone. Drinks and eatables can be taken only inside the cafeteria and allowed areas. Drinking/eating at all other places is prohibited.

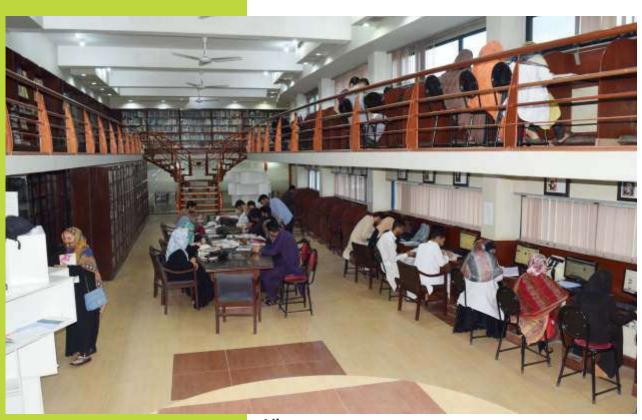


# We Are **Focused on Your Academic Counselling**

Establishment of Integrated Students' Counselling System (ISCS) in Fall-2016 was a step forward in the direction of documentation, tracking, reporting and maintenance of real-time assessment of every Academically Deficient Student (ADS). Monthly meetings of Student Performance Review (SPR) are presided over by the Honourable Vice Chancellor along with Students' Academic and Wellness Counsellor (SAWC), and departmental coordinators. In these meetings, progress over the whole month regarding every ADS is put forth by the SAWC and departmental coordinators. From dealing students struggling with university adjustment, advising about the impact of course selection on the overall academic performance, management of the stress of the course load, intimating the new students with the dos and don'ts of semester system to mitigating exam phobia among students especially newcomers comprise some of the aspects of the scheme of ISCS.

#### **Computer Laboratories**

The Computer Laboratories are equipped with latest computers, printers, multimedia and other presentation equipment for the personal and academic growth of students. High speed Internet facility is available during university hours through wi-fi.



#### Library

A library with a variety of books in multiple disciplines is available for students. The library is also equipped with local & international journals, magazines and CDs. For research purpose, the library is equipped with Computer Systems and the digital library provided by Higher Education Commission (HEC).



**Civil Engineering Laboratories & Workshops** For Civil Engineering programme, Laboratories and Workshops and departmental library are available which give students hands-on practice during their practical, lab-work and workshop practice."

## **Electrical Engineering Laboratories & Workshops**

For Electrical Engineering programmes, Laboratories and Workshops and departmental library are available which give students hands-on practice during their practical, lab-work and workshop practice.



#### **Centrally Air-Conditioned Building**

To face extreme weather conditions, the campus is centrally airconditioned, which helps to provide conducive environment for learning at the desired level.



#### **Book Bank & Bookshop**

A Bookshop is available which caters to the needs of the students regarding book bank, photostat, stationery, basic text-books etc.



## Centrally Air-conditioning, Heating, Electricity Generators and UPSs

The plant provides Centrally Air-conditioning for summer season and Centrally Heating for winter season. To ensure uninterrupted power supply to the whole campus, the university has auto-start stand-by Diesel Electric Generators & UPSs.



#### **Transport**

Transport facility for designated areas and routes is available to students and staff. Further detail on transport are available from the university office.



### **Secure Parking**

For the students, staff and visitors, spacious Parking for cars, motorcycles and cycles etc is available.



#### Cafeteria

A neat and clean cafeteria is available to students which provides snacks, food and beverages. The place also provides them an opportunity to relax, chat and share information.



#### **Recreational Centre**

The university has a Recreational Centre on its premises. A variety of indoor-games such as snooker, table-tennis, chess, etc. are provided to the students for their recreation.



#### Lawns

A lush-green rear lawn and multiple triangular mini front lawns are available which add to the grandeur and beauty of the campus. The flower-beds, ornamental plants and the greenery add to the pleasant environment.



Mosque

An Air-Conditioned mosque with a reasonable capacity is available, which provides sufficient space to offer prayers.



#### **Girls Common Room**

A separate Girls Common Room is available to female students to relax, gossip and wait during their spare time at the campus.









# Student Life

#### **Students Services Office**

The Students Service Office of CUSIT works as a bridge between the students and the university.

S.S.O inspects all the student affairs and provides student services pertinent to programs offered at the university for students. Students are facilitated in providing all the information and are guided for all the rules and regulations of the university. The S.S.O provides all the services in the following matters:

#### **Students' Counselling**

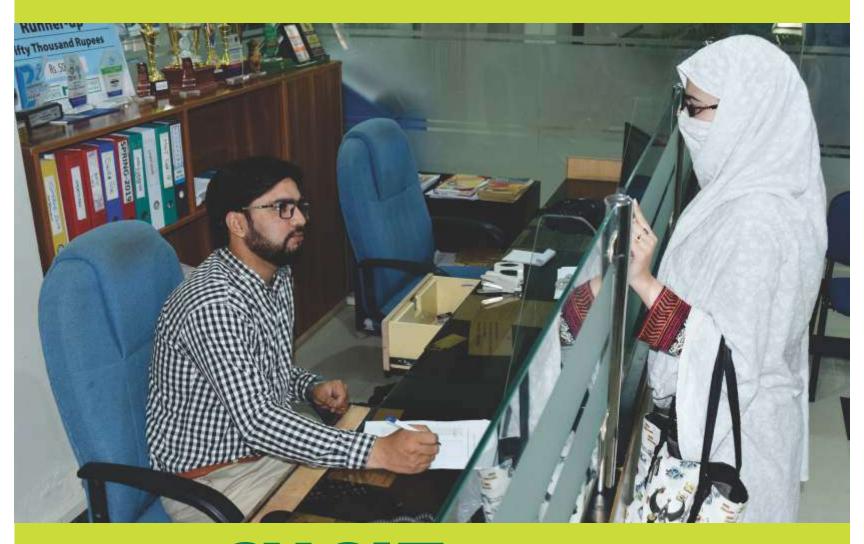
Counselling of freshly admitted as

well as existing students is done through a students' counsellor, available to the students during university hours. The students' counsellor works closely with students to solve their academic as well as administrative problems.

#### **Co-Curricular Activities**

The university encourages students to take part in co-curricular activities. Due importance is given to recreation and exploring the talent of students by providing them means of sports, cultural and stage performances. Students are encouraged to take part in





# in CUSIT

writing & debating in order to enhance their intellectual ability & communication skills. Students enjoy group leisure-trips to tourist spots and hill-stations. To discover sports talent, the university encourages all types of games.

#### **Students' Societies**

Different students' societies are working for the students to express themselves. These societies provide a platform to students to develop leadership qualities and organizational skills. These societies arrange and conduct various recreational programmes from time-to-time e.g. Inter-Uni-

versities Debates, Sports Tournaments, IT competitions, Naat Khawani, Tours etc.

At present, the following Students' Societies are operational:

- Organizing Society
- Literary Society
- Tour Society
- Sports Society
- I.T Society
- Fine Arts Society
- Character Building Society
- Entrepreneur Society



# CONVOCATION







# **10th Convocation**

In the 10th Convocation, held on 05th November, 2019 in which 751 successful graduates of MS (Electrical Engineering), MS (Mathematics), MS (Software Engineering), MS (Computer Science), M.Phil. (Education), MS (Management Sciences), M.Phil (Economics), B.Sc. Electrical Engineering, B.Sc. Civil Engineering, B.Tech Electrical, B.Tech Civil, M.Sc. Mathematics, MCS, BS (SE), BS (CS), M.A. English, M.Ed., BS (English), MBA (1.5 Year), MBA (3.5 Year), M.Com, BBA, BBS and B.Com were conferred degrees.

Degrees was distributed by the Chief Guest Mr. Mushtaq Ahmed Ghani, Speaker Khyber Pukhtunkhwa Provincial Assembly.

40 Gold Medals were also awarded to the outstanding graduates.





# City University of Science & Information Technology **Alumni Association (CUSITAA)**

The Product of an Institute is its graduates. What they become in practical life and where they reach cannot be attributed to him/her only it is the continuation of the accomplishments of their Alma-mater as well. CUSITAA is a non-political and voluntary organization, which has been established to have a social and interactive forum to work for the welfare of the present and old students.

#### **Purpose**

- Connect students for a lifetime relationship with their fellow Alumni and the University.
- Provides and Enhances Alumni support to the current students through community leadership, service and fundraising initiatives of Alumni.
- To actively contribute and initiate to arrange for the advancement and financial support of needy students of their Alma-mater.
- Provides a channel of communication between alumni and the University.
- Promotes the public image of the University and its programs.







# **Academic Programs**

City University offers degree programs that are demanding, broad and relevant to today's professional needs.....

#### **Department of Architecture**

• B. Architecture

#### **Department of Art & Design**

• Fine Arts • Fashion Design • Visual Communication Design

#### **Department of Computer Science**

- BS-CS
- BS-SE
- MS-CS
- MS-SE
- Ph.D Computer Science

### **Department of Civil Engineering**

• B.Sc. Civil Engineering

#### **Department of Electrical Engineering**

- B.Sc. Electrical Engineering (Power / Electronics / Telecommunication)
- MS. Electrical Engineering
- Ph.D Electrical Engineering

#### **Department of Engineering Technology**

- B.Sc. Civil Engineering Technology
- B.Sc. Electrical Engineering Technology

#### **Department of English**

• BS. English • MA. English • MS. English

#### **Department of Education**

- ADE
- B.Ed (1.5 / 2.5 Years) M.Phil Education

- B.Ed (Hons)

Ph.D Education

#### **Department of Health Sciences**

Pharm-D

- BS-MLT Medical Laboratory Technology
- DPT-Doctor of Physical Therapy BS-Microbiology

#### **Department of Regional Languages**

BS-Hindko

#### **Department of Management Sciences**

- BS-Social Sciences
- BBA
- M.Phil Economics

Ph.D Mgt. Sciences

- BS-Accounting & Finance MBA
- MS-MS (HRM/Finance/Marketing)

- BS-Economics

- BS-Commerce
- MPM M.Com

### **Department of Mathematics**

- BS. Mathematics
- M.Sc. Mathematics
- MS. Mathematics
- Ph.D Mathematics



# **DEPARTMENT OF**

# ARCHITECTURE





Ar. Naseer Ahmed Khan Orakzai
Head of Department

# MESSAGE FROM HEAD OF DEPARTMENT

Firstly, as a pioneer & presently as an HoD, I am honored to speak my mind about architecture in general and architects in specific.

The region we are living in has its own culture which I need to emphasize. It is the need of the hour that from the present environment, there should emerge a true spirit of architecture – the practitioners – well-trained and well-educated, knowing the ethics and values of the region they live in, deeply rooted in the soil they belong to and who can lead their identity to international level and can observe and absorb changes in the world.

As designers of our built environment, responsibility for its success or failure falls to each and every one of us. I know from personal experience that my learning and creativity is enriched by engaging with people of diverse backgrounds. This is the reason, in City University, often I tried to introduce practitioners of diverse professions because our designs are strengthened & improved when considered from multiple perspectives.

# WHY ARCHITECTURE?

Here you will....





# CURRICULUM

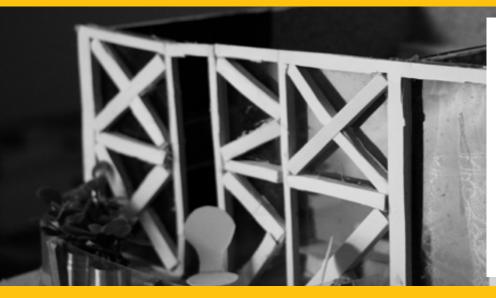
Through our programs, we enable our students to become responsible leaders in their field, who have the skills to envision, design and construct a desirable and viable future. Architecture graduates are critical thinkers and problem solvers that develop a diverse range of skills and qualities during their studies. Supported by the insight of practicing faculty, we strive to educate future architects that are able to bridge artistic vision with technical comprehension.

Our curriculum consists of...

## **ARCHITECTURAL EXPLORATIONS**

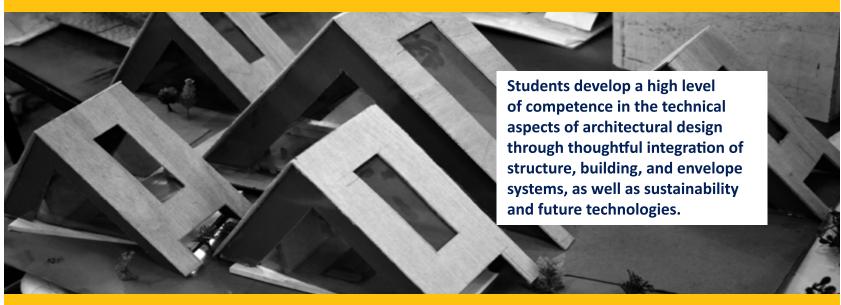


# **CONCEPTUAL DESIGN THINKING**

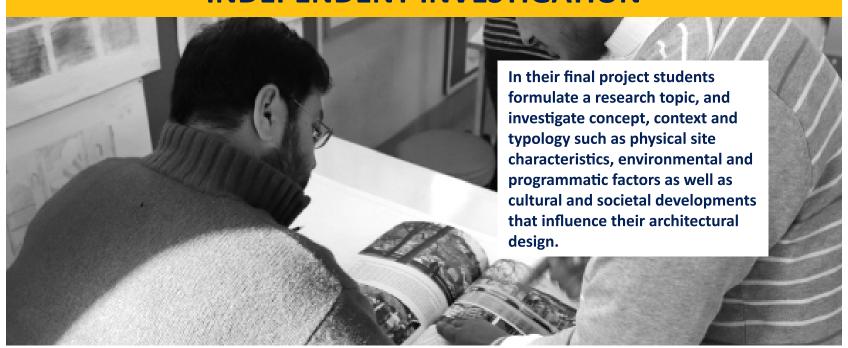


Through an analysis and understanding of type, program, and site, students will explore the synthesis of an architectural concept from its early design schematics towards its final physical manifestation. We foster critical design thinking skills and teach up to date, effective, and contemporary design processes so our students are capable to be confident and successful once they enter the profession.

## **TECTONIC UNDERSTANDING**



# INDEPENDENT INVESTIGATION



# SEMESTER DIVISION

3

2

20

#### **MORNING PROGRAM:**

Bachelor of Architecture Total Credit Hours = 179

**ARCH - 110** 

**ENG - 121** 

#### **SEMESTER 01 Credit Hours** Course **Course Title ARCH - 101 BASIC DESIGN-I** 6 **ARCH - 102 VISUAL COMMUNICATION-I** 4 **ARCH - 109** INTRO TO ENVIRONMENT 3 **HUM - 101 ISLAMIC STUDIES** 2

**HISTORY OF CIVILIZATION** 

**ENGLISH COMPOSITION** 

**TOTAL** 

#### **ELIGIBILITY CRITERIA:**

Intermediate, A-levels or equivalent qualification with at least 50% marks

SEMESTER 02		
Course	Course Title	Credit Hours
ARCH - 104	BASIC DESIGN-II	6
ARCH - 105	VISUAL COMMUNICATION-II	4
ARCH - 101	HISTORY OF CIVILIZATION – II	3
ARCH - 112	INTRO TO MATERIALS	3
HUM - 102	PAKISTAN STUDIES	2
	TOTAL	18

SEMESTER 03		
Course	Course Title	Credit Hours
ARCH - 201	ARCHITECTURE DESIGN-I	6
ARCH - 310	SURVEYING AND LEVELLING	3
ARCH - 203	HIST. OF ARCHITECTURE - I	3
ARCH - 204	BUILDING CONSTRUCTION – I	3
ARCH - 206	STRUCTURE-I	2
	TOTAL	17

SEMESTER 04		
Course	Course Title	Credit Hours
ARCH - 207	ARCHITECTURE DESIGN - II	6
ARCH - 209	HIST. OF ARCHITECTURE - II	3
ARCH - 210	BUILDING CONSTRUCTION - II	3
ARCH - 213	VISUAL COMMUNICATION - III	3
ARCH - 212	STRUCTURE-II	2
	TOTAL	17

SEMESTER 05		
Course	Course Title	<b>Credit Hours</b>
ARCH - 301	ARCHITECTURE DESIGN – III	6
ARCH - 302	HIST. OF ARCHITECTURE - III	2
ARCH - 303	THEORY OF ARCHITECTURE - I	2
ARCH - 304	BUILDING CONSTRUCTION - III	3
ARCH - 211	COMPUTER APPLICATION – I	2
ARCH - 313	ENERGY EFFICIENCY	3
	TOTAL	18

	SEMESTER 06		
Course	Course Title	Credit Hours	
ARCH - 307	ARCHITECTURE DESIGN-IV	6	
ARCH - 309	THEORY OF ARCHITECTURE-II	2	
ARCH - 314	MEP SYSTEMS AND SERVICES	3	
ARCH - 305	COMPUTER APPLICATION – II	3	
ARCH - 312	HISTORY OF ARCHITECTURE - IV	3	
	TOTAL	17	

SEMESTER 07		
Course	Course Title	Credit Hours
ARCH - 401	ARCHITECTURE DESIGN-V	8
ARCH - 402	URBAN THEORIES	3
ARCH - 403	INTERIOR DESIGN	3
ARCH - 311	COMPUTER APPLICATION – III	3
ARCH - 404	SUSTAINABLE HOUSING	3
	TOTAL	20

)	SEMESTER 08		
)	Course	Course Title	Credit Hours
)	ARCH - 405	ARCHITECTURE DESIGN-VI	8
)	ARCH - 406	LANDSCAPE DESIGN	3
)	ARCH - 407	RESEARCH METHODOLOGIES	3
)	ARCH - 408	ENTREPRENUERSHIP	2
)	ARCH - 409	ARCHITECTURAL HERITAGE AND DOCUMENTATION	3
)		TOTAL	19

SEMESTER 09			
Course	Course Title	Credit Hours	
ARCH - 599	THESIS DESIGN-I	12	
ARCH - 501	PROFESSIONAL PRACTICE- I	3	
ARCH - 502	CONSTRUCTION/PROJECT MANAGEMENT	3	
	TOTAL	18	

	SEMESTER 10		
Course	Course Title	Credit Hours	
4 D C U - F C C	THESIS DESIGNATION	12	
ARCH - 599	THESIS DESIGN – II	12	
ARCH - 503	PROFESSIONAL PRACTICE-II	3	
	TOTAL	15	



# S R R

Peshawar, being located on the cross-road between central and South Asia, has emerged to be a city of diverse cultural traditions, religious philosophies and multiple ethnicities. Owing to this strategic location it has been one of the earliest living cities of south Asia since last two thousand years, as shown by the archaeological record (Durrani, Ali & Rehman, 1997). Because of the frequent interaction with outside cultures, the art and architecture in Peshawar got developed with new traditions and elements.

In addition to the glorious art of Gandhara and the Islamic, the colonial art and architecture is also noteworthy that flourished in this part of the British Empire apart from Kolkata, Mumbai and Lahore. One of the notable architectural structures of that age is building of Islamia College Peshawar that speaks the grandeur of the British Rai.



# PCATP ACCREDITATION

The Pakistan Council of Architects and Town Planners Ordinance 1983 has been promulgated with a view to give recognition and protection to the profession of architecture and town planning in Pakistan. The council has wide-ranging powers and is authorized to perform all functions and to take steps connected with or ancillary to all aspects of the two professions including laying down standards of conduct, safe-guarding interests of its members, assisting the government and national institutions in solving national problems relating to the professions, promotion of reforms in the professions, promotion of education of these professions, reviewing and advising the government in the matter of architecture and town planning education, etc.



NOC was granted on 19-06-2017.

Interim visit is due in 2020 and final Accreditation visit is due in 2022.

# OUR STUDENTS



## **FIRST YEAR**



## **SECOND YEAR**

The syllabus of architectural design in the Second Year of the five year course in architecture is designed exactly to widen and explore the channels of creativity. These channels of creativity help to stimulate one's mind and create design. These are developed by breaking out of 'concept prisons' of old ideas & introducing the students to lateral thinking. Design process as a thinking process makes the students more proactive & analytical.



## **EXPLORING DESIGN CONCEPTS**



**TO...** 

### **FORMALIZING IDEAS**



The process of creativity is initiated either through brainstorming sessions or through a design exercise. It helps find & unlock one's own brand of creativity & hereby practice it at a later stage. These assignments help to stimulate one's imagination & resort to "in the box," out of the box," and "new box" thinking. Creative ability awakens the psychological qualities, builds up the skills and adds a new dimension to the intellect of the student.

## **THIRD YEAR**

Students will focus on expanding their control of iterative design processes by adding additional criteria & complexities for consideration. They will also focus on the quality & depth of their research, & will develop abilities to construct architectural systems from architectural agendas. The ultimate objective is to design a facility that combines numerous design criteria into a compelling and beautiful assembly of

architectural systems and

components.



## **COMPLEXITY IN DESIGN CONCEPTS**



**TO...** 

### **REAL LIFE DESIGN PROJECTS**



Alongside the coursework, students are encouraged to take part in live small scale projects to test their abilities in the real life practice of architecture. Projects can range from interior design of offices, to out door public space seating areas for cafeterias, & facade designs. This enables the students to put their theoretical ideas into practice and face the challenges posed by the profession in real life.



O U R





# **CONCEPTUAL EXPLORATIONS**





# **CURATED STUDIO SPACES**





# **JURIES & DISCUSSIONS**





# MEET THE FACULTY



Architect Naseer Ahmed Khan Orakzai Head of Department / Assistant Professor

He has done his Bachelors of Architecture from Dawood College of Engineering & Technology, Karachi. He has 20 years of experience in consultancy and design practice at national and international level including Japan, Hungary, Ireland, Spain, Afghanistan, Kingdom Of Saudi Arabia and NewYork. His work reflects his concepts and his vision in the pursuit of THE QUEST named as LATOON that encompasses all fields of design,ranging from urban scale to paintings,products,interiors and furniture. He has been running his own practice with the name of Latoon Jongara Studios Private Limited and involved in teaching as Assistant Professor for 10 years.



Architect Zain Ul Abedin Associate Professor

Prof. Zain is an academic and a consultant with diverse professional, teaching, and research experience in Pakistan and Abroad. He is a recipient of several awards and scholarships. He is former Dean of Architecture and Design at CUI. Areas of interest are course development, urban design, environmental psychology, museums, and heritage.



**Architect Mohammad Afzal Ebrahim**Associate Professor

Architect Mohammad Afazal Ebrahim did his Diploma in Architecture from National College of Engineering & Technology (now, Dawood University of Engineering and Technology) and formerly, Government School of Architecture), Karachi, Pakistan, 1971. He did his Bachelors in Architecture from Arizona State University, Tempe, Arizona, USA, 1977. He then pursued Masters in Environmental Planning (Solar Architecture & Energy Technology) from Arizona State University, Tempe, Arizona, USA, 1986. He has over 30 years of professional experience in USA and Pakistan in architecture, green and sustainable buildings and research including teaching for 11 years. He is a certified as an architect by NCARB (National Council of Architectural Registration Boards), Washington, DC, USA. NCARB certification enables me to obtain licensing in all 50 States of USA, Guam & Puerto Rico, Canada, Mexico, Australia and New Zealand.



**Architect Uzma Nooreen** Associate Professor

Having done her Bachelor of Architecture from Dawood College of Engineering Technology, Karachi and Masters in Urban Design and MBA from Oxford Brookes University, she is an architect, urban designer and interior designer. She has professional, academic and leadership experience of over 30 years in Pakistan and abroad. Her specific interests include heritage buildings and structures.



**Artist Sajid Ali**Assistant Professor

Born Peshawar, Pakistan, Ali Sajid holds a master degree in painting, advanced courses in painting and sketching from Singapore and Tokyo Japan. Ali has worked as a creative director in Singapore, as Urban Sketcher in Tokyo, assistant professor at City University of Science & Information technology Peshawar. He has exhibited his work globally including Tokyo, India, Italy, Dubai, Canada, Hong Kong, Albania and all over Pakistan. He won several International Awards including Daniel Smith Award at Fabraino Italy (2016), held 1st position in International Watercolor Festival Dubai, UAE(2017), Landscape Artist Award Albania and Global Association of Watercolor Artist Award Canada(2018) and also national Awards including "Living human treasure Award" by govt of KP, "National Heroes of Peshawar" by government of KP, SS Hyder and Gulgee Awards. Juried IWS Arab Nation Contest, IWS Turkey watercolour contest and Pakistan 1st International watercolour contest. his paintings enrich art collections all over the world including office of UNESCO, UNCHR, Fabraino Museum Italy, at 11 corps headquarters and also in the CM house Khyber Pakhtunkhwa.



Architect Muhammad Umer Sardar Lecturer

Architect Muhammad Umer Sardar is a graduate of CECOS University and within a short span of time has a variety of work experiences. He has been a team member of the award of the Women Seerat Center, Lahore, Pakistan, 2017 (with Ar. Naseer Ahmed Orakzai as a team member), for 2nd Prize of PKR 1,50,000. He has organized a number of events and study excursions, including participation in an international study visit as well. He has been successful in building a positive rapport with his students and is successfully teaching since the last four years, besides serving as Coordinator for the Department of Architecture.



**Architect Raza Hussain Shah** Lecturer

Architect Raza Ali Shah is a graduate of CECOS University and has national as well as international work experience. He has worked in Qatar with the HBK Group. He worked with Meinhardt Consulting Group in Islamabad. He has a record of diligent and technical work and has experience in site management and implementation of projects. He has built a positive report with his students and is successfully teaching since the last two years. His proficiency is wide ranging while his special interest is in Building Information Modelling (BIM).



**Architect Sohaib Fakhar** Lecturer

He is a graduate of CECOS University and has done his Masters in Urban and Regional Planning from NUST, Islamabad. He has worked in reputed organisations across the country in both public and private sector organisations which include Wings Consultants Peshawar, Design Matrix DHA Lahore and served for directorate of works at Bacha Khan University, Charsadda. He has an international exposure of UAE where he worked as an intern in Almaali Engineering & Consulting. He has hands on skills in architecture visualization and holds an advanced diploma in that. He also has completed a certification in project management from Institute of Management Studies Peshawar. With all his experience he is serving as a lecturer in department of architecture since Feburary 2020.



**Architect Ashfaq Ahmad**Program Coordinator / Lecturer

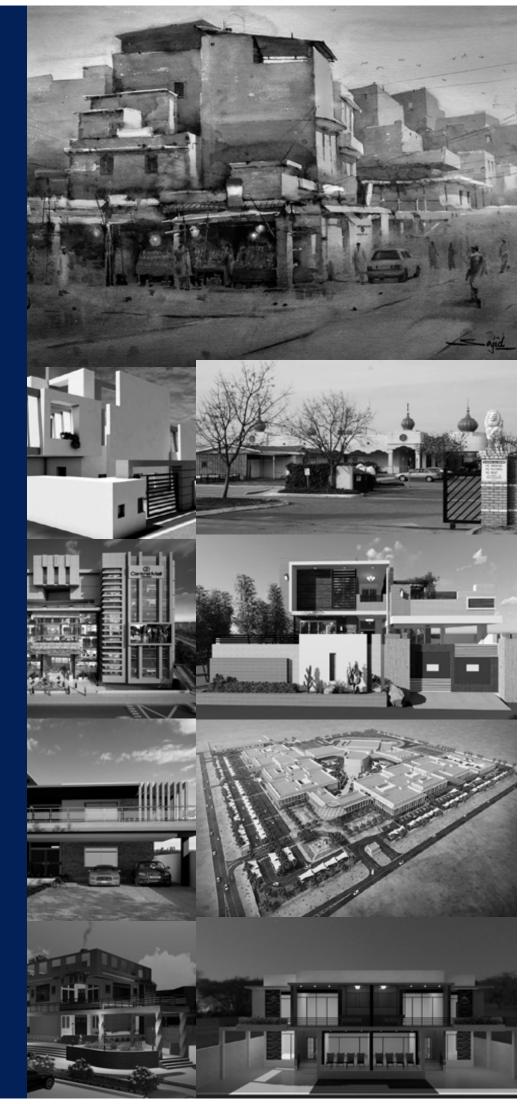
He has done his B. Arch from CECOS University of IT and emerging Sciences Peshawar and M. Arch from University of Engg. & Technology Lahore. He has been working as a practicing architect since 2015 and teaching in different universities.



**Architect Abeera Saleem**Junior Lecturer

She has done her bachelor's from NED University of engineering and technology, Karachi in 2018. An aspiring architect with experience of research in Heritage Conservation of Karachi.

# F A C O R

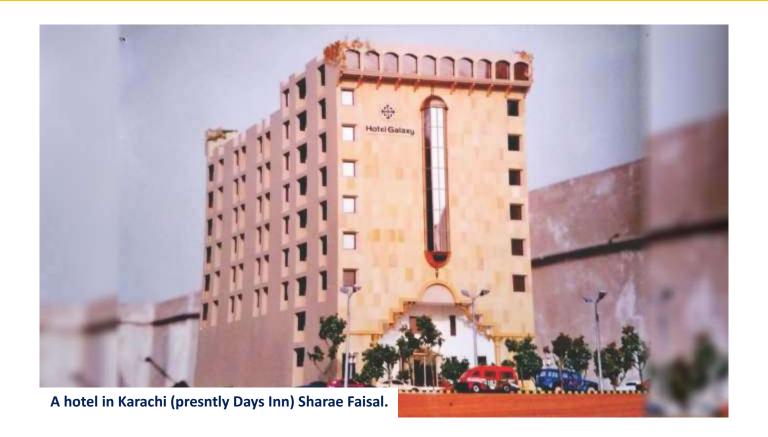


# **Architect Naseer Ahmed Khan Orakzai**





## **Architect Zain Ul Abedin**



# **Architect Mohammad Afzal Ebrahim**



## **Architect Uzma Nooreen**



# **Artist Sajid Ali**



Peepal Mandi Peshawar at International Watercolour Contest Dubai 2018. Size: 16/30 inch. Medium Watercolor on Paper.

## **Architect Muhammad Umer Sardar**



## **Architect Sohaib Fakhar**



# **Architect Ashfaq Ahmad**

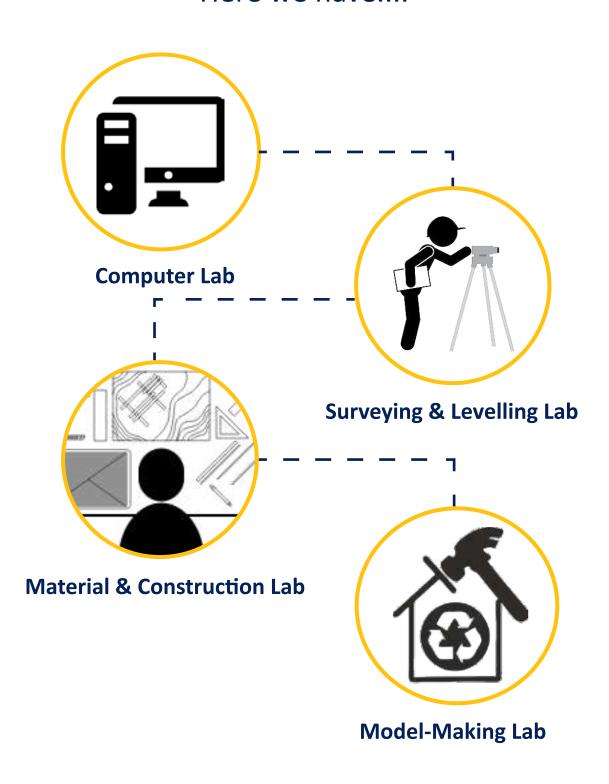


# **Architect Abeera Saleem**



# OUR FACILITIES

Here we have....



# E E T S



#### **INTERACTIVE SEMINARS**

To get the students up and running creatively, our teachers provide interactive seminars with professional architects in studio projects. Students are pushed outside of their comfort zone through studio exchange programs with local architecture insitituions like UET **Abbotabad and Comsats** Islamabad. This enables our students to gain exposure & collaborate with diverse young architects from across the country, opening their minds to world of architecture design.



#### STUDIO EXCHANGE PROGRAMS

1 TO...



AND...

#### **REAL LIFE DESIGN PROJECTS**



Alongside our university's coursework, students are encouraged to take part in live small scale projects to test their abilities in the real life practice of architecture. Projects can range from interior design of offices, to out door public space seating areas for cafeterias, & facade designs. This enables the students to put their theoretical ideas into practice and face the challenges posed by the profession in real life.

#### **MODEL MAKING WORKSHOPS**



## GALLERIES AND EXHIBITIONS

### **KP ART & ARCHITECTURE GALA 2017**



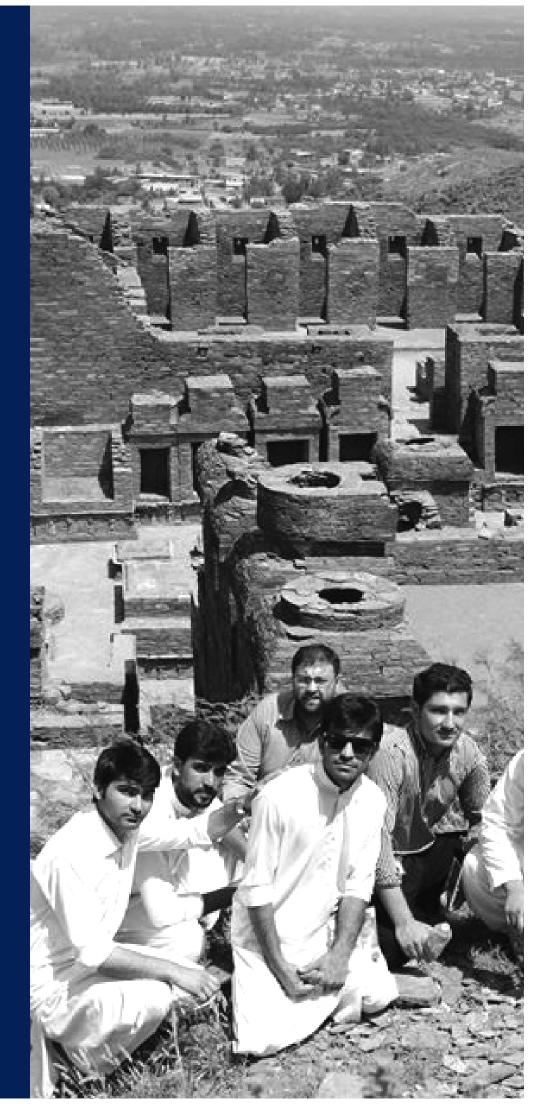


#### **1ST KP ARTISTS PAINTING EXHIBITON 2019**





# E A R N H R O U G H N G N G



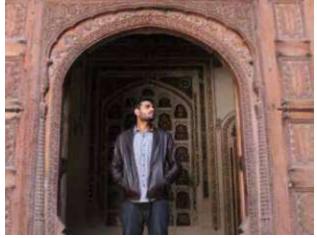
#### **VISIT TO TAKHT-E-BAHI RUINS**





### **VISIT TO INTERIOR PESHAWAR**





### **TRIP TO NORTHERN AREAS**





## VISIT US!

Visit our Admission Section office and get all the relevant details for the Admission in Architecture Department at City University.



## **Computer Science**

**BS Computer Science, BS Software Engineering** 

MS Computer Science (Data/Networks/Multimedia)

MS Software Engineering

**Ph.D Computer Science** 



# Faculty Members of Computer Science



### **Dr. Muhammad Arshad (Associate Professor) Head of Department**

PhD (CS), Liverpool John Moores University, Liverpool, UK

**Dr. Ijaz Ud Din** (Assistant professor) PhD-CS, University of Nottingham, Malaysia

**Dr. Muhammad Sadiq Khan** (Assistant professor) PhD-CS, University of Malaya, Malaysia

**Dr. Shahab Haider** (Assistant Professor) PhD-CS, GIK, Topi MS-IT IM Sciences Peshawar

**Dr. Iftikhar Alam** (Assistant Professor) PhD, University of Peshawar MS-CS University of Peshawar

**Dr. Zulfiqar Ali** (Assistant Professor) PhD- CS , TU Graz, Austria

Mr. Mumtaz Ali (Assistant Professor) PhD (in progress) MS-IT (information & Business Support System) IM Sciences Peshawar

**Mr. Shehzad Saifullah** (Lecturer) MS-CS FAST, Islamabad BS-CS, FAST Islamabad

**Mr. Muhammad Abdul Tawab Khan,** Lecturer / Academic Coordinator CS PhD (in progress) MS-CS IMSciences Peshawar

**Mr. Sanaullah Khan** (Lecturer) MS-CS IM sciences

**Engr. Muhammad Asad** (Lecturer) PhD (in progress) MS-SE NUST, Islamabad

**Mr. Muhammad Adnan** (Lecturer) MS-CS, CUSIT Peshawar MSc-CS, University of Peshawar

Mr. Haji Gul (Lecturer)
MS-CS, IM Sciences Peshawar
MSc (Computer Science) IM Sciences Peshawar

**Mr. Bilal Khan** (Lecturer) MSCS CUSIT Peshawar

**Engr. Farhan Naeem** (Lecturer) MS Computer Systems Engineering, UET Peshawar

**Engr. Nazir Jan** (Lecturer) PhD (in progress), UET Peshawar MS Computer Systems Engineering, UET Peshawar

**Mr. Wahab Khan** (Lecturer/Coordinator SE) PhD (CS), (in progress) MS-SE CASE Islamabad

**Mr. Sher Jeel Ahmad** (Lecturer) MS Computer Science (Software Engineering), University of HULL, England

**Mr. Muhammad Zakir Khan** (Lecturer) PhD (CS), study leave University of Glasgow MS-SE, CUSIT Peshawar

**Mr. Qazi Haseeb Yousaf** (Lecturer) MS-CS CUSIT, Peshawar

**Ms. Iqra Saleem** (Lecturer)
MS Computer Engineering, UET Peshawar

**Mr. Faheem Mahmood** (Lecturer) MS-CS, FAST, Islamabad

**Mr. Saifullah Jan** (Lecturer) PhD (in progress) MS-CS, Iqra National University Peshawar

**Mr. Manzar Iqbal** (Lab Engineer) BSSE CUSIT Peshawar

**Ms. Noreen Khan** (Lab Engineer) MS-CS (In progress) MCS CUSIT Peshawar

## Computer Science

**Ms. Zartasha Saeed** (Junior Lecturer) MS-CS (in progress), CUSIT Peshawar BS-SE, CUSIT Peshawar

**Ms. Zarah Zainab** (Lab Engineer) MS-CS CUSIT (In progress) BCS CUSIT Peshawar

**Mr. Muhammad Wasim** (Lab Engineer) MS-SE (In progress) CUSIT Peshawar BS-SE, CUSIT Peshawar

**Mr. Fahad Ali** (Lab Engineer) MS-CS (In Progress) CUSIT Peshawar BS-SE, CUSIT Peshawar **Mr. Syed Salah Ud Din** (Lab Engineer) BSSE CUSIT Peshawar

**Mr. Sohail Ilyas** (Lab Engineer) BSSE CUSIT Peshawar

**Mr. Muhammad Yasir** (Lab Engineer) BSSE CUSIT Peshawar

**Mr. Hummad Hassan** (Lab Engineer) BSSE CUSIT Peshawar

**Mr. Izaz Ali** (Departmental Assistant) BA, University of Peshawar

#### **Mission Statement**

- **M-1.** Educate the youth with an in-depth understanding of the theoretical and practical concepts of computer science through a rigorous course work and participating in cutting edge research.
- **M-2.** Equip them with the technological tools to meet the challenges in their professional career or in pursuit of advanced degrees in computer science.
- **M-3.** Support society by participating in and encouraging technology transfer for economically sustainable and socially acceptable department.

#### **Program Educational Objectives**

The overall objective of the computer science program is to prepare graduates who will be successful in their chosen career paths. Within a few years of graduation, graduates/alumni of the computer science program will attain following objectives:



#### **BS Computer Science**

#### **Engineering Quality**

**PEO-1**: Our graduates will engage in the productive practice of computer science to identify and solve significant problems across a broad range of application areas.

#### Leadership

**PEO-2**: Our graduates will engage in successful careers in industry, academia, and public service, providing technical leadership for their business, profession and community.

#### **Economic Impact**

**PEO-3**: Our graduates will enhance the economic well-being of Pakistan through a combination of technical expertise, leadership and entrepreneurship.

#### **Lifelong Learning**

**PEO-4**: Our graduates will adapt to new technologies, tools and methodologies to remain at the leading edge of computer science practice with the ability to respond to the challenges of a changing environment.

S.No	Program Learning Outcomes (PLOs)	Computing Professional Graduate	
	To prepare the students for a successful professional and personal life, the BS Computer program is designed to produce computer science graduates who have attained the following program/student learning outcomes at the time of graduation		
1	Foundation	Demonstrate mastery of Computer Science in the following core knowledge areas Algorithms and Data Structures, programming languages, data structures, operating systems, databases, artificial intelligence, computer networking, software engineering and development	

# Department of Computer Science

2	Problem Analysis/ Investigation  Apply system-level perspective by thinking at multiple levels of detail and abstraction and by recognizing the context in which a computer/software system may functional including its interactions with people and the physical world.	
3	Development of Solutions /Project Management	Apply problem-solving skills and the knowledge of computer science to solve real problems, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.
4	Environment and Sustainability	An ability to understand the impact of professional engineering solutions. In social and environmental contexts and demonstrate knowledge of and need for sustainable development.
5	Modern Technologies  Understand how technological advances impact society and the social, legal, et and cultural ramifications of computer technology and their usage.	
6	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
7	Individual and Team Work	An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.
8	Communication	Write about and orally communicate technical material about computer science and computer systems, broadly conceived.
9	Lifelong Learning or Growth	An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

#### **BS Software Engineering**

#### **Program Educational Objectives**

The educational objective of the BS Software Engineering programs is to ensure that the graduates are fundamentally sound, practical, participatory and professional. Specifically after three to four years our graduates will have the following career and professional goals.

#### **Engineering Quality**

**PEO-1:** Our graduates will engage in the productive practice of software engineering to identify and solve significant problems across a broad range of application areas.

#### Leadership

**PEO-2:** Our graduates will engage in successful careers in industry, academia, and public service, providing technical leadership for their business, profession and community.

#### **Economic Impact**

**PEO-3:** Our graduates will enhance the economic well-being of Pakistan through a combination of technical expertise, leadership and entrepreneurship.

#### **Lifelong Learning**

**PEO-4:** Our graduates will adapt to new technologies, tools and methodologies to remain at the leading edge of computer science practice with the ability to respond to the challenges of a changing environment.

# Department of Computer Science

#### **Program Learning Outcomes**

The following are the Software Engineering outcomes describing what students are expected to know to be able to do by the time of graduation from the program.

S.No	Program Learning Outcomes (PLOs)	Computing Professional Graduate	
	The following are the Software Engineering outcomes describing what students are expected to know or be able to do time of graduation from the program.		
1	Foundation	Demonstrate mastery of Software Engineering in the following core knowledge area (1) Computing Essentials; (2) Mathematical and Engineering fundamentals; (3 Professional Practice; 3) Software lifecycle process (4) Software Modeling and Analysis (5) Software design; (6) Software Verification and Validation; (7) Software Evolution; (8 Software Process; (9) Software Quality; (10) Software Management.	
2	Problem Analysis/ Investigation	Apply system-level perspective by thinking at multiple levels of detail and abstraction and by recognizing the context in which a software system may function, including its interactions with people and the physical world. (Architecture and design patterns)	
3	Development of Solutions/ Project Management	Apply problem-solving skills and the knowledge of software engineering over the entire system life cycle to solve real problems, as a member and/or leader in a team, to manage projects in a multidisciplinary environment. (Development and Process and quality)	
4	Environment and Sustainability	An ability to understand the impact of professional software engineering solutions. In social and environmental contexts and demonstrate knowledge of and need for sustainable development.	
5	Modern Technologies	Understand how technological advances impact society and the social, legal, ethical and cultural ramifications of software engineering technologies and their usage.	
6	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of software engineering practice.	
7	Individual and Team Work	An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.	
8	Communication or Presentation	Prepare and publish the necessary documents required throughout the project lifecycle using electronic communication tools to effectively collaborate with team members in different countries with different cultural backgrounds. Graduates can effectively contribute to project discussions, presentations, and reviews.	
9	Lifelong Learning	An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.	

## **Computer Science**

0244 BS Computer Science

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Pre-Engineering/Pre-Medical

#### 1st Semester

Course	Course Title	Credit Hours
GE	Introduction to Info. & Comm.	3+1
	Technologies	
CC	Programming Fundamentals	3+1
GE	English Composition & Comprehension	3+0
MSF	Calculus & Analytical Geometry	3+0
GE	Pakistan Studies	2+0
MSF	Applied Physics	2+1

#### 3rd Semester

Course	Course Title	Credit Hours
СС	Data Structures & Algorithms	3+1
CSC	Computer Architecture &	3+1
	Organization	
CC	Discrete Structures	3+0
GE	Professional Practices	3+0
CSS	CS Supporting – I	3+0

#### 5th Semester

Course	Course Title	Credit Hours
CSC	Compiler Construction	3+0
СС	Operating Systems	3+0
CC	Software Engineering	3+0
CSS	CS Supporting – II	3+0
CSS	CS Supporting – III	3+0

#### 7th Semester

Course	Course Title	Credit Hours
UE	University Elective – III	3+0
CSC	Parallel & Distributed Computing	3+0
CSE	CS Elective III	3+0
CSE	CS Elective IV	3+0
CC	Final Year Project – I	0+3

#### 2nd Semester

Course	Course Title	Credit Hours
CC	Object Oriented Programming	3+1
GE	Communication & Presentation	3+0
	Skills	
CSC	Digital Logic Design	3+1
MSF	Probability & Statistics	3+0
GE	Islamic Studies	2+0
UE	University Elective – I	3+0

#### 4th Semester

Course	Course Title	Credit Hours
CSC	Design & Analysis of Algorithm	3+0
CSC	Theory of Automata	3+0
CC	Database Systems	3+0
MSF	Linear Algebra	3+0
UE	University Elective-II	3+0

#### 6th Semester

Course	Course Title	Credit Hours
CSC	Artificial Intelligence	3+1
CSC	Data Communication & Computer Networks	3+1
CSE	CS Elective-I	3+0
CSE	CS Elective-II	3+0
GE	Technical & Business Report Writing	3+0

#### 8th Semester

Course	Course Title	Credit Hours
UE	University Elective – IV	3+0
CSE	CS Elective – V	3+0
CC	Information Security	3+0
CC	Final Year Project – II	0+3



## Computer Science

Course	Course Title	Credit Hours
University	Elective Courses:	21
ACC-201	Fundamentals of Accounting	3
HRM-201	Organizational Behaviour	3
MGT-101	Principles of Management	3
MGT-302	Entrepreneurship	3
MGT-408	Leadership	3
MKT-203	Marketing Management	3
PSY-101	Fundamentals of Psychology	3

#### **Elective courses not limited to the list**

Course Computer S	Course Title cience Elective Courses:	Credit Hours 21
CSC-214	Computer Graphics	2
CSC-214(L)	Computer Graphics	1
CSC-215	Web Engineering - 1	2
CSC-215(L)	Web Engineering - 1	1
CSC-305	Routing and Switching	2
CSC-305(L)	Routing and Switching	1
CSC-319	Wireless Network	3
CSC-420	Web Engineering - II	2
CSC-420(L)	Web Engineering - II	1
CSC-424	Digital Image Processing	2
CSC-424(L)	Digital Image Processing	1
CSC-446	Fuzzy Logics	3

Course	Course Title	Credit Hours
Computer S	cience Elective Courses:	21
CSC-433	Data Mining	3
CSC-434	Mobile Application & Development	2
CSC-434(L)	Mobile Application & Development	1
CSC-435	Computer Vision	3
CSC-436	Data Warehousing	3
CSC-439	Modern Web Technology	2
CSC-439(L)	Modern Web Technology	1
CSC-445	Digital Signal Processing	3
CSC-443	Distributed Computing	3



## **Computer Science**

0246 BS Software Engineering

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Pre-Engineering/Pre-Medical

#### 1st Semester

Course	Course Title	Credit Hours
GE	Introduction to Info.& Comm.	3+1
	Technologies	
CC	Programming Fundamentals	3+1
GE	English Composition &	3+0
	Comprehension	
MSF	Calculus & Analytical Geometry	3+0
GE	Pakistan Studies	2+0
MSF	Applied Physics	2+1

#### **3rd Semester**

Course	Course Title	Credit Hours
CC	Data Structures & Algorithms	3+1
SEC	Software Requirement	3+0
	Engineering	
SEC	Human Computer Interaction	3+0
MSF	Linear Algebra	3+0
UE	University Elective-II	3+0

#### 5th Semester

Course	Course Title	Credit Hours
SEC	Software Construction and	3+0
	Development	
CC	Computer Networks	3+1
GE	Technical and Business Writing	3+0
SES	SE Supporting-I	3+0
SES	SE Supporting-II	3+0
	•	

#### 7th Semester

Course	Course Title	Credit Hours
SEC	Software Project Management	3+0
SEC	Software Re-Engineering	3+0
SEE	SE Elective-II	3+0
SEE	SE Elective-III	3+0
CC	Final Year Project-I	0+3

#### 2nd Semester

Course	Course Title	Credit Hours
CC	Object Oriented Programming	3+1
GE	Communication & Presentation	3+0
	Skills	
CC	Discrete Structures	3+0
GE	Software Engineering	3+0
GE	Islamic Studies	2+0
UE	University Elective-I	3+0

#### 4th Semester

Course	Course Title	Credit Hours
CC	Operating Systems	3+0
CC	Database Systems	3+1
SEC	Software Design & Architecture	3+0
MSF	Probability and Statistics	3+0
UE	University Elective-III	3+0

#### 6th Semester

Course	Course Title	Credit Hours
SEC	Software Quality Engineering	3+0
CC	Information Security	3+0
GE	Professional Practice	3+0
SEC	Web Engineering	2+1
SEE	SE Elective-I	3+0
SES	SE Supporting-III	3+0

#### 8th Semester

Course	Course Title	Credit Hours
SEE	SE Elective – III	3+1
SEE	SE Elective – III	3+1
UE	University Elective – IV	3+0
CC	Final Year Project – II	0+3



## Computer Science

Course	Course Title	Credit Hours
University	y Elective Courses:	21
ACC-201	Fundamentals of Accounting	3
HRM-201	Organizational Behaviour	3
MGT-101	Principles of Management	3
MGT-302	Entrepreneurship	3
MGT-408	Leadership	3
MKT-203	Marketing Management	3
PSY-101	Fundamentals of Psychology	3

#### Elective courses not limited to the list

Course	Course Title	Credit Hours
Software Er	ngineering Elective Courses:	21
CSC-207	System Analysis & Design	3
CSC-314	Web - Engineering	3
CSC-320	Artificial Intelligence	3
CSC-420	Web Engineering - II	3
CSC-433	Data Mining	3
CSC-434	Mobile Application Development	3
CSC-436	Data Warehousing	3
CSC-439	Modern Web Technology	2
CSC-439(L)	Modern Web Technology	1
CSC-447	Software Engineering Economics	3
CSC-448	Aspect Oriented Software Design	3

Course	Course Title	<b>Credit Hours</b>
Software Er	ngineering Elective Courses:	21
CSC-449	Information System Audit	3
CSC-450	Agent Based Computing	3
CSC-451	Cloud Computing	3
CSC-452	Introduction to Soft Computing	3
CSC-453	Real-Time Systems	3
CSC-454	Data Security & Encryption	3
CSC-455	Secure Software Development	3
CSC-456	Business Process Engineering	3
CSC-457	Advance Database Management Systems	3
CSC-458	Introduction to Bioinformatics	3
CSC-459	Bioinformatics Software Engineering	3



## **Computer Science**

#### 0306 Master of Science in Computer Science

Specialization: Computer Networks/Database Systems/Multimedia/Information Management/Net-Centric Computing

Shift : Weekend

Duration: 2 Years, 4 Semsters, 30 Credit Hours

Eligibility : MCS / BCS (4 Years) / M.Sc /B.E or equivalent qualification with at least 50% marks or CGPA 2.50/4.00

from any HEC recognized University and GAT test obtaining at least 50% marks / university test with

50% score.

#### 1st Semester

Course	Course Title	Credit Hours
CSC-6XX	Core-l	3
CSC-6XX	Core-II	3
CSC-6XX	Core-III	3
CSC-6XX	Core-IV	3

#### **2nd Semester**

ı	Course	Course Title	Credit Hours
	CSC-6XX	1 Electives	3
	CSC-6XX	2 Electives	3
	CSC-6XX	3 Electives	3
	CSC-6XX	4 Electives	3

#### **3rd Semester**

Course	Course Title	Credit Hours
CSC-699	Research Thesis	3

#### 4th Semester

Course	Course Title	Credit Hours
CSC-699	Research Thesis	3



#### **Core Courses**

CSC-606	Advanced Analysis of Algorithm
CSC-623	Advanced Operating Systems
CSC-638	Theory of Programming
	Languages

CSC-640 Theory of Automata-II

CSC-602 Advanced Computer Architecture

#### **Elective Courses for Specialization:**

#### A. Computer Networks

CSC-603	Network Security & Cryptography
CSC-609	Advance Wireless Networks
CSC-614	Network Programming
CSC-633	Network Simulation & Modeling
CSC-609	Wireless Sensor Networks

#### **B. Database Systems**

CSC-601	Advance topics in	Database
---------	-------------------	----------

CSC-605 Data Warehousing

CSC-612 Distributed Database Systems

#### C. Multimedia

CSC-621	Virtual	Reality

CSC-622 Advanced Computer Graphics

CSC-628 Computer Vision

CSC-641 Human Computer Interaction

#### **D. Information Management**

CSC-613	Data Mining
CSC-629	Machine Learning
CSC-630	<b>Utility Computing</b>
CSC-631	Image Processing

## **Computer Science**

0304 Master of Science in Software Engineering

Shift : Weekend

Duration : 2 Years, 4 Semesters, 30 Credit Hours

Eligibility : BS-SE / BSE (4 Years) equivalent qualification with at least 50% marks or CGPA 2.50/4.00

from any HEC recognized University and GAT test obtaining at least 50% marks / university test with

50% score.

#### **1st Semester**

ı	Course	Course Title	Credit Hours
ı	CSC-607	Software System Design &	3
ı		Architecture	
ı	CSC-618	Topics in Soft Requirement	3
ı		Engineering	
ı	CSC-6XX	Elective-I	3
ı	CSC-6XX	Elective-II	3

#### 2nd Semester

Course	Course Title	Credit Hours
CSC-626	Software Quality Assurance	3
CSC-6XX	Elective-III	3
CSC-6XX	Elective-IV	3

#### **3rd Semester**

Course	Course Title	Credi	it Hours
CSC-6XX	Elective-V		3
CSC-699	Research Thesis		3

#### 4th Semester

Course	Course Title	Credit Hours
CSC-699	Research Thesis	3

#### **Elective Courses for specialization:**

C2C-012	Data Mining
CSC-616	Advance Software Project
	Management
CSC-617	Formal Methods
CSC-625	Research Methods in
	Computing

CSC-629 Machine Learning

CSC-631 Digital Image Processing
CSC-632 Topics in Software Engineering

CSC-639 Software Testing

**Note:** Two courses of 3 credit hourse each, may be taken from MS-CS courses.



# Department of Computer Science

406 Ph.D Computer Science

Shift : Weekend

Duration: 3 Years, 6 Semesters, 27 Credit Hours

Eligibility : M.S /M.Phil. degree in Computer science with research thesis in relevant area, securing at least

minimum CGPA 3.0 (out of 4.0 in the Semester System) or First Division (in the Annual System) in M.Phil./ M.S/ Equivalent degree is required from HEC recognized university with NTS-GAT (subject) with 60% marks. If the Test is not available in NTS subject list, then a University Committee consisting of at least 3 PhD faculty members in the subject area and approved by the HEC will conduct the Test

at par with GRE Subject Test and qualifying score for this will be 70% score.

#### **Ph.D Program Structure**

#### The complete details of PhD (CS) are given below;

- Minimum credit hours for course work shall be 18 C.H. + 9 C.H for PhD (CS) Thesis, and followed by a comprehensive examination for granting candidacy as PhD researcher.
- The program shall comprise of minimum Six (6) semesters spread over Three (3) years with two semesters a year. The maximum duration for PhD program is seven (7) years.
- The list of elective courses/specialization for PhD (CS) is given below which may be updated by the university time-to-time.

#### **1st Semester**

Course	Course Title	Credit Hours
CSC-7XX	Elective-I	3
CSC-7XX	Elective-II	3
CSC-7XX	Elective-III	3

#### **3rd Semester**

Course	Course Title	Credit Hours
CSC-7XX	Comprehensive Exam	3
CSC-7XX	Ph.D Research Proposal	3

#### **5th Semester**

Course	Course Title	Credit Hours
CSC-799	Ph.D Thesis-II	3

#### **2nd Semester**

Course	Course Title	Credit Hours
CSC-7XX	Elective-IV	3
CSC-7XX	Elective-V	3
CSC-7XX	Elective-VI	3

#### 4th Semester

Course	Course Title	Credit Hours
CSC-799	Ph.D Thesis-I	3

#### **6th Semester**

Course	Course Title	Credit Hours	ı
CSC-799	Ph.D Thesis-III	3	



# Civil Engineering B.Sc. Civil Engineering



### Faculty Members of

## **Civil Engineering**



## **Engr. Dr. Hafiz Asfandyar Ahmed Assistant Professor (Head of Department)**

Ph.D. Civil Engineering (Structural Engineering) UET, Peshawar M.Sc. Civil Engineering (Structural Engineering) UET, Peshawar B.Sc. Civil Engineering UET, Peshawar

Engr. Dr. Muhammad Mahboob Alam Associate Professor (Dean Faculty of Engineering, Technology & Architecture) Ph.D Civil Engineering (Water Resources) M.Sc. Civil Engineering (Water Resources) University of Stuttgart, Germany B. Sc. Civil Engineering, UET, Peshawar

Engr. Aziz Ahmad, Assistant Professor Ph.D. Civil Engineering (Water Resources) (In Progress) UET, Peshawar M.Sc. Civil Engineering (Urban Infrastructural Engineering) UET, Peshawar B.Sc. Civil Engineering UET, Peshawar

#### **Engr. Syed Bilal Ahmed Shah**

Lecturer/OBE Coordinator
M.Sc. Civil Engineering (Structural Engineering) MCE, Rislapur
B.Sc. Civil Engineering SUIT, Peshawar.

#### **Engr. Hazrat Bilal**

Lecturer/Coordinator (Academics)
M.Sc. Civil Engineering (Structural Engineering) UET, Taxila
B.Sc. Civil Engineering (With Honors) UET, Taxila

#### Engr. Zeeshan Khan, Lecturer

M.Sc. Civil Engineering (Structural Engineering) UET, Peshawar B.Sc. Civil Engineering UET, Peshawar

#### Engr. Muhmmad Junaid, Lecturer

M.Sc. Civil Engineering (Transportation Engineering) NUST, Islamabad B.Sc. Civil Engineering UET, Peshawar

#### Engr. Muhammad Irfan, Lecturer

M.Sc. Civil Engineering (Water Resources) INU, Peshawar B.Sc. Civil Engineering UET, Peshawar

#### Engr. Muhammad Khubaib, Lecturer

M.Sc. Civil Engineering (Structural Engineering)
CECOS, Peshawar
B.Sc. Civil Engineering UET, Peshawar

Engr. Waleed Ahmed, Lab Engineer M.Sc. Civil Engineering (Water Resources) (In Progress) UET, Peshawar B.Sc. Civil Engineering UET, Peshawar

#### Engr. Sahibzada Zarak Khan, Lab Engineer

M.Sc. Civil Engineering (Urban Infrastructural Engineering) (In Progress) UET, Peshawar B.Sc. Civil Engineering CUSIT, Peshawar

Engr. Karim Ullah, Lab Engineer M.Sc. Civil Engineering (Construction Management) (In Progress) INU, Peshawar B.Sc. Civil Engineering UET, Peshawar

## **Engr. Syed Amir Mehmood**, Lab Engineer M.Sc. Civil Engineering (Transportation Engineering) (In Progress) MCE, Rislapur

B.Sc. Civil Engineering CECOS, Peshawar

#### Engr. Muhammad Imad, Lab Engineer

M.Sc. Civil Engineering (Transportation Engineering) (In Progress) MCE, Rislapur B.Sc. Civil Engineering CECOS, Peshawar.

#### Engr. Inam Ullah, Lab Engineer

M.Sc. Civil Engineering (Construction Management)
(In Progress) MCE, Rislapur
B. c. Civil Engineering CUSIT, Peshawar

#### Engr. Wali Ullah, Lab Engineer

B.Sc. Civil Engineering CUSIT, Peshawar

#### Engr. Aiman Afridi, Lab Engineer

B.Sc. Civil Engineering UET, Peshawar M.Sc. Transportation Engineering (In Progress) MCE, Risalpur

# Department of Civil Engineering

#### Introduction

Department of Civil Engineering was established in 2014 in lower case the short and long term requirements of industrial/commercial organizations of Pakistan for graduates in Civil Engineering. Subsequent to the decision of the Board of Governors for starting the discipline of Civil Engineering, university improved its infrastructure in accordance with the Pakistan Engineering Council (PEC) guidelines and developed purpose-built classrooms, laboratories and allied facilities.

The 86th EA & QEC/EAB meeting of Pakistan Engineering Council held on March 29-30 and April 8, 2018 at Islamabad, granted accreditation to the first batch of Civil Engineers. The department is now in the process of applying for change of scope (increased intake) to the accreditation body.

#### Outcome Based Education (OBE) Model in Civil Engineering

To enhance the quality of education and learning process, Department of Civil Engineering, CUSIT, has adopted OBE (Outcome Based Education) model of Washington Accord, USA. Student's assessment is based on the achievement of specified goals (outcomes). This model focuses on the outcomes of learning, rather than traditional teaching system.

#### **Vision & Mission of Department of Civil Engineering**

The Vision of the department is to provide State-of-the-Art education in Civil Engineering that enables new generation of Civil Engineers to meet the challenges of the future, promote a sense of scholarship, leadership and service to the mankind through creativity and innovations.

The Mission of the CE department can be summarized as

- 1. To provide students with high quality education and training required to fully develop their professional qualities and skills as Civil Engineers.
- 2. To provide their personal potential to the greatest extent possible to be able to pursue higher studies and research.
- 3. To enable them to do research to serve the people and society of KP and Pakistan for their socio-economic development.
- 4. Develop University Consultancy group in diversified Civil Engineering fields for economically sustainable and socially acceptable Civil Engineer Program.

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

The graduates of Civil Engineering Program after 4-5 years of graduation will:

- **PEO-1:** Successfully practice Civil Engineering at the appropriate level.
- **PEO-2:** Demonstrate necessary background knowledge and communication skills to work professionally in one or more relevant areas of Civil Engineering.
- **PEO-3:** Participate in societal activities with recommended social and ethical values.
- **PEO-4:** Demonstrate pursual of continued life-long learning

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

The PLOs define by Washington accord will be customized to the needs of Civil Engineering Programme.

- **PLO-1:** Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- **PLO-2:** Problem Analysis: An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- **PLO-3:** Design/Development of Solutions: An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- **PLO-4:** Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

## **Civil Engineering**

**PLO-5:** Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of limitations.

**PLO-6:** The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

**PLO-7:** Environment and Sustain ability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge, and need for sustainable development.

**PLO-8:** Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.

**PLO-9:** Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multi disciplinary 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 multi disciplinary environment.

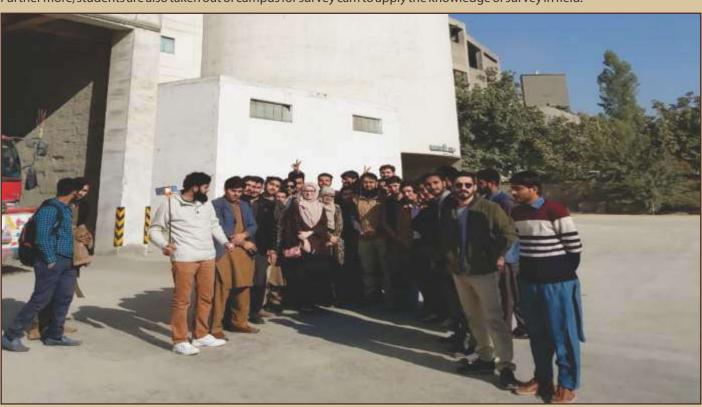
**PLO-12:** Lifelong Learning: An ability to recognize importance of, and pursue life long learning in the broader context of innovation and technological developments.

#### **Scheme of Studies**

Courses offered to the students are selected by the Department from the given list of HEC/PEC approved courses and approved by statutory bodies of the university. The Courses work comprise of theory courses, laboratory courses, survey camp and final year project.

During the 7th and 8th semesters, students carry out group projects and submit project reports. The project comprises of 3 credit hours in each semester. Grade "I" (Incomplete) is awarded for the project in 7th semester, which is converted into earned letter grade at the end of 8th semester, based on student's performance in both semesters.

Further more, students are also taken out of campus for survey cam to apply the knowledge of survey in field.



## **Civil Engineering**

0252 B.Sc. Civil Engineering

Shift : Morning

Duration: 4 Years, 8 Semesters, 139 Credit Hours

Eligibility : F.Sc. (Pre-Engineering) / DAE (Civil) or equivalent with at least 60% marks form any recognized

Board and Entrance test conducted by Educational Testing & Evaluation Agency (ETEA)

#### **1st Semester**

Course	Course Title	Credit Hours
CE-111	Civil Engineering Materials	2
CE-111(L)	Civil Engineering Materials	1
CE-112	Basic Electro-Mechanical Engg.	2
CE-112(L)	Basic Electro-Mechanical Engg.	1
CE-113	Engineering Drawing	2
CE-113(L)	Engineering Drawing	1
ENG-115	English Language skills	2
MTS-117	Applied Calculus/Maths-I	3
HUM-101	Islamic Studies*	2

#### 2nd Semester

Course	Course Title	Credit Hours
CE-121	Properties of Concrete	2
CE-121 (L)	Properties of Concrete	1
CE-122	Engineering Mechanics	3
CE-122 (L)	Engineering Mechanics	1
CSC-220	Computer Applications in Civil Engg.	2
CSC-220 (L)	Computer Applications in Civil Engg.	1
HUM-102	Pakistan Studies	2
MTS-116	Differential Equation/Math-II	3
HUM-108	Professional Ethics	2

#### 3rd Semester

Course	Course Title	Credit Hours
CE-211	Engineering Surveying-I	2
CE-211 (L)	Engineering Surveying-I	1
CE-212	Mechanics of Solids-I	3
CE-212 (L)	Mechanics of Solids-I	1
CE-213	Construction Engineering	2
CE-214	Computer Aided Civil Engg. Drawing & Graphics	2
CE-214 (L)	Computer Aided Civil Engg.Drawing & Graphics	1
MTS-305	Numerical Analysis/Maths-III	3
MTS-307	Probability and Statistics/Maths-IV	3

#### 4th Semester

Course	Course Title	Credit Hours
CE-221	Mechanics of Solids-II	3
CE-221 (L)	Mechanics of Solids-II	1
CE-222	Structural Analysis-I	3
CE-223	Fluid Mechanics-I	3
CE-223 (L)	Fluid Mechanics-I	1
CE-224	Engineering Surveying-II	2
CE-224 (L)	Engineering Surveying-II	1
CE-225	Architecture & Town Planning	3

#### 5th Semester

	Course	Course Title	Credit Hours
	CE-311	Fluid Mechanics-II	3
ı	CE-311 (L)	Fluid Mechanics-II	1
	CE-312	Structural Analysis-II	3
	CE-313	Geotechnical Engineering-I	3
ı	CE-313 (L)	Geotechnical Engineering-I	1
	CE-314	Environmental Engineering-I	2
ı	CE-314 (L)	Environmental Engineering-I	1
ı	CE-315	Geoinformatics	1
ı	CE-315 (L)	Geoinformatics	1
	CE-316	Engineering Geology	2

#### 6th Semester

Course	Course Title	Credit Hours
CE-321	Geotechnical Engineering-II	3
CE-321 (L)	Geotechnical Engineering-II	1
CE-322	Transportation Engineering-I	3
CE-323	Plain & Reinforced Concrete-I	3
CE-323 (L)	Plain & Reinforced Concrete-I	1
CE-324	Environmental Engineering-II	2
ECO-303	Engineering Economics	2
ENG-201	Business Communication	2





## **Civil Engineering**

7th Se	mester	
Course	Course Title	Credit Hours
CE-411	Plain & Reinforced Concrete-II	3
CE-411(L)	Plain & Reinforced Concrete-II	1
CE-412	Quantity Surveying & Estimation	2
CE-412 (L)	Quantity Surveying & Estimation	1
CE-413	Transportation Engineering-II	3
CE-413 (L)	Transportation Engineering-II	1
CE-414	Hydrology & Water Resources Management	2
CE-414 (L)	Hydrology & Water Resources Management	1
CE-426	Civil Engineering Project	3
ENG-102	Technical Report Writing	1

8th Ser	mester <b>Leading</b>	
Course	Course Title	Credit Hours
CE-421	Steel Structures	3
CE-422	Hydraulics & Irrigation Engineering	3
CE-422 (L)	Hydraulics & Irrigation Engineering	1
CE-423	Fundamentals of Earthquake	2
	Engineering	
CE-424	Disaster Managnent	1
CE-425	Construction Management	2
CE-425 (L)	Construction Management	1
CE-426	Civil Engineering Project	3
MGT-302	Entreprenureship	2

#### Note: Pre-requisite for the award of degree:

The students of B.Sc Civil Engineering programme shall complete 6 to 8 weeks Internship & Survey in an organization acceptable to the university and shall get an internship certificate from the concerned organization. The students who are already in service shall be exempted from Internship.

Hence, to earn the bachelor's degree, a student must have an internship certificate and a survey camp certificate. Also as per the criteria of Outcome Based Education System, a student must also have to qualify all the prescribed program learning outcomes of PEC.

\*The information provided in this section is subject to change according to the recommendations of approved statuary bodies of CUSIT.



## **Civil Engineering**

### **Civil Engineering Survey Camp**







## **Electrical Engineering**

B.Sc. Electrical Engineering MS Electrical Engineering Ph.D Electrical Engineering



## Faculty Members of Electrical Engineering



Engr. Dr. Muhammad Asif
(Head of Department)
Ph.D (Electronic Engineering)
University of Chinese Academy of Sciences, China

**Prof. Dr. Sahibzada Fayaz Noor** Professor Ph.D. (Electrical Engineering) University of Strathclyde Glasgow, UK

## **Engr. Ambar Lal**Assistant Professor MS (Electrical Engineering), UET, Peshawar B.Sc. (Electrical Engineering), UET, Peshawar

## **Engr. Sumayya Imran**Assistant Professor MS (Electrical Engineering), UET, Peshawar B.Sc. (Electrical Engineering), UET, Peshawar

### Engr. Muhammad Fayyaz Khan

MS (Electrical Engineering), UET, Peshawar B.Sc. (Telecommunication Engineering), UET, Peshawar

#### Engr. Imranzeb Durrani

Lecturer
MS (Electrical Engineering) LUMS, Lahore
BS (Electrical Engineering) FAST, Peshawar

#### **Engr. Mubashir Javed**

Lecturer

MS (Electrical Engineering), CUSIT, Peshawar B.Sc. (Electrical Engineering), CUSIT, Peshawar

#### **Engr. Bahadar Shah**

Lecturer
MS (Electrical Engineering), CUSIT, Peshawar
B.Sc. (Telecommunication Engineering), CUSIT, Peshawar
Ph.D (Electrical Engineering) (In progress)

#### **Engr. Sohail Muhammad**

Lab Engineer MS (Electrical Engineering), CUSIT, Peshawar B.Sc. (Electrical Engineering), UST, Bannu

#### **Engr. Fazal e Subhan**

Lab Engineer MS (Electrical Engineering) USPCASE, UET, Peshawar B.Sc. (Electrical Engineering), UET, Peshawar

#### Engr. Ahsan Zafar

Lab Engineer MS (Electrical Engineering), Comsats Islamabad B.Sc. (Electrical Engineering), UET, Peshawar

#### **Engr. Saad Hassan Kiani**

Lab Engineer

MS (Electrical Engineering), Iqra National University, Peshawar B.Sc. (Electrical Engineering), CUSIT, Peshawar

#### Mr. Muhammad Tariq

Lab Technician
DAE (Radio Technology)

#### Mr. Atif Hussain

Lab Technician

B.Sc. (Electrical Engineering Technology)
DAE (Electrical)

#### Mr. Usman Ghani

Lab Assistant

B.Sc. (Computer Science), Bacha Khan University, Charsadda DAE (Electrical)

#### Mr. Safiullah

Lab Assistant

B.Sc. (Electrical Engineering Technology), CUSIT, Peshawar DAE (Electrical)

## Department of **Electrical Engineering**

#### Introduction

Department of Electrical Engineering was established in 2008 in order to meet the short and long term requirements of industrial/commercial organizations of Pakistan for graduates in Electrical Engineering. Subsequent to the decision of the Board of Governors for starting the discipline of Electrical Engineering, University improved its infrastructure in accordance with the Pakistan Engineering Council (PEC) guidelines and developed purpose built Classrooms, Laboratories and allied facilities.

Electrical Engineering is one of the oldest fields of engineering. Initially, Electrical Engineering was confined to Power Generation, Transmission lines distribution and Telephony. However, due to advancement and rapid growth in technology, there is tremendous expansion in various areas of Electrical Engineering.

This expansion is so large that each area is now recognized as independent discipline. These include Telecommunication Engineering, Electronic Engineering, Power Engineering, Computer Engineering, Control System Engineering and many more. However, Electrical Engineering is still considered as parent discipline to these areas.

The department has to an up-to-date library, stocked with the latest reading materials and text-books for the use of the students and the faculty members. The department arranges seminars and workshops on various areas of Electrical Engineering. These seminars are delivered by faculty members and prominent scholars. Before the commencement of the program, Pakistan Engineering Council inspected the University's facilities under its Zero Visit's and gave prior permission to start degree program in Electrical Engineering. PEC through its visits accredited nine batches of the University i.e. 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016 & 2017 so far.



## Department of **Electrical Engineering**

#### Department of Electrical Engineering offers the following degree programs:

- B.Sc. Electrical Engineering
- MS Electrical Engineering
- Ph.D. Electrical Engineering

#### **B.Sc. Electrical Engineering**

#### **Mission Statement**

To produce graduates equipped with education, in-depth knowledge and relevant soft and technical skills to develop effective socio-economical engineering solutions for meeting the present and future challenges.

#### **Program Educational Outcomes (PEOs)**

**PEO – 1:** Successfully practice Electrical Engineering at the highest professional level.

**PEO – 2:** Demonstrate necessary background, technical and communication skills to work professionally in or more relevant areas of Electrical Engineering.

**PEO – 4:** Demonstrate pursual of continued lifelong learning.

**PEO – 3:** Participate in societal activities with recommended social and ethical values.

#### Program Learning Outcomes (PLOs)

**PLO-1: Engineering Knowledge:** An ability to apply knowledge of mathematics, science, engineering fundamentals and engineering specialization to the solution of complex electrical engineering problems.

**PLO-2: Problem Analysis:** An ability to identify, formulate, research literature, and analyze complex electrical engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

**PLO-3: Design/Development of Solutions:** An ability to design solutions for complex electrical engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

**PLO-4: Investigation:** To investigate complex electrical engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

**PLO-5: Modern Tool Usage:** To create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex electrical engineering activities, with an understanding of the limitations.

**PLO-6: The Engineer and Society:** 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 the complex electrical engineering problems.

**PLO-7: Environment and Sustain ability:** To understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge and need for sustainable development.

**PLO-8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

**PLO-9: Individual and Team Work:** To work effectively, as an individual or in a team, on multifaceted and /or multi disciplinary settings.

**PLO-10: Communication:** To communicate effectively, orally as well as in writing, on complex electrical 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.

## **Electrical Engineering**

**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 multi disciplinary environment. **PLO-12: Lifelong Learning:** An ability to recognize importance and pursue life long learning in the broader context of innovation and technological developments.

#### **Undergraduate Program**

The undergraduate program offers a 4-years degree in "Bachelor of Science in Electrical Engineering". The degree program is covered with State-of-the Art courses designed by the Pakistan Engineering Council (PEC) and in accordance with the Higher Education Commission (HEC) guidelines. Laboratory work is done with theoretical courses to illustrate important concepts and provide practical demonstration to students. The laboratories are well equipped with the related courses requirements.

The Bachelor's degree curriculum provides exposure to a wide spectrum of basic knowledge in Physics, Mathematics and Computer, followed by an intensive coverage of the principles of Electrical Engineering, both in class-rooms as well as in the laboratories.

#### **Scheme of Studies**

Course work for earning degree comprises theory courses, laboratory courses and project. Courses offered to the students are selected by the department from the given list of HEC/ PEC approved courses.

During the 7th and 8th semesters, students carry out group projects and write project reports. The project comprises of 3 credit hours (9 contact hours per week) in each semester. Grade "I" incomplete is awarded for the project in the 7th semester, which is converted into the earned letter grade at the end of 8th semester, based on students' performance in both semesters.



# Department of **Electrical Engineering**

0260 B.Sc. Electrical Engineering

Shift : Morning

Duration: 4 Years, 8 Semesters, 133 Credit Hours

Eligibility : F.Sc. (Pre- Engineering)/ DAE (Electrical) or equivalent with at least 60% marks from any recognized Board

and Entrance Test conducted by the Educational Testing & Evaluation Agency (ETEA).

#### 1st Semester

Course	Course Title	Credit Hours
CSC-101	Intro to Computing	1
CSC-101(L)	Intro to Computing	1
EE 103(L)	Workshop Practice	1
ENG-116	Functional English	2
HUM-101	Islamic Studies/ Ethics/ Theology	2
MTS-122	Calculus and Analytical Geometry	3
PHY-102	Applied Physics	3
PHY-102(L)	Applied Physics	1

#### 2nd Semester

Course	Course Title	Credit Hours
CSC-115	Programming Fundamentals	2
CSC-115(L)	Programming Fundamentals	1
EE-101	Linear Circuit Analysis	3
EE-101(L)	Linear Circuit Analysis	1
ENG-101	Communication Skills	2
HUM-102	Pakistan Studies	2
MCE-102(L)	Engineering Drawing	1
MTS-123	Linear Algebra and Differential	3
	Equation	

#### **3rd Semester**

Course	Course Title	Credit Hours
CSC-201	Digital Logic Design	3
CSC-201(L)	Digital Logic Design	1
EE-204	Electrical Network Analysis	3
EE-204(L)	Electrical Network Analysis	1
EE-209	Electronic Devices and Circuits	3
EE-209(L)	Electronic Devices and Circuits	1
MTS-215	Complex Variable & Transforms	3
MCE-201	IDEE-I (Thermodynamics)	3

#### 4th Semester

Course	Course Title	<b>Credit Hours</b>
EE-302	Signals and Systems	3
EE-302(L)	Signals and Systems	1
CSC-216	Data Structure & Algorithms	3
CSC216(L)	Data Structure & Algorithms	1
MTS-216	Probability Methods for Engineers	3
EE-205	Elective-I	3
EE-205(L)	Elective-I	1
HUM-108	Professional Ethics	3

#### **5th Semester**

Course	Course Title	<b>Credit Hours</b>
EE-206	Electromagnetic Field Theory	3
EE-301	Electrical Machines	3
EE-301(L)	Electrical Machines	1
EE-304	Communication Systems	3
EE-304(L)	Communication Systems	1
MTS-203	Numerical Analysis	3
CSC-327	IDEE-II (Computer Organization	3
	and Architecture)	

#### 6th Semester

	Course	Course Title	<b>Credit Hours</b>
	EE-313	Introduction to Embedded System	3
	EE-313(L)	Introduction to Embedded System	1
	EE-404	Linear Control System	3
	EE-404(L)	Linear Control System	1
	EE-4XX	Breadth Core-I	3
	EE-4XX(L)	Breadth Core-I	1
	EE-4XX	Breadth Core-II	3
	EE-4XX(L)	Breadth Core-II	1
	ENG-102	Technical Report Writing	2

#### **7th Semester**

Course	Course Title	Credit Hours
EE-4XX	Elective-II	3
EE-4XX(L)	Elective-II	1
EE-4XX	Elective-III	3
EE-4XX(L)	Elective-III	1
HRM-410	Entrepreneurship Skills	3
ECO-301	Project Management	3
EE-499	Final Year Project Phase-l	3

#### 8th Semester

Course	Course Title	<b>Credit Hours</b>
EE-4XX	Elective-IV	3
EE-4XX(L)	Elective-IV	1
EE-4XX	Elective-V	3
MGT-311	Engineering Economics	3
EE-499	Final Year Project Phase-II	3
EE-412	Renewable Energy System	3

## **Electrical Engineering**

List of courses under breadth core and elective options for specialization of the HEC's course Framework for Engineering.

#### **Breadth Core Courses for Electrical Engineering**

EE-407 Power System Analysis

EE-410 Power Transmission & Distribution

#### **Elective Courses for Electrical Engineering**

EE-205 Instrumentation & Measurement

EE-408 Advanced Electrical Machines

**EE-309 Power Electronics** 

**EE-312 Power System Protection** 

EE-411 Power Generation and Utilization

#### Note: Pre-requisite for the award of degree

The B.Sc Electrical Engineering program students shall complete 6 to 8 weeks Internship in an organization acceptable to the university and shall get an internship letter/certificate from the concerned organization. The students who are already in service shall be exempted from internship.







## **Electrical Engineering**

0320 MS Electrical Engineering

Shift : Weekend

Duration : 2 Years, 4 Semsters, 30 Credit Hours

Eligibility: B.Sc. Electrical Engineering/ B.Tech. (Electrical)/ B.Sc. Electrical Engineering Technology (4 years) or

equivalent qualification with at least CGPA 2.50/4.00 or equivalent from any HEC recognized University

and qualify University test.

The Master's degree courses are aimed at bringing the students abreast with the most recent developments in their fields of specialization. These courses are offered for both part-time and full-time students.

At postgraduate level the department of Electrical Engineering offers MS Program in Electrical Engineering. The areas of active research includes Electronic Devices and Materials, Intelligent Systems, Microelectronics and Computer Systems, Nano-Engineering, Photonics Systems, Systems and Control, Telecommunications and Signal Processing. This gives graduates an unparalleled advantage in both technical skills and intellectual discipline to become leaders in overcoming the challenges of modern technological advancements.

#### 1st Semester

Course	Course Title	Credit Hours
EE-6XX	Core Course-I	3
EE-6XX	Core Course-II	3
EE-6XX	Elective-I	3

#### **3rd Semester**

Course	Course Title	Credit Hours
EE-699	Research Thesis	3
EE-6XX	Elective-III	3
EE-6XX	Elective-IV	3

#### 2nd Semester

Course	Course Title	Credit Hours
EE-6XX	Core Course-III	3
EE-6XX	Core Course-IV	3
EE-6XX	Elective-II	3

#### 4th Semester

Course	Course Title	Credit Hours
EE-699	Research Thesis	3
EE-6XX	Elective-V**	3
EE-6XX	Elective-VI**	3

#### Core Courses for MS Electrical Engineering

EE-614	Linear System Theory
EE-619	Renewable Energy System
EE-602	Stochastic Processes
EE-623	Optimization Technique for Engineers



#### **Elective Courses for MS Electrical Engineering**

EE-6	510	Advance Power Electronics
EE-6	5XX	Advance Power System Control
EE-6	5XX	Power System Stability and Control
EE-6	5XX	High Voltage Engineering
EE-6	512	Advance Power System Analysis
EE-6	520	Advance Power System Protection
EE-6	5XX	Smart Grid
EE-6	5XX	Power Devices & Circuits
EE-6	518	Advance Digital Communications
EE-6	5XX	Mobile & Wireless Networks
EE-6	509	Advance Digital System Design
EE-6	519	Advance Wireless Communications
EE-6	5XX	RF Devices & Circuits
EE-6	5XX	*Research Methodology

\* Mandatory for students under Plane - A

\*\*Mandatory for students under Plane - B

## **Electrical Engineering**

#### **Ph.D Electrical Engineering**

Shift : Weekend / Afternoon

Duration: 3 Years, 6 Semsters, 30 Credit Hours

Eligibility : MS. Electrical Engineering with research thesis in the relevant field or equivalent qualification with at least

CGPA 3.00/4.00 or equivalent from any HEC recognized University and ETS-GRE(Subject) passed with

50 percent percentile or NTS-GAT(Subject) with 60% marks.

#### **Research Opportunities (Power & Control)**

• Renewable Energy resources and integration to grid.

- Advance Control methods and its application to FACTS devices. DC/ DC converters, wind energy, smart energy buildings and fuel cells process.
- Fault tolerant power system and solution using embedded and FPGA.
- High voltage insulation, reliability and life cycle for each.

#### **Electronics & Communication**

- Fault tolerant digital systems.
- · Reconfigurable real time systems.
- Software defined radio and defined networks.
- · VLSI testing.
- Electronic design automation for reliability and configurability.
- Adaptive signal image processing system.
- · Wireless sensor networks.







# **ENGINEERING TECHNOLOGY**

BS Electrical Engineering Technology BS Civil Engineering Technology



## Faculty Members of **Electrical Engineering Technology**



Engr. Sheraz Abbas
Head of Department
Lecturer
Ph.D (Structure Engineering)
Tongji University Shanghai, China (in progress)
M.Sc (Structural Engineering) UET Peshawar
B.Sc (Civil Engineering) UET Peshawar

## **Engr. Umair Rahim (Lecturer)**MS (Electrical Engineering) IUKL, Malaysia BS (Electrical Engineering) CUSIT, Peshawar

**Engr.T. Naveed Ur Rehman (Lecturer)**MS (Electrical Engineering) COMSATS, Abbotabad
B.Tech (Electrical) SCUIT, Peshawar

**Engr.T. Abdullah Jan (Junior Lecturer)**MS (Electrical Engineering) (In progress)
BS (Electrical Engineering) CUSIT, Peshawar



Engr. Burhan Ud Din
Program Coordinator
Lecturer
M.Sc. (Electrical Engineering)
Fast National University, Peshawar
B.Sc. (Telecommunication Engineering),
CUSIT, Peshawar

## **Engr. Shazmina (Lecturer)**MS (Electrical Engineering) UET, Peshawar BS (Electrical Engineering) UET, Peshawar

**Engr. Suleman Tahir (Lecturer)**MS (Electrical Engineering) NUST, Islamabad BS (Electrical Engineering)
FAST National University, Peshawar



## Department of **Electrical Engineering Technology**

#### **Mission Statement**

The mission of Electrical Engineering Technology Department is to provide high quality education in pure and applied engineering technology in order to prepare students for graduate studies or professional careers in applied technology. The department, through its faculty, will continue to contribute to graduate qualified cadres who are equipped with insight and research skills in the field of engineering technology.

#### **Preamble**

The National Technology Council (NTC) has been established by Higher Education Commission of Pakistan (HEC) as a statutory autonomous body to regulate the Quality and Conduct of Engineering Technology Education Programs in Pakistan, ensure competence of Graduate Engineering Technologists and help socio-economic uplift of the country. The strategic focus of National Technology Council is to improve Quality of Engineering Technology Education Programs based on Outcome Based Education (OBE) & Outcome Based Assessment (OBA) system through a comprehensive Policy & Processes of Accreditation and Certification, adopting international best practices both in public and private Higher Education Institutions / universities imparting Engineering Technology Education in the country.

NTC has set up Technology Accreditation Board (TAB) to monitor the growth and quality of Engineering Technology Education in Pakistan. NTC's TAB has a mandate to evolve procedures, articulate the criterion, define parameters, and establish appropriate benchmarks. Accordingly, NTC has designed Accreditation & Evaluation processes and Accreditation Manual, First Edition -2017, incorporating all aspects of OBE and OBA applicable to Engineering Technology Education Programs being run in the country. It is expected to serve as guidelines to the Higher Education Institutions (HEIs) and all stakeholders to meet Quality Assurance Standards. Consequently, Degree Awarding Institutions (DAIs) are expected to produce competent Engineering Technologists to meet stakeholders' requirements and contribute their best for the National development. City University of Science & Information Technology, Peshawar has started Electrical Engineering Technology since 2015.

#### Program Learning Outcomes (PLOs)

Electrical Engineering Technology Program at CUSIT has been adopted the twelve attributes which includes Knowledge (Cognitive domain), Skills (Psychomotor domain) and Attitudes (Affective domain) that should be attained by the students at the time of graduation as a program learning outcome. The NTC Manual of Accreditation 2017, based on Outcome Based Education and Assessment (OBE/OBA), has identified the 12 generic Program Learning Outcomes for engineering technology programs.

For BSc Electrical Engineering Technology program, these Program Learning Outcomes (PLOs) have been customized to the needs and demand of the program. The Course Learning Outcome (CLOs) and Lecture Learning Outcomes (LLOs) for all courses/lectures have been aligned with the PLOs. Both direct and indirect assessment system has been deployed for measuring the individual and cohort based performance.

#### **Continuous Quality Improvement**

For CUSIT, quality is always a journey to excellence, which would never stop. The endeavours of the Management, faculty and staff are always aimed at creating excellence in teaching, research and all components of Learning Management System. This is essential for survival of the University, operating in private sector, as the market dynamics and demand supply conditions of the program require to establish high level of quality in all its pursuits, based on the principles of Total Quality Management (TQM).

## Department of **Electrical Engineering Technology**

#### **Program Educational Outcomes (PEOs)**

- **PEO-1:** To make technically competent electrical engineers equipped with high quality of education and skills.
- **PEO-2:** Provide effective solutions for contemporary and future technical challenges in electrical engineering by gathering and utilizing knowledge and skills to contribute in socio-economic development.
- **PEO-3:** Be sensitive to ethical and societal aspects while undertaking an engineering task; individually or in a team.
- **PEO-4:** Demonstrate life-long learning, to improve their professional capabilities for personal fulfillment and for the betterment of society.

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

- **PLO-1: Engineering Knowledge:** An ability to apply knowledge of mathematics, science, engineering fundamentals and engineering specialization to the solution of complex electrical engineering problems.
- **PLO-2: Problem Analysis:** An ability to identify, formulate, research literature, and analyze complex electrical engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- **PLO-3: Design/Development of Solutions:** An ability to design solutions for complex electrical engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- **PLO-4: Investigation:** To investigate complex electrical engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.
- **PLO-5: Modern Tool Usage:** To create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex electrical engineering activities, with an understanding of the limitations.
- **PLO-6: The Engineer and Society:** 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 the complex electrical engineering problems.
- **PLO-7: Environment and Sustain ability:** To understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge and need for sustainable development.
- **PLO-8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- **PLO-9: Individual and Team Work:** To work effectively, as an individual or in a team, on multifaceted and /or multi disciplinary settings.
- **PLO-10: Communication:** To communicate effectively, orally as well as in writing, on complex electrical 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 multi disciplinary environment.
- **PLO-12: Lifelong Learning:** An ability to recognize importance and pursue life long learning in the broader context of innovation and technological developments.

## Department of **Electrical Engineering Technology**

0276 B.Sc. Electrical Engineering Technology

Shift : Afternoon

Duration : 4 Years, 8 Semesters, 132 Credit Hours

Eligibility : DAE (Electrical) or equivalent with at least 50% marks from any recognized Board.

#### **1st Semester**

Course	Course Title	Credit Hours
CSC-118	Introduction to computer	1
	Fundamentals	
CSC-118 (L)	Introduction to computer	2
ENG-116	Fundamentals Lab	
	Functional English	1
HUM-131	Islamic Studies	1
MTS-121	Applied Mathematics - I	3
PHY-102	Applied Physics	2
PHY-102 (L)	Applied Physics Lab	1
ET-116	Linear Circuit Analysis	2
ET-116 (L)	Linear Circuit Analysis Lab	2

#### 3rd Semester

	ICSCCI	
Course	Course Title	Credit Hours
ET-221	AC Circuits Analysis	2
ET-221 (L)	AC Circuits Analysis Lab	2
ET-217	Electromagnetic Field Theory	2
ET-220	Electrical Instrumentation &	2
	Measurements	
ET-220 (L)	Electrical Instrumentation &	2
	Measurements Lab	
ET-219	Digital Electronics	2
ET-219 (L)	Digital Electronics Lab	2
MGT-204	Total Quality Management	2
MGT-205	Professional Ethics	1

#### 5th Semester

Course	Course Title	Credit Hours
ET-313	Microprocessor Theory & Interfacing	2
ET-313 (L)	Microprocessor Theory & Interfacing Lab	1
ET-244	Electrical Machine-II	2
ET-244 (L)	Electrical Machine-II Lab	2
ET-311	Signals and Systems	2
ET-311 (L)	Signals and Systems Lab	1
ET-323	Switch Gears & Protective Devices	2
ET-323 (L)	Switch Gears & Protective Devices Lab	1
ET-353	Power System Analysis	3

#### **Semester 06 (Summer Project Work**

Course	Course Title	Credit Hours
ET-499	Project Phase-II	3

#### 7th Semester

Course	Course Title	Credit Hours
ET-4116	16 Weeks Supervised Industrial Phase-II	16
	/ Field Training (8x5=40Hrs / Week)	

#### 2nd Semester

Course	Course Title	Credit Hours
ET-119	Electronics	2
ET-119 (L)	Electronics Lab	2
ET-117	Power Generation Systems and	2
	Utilization	
ET-314	Basic Mechanical Technology	2
ET-114 (L)	Engineering Drawing Lab	2
ENG-101	Communication Skills	2
HUM-102	Pakistan Studies	1
MTS-124	Applied Mathematics – II	3

#### 4th Semester

4th Semester		
Course	Course Title	Credit Hours
ET-174	Electrical Machine-I	2
ET-174 (L)	Electrical Machine-I Lab	1
ET-273	Electrical Power Transmission &	2
	Distribution	
ET-273 (L)	Electrical Power Transmission &	2
	Distribution Lab	
EH-322	Technical Report Writing	2
ET-317	Power Electronics	2
ET-317 (L)	Power Electronics Lab	2
ET-214	Communication Technology	2
ET-214 (L)	Communication Technology Lab	2

#### 6th Semester

oth Semester		
Course	Course Title	Credit Hours
ES-301	Occupational Health and Safety	3
ET-343	Control Technology	2
ET-343 (L)	Control Technology Lab	1
ET-364	Data Communication & Computer	2
	Networks	
ET-364 (L)	Data Communication & Computer	2
	Networks Lab	
ET-373	High Voltage Technologies	3
ET-499	Project Phase-I	3

Course	Course Title	Credit Hours
ET-4116	16 Weeks Supervised Industrial Phase-I	16
	/ Field Training (8x5=40Hrs / Week)	

## Faculty Members of Civil Engineering Technology



Engr. Sheraz Abbas
Head of Department
Lecturer
Ph.D (Structure Engineering)
Tongji University Shanghai, China (in progress)
M.Sc (Structural Engineering) UET Peshawar
B.Sc (Civil Engineering) UET Peshawar



Engr. Zeeshan Umar Program Coordinator Lecturer M.Sc. (Structure Engineering) UET Peshawar B.Sc. (Civil Engineering) UET Peshawar

#### Engr. Sheraz Abbas (Incharge Deptt. of Technology / Lecturer)

Ph.D (Structure Engineering) Tongji University Shanghai, China (in progress) M.Sc (Structural Engineering) UET Peshawar B.Sc (Civil Engineering) UET Peshawar

#### **Engr. Muhammad Fahad Ullah (Lecturer)**

Ph.D (Structure Engineering) Tongji University Shanghai, China (in progress) M.Sc (Structural Engineering) UET Peshawar B.Sc (Civil Engineering) UET Peshawar

### **Engr. Muhammad Mashhood Khan** (Junior Lecturer)

M.Sc. (Geotechinical Engineering) NUST, Islamabad (in progress) B.Sc. (Civil Engineering) IIUI, Islamabad

#### **Engr. Rahman Ullah (Lab Engineer)**

M.Sc (Urban Infrastructure Engineering)
NIUP, UET Peshawar (in progress)
B.Sc. (Civil Engineering) CUSIT, Peshawar

#### **Engr. Zeeshan Umar (Lecturer)**

M.Sc. (Structure Engineering) UET Peshawar B.Sc. (Civil Engineering) UET Peshawar

#### **Engr. Faizan Halim (Lecturer)**

M.Sc. (Structure Engineering) CECOS, Peshawar B.Sc. (Civil Engineering) UET Peshawar

#### **Engr. Muhammad Saad Waheed**

M.Sc. (Transportation Engineering) NUST, Islamabad B.Sc. (Civil Engineering) UET Peshawar

#### **Engr.T. Sajid Iqbal (Junior Lecturer)**

M.Tech (Civil) Sarhad University Peshawar (in progress) B.Tech (Civil) CUSIT, Peshawar

#### **Engr. Basit Ali (Lab Engineer)**

B.Sc. (Civil Engineering) CUSIT, Peshawar

## Department of **Civil Engineering Technology**

#### **Vision**

To produce technologists with excellence in technical qualities to serve the nation.

#### Mission

- To provide, students with high-quality education and training required to fully develop their professional qualities and skills.
- To develop their personal and technical potential to the greatest extent possible to pursue higher studies.
- To provide technical solution to problems and serve the people and society of KP and Pakistan for their socioeconomic development.

#### Civil Engineering Technology Program Education objectives:

- **PEO-1.** Successfully practice in Civil Engineering industry.
- **PEO-2.** Basic knowledge of construction practices for better supervision of construction projects.
- **PEO-3.** Be able to supervise and communicate in the field.
- **PEO-4.** Strive for the improvement of society using Engineering practices.

#### Civil Engineering Technology Program Learning Outcomes (PLOs)

The graduates of City University will achieve the following outcomes by the time they graduate:

- **PLO-1:** Engineering Technology Knowledge (SA1): An ability to apply knowledge of mathematics, natural science, Engineering Technology fundamentals and Engineering Technology specialization to defined and applied Engineering Technology procedures, processes, systems or methodologies.
- **PLO-2: Problem Analysis (SA2):** An ability to Identify, formulate, research literature and analyze broadly-defined Engineering Technology problems reaching substantiated conclusions using analytical tools appropriate to the discipline or area of specialization.
- **PLO-3: Design/Development of Solutions (SA3):** An ability to design solutions for broadly-defined Engineering Technology problems and contribute to the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- **PLO-4: Investigation (SA4):** An ability to conduct investigations of broadly-defined problems; locate, search and select relevant data from codes, data bases and literature, design and conduct experiments to provide valid conclusions.
- **PLO-5: Modern Tool Usage (SA5):** An ability to Select and apply appropriate techniques, resources, and modern technology and IT tools, including prediction and modelling, to broadly-defined Engineering Technology problems, with an understanding of the limitations.
- **PLO-6: Engineering Technologist and Society (SA6):** An ability to demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant 13 to Engineering Technology practice and solutions to broadly defined Engineering Technology problems.
- **PLO-7: Environment and Sustainability (SA7):** An ability to understand and evaluate the sustainability and impact of Engineering Technology work in the solution of broadly defined Engineering Technology problems in societal and environmental contexts.
- **PLO-8: Ethics (SA8):** Understand and commit to professional ethics and responsibilities and norms of Engineering Technology practice.
- **PLO-9: Individual and Team Work (SA9):** An ability to Function effectively as an individual, and as a member or leader in diverse teams
- **PLO-10: Communication (SA10):** An ability to communicate effectively on broadly defined Engineering Technology activities with the Engineering Technologist community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

## Department of **Civil Engineering Technology**

**PLO-11: Project Management (SA11):** An ability to demonstrate knowledge and understanding of Engineering Technology management principles and apply these to one's own work, as a member or leader in a team and to manage projects in multi disciplinary environments.

**PLO-12: Lifelong Learning (SA12):** An ability to recognize the need for, and have the ability to engage in independent and lifelong learning in specialist Engineering Technologies.

## Department of **Civil Engineering Technology**

0278 B.Sc. Civil Engineering Technology

Shift : Afternoon

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility : Minimum 50% marks in DAE Civil or Minimum 50% marks in F.Sc (Pre-Engineering).

Qualifying the Entry Test.

#### 1st Semester

Course	Course Title	Credit Hours
CT-154	Material & Methods of	2
	Constructions	
CT-154 (L)	Material & Methods of	1
	Constructions	
CS-113	Applied Mathematics-I	3
CS-123	Introduction to Computer	1
	Fundamentals	
CS-123 (L)	Introduction to Computer	1
	Fundamentals	
CT-113	Civil Engineering Drawing	1
CT-113 (L)	Civil Engineering Drawing	2
CT-124	Surveying	2
CT-124 (L)	Surveying	2

#### 3rd Semester

Course	Course Title	Credit Hours
CT-212	Introduction to Architecture	2
	and Town Planning	
CH-212	Pakistan Studies	2
CT-233	Soil Mechanics	2
CT-233 (L)	Soil Mechanics	1
CT-243	Fluid Mechanics	2
CT-243 (L)	Fluid Mechanics	1
CT-254	Mechanics of Solids	2
CT-254 (L)	Mechanics of Solids	1
ENG-116	Functional English	2

#### **5th Semester**

Course	Course Title	Credit Hours
CT-313	Hydrology	2
CT-313 (L)	Hydrology	1
CT-323	Reinforced Concrete Structures	2
CT-323 (L)	Reinforced Concrete Structures	1
CT-333	Construction and Hydraulic	2
	Machinery	
CT-333 (L)	Construction and Hydraulic	1
	Machinery	
CT-353	Foundation Engineering	2
CT-353 (L)	Foundation Engineering	1
CM-313	Project Management	3

#### **7th Semester**

Course	Course Title	Credit Hours
CT-4116	Professional Supervised Field Training	16
	(8x5=40 hrs / Week)	

#### 2nd Semester

Course	Course Title	Credit Hours
CH-112	Islamic Studies / Professional	2
	Ethics	
CT-134	Concrete Technology	2
CT-134 (L)	Concrete Technology	2
CH-123	Communication Skills	3
CT-144	Applied Mechanics	2
CT-144 (L)	Applied Mechanics	1
CS-133	Applied Mathematics - II	3
CM-112	Occupational Health and	2
	safety Management	

#### 4th Semester

Course	Course Title	Credit Hours
CT-264	Transportation Engineering	2
CT-264 (L)	Transportation Engineering	1
CT-274	Water Supply & Waste Water	2
	Management	
CT-274 (L)	Water Supply & Waste Water	1
	Management	
CM-213	Environmental Management	2
CM-213 (L)	Environmental Management	1
CT-283	Theory of Structures	2
CT-283 (L)	Theory of Structures	1
CH-223	Technical Report Writing	3

#### **6th Semester**

Course	Course Title	Credit Hours
CT-363	Pre-stressed & Precast concrete	2
CT-363 (L)	Pre-stressed & Precast concrete	1
CT-373	Geology & Earthquake Engineering	2
CT-373 (L)	Geology & Earthquake Engineering	1
CT-383	Irrigation and Hydraulic Structures	2
CT-383 (L)	Irrigation and Hydraulic Structures	1
CT-393	Steel Structures	2
CT-393 (L)	Steel Structures	1
CT-223	Quantity Surveying and Contract	1
	Documents	
CT-223 (L)	Quantity Surveying and Contract	2
	Documents	
CT-3103	Project	3

#### Semester 06 (Summer Project Work)

Course	Course Title	Credit Hours
CT-3113	Project (Continue)	3

Course	Course Title	Credit Hours
CT-4216	Professional Supervised Field Training	16
	(8x5=40 hrs / Week)	

BS. English MS. English



## Faculty Members of English



#### Dr. Zulfiqar Ali (Head of Department)

Ph.D (Applied Linguistics)
MA. English (Literature), University of Peshawar
MA. Intl ELT & Applied Linguistics
London Metropolitan University, UK

#### Dr. Riaz Ud Din

Assistant Professor Ph.D. English (Linguistics) AJK, Muzaffarabad

#### **Dr. Humaira Riaz**

Assistant Professor PhD English (Literature) Fatima Jinnah University, Rawalpindi

#### Dr. Ishaq Khan

Assistant Professor PhD English (Literature) Qurtuba University of Science & I.T, Peshawar

#### Ms. Sheeba Sadaf

Lecture

MS English (Literature) Bacha Khan University, Charsadda MA. English, University of Peshawar

#### Ms. Uzma

Lecturer

MS English (Applied Linguistics) University of Peshawar MA. English, University of Peshawar

#### **Mr. Ahmad Farooq**

Lecturer

MS English (Linguistics) in progress Islamia College University, Peshawar MA English, NUML, Islamabad

#### Mr. Rehman Ullah

Lecture

MS English (Literature) City University, Peshawar MA English (Literature & Linguistics) City University, Peshawar Mr. Syed Zia Ullah Shah

Lecturer

MS. English (Literature) Qurtuba University of Science & I.T, Peshawar MA English (Literature & Linguistics) University of Peshawar

#### Ms. Naureen Waqar

Lecturer

MS English (Linguistics) City University, Peshawar MA English, University of Peshawar

#### Ms. Bibi Ranra

Lecturer

MS English (Applied Linguistics) University of Peshawar MA English (Literature & Linguistics) University of Peshawar

#### Mr. Muhammad Ishtiaq

Lecture

MS English (Literature) City University, Peshawar MA English (Literature & Linguistics) Abdul Wali Khan University, Mardan

#### Mr. Rahil Kashif

Lecture

MA English (Literature & Linguistics) NUML, Peshawar

#### Mr. Rizwan Safdar

Lecturer

MS English (Literature) in progress Qurtuba University, Peshawar MA English (Linguistics & Literature) NUML, Peshawar

#### Mr. Ihsan Ullah

Lecturer

MS English (Literature) University of Peshawar MA English (Literature & Linguistics) University of Peshawar



#### **Vision Statement**

The vision of the department of English is to provide state of the art education in English (Literature and Linguistics) that enables the new generation to meet the challenges of the future by reading professional writers, and their own creative and critical production and presentation in Linguistics and English Literature.

#### **Mission Statement**

To ensure the graduation of competent, dynamic and reactive individuals in the study of English Literature and Linguistics.

#### **Objective**

- To educate students in both the artistry and utility of English language through the study of literature and other contemporary forms of culture.
- To provide students with the critical faculties necessary in academic environment, on the job, and in an increasingly complex, interdependent world
- To graduate students who are capable of performing research analysis and criticism of literary and cultural texts from different historical period and genre
- To assist students in the development of intellectual flexibility, creativity, and cultural literacy so that they may engage in life-long learning.

#### Follow an expected outcomes of the programme in which students should be:

- Familiar with representative literary and cultural texts within a significant number of historical, geographical, and cultural contexts.
- Able to apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genre
- Able to identify, analyze, interpret and describe the critical ideas, values and themes that appear in literary and cultural texts and understand the way these ideas, values and themes inform and impact culture and society, both now and in the past.
- Able to write analytically in a variety of formats, including essays, research papers, reflective writing, and critical reviews of secondary sources.
- Able to ethically gather, understand, evaluate and synthesize information from a variety of written and electronic sources.
- Proficient in oral digital and written ......

#### Alignment of Programs' objectives with University's Mission Statement

University and program's mission statement guide the program's objectives of English Programs of BS and MS/MPhil. It is done through imparting related linguistic and literary skills through quality education which enables them to serve their organization and nation.

#### Main Elements of Strategic plan (Curriculum Design)

The main elements of CUSIT strategic plan for MS/MPhil and BS English programs are programs course contents, delivery/teaching methodology and output evaluation. This educates and prepare students professionally and personally through conceptual understanding and practical exposure.

**BS. English** 0258

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Intermediate or equivalent qualification with Eligibility:

at least 50% marks from any recognized board.

#### 1st Semester

ш			
	Course	Course Title	<b>Credit Hours</b>
	MGT-104	Entrepreneurship	3
	ENG-116	Functional English	3
	ENG-128	Introduction to English	3
		Literature (Poetry & Drama)	
	ENG-127	Introduction to Language Studies	3
	HUM-102	Pakistan Studies	3
	PSY-104	Psychology	3

#### 2nd Semester

Course	Course Title	Credit Hours
ENG-120	History of English Literature-I	3
	(Medieval to Romantics)	
ENG-129	Study Skills	3
HUM-101	Islamic Studies	3
ENG-125	Communication & Presentation Skills	3
ENG-130	Gender Studies	3
ENG-119	Introduction to Phonetics & Phonology	3

#### 3rd Semester

Course	Course Title	Credit Hours
ENG-214	History of English Literature	3
	(19th century realism to	
	Modernism)	
ENG-221	Short Fictional Narrative	3
ENG-219	Morphology and Syntax	3
ENG-222	Composition Writing	3
ENG-211	International Relation	3
CSC-101	Introduction to Computing	3

#### 4th Semester

Course	Course Title	Credit Hours
ENG-318	Novel-I	3
ENG-217	Advanced Academic Reading	3
	and Writing	
ENG-420	Prose	3
HUM-205	Human Rights and Citizenship	3
ENG-223	Introduction to Geography	3
ENG-216	Semantics	3

#### 5th Semester

Course	Course Title	Credit Hours
ENG-206	Poetry-I	3
ENG-320	Classical and Renaissance Drama	3
ENG-319	Novel-II	3
ENG-313	Discourse Analysis	3
ENG-310	Sociolinguistics	3
ENG-209	American Literary Movements-I	3

#### **6th Semester**

Course	Course Title	Credit Hours
ENG-306	Poetry-II	3
ENG-321	Foundations of Literary Criticism	3
ENG-424	Research Design	3
ENG-213	American Literary Movement-II	3
ENG-315	Psycholinguistics	3

#### 7th Semester

Linguistics & Literature		
Course	Course Title	Credit Hours
	Elective-I	3
	Elective-II	3
	Elective-III	3
	Elective-IV	3
ENG-499	Research Project	3

Linguistics & Literature		
Course	Course Title	Credit Hours
	Elective-V	3
	Elective-VI	3
	Elective-VII	3
	Elective-VIII	3
ENG-499	Research Project	3

Course	Course Title	Credit Hours
BS. Englis	h Elective Courses (Literature)	
American	Literature	3
Psycho-Ai	nalytical Studies-I	3
Common	wealth Literature-l	3
(Post-colo	nial Discourse+South Asian Literature+	3
20th Cent	ury Literature (Poetry & Drama)+	
20th Cent	ury English Literature	
Psycho-Ai	nalytical Studies-II	3
Science Fi	ction	3
Common	wealth Literature-II	3
(Post-colo	nial Discourse+South Asian Literature+	3
20th Cent	ury Literature (Poetry & Drama)+	3
20th Cent	ury English Literature	
Pakistan L	iterature	3

Course	Course Title	Credit Hours
BS. English	Elective Courses (Linguistics)	
Discourse A	nalysis (Also Critical Discourse Analysis)	3
World Engli	shes	3
Second Lan	guage Acquisition	3
Trends and Issues in Linguistics		3
Genre Analysis		3
Pragmatics		3
Syllabus De	signing and Testing	3
Media Disco	ourse: Media and Language	3
English Lan	guage Teaching	3

0322 MS. English

Shift : Weekend

Duration: 2 Years, 4 Semesters, 30 Credit Hours

Eligibility: BS. English, MA. English or equivalent qualification with at least 50% marks or CGPA 2.50 / 4.00 from

any HEC recognized university and GAT Test obtaining at least 50% marks / university test with 50% score.

#### Introduction

English may be regarded a professional degree in terms of its wide demand as basic qualification to enter the teaching profession- from the nursery to the tertiary level. Hitherto, an MA in English was the degree of choice for young men and women to enter the teaching profession as teachers of English at whatever level. However, the situation is changing due to the ever- increasing thrust from the Higher Education Commission with a view to transforming higher education in Pakistan. Recently, HEC has encouraged private-sector universities to start MS/M.Phil programs. It is, therefore, an opportune time for the private-sector universities to grab this opportunity. Keeping in view this new thrust and the importance of MS/ M.Phil degrees for future of the discipline, CUSIT has resolved to initiate MS/ M.Phil Degree program in the discipline of English Literature and Linguistics.

#### **1st Semester**

Linguistics & Literature			
Course	Course Title	<b>Credit Hours</b>	
ENG-601	Research Methodology and	3	
	Writing (core course)		
ENG-6XX	Core Course for Linguistics	3	
	/ Literature		
ENG-6XX	Core Course for Linguistics	3	
	/ Literature	3	
ENG-6XX	Elective-I		

#### **2nd Semester**

Linguistics & Literature		
Course	Course Title	Credit Hours
ENG-6XX	Elective-II	3
ENG-6XX	Elective-III	3
ENG-6XX	Elective-IV	3
ENG-6XX	Elective-V	3

#### 3rd Semester

Linguistics & Literature		
Course	Course Title	Credit Hours
ENG-699	Research Thesis	3

Linguistics & Literature		
Course	Course Title	Credit Hours
ENG-699	Research Thesis	3

Course Title	Credit Hours
MS. English Elective Courses (Literature)	
Contemporary Postcolonial Studies	3
War Literature	3
Literature and Globalization	3
Literature and Environment	3
Literature and Film Studies	3
Women's Writings	3
Postmodern Fiction	3
Transnational Poetry	3
Digital Humanities	3
Shakespearean Studies	3
Postmodern American Literature	3
World Literature & Translation	3
South Asian Literature	3
Diasporic Literatures	3

Course Title	Credit Hours
MS. English Elective Courses (Linguistics)	
Corpus Linguistics	3
Language and Technology	3
Psycho-Neurolinguistics	3
Advanced Stylistics	3
Anthropological Linguistics	3
Systemic Functional Linguistics	3
Critical Discourse Analysis	3
Bilingualism	3
Genre Analysis	3
Issues in Syntax	3
Applied Linguistics	3
Multilingualism	3
Teaching and Learning English in Large Classes	3
Cross-Cultural Communication	3
Theoretical Phonology	3
Phonetics	3
Language Program Management	3
Morphology & its Theoretical Foundations	3
Neuro-linguistics	3
Cognitive Linguistics	
Sociolinguistics	3
World Englishes	3

## **Health Sciences**

Doctor of Physical Therapy (DPT)
BS Medical Laboratory Technology (MLT)
BS Microbiology



### Faculty Members of

## **Health Sciences**



### Mr. Muhammad Ibrahim (Ex-Director / Principal IPMR, KMU) (Head of Department)

Professor BS-Physical Therapy, University of Karachi

Specialization Details:

- 1. Post Graduation in Pediatric Neurology from Salford College of Technology, Manchester (Presidential Scholarship)
- 2. Training in Manipulation of Vertebrae and limbs from Royal National Orthopaedic Hospital London
- 3. Training in Joints Disease from Robert John and Hunt Hospital Oswestry
- 4. Training in Spinal Injuries from Prominade Hospital Southport Liverpool, UK

#### **Dr. F.M. Zafar Kaifi** Professor

Ph.D in-Organic Chemistry,

#### Mr. Muhammad Bilal Qasim

Lecturer

BS. Biotechnology, University of Peshawar
MS. Healthcare Biotechnology, NUST Islamabad

#### **Ms. Lalina Maroof**

Assistant Professor Ph.D Microbiology University of Peshawar

#### Prof. Dr. Habib ur Rehman

Professor University of Peshawar Ph.D Chemistry, University of Glasgow, UK

#### Mr. Muhammad Uzair Khan

Lecturer
MPhil Biotechnology
CECOS University of IT and emerging sciences
PhD (In progress) Molecular biology and genetics
Khyber Medical University

#### Mr. Qaiser Shah

Junior lecturer BS-Medical Laboratory Technology Hafeez Institute of Medical Sciences Afiliated with Khyber Medical University

#### Dr. Aman Khan Afridi (PT)

Lecturer
Doctor of Physical Therapy
Khyber Medical University
Mphil Riphah International University Islamabad

#### Dr. Sareena Ikram (PT)

Lecturer
Doctor of Physical Therapy
Khyber Medical University
M.Phil Riphah International University Islamabad

#### Dr. Fouqia Anum Sana (PT)

Junior Lecturer Doctor of Physical Therapy Khyber Medical University

#### Dr. Zohaib Khalid (PT)

Junior Lecturer Doctor of Physical Therapy Khyber Medical University

#### Mr. Muhammad Jawad Ullah

Lecturer M.Phil Microbiology PhD (In progress) University of Peshawar

#### Dr. Hira Wahab (PT)

Junior Lecturer
Doctor of Physical Therapy
Khyber Medcal University

#### Ms. Faiza Rashid

Lecturer M.Phil Microbiology University of Peshawar

#### **Muhammad Israr**

Demonstrator
BS Medical Lab Technoloy
M.PHIL (in progress)
Abbottabad University of Science and Technology

#### **Farhan Haleem**

Lecturer
Doctor of Physical Therapy
Khyber Medical University
Master in Neuromuscular Physical Therapy
Riphah International University Islamabad

#### Muhammad Irfan

Demonstrator
Doctor of physical therapy
Khyber Medical University

### **Health Sciences**

#### **Doctor of Physical Therapy**

#### **Rationale**

Physical Therapy is an essential segment of modern health care system. It is a "science of healing and art of caring". It pertains to the Clinical Examination, Evaluation, assessment, diagnosis and treatment of Msculoskeletal, Neurological, Cardio-Vascular and Respiratory systems functional disorders including symptoms of pain, edema, Physiological, structural and psychosomatic ailments. It deals with methods of treatment based on movement, manual therapy, physical agents, and therapeutics modalities to relieve the pain and other complications.

Hence, Physical Therapy covers basic parameters of healing sciences i.e. preventive, promotive, diagnostic, rehabilitative, and curatie.

#### Goals of the Programme

The purpose of the Doctor of Physical Therapy programme (DPT) is to prepare physical therapists who will:

- be primary providers of physical therapy care.
- serve as responsible members in the professional community, and are willing to be able to assume leadership roles in the communities they serve.
- identify researchable problems, advocate and participate in research, and incorporate research findings into clinical practice.
- understand and place in context the social, economic and cultural issues of practice, and effectively advocate for changes in policy.
- correlate theory with practice and think creatively about, react to, adapt or shape new practice environments.
- participate in, and provide education for communities, patients, peers, students and others.









## **Health Sciences**

266 Doctor of Physical Therapy (DPT)

Shift : Morning

Duration: 5 Years, 10 Semesters, 172 Credit Hours

Eligibility: F.Sc. (Pre-Medical) equivalent with a minimum of 60% from any recognized board.

#### **1st Semester**

urse	Course Title	
	Course Title	Credit Hours
T-101	Anatomy-l	4 (3-1)
T-102	Physiology-I	3 (2-1)
T-103	Kinesiology-I	3 (2-1)
G-116	English-I (Functional English)	3 (3-0)
M-102	Pakistan Studies	2 (2-0)
C-101	Introduction to Computer	3 (2-1)
	T-102 T-103 G-116 M-102	T-102 Physiology-I T-103 Kinesiology-I G-116 English-I (Functional English) M-102 Pakistan Studies

#### **3rd Semester**

Course	Course Title	Credit Hours
ENG-208	English-III (Technical Writing &	3 (3-0)
	Presentation Skills)	
DPT-201	Medical Physics	3 (2-1)
DPT-202	Anatomy-III	3 (2-1)
DPT-203	Physiology-III	3 (2-1)
DPT-204	Biomechanics & Ergonomics-I	3 (3-0)
DPT-205	Biochemistry-l	2 (2-0)

#### **5th Semester**

Course	Course Title	Credit Hours
DPT-301	Pathology & Microbiology-I	2 (2-0)
DPT-302	Pharmacology & Therapeutics-I	2 (2-0)
DPT-303	Physical Agents & Electrotherapy-I	3 (2-1)
DPT-304	Therapeutic Exercises & Techniques	3 (2-1)
DPT-305	Biostatistics-I	3 (3-0)
DPT-306	Behavioral Sciences	2 (2-0)
	(Psychology & Ethics)	
DPT-307	Supervised Clinical Practice-I	3 (0-3)

#### 7th Semester

Course	Course Title	Credit Hours
DPT-401	Medicine-I	3 (3-0)
DPT-402	Surgery-I	3 (3-0)
DPT-403	Radiology & Diagnostic Imaging	3 (2-1)
DPT-404	Musculoskeletal Physical Therapy	3 (2-1)
DPT-405	Evidence Based Practice	3 (2-1)
DPT-406	Supervised Clinical Practice-III	3 (0-3)

#### 9th Semester

Course	Course Title	Credit Hours
DPT-501	Cardiopulmonary Physical Therapy	3 (2-1)
DPT-502	Prosthetics & Orthotics	2 (2-0)
DPT-503	Clinical Decision Making & Differential Diagnosis	3 (3-0)
DPT-504	Biostatistics-II	3 (3-0)
DPT-505	Professional Practice (Laws, Ethics	2 (2-0)
	& Administration	
DPT-506	Integumentry Physical Therapy	2 (2-0)
DPT-507	Supervised Clinical Practice-V	3 (0-3)

#### 2nd Semester

Course	Course Title	Credit Hours
DPT-104	Anatomy-II	4 (3-1)
DPT-105	Physiology-II	3 (2-1)
DPT-106	Kinesiology-II	3 (2-1)
ENG-101	English-II (Communication Skills)	3 (2-1)
HUM-101	Islamic Studies / Ethics	2 (2-0)
HUM-103	Sociology	2 (2-0)

#### 4th Semester

Course	Course Title	Credit Hours
DPT-206	Anatomy-IV (Neuro Anatomy)	3 (2-1)
DPT-207	Biomechanics & Ergonomics-II	3 (2-1)
DPT-209	Health & Welness	2 (2-0)
DPT-208	Biochemistry-II	3 (2-1)
DPT-210	Exercise Physiology	3 (2-1)
DPT-211	Molecular Biology & Genetics	2 (2-0)

#### 6th Semester

Course	Course Title	Credit Hours
DPT-308	Pathology & Microbiology-II	3 (2-1)
DPT-309	Pharmacology-II	2 (2-0)
DPT-310	Physical Agents & Electrotherapy-II	3 (2-1)
DPT-311	Manual Therapy	3 (2-1)
DPT-312	Teaching Methodology &	3 (3-0)
	Community Medicine	
DPT-313	Supervised Clinical Practice-II	3 (0-3)

#### 8th Semester

Course	Course Title	Credit Hours
DPT-407	Medicine-II	3 (3-0)
DPT-408	Surgery-II	3 (3-0)
DPT-409	Neurological Physical Therapy	3 (2-1)
DPT-410	Scientific Inquiry & Research Methodology	3 (2-1)
DPT-411	Emergency Procedures & Primary Care in	3 (2-1)
	Physical Therapy	
DPT-412	Supervised Clinical Practice-IV	3 (0-3)

Course	Course Title	Credit Hours
DPT-508	Obstetrics & Gynaecological	2 (2-0)
	Physical Therapy	
DPT-509	Paediatric Physical Therapy	2 (2-0)
DPT-510	Gerontology & Geriatric Physical	2 (2-0)
	Therapy	
DPT-511	Sports Physical Therapy	2 (2-0)
DPT-512	Supervised Clinical Practice-VI	4 (0-4)
DPT-513	Research Project	6

### **Health Sciences**

264 BS-Medical Laboratory Technology (MLT)

Shift : Morning

Duration: 4 Years, 8 Semesters, 135 Credit Hours

Eligibility: F.Sc. (Pre-Medical) equivalent with a minimum of 50% from any recognized board.

**Objectives:** To prepare a cadre of health technologists, who can effectively enhance the ability of doctors in the delivery of quality health services.

- To prepare paramedical workers for all levels of health care delivery system from basic to the advanced level.
- To introduce and impart standard technical education with new modern techniques, within the fields of medical technologies, by replacing the conventional methods of pre-service training (certificate level).
- To provide medical workers a status and recognition in the health care delivery system through improving their capacity along with increasing awareness of their responsibilities, authority and job description.
- To equip medical staff with modern skills and latest technical knowledge and bring them at par with other national and international standards.

#### **1st Semester**

Course	Course Title	Credit Hours
	Expository Writing-I: Functional English	3(3-0)
	Natural Sciences-I: Mathematics	3(3-0)
	Social Sciences-I: Sociology	3(3-0)
	Quantitative Reasoning-I: Introduction	3(3-0)
	to Computing	
	Arts & Humanities-I: Philosophy	3(3-0)
	Civilization-I: Islamiat	3(3-0)

#### 2nd Semester

Course	Course Title	Credit Hours
	Expository Writing-II: Comprehensive Writing	3(3-0)
	Natural Sciences-II: Ecology	3(3-0)
	Social Sciences-II: Management/	3(3-0)
	Entrepreneurship	3(3-0)
	Quantitative Reasoning-II: Statistics	3(3-0)
	Arts & Humanities-II: History	3(3-0)
	Civilization-II: Pak.Studies	

#### **3rd Semester**

Course	Course Title	Credit Hours
	Expository Writing-III: Academic	3(3-0)
	Reading and Writing Skills	
	Behavioral Sciences	3(3-0)
	Medical Laboratory Instrumentation	3(2-1)
	Biochemistry-I	3(2-1)
	Human Anatomy-I	3(2-1)
	Human Physiology-I	3(2-1)

#### 4th Semester

_		
Course	Course Title	Credit Hours
	Biochemistry-II	3(2-1)
	Human Anatomy-II	3(2-1)
	Human Physiology-II	3(2-1)
	Epidemiology	3(3-0)
	Biosafety & Quality Control	3(2-1)

#### **5th Semester**

Course	Course Title	Credit Hours
	Chemical Pathology	3(2-1)
	General Pathology-I	3(2-1)
	General Pharmacology	3(2-1)
	Molecular Biology & Genetics-I	3(2-1)
	Hematology-I	3(2-1)
	Clinical Virology	3(2-1)

#### **6th Semester**

Course	Course Title	Credit Hours
	General Pathology-II	3(2-1)
	Molecular Biology & Genetics-II	3(2-1)
	Hematology-II	3(2-1)
	Clinical Pathology	3(2-1)
	Research Methodology	3(3-0)
	Clinical & Diagnostic Bacteriology	3(1-2)

#### 7th Semester

Course	Course Title	Credit Hours
	Bioethics	3(3-0)
	Histopathology	3(2-1)
	Final Year Project-I	3(0-3)
	Immunology & Serology	3(2-1)
	Mycology & Parasitology	3(2-1)
	Bioinformatics	3(2-1)

Course	Course Title	Credit Hours
	Blood Banking	3(2-1)
	Seminar	3(3-0)
	Final Year Project-II	3(0-3)
	Public Health	3(3-0)

## **Health Sciences**

#### **BS-Microbiology**

Shift : Morning

Duration: 4 years, 8 semesters, 130 credit hours

Eligibility: F.Sc. (Pre-Medical) equivalent with a minimum of 50% from any

recognized board.

**Objectives**: The curriculum designed for the BS Microbiology will prepare the graduates to cope up with the issues for wide spectrum of areas including Medicine, Dairy, Poultry, Agriculture and Industry. These groomed men power will play a vital role in the economic growth, and would bring qualitative change in the above mentioned areas in the country. Internship in the curriculum will provide hands on experience in different fields mentioned above. It will also create awareness about public health and safety, and facilitate the establishment of liaison among Microbiologist with society & industry.



#### **1st Semester**

	Course	Course Title	<b>Credit Hours</b>
	ENG-116	Functional English	3
	HUM-101	Islamiat	2
	CSC-116	Introduction to Computer	2
	MB-101	Fundamentals of Microbiology	4 (3+1)
	MB-102	Biochemistry I	3 (2+1)
	MTS-116	Mathematics	3

#### 2nd Semester

Course	Course Title	Credit Hours
HUM-102	Pakistan Studies	2
MB-103	Biostatistics	2
MB-104	Principles of Genetics	4 (3+1)
MB-105	Biodiversity of Plants	3 (2+1)
MB-106	Biodiversity of Animals	3 (2+1)
MB-107	Biochemistry II	3 (2+1)

#### **3rd Semester**

Course	Course Title	Credit Hours
MB-201	Ecosystem	3 (2+1)
MB-202	Cell Biology I	4 (3+1)
MB-203	Microbial genetics	4 (3+1)
MB-204	Human genetics	3 (2+1)
MB-205	Environmental Microbiology	3 (2+1)

#### 4th Semester

Course	Course Title	Credit Hours
MB-206	Microbial Physiology	4 (3+1)
MB-207	Microbial Ecology	4 (3+1)
MB-208	Cell Biology II	4 (3+1)
MB-209	Immunology	3 (2+1)
MB-210	Bacterial Metabolism	4 (3+1)

#### **5th Semester**

Course	Course Title	<b>Credit Hours</b>
MB-301	Food and Dairy Microbiology	3 (2+1)
MB-302	Recombinant DNA Technology	3 (2+1)
MB-303	Medical Microbiology	3 (2+1)
MB-304	Microbial Diversity	3 (2+1)
MB-305	Molecular mechanism of Gene	3 (2+1)
	Expression	
MB-306	Soil and Agriculture Microbiology	3 (2+1)

#### 6th Semester

Course	Course Title	Credit Hours
MB-307	Industrial Microbiology	4 (3+1)
MB-308	Human genetic diseases and their	3 (2+1)
	Diagnosis	
MB-309	Plant Pathology	3 (2+1)
MB-310	Chromosomal abnormalities	2
	and genetic counseling	
MB-311	Virology	3 (2+1)
MB-312	Bioinformatics	2 (1+1)

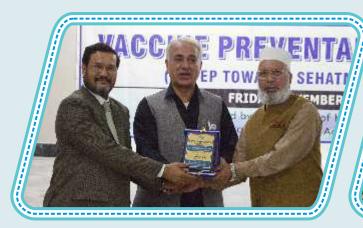
#### 7th Semester

Course	Course Title	Credit Hours
MB-401	Molecular genetics of yeast	4 (3+1)
MB-402	Ethical issues of Genetics	2
MB-403	Biodegradation and Bioremediation	3 (2+1)
MB-404	Gene Therapy	3 (2+1)
MB-405	Antiviral Agents	3 (2+1)
MB-406	Research Methodology	2

Course	Course Title	: Credit Hours
MB-407	Industrial Microbiology II	3 (2+1)
MB-408	Plant Biotechnology	3 (2+1)
MB-409	Seminar	2 (0+2)
MB-499	Research Project	8 (0+8)

## **Health Sciences**

### **EVENTS AND ACHIEVEMENTS**













### **Management Sciences**

BBA, BS. Accounting & Finance, BS. Economics, BS. Social Sciences, BS. Commerce, MBA, MS. Management Sciences, M.Phil Economics, Ph.D Management Sciences



# Faculty Members of Management Sciences



**Dr. Aamir Nadeem**Associate Professor
Dean Faculty of Management Sciences
Ph.D (Marketing), Abasyn University, Peshawar



**Dr. Samra Kiran**, Assistant Professor Ph.D (Management Sciences) Abdul Wali Khan University, Mardan MS (Finance), IMSciences, Peshawar

**Dr. Muhammad Nauman Habib,** Assistant Professor Ph.D (Management Sciences) IMSciences, Peshawar MS (HRM), IMSciences, Peshawar

**Mr. Muhammad Zeeshan Ahmad**, Assistant Professor Ph.D (in progress) M.Phil (Economics) University of Peshawar

**Dr. Jangraiz Khan** Assistant Professor Ph.D (Economics) University of Peshawar

**Dr. Zain Ullah**, Assistant Professor Ph.D Qurtaba University MS (Business Administration) NUML, Islamabad



**Dr. Muhammad Zahid**Assistant Professor/ Head of Department
Ph.D (Management Sciences)
Universiti Teknologi PETRONAS, Malaysia

**Mr. Zunnoorain Khan**, Assistant Professor Ph.D (in progress) MS. (HRM), CECOS University, Peshawar

**Dr. Muhammad Asif**, Assistant Professor Ph.D Qurtaba University MS (Finance), Abasyn University Peshawar

**Ms. Saima Bano**, Lecturer MBA, Quaid-e-Azam University, Islamabad MS (HRM) Islamia College University, Peshawar

**Mr. Sohrab Arshad**, Lecturer MBA, University of Sunderland, UK



#### Vision

"To be recognized as pioneer business school for business education, research and practices by developing entrepreneurs, business professionals and leaders who are able to face local, national and international challenges."

#### Mission

Our mission is to provide business education, ranging from undergraduate to post-graduate programs, which have an impact on the business world and society at large with emphasis on creation and dissemination of relevant knowledge, the creation of new and advance learning opportunities, the discovery and engagement of learners in activities that develop their professional competencies, through experienced faculty, conducive learning environment, and community engagement.

#### **Objectives**

- To produce leaders who can tackle challenging situations in contemporary business world.
- To develop business graduates with in-depth knowledge of business and related subjects.
- To produce well-groomed students that are able to compete at local, national and global level.
- To provide quality business and management education with market trends, social responsibilities and practical exposures.
- To contribute in the local and national economy by producing entrepreneurs, leaders, and business professionals.
- To create an academia-industry linkage and other understanding with the corporate world that can contribute in the learning of students, faculty and is also used as a mean of contribution to the society.

#### **Learning Outcomes**

- The students who earn the Management or Commerce degree will be able to;
- effectively utilize various human relation skills including leadership; oral and written communication; teamwork and collaboration.
- demonstrate competence in applying the tools and techniques of business management, drawing on a broad-based knowledge of the major functions like accounting, economics, finance, information systems, marketing, strategy and management to solve complex business problems and make sound business decisions.
- use qualitative, quantitative methods and analytic tools to diagnose business challenges; identify, and analyze alternatives in a business context.
- think critically and creatively in seeking solutions to establish new business ventures.



0248 Bachelor of Business Administration

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Intermediate or equivalent qualification with at least 50% marks from any recognized board.

#### 1st Semester

Course	Course Title	Credit Hours
CSC-101(2)	Introduction to Computing	3
ENG-111	Freshman English-I	3
HUM-101	Islamic Studies	3
MGT-103	Business in Contemporary World	3
MTS-104	Business Mathematics	3

#### 2nd Semester

_	\	
Course	Course Title	Credit Hours
ECO-102	Micro Economics	3
ENG-207	Freshman English-II	3
HUM-102	Pakistan Studies	3
MGT-204	Introduction to Management	3
PSY-101	Fundamentals of Psychology	3

#### **3rd Semester**

Course	Course Title	Credit Hours
ACC-211	Financial Accounting-I	3
ECO-103	Macro Economics	3
ENG-209	Oral Communication	3
HRM-202	Human Resource Management	3
HUM-103	Sociology	3
MTS-217	Business Statistics	3

#### 4th Semester

Course	Course Title	Credit Hours
ACC-212	Financial Accounting-II	3
ECO-301	Economy of Pakistan	3
ENG-201	Business Communication	3
FIN-202	Business Finance	3
MGT-205	International Relations &	3
	Current Affairs	
MKT-201	Principles of Marketing	3

#### **5th Semester**

Course	Course Title	Credit Hours
ACC-301	Cost Accounting	3
FIN-301	Money, Banking & Finance	3
FIN-303	Financial Management	3
HUM-201	Logic & Critical Thinking	3
MGT-307	Business Law	3
MKT-203	Marketing Management	3

#### **6th Semester**

Course	Course Title	Credit Hours
CSC-409	Management Information System	3
HRM-201	Organizational Behavior	3
MGT-309	Business Ethics	3
MGT-311	Business Research & Report Writing	3
MGT-408	Leadership	3
MKT-402	Consumer Behavior	3

#### 7th Semester

Course	Course Title	Credit Hours
MGT-302	Entrepreneurship	3
MGT-306	E-Commerce	3
	Elective-I (FIN/HRM/MKT/ENT)	3
	Elective-II (FIN/HRM/MKT/ENT)	3
MGT-499	Research Project	3

Course	Course Title	Credit Hours
MGT-402	Operations Management	3
MKT-403	International Business Management	3
	Elective-III (FIN/HRM/MKT/ENT)	3
	Elective-IV (FIN/HRM/MKT/ENT)	3
MGT-499	Research Project	3



#### **Elective Courses for Specialization in Bachelor of Business Administration**

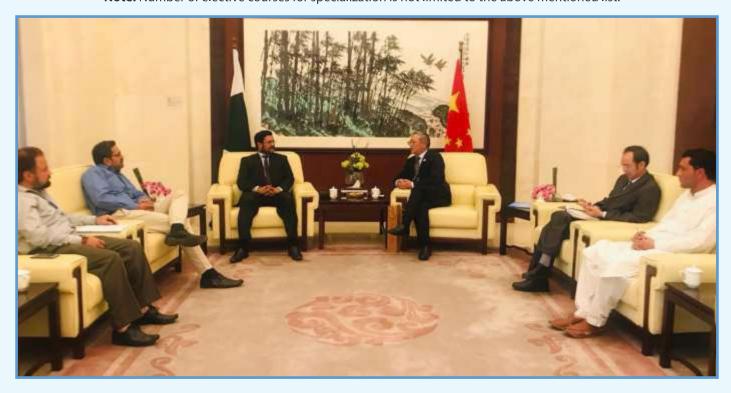
A. Human	Resource Management
HRM-401	Organizational Development
HRM-402	Human Resource Development
HRM-403	Strategic Human Resource Management
HRM-404	Training & Development
HRM-405	Compensation Management
HRM-406	Industrial & Labour Laws
HRM-407	Staffing & Performance Management
HRM-408	Change Management
HRM-409	Conflict Management
HRM-412	Case Studies in HRM

1111111-412	Case Studies III FINIVI
C. Market	ing
MKT-401	Strategic Marketing
MKT-402	Consumer Behavior
MKT-403	International Business
MKT-404	Advertising
MKT-405	Marketing of Services
MKT-406	Contemporary Issues in Marketing
MKT-407	New Product Management
MKT-408	Strategic Brand Management
MKT-409	Social Marketing
MKT-410	Export Marketing
MKT-412	Integrated Marketing Communication
MKT-413	International Marketing

B. Humai	n Resource Management
FIN-401	Islamic Banking
FIN-402	Financial Institutions & Capital Markets
FIN-403	Investment & Portfolio Management
FIN-404	Financial Statement Analysis
FIN-405	Islamic Financial System
FIN-406	Corporate Finance
FIN-407	Micro Business and Islamic Finance
FIN-408	Business Taxation
FIN-409	Financial Management
FIN-410	Islamic Banking & Finance

D. Entrep	reneurship
MGT-314	Generating New Startup and Venture ideas
MGT-315	New Venture Feasibility
MGT-316	Entrepreneurial Strategies
MGT-317	Social Innovation and Entrepreneurship
MGT-318	Product Design and Marketing
MGT-319	Project Integration and Planning
MGT-320	Environmental Issues and Ecosystem for Bus
MGT-321	Corporate Entrepreneurship
MGT-322	Entrepreneurship Theories

**Note:** Number of elective courses for specialization is not limited to the above mentioned list.



## **Management Sciences**

0268 BS Accounting & Finance

ACCA Accredited with Nine (09) Exemptions

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Intermediate or equivalent qualification with at least 50% marks from any recognized Board.

#### **1st Semester**

Course	Course Title	<b>Credit Hours</b>
ACC-211	Financial Accounting-I	3
CSC-101	Introduction to Computing	3
ENG-111	Freshman English-I	3
HUM-101	Islamic Studies	3
MGT-103	Business in Contemporary World	3
MTS-104	Business Mathematics	3

#### **3rd Semester**

Course	Course Title	Credit Hours
ACC-206	Cost Accounting	3
ECO-103	Macro Economics	3
ENG-209	Oral Communication	3
FIN-202	Business Finance	3
FIN-301	Money, Banking & Finance	3
MKT-201	Principles of Marketing	3

#### 5th Semester

Course	Course Title	Credit Hours
ACC-208	Managerial Accounting	3
HRM-202	Human Resource Management	3
HUM-203	Sociology	3
MGT-306	E-Commerce	3
MGT-307	Business Law	3
FIN-304	Corporate Governance	3

#### 7th Semester

Course	Course Title	Credit Hours
MGT-302	Entrepreneurship	3
MKT-403	International Business	3
	Elective-l	3
	Elective-II	3
MGT-499	Research Project	3

#### A. Finance

Elective	Courses for Specialization
FIN-404	Financial Statement Analysis
FIN-402	Financial Institution and Capital Market
FIN-411	Strategic Finance
FIN-412	Corporate Risk Management
FIN-405	Islamic Financial System
FIN-403	Investment & portfolio Management
FIN-413	Merger & Acquisition
FIN-414	Case studies in Finance
FIN-415	Treasury and Fund Management

#### **2nd Semester**

Course	Course Title	Credit Hours
ACC-212	Financial Accounting-II	3
ECO-102	Micro Economics	3
ENG-207	Fresham English-II	3
HUM-102	Pakistan Studies	3
MGT-204	Introduction to Management	3
MTS-217	Business Statistics	3

#### 4th Semester

-			
	Course	Course Title	Credit Hours
	ACC-205	Auditing	3
	ECO-301	Economy of Pakistan	3
	ENG-201	Business Communication	3
	FIN-303	Financial Management	3
	MTS-208	Statistical Inference	3
	PSY-101	Fundamental of Psychology	3

#### **6th Semester**

Course Title	Credit Hours
Management Information System	3
Corporate Finance	3
Business Taxation	3
Behavioral Finance	3
Methods in Business Research	3
Corporate Law	3
	Management Information System Corporate Finance Business Taxation Behavioral Finance Methods in Business Research

#### 8th Semester

Course Title	Credit Hours
Accounting & Software	3
Elective-III	3
Elective-IV	3
Research Project*	3
	3
	Accounting & Software Elective-III Elective-IV

#### **B.** Accounting

ACC-407 Advanced Auditing	
ACC-403	Advance Financial Accounting
ACC-409	Advance Financial Reporting Budgeting

### **Management Sciences**

0274 BS Economics

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Intermediate or equivalent qualification with at least 50% marks from any recognized board.

#### **1st Semester**

	Course	Course Title	Credit Hours
	CSC-101	Introduction to Computing	3
	ENG-111	Freshman English-I	3
	HUM-101	Islamic Studies	3
	ECO-102	Micro Economics	3
	MTS-118	Mathematics-I	3

#### **2nd Semester**

Course	Course Title	Credit Hours
ECO-103	Macro Economics	3
ENG-207	Freshman English-II	3
HUM-102	Pakistan Studies	3
MTS-119	Mathematics-II	3
	Elective-I (Non-Economics)	3
	Elective-II (Non-Economics)	3

#### **3rd Semester**

Course	Course Title	Credit Hours
ENG-209	Oral Communication	3
ECO-302	Development Economics	3
ECO-204	Intermediate Micro Economics	3
MTS-219	Statistics-I	3
	Elective-III (Non-Economics)	3
	Elective-IV (Non-Economics)	3

#### 4th Semester

Course	Course Title	Credit Hours
ECO-205	Intermediate Macro Economics	3
MTS-220	Statistics-II	3
ENG-201	Business Communication	3
	Elective-V (Non-Economics)	3
	Elective-VI (Non-Economics)	3
ECO-2XX	World Economics History	3

#### **5th Semester**

Course	Course Title	Credit Hours
ECO-306	Micro Economics	3
ECO-307	Macro Economics	3
	Elective-VII (Non-Economics)	3
MTS-309	Mathematical Economics-I	3
ECO-301	Pakistan Economy	3
MGT-311	Research Methods	3

#### **6th Semester**

Course	Course Title	Credit Hours
MTS-310	Mathematical Economics-II	3
ECO-308	Econometrics-I	3
ECO-309	Economic Growth	3
	Elective-I (Economics)	3
ECO-310	Public Sector Economics	3

#### **7th Semester**

Course	Course Title	Credit Hours
MGT-419	International Trade Theory	3
ECO-403	Islamic Economics	3
ECO-404	Econometrics-II	3
	Elective-II (Economics)	3
	Elective-III (Economics)	3
MGT-499	Research Project	

#### 8th Semester

Course	Course Title	Credit Hours
	Elective-IV (Economics)	3
ECO-402	Monetary Economics	3
ECO-405	Entrepreneurial Economics	3
MGT-499	Research Project	3
		3

#### A. Non Economics

Elective Courses for BS Economics		
HUM-103	Sociology	
HUM-105	Education	
PSY-101	Psychology	
HUM-204	History	
HUM-202	Geography	
HUM-401	Philosophy	
MTS-204	Mathematics	
MGT-307	Business Law	
MGT-323	Business Administration	

#### B. Economics

Elective Co	Elective Courses for BS Economics		
ECO-204	Institutional Economics		
ECO-205	Industrial Economics		
ECO-206	Welfare Happiness Economics		
ECO-207	Labor Economics		
ECO-311	Population Economics		
ECO-312	Comparative Economics System		
ECO-313	Agricultural Economics		
ECO-314	Regional Economics		
ECO-315	Energy Economics		
ECO-316	Political Economy		

## **Management Sciences**

0270 BS Commerce

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Intermediate or equivalent qualification with at least 50% in any recognized board.

#### **1st Semester**

Course	Course Title	Credit Hours
ACC-213	Principals of Accounting	3
ECO-102	Micro Economics	3
ENG-111	Freshman English-I	3
HUM-101	Islamic Studies	3
MGT-102	Introduction to Business	3
MTS-104	Business Mathematics	3

#### **3rd Semester**

Course	Course Title	Credit Hours
ACC-210	Advanced Accounting-I	3
ECO-301	Economy of Pakistan	3
FIN-202	Introduction to Business Finance	3
FIN-203	Business Taxation	3
MGT-101	Principles of Management	3
MGT-307	Business Law	3

#### **5th Semester**

П			
	Course	Course Title	Credit Hours
	ECO-401	Managerial Economics	3
	FIN-303	Financial Management	3
	HRM-202	Human Resource Management	3
	MGT-303	Research Methods in Business	3
	MGT-306	E-Commerce	3
	MTS-208	Inferential Statistics	3

#### 7th Semester

Course	Course Title	Credit Hours
FIN-411	Corporate Governance	3
MGT-412	Operations Management	3
MKT-403	International Business	3
	Elective-I	3
	Elective-II	3

#### **2nd Semester**

Course	Course Title	Credit Hours
ACC-203	Financial Accounting	3
CSC-101	Introduction to Computing	3
ECO-103	Macro Economics	3
ENG-207	Freshman English-II	3
HUM-102	Pakistan Studies	3
MTS-217	Business Statistics	3

#### 4th Semester

Course	Course Title	Credit Hours
ACC-206	Cost Accounting	3
ACC-302	Advanced Accounting-II	3
ENG-209	Oral Communication	3
FIN-204	Financial and Regulatory	3
	Institutions	
ACC-205	Auditing	3
MKT-201	Principles of Marketing	3

#### 6th Semester

Course	Course Title	Credit Hours
ACC-208	Managerial Accounting	3
HRM-302	Organizational Behavior	3
HUM-201	Logical and Critical Thinking	3
MGT-302	Entrepreneurship	3
MGT-406	Principles of Risk Management	3
	& Insurance	
PSY-101	Fundamental of Sociology	3

Course	Course Title	Credit Hours
	Elective-III	3
	Elective-IV	3





#### **Elective Courses for Specialization in BS Commerce**

ACC-304	Corporate Accounting
FIN-203	Taxation
MGT-307	Company Law
ACC-205	Auditing
ACC-206	Cost Accounting
ACC-202	Money and Banking
ACC-403	Accounting Theory
ACC-305	Advanced Financial Accounting
ACC-306	Cost Management
ACC-307	Accounting Information Systems
ACC-308	Accounting for Specialized Concerns
FIN-305	Corporate Taxation
ACC-309	Seminar in Accounting and Finance
FIN-406	Corporate Finance
FIN-306	Mathematics of Finance
FIN-402	Capital Markets in Pakistan
FIN-404	Financial Statement Analysis
FIN-307	Risk Management in Banking Industry
FIN-403	Investment Management
FIN-410	Islamic Banking

B. Human Resource Management		
HRM-401	Organizational Development	
HRM-405	Compensation Management	
HRM-409	Conflict & Management	
HRM-303	Conflict & Negotiation Management	
HRM-402	Human Resource Development	
HRM-408	Change Management	
HRM-404	HRM Training and Development	
HRM-304	Organizational Theory	
HRM-412	Case Studies in HRM	
HRM-407	Staffing & Performance Management	

C. Human	Resource Management
MKT-401	Strategic Marketing
MKT-402	Consumer Behavior
MKT-403	International Business
MKT-404	Advertising
MKT-202	Marketing of Services
MKT-406	Contemporary Issues in Marketing
MKT-407	New Product Management
MKT-409	Social Marketing
MKT-410	Export Marketing
MKT-412	Integrated Marketing Communication
MKT-413	International Marketing

\*Number of Elective courses for specialization is not limited to the above mentioned list.





0272 BS Social Sciences

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Intermediate or equivalent qualification with at least 50% from any recognized board.

#### **1st Semester**

Course	Course Title	Credit Hours
ENG-111	Freshman English-I	3
HUM-101	Islamic Studies	3
CSC-101	Introduction to Computing	3
ECO-102	Micro Economics	3
MTS-115	Basic Mathematics	3
SSC-101	Introduction to Social Science	3

#### **2nd Semester**

Course	Course Title	Credit Hours
ENG-207	Freshman English-II	3
HUM-102	Pakistan Studies	3
ECO-103	Macro Economics	3
SSC-102	Introduction to Political Science	3
SSC-103	Introduction to International	3
	Relations	
SSC-104	Introduction to Philosophy	3

#### 3rd Semester

Course	Course Title	Credit Hours
ENG-212	Oral Communication	3
MTS-218	Statistics	3
MGT-102	Introduction to Business	3
SSC-201	International Relations and	3
	Current Affairs	
SSC-202	Socio-Economic Development	3
	of Pakistan	
PSY-101	Introduction to Psychology	3

#### 4th Semester

Course	Course Title	Credit Hours
HUM-103	Sociology	3
MGT-101	Principles of Management	3
SSC-203	Peace Education	3
SSC-204	Introduction to Law	3
ENG-201	Business Communication	3
SSC-205	Introduction to History	3

#### **5th Semester**

Course	Course Title	Credit Hours
SSC-301	Environment & Sustainable	3
	Development	
SSC-302	Ethics	3
SSC-303	Public Administration	3
SSC-304	Peace and conflict	3
SSC-305	International Laws	3
SSC-306	Gender Studies	3

#### 6th Semester

Util Jei		
Course	Course Title	Credit Hours
SSC-307	Research Techniques in	3
	Social Sciences	
HRM-202	Human Resource Management	3
SSC-308	Public Policy	3
ACC-203	Financial Accounting	3
SSC-309	Human Rights	3

#### **5th Semester**

Course	Course Title	Credit Hours
HRM-302	Organization Behavior	3
SSC-401	Asian & European Studies	3
SSC-4XX	Elective-I	3
SSC-4XX	Elective-II	3
SSC-499	Research Project/Social Work/	3
	Courses	

#### 6th Semester

Course	Course Title	Credit Hours
SSC-402	Culture, Media & Society	3
SSC-4XX	Elective-III	3
SSC-4XX	Elective-IV	3
SSC-499	Research Project/Social Work/	3
	Courses	E

#### **Area of Specialization for Students**

A. Sociology

**B.** Political Science

C. Public Administration

**D.** Management Studies

E. Peace and Conflict Studies

### **Management Sciences**

0312 Master of Business Administration

Shift : Weekend

Duration: 1.5 years, 3 semesters, 36 credit hours

Eliqibility : BBA (4 years) or BBS (2 years) degree with CGPA 2.00/4.00 from any HEC recognized university.

#### **1st Semester**

	Course	Course Title	<b>Credit Hours</b>
	ACC-501	Managerial Accounting	3
	FIN-520	Strategic Finance	3
	MGT-502	Advanced Research Methodology	3
	MGT-505	Advanced Strategic Management	3

#### 2nd Semester

Course	Course Title	<b>Credit Hours</b>
MGT-503	Project Management	3
MKT-505	Strategic Marketing Management	3
	Elective-I (HRM/FIN/MKT)	3
	Elective-II (HRM/FIN/MKT)	3
MGT-599	Dissertation/Research Project-I	3

#### **3rd Semester**

Course	Course Title	Credit Hours
	Elective-III (HRM/FIN/MKT)	3
	Elective-IV (HRM/FIN/MKT)	3
	Dissertation/Research Project	3

#### 0220 Master of Business Administration

Shift : Weekend

Duration: 2 years, 4 semesters, 72 credit hours

Eligibility: 16 years non-business degree in any discipline having at least 2 division with 45% or equivalent

qualification with CGPA 2.00/4.00 from any HEC recognized University

#### **1st Semester**

Course	Course Title	Credit Hours
ECO-306	Micro Economics	3
MGT-413	Principles of Management	3
MTS-204	Business Mathematics	3
ACC-401	Financial Accounting	3
MGT-307	Business Law	3
HRM-402	Human Resource Management	3

#### 2nd Semester

Course	Course Title	Credit Hours
ECO-401	Macro Economics	3
ENG-201	Business Communication	3
MTS-217	Business Statistics	3
FIN-504	Business Finance	3
MKT-203	Marketing Management	3
MGT-416	Advance Research Methodology	3

#### **3rd Semester**

П			
	Course	Course Title	Credit Hours
	ACC-501	Managerial Accounting	3
	FIN-520	Strategic Finance	3
	MGT-502	Production & Operation	3
		Management	
	MGT-505	Advance Strategic Management	3
		Elective-I	3
	MGT-599	Dissertation / Research Project	3

Course	Course Title	Credit Hours
MKT-505	Strategic Marketing Management	3
	Elective-II	3
	Elective-III	3
	Elective-IV	3
MGT-599	Dissertation / Research Project	3
HRM-410	Organizational Behavior and	3
	Leadership	

#### **Elective Courses For Specialization:**

		•
A. HRM		D. Project Management
HRM-501	Motivation	Project Risk Management
HRM-502	Applied Research in HRM	Project Human Resource Management
	Strategic Human Resource Management	Project Monitoring & Evaluation
	Organizational Development	Advance Project Management
	Conflict and Negotiation Management	Public Sector Project Management
	Micro Organizational Dynamics	Disaster Management Project Procurement
	Training and Development	Government Projects (PC1-5)
	Compensation Management	Supply Chain Management
	Staffing and Performance Management	Operations Research
		Environmental Assessment
	Change Management	Financial Decision Analysis
	Organizational Theory Design & Change	Software Project Management
	Contemporary Issues in HRM	Project Change Management
	Conflict Management	E. Logistics and Supply Chain Management
HRM-514	3	Supply Chain Management
HRM-515	Case Studies in HRM	Logistics and Transportation
B. Finance	2	Inventory and Warehouse Management
FIN-501	International Trade, Finance & Foreign	Operations Management
1111 301	Exchange	Operations Research
FIN-502	•	Supply Chain Strategy
	Credit Management	Procurement Management
FIN-504	Financial Statement Analysis	Supply Chain Accounting and Finance
FIN-505	Corporate Finance	MIS and E-Business
FIN-506	Advance Investment & Portfolio	Case Studies in Logistics and Supply Chain Management
	Management	Freight Transportation Humanitarian Logistics
FIN-507	Financial Risk Management	
FIN-508	Micro Business & Islamic Finance	F. Healthcare Management
FIN-509	Corporate Governance	Healthcare Management
FIN-510	Accounting & Auditing Standards for	Supply Chain Management
	Islamic Banks	Logistics Management
FIN-511	Financial Institutions & Capital Markets	Leadership and Team Management Operations Management
FIN-512	Strategic Financial Management	Medical Devices and Diagnostics
FIN-513	Theory of Finance	Negotiation and Communication
FIN-514	Merger & Acquisitions	Healthcare Financial Management
FIN-515	Case Studies in Finance	
FIN-516	Islamic Banking & Takaful	G. Pharmaceutical Management Pharmaceutical Selling
FIN-517	Income Tax Law	Intro to Pharma Regulatory Affairs
C Maulcot	.:	Pharma Business Strategy
C. Market	-	Supply Chain Management
MKT-501	Brand Management	Medical Devices and Diagnostic
	Marketing Research	Negotiation and Communication
	Integrated Marketing Communication	H. Hospitality and Tourism Management
	Marketing of Services	Public Relations
	Advance Marketing Strategies	Event Management
	International Marketing	Tourism and Hospitality Laws and Ethics
MKT-508	Strategic Brand Management	Hospitality Infrastructure
MKT-509	New Product Management	Issues in Tourism and Hospitality Management
MKT-510	Contemporary Issues in Marketing	Tourism Policies
MKT-511	Advertising	Hospitality Management
	Social Marketing	Leadership and Team Management
		Restaurant Management
Number of	Elective courses for specialization are not	Sustainable Tourism

**Conflict and Negotiation Management** 

### **Management Sciences**

0318 Master of Philosophy in Economics

Shift : Weekend

Duration : 2 Years, 4 Semesters, 30 Credit Hours

Eligibility : M.Sc/MA in Economics / BS Economics with 16 years of education with at least 50% marks or CGPA

2.50 / 4.00 from any HEC recognized university and GAT test obtaining at least 50% marks /

university test with 50% score.

#### **1st Semester**

Course	Course Title	Credit Hours
ECO-603	Advanced Micro Economics	3
ECO-604	Econometrics-I	3
MGT-607	Research Methodology	3
	Elective-I	3

#### **2nd Semester**

Course	Course Title	Credit Hours
ECO-606	Econometrics-II	3
ECO-607	Advanced Macro Economics	3
	Elective-II	3
	Flective-III	3

#### **3rd Semester**

Course	Course Title	Credit Hours
ECI-699	Elective-IV	3
	Research Thesis	3

#### 4th Semester

Course	Course Title	Credit Hours	
	Elective-V	3	
ECO-699	Research Thesis	3	

#### **Elective Courses for M.Phil Economics**

ECO-605	Economics of Natural Resources & Environment
HRM-607	Human Resource Development & Management
FIN-608	Project Analysis & Investment Decision Making
ECO-601	Advanced Managerial Economics
ECO-614	Topics in Public Sector Economics
ECO-610	Topics in Agricultural Economics
ECO-613	Topics in Urban Economics
ECO-609	Issues in Islamic Economics







#### 0308 Master of Science in Management Sciences

Specialization: Human Resource Management / Finance / Marketing

Shift : Weekend

Duration : 2 Years, 4 Semesters, 30 Credit Hours

Eligibility : 4 years (BBA/BBIT), B.Com (4 years), MBA/MPA (16 years), MA/M.Sc. Economics/M.Com/ ICMA/CA

or equivalent qualification with at least 50% marks or CGPA 2.50/4.00 from any HEC recognized

university. GAT test obtaining at least 50% marks / university test with 50% score.

#### **1st Semester**

Course	Course Title	Credit Hours
MGT-601	Advance Research Methods	3
MGT-603	Strategic Management	3
MGT-608	Contemporary Issues in	3
	Management	

#### 2nd Semester

Course	Course Title	Credit Hours
MKT-602	Strategic Marketing	3
	Elective-I (HRM/FIN/MKT)	3
	Elective-II (HRM/FIN/MKT)	3

#### **3rd Semester**

Course	Course Title	Credit Hours
	Elective-III (HRM/FIN/MKT)	3
	Elective-IV (HRM/FIN/MKT)	3
MGT-699	Research Thesis	3

#### 4th Semester

Course	Course Title	Credit Hours
MGT-699	Research Thesis	3

#### **Elective Courses For Specialization**

#### A. HRM

HKIVI-60 I	Compensation Management
HRM-602	Training & Development
HRM-603	Organizational Development & Change
	Management
HRM-604	Recruitment & Selection
HRM-605	Conflict & Negotiation
HRM-606	Organizational Development
HRM-607	Strategic Human Resource Management
HRM-608	Contemporary Issues in HRM
HRM-609	Workforce Diversity Management

HRM-610 International HRM

HRM-611 Leadership & Motivation Techniques

HRM-612 Case Studies in HRM

HRM---- Human Resource Information Systems
Legal & Ethical Environment of Business

#### C. Marketing

MKT-601	Advanced Marketing Strategies
MKT-603	Social Marketing
MKT-604	Brand Management
MKT-605	Strategic Marketing Management
MKT-606	Marketing of Services
MKT-607	International Marketing
MKT-608	Marketing Research
MKT-609	Integrated Marketing Communication
MKT-610	Export Marketing
MKT-611	Digital Marketing

#### Note:

Specialization subjects can be offered other than the given list, subject to the current market needs and availability of faculty member.

#### B. Finance

D. I IIIaiic	
FIN-601	Investment & Portfolio Management
FIN-602	Advanced Financial Management
FIN-603	Islamic Financial System
FIN-605	Corporate Governance
FIN-606	International Banking Systems
FIN-607	International Finance
FIN-608	<b>Project Analysis &amp; Investment Decision</b>
FIN-609	Corporate Finance
FIN-610	Merger & Acquisition
FIN-611	Case Studies in Finance
FIN-612	Financial Risk Management



0408 **Ph.D Management Sciences** 

Shift Weekend

3 Years, 6 Semesters, 28 Credit Hours Duration :

MS-MS / M.Phil degree from an HEC recognized university with CGPA of 3.00 / 4.00 or 60% marks Eligibility:

equivalent degree (foreign or national) in the relevant field is required.

A valid GAT subject test with minimum of 60% score or ETS-GRE (Subject) passed with 50% score is

mandatory for admission.

In case of course based MS the applicant should have published a research paper in HEC X or Y category

Journal as principal author.

#### **1st Semester**

Course	Course Title	Credit Hours
MGT-701	Current Issues in Management	3
MGT-702	Quantitative Research Techniques	3
MGT-703	Qualitative Research Techniques	3

#### 2nd Semester

	<u> </u>	
Course	Course Title	Credit Hours
	Elective-I	3
	(Marketing/ Finance/ HRM)	
	Elective-II	3
	(Marketing/ Finance/ HRM)	
	Elective-III	3
	(Marketing/Finance/HRM)	

#### 3rd to 6th Semester

Course	Course Title	<b>Credit Hours</b>
MGT-799	Ph.D Thesis	9

#### **Elective Courses For Specialization**

#### A HRM

HRM-702	Training & Development
HRM-703	Organizational Development & Change
	Management
HRM-704	Recruitment & Selection
HRM-705	Conflict & Negotiation
HRM-706	Organizational Development
HRM-707	Strategic Human Resource Management
HRM-708	Contemporary Issues in HRM

HRM-701 Compensation Management

HRM-709 Workforce Diversity Management HRM-710 International HRM

HRM-711 Leadership & Motivation Techniques

HRM-712 Case Studies in HRM

HRM-713 Human Resource Information Systems HRM-714 Legal & Ethical Environment of Business

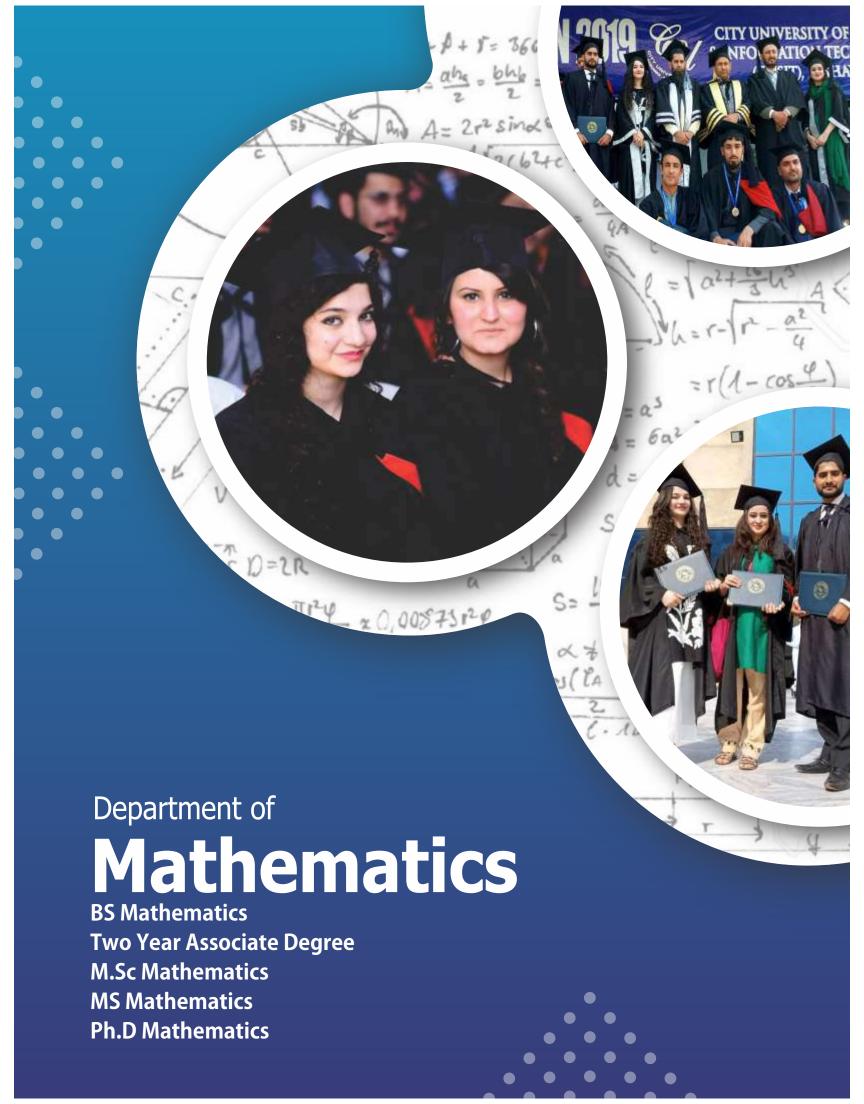
#### C. Marketing

MKT-701	Advanced Marketing Strategies
MKT-702	Social Marketing
MKT-703	Brand Management
MKT-704	Strategic Marketing Management
MKT-705	Marketing of Services
MKT-706	International Marketing
MKT-707	Marketing Research
MKT-708	Integrated Marketing Communication
MKT-709	Export Marketing
MKT-710	Digital Marketing

Specialization subjects can be offered other than the given list, subject to the current market needs and availability of faculty member.

B. Finance		
FIN-701	Investment & Portfolio Management	
FIN-702	Advanced Financial Management	
FIN-703	Islamic Financial System	
FIN-705	Corporate Governance	
FIN-706	International Banking Systems	
FIN-707	International Finance	
FIN-708	<b>Project Analysis &amp; Investment Decision</b>	
FIN-709	Corporate Finance	
FIN-710	Merger & Acquisition	
FIN-711	Case Studies in Finance	
FIN-712	Financial Risk Management	







Dr. Farhad Ali
Head of Department

#### **Message from HoD:**

I welcome you to the Department of Mathematics at CUSIT, Peshawar. It is my goal to create a department that is thriving with good teachers, good researchers, and good students, all working together for the benefit of all.

Graduate & postgraduate programs of the Department of Mathematics aims to present fundamental knowledge in pure and applied mathematics and mathematical thinking system.

I believe that the research environment is the essence of a department. Various research groups have been formed in the department to heave the research culture and enhance more research collaborations at the national and international levels. The department is producing a good number of quality research papers that are published in well-reputed international ISI index Journals. Faculty members and research scholars are active in delivering talks at various national conferences, seminars, and workshops.

### CENTER OF EXCELLENCE



### MISSION STATEMENT

The mission of the Mathematics department is to provide high quality education in pure and applied mathematics in order to prepare students for graduate studies or professional careers in mathematical sciences. The department, through its faculty, will continue to contribute to graduate qualified cadres who are equipped with insight and research skills in the field of mathematics.

#### **Objectives**

- To train qualified, adaptable, motivated, and responsible mathematicians who will contribute to the scientific and technological development of the country.
- To provide an in-depth understanding of the fundamental principles and techniques of mathematics.
- To develop mathematical thinking, reasoning and skills needed in modeling and solving.
- To produce graduates in mathematics that are adaptable to teach in secondary schools, colleges, universities and work in industries, research institutes etc.
- To encourage participation in scientific forums and seminars.
- To encourage follow up of latest scientific research and techniques in the field.
- Build and enhance computational skills necessary in todays society.
- Provide an environment which will help all faculty and staff to achieve their professional goals.
- To Work effectively in teams by having ethical and professional behavior.

#### **Learning Outcomes**

On successful completion of the degree programme, the graduate will be able to

- Formulate and analyze mathematical and statistical problems, precisely define the key terms, and raw
  clear and reasonable conclusions to solve well-defined problems and present their mathematical
  work, both in oral and written format.
- Explain the importance of mathematics and its techniques to solve real life problems and provide the limitations of such techniques and the validity of the results.
- Read, understand, and construct correct mathematical and statistical proofs and use the library and electronic data-bases to locate information on mathematical problems.

#### **Career for Mathematicians**

The range of careers on which mathematicians are engaged is wide. We give a few examples.

- Scientific research, design and development.
- Management services and computing.
- Financial work.
- Statistical work.
- Teaching.
- Postgraduate study.

# MEET THE FACULTY



Dr. Farhad Ali

Dean of Sciences and IT/HoD Director ORIC/Associate Professor

Ph.D. Applied Mathematics, Universiti Teknologi Malaysia M.S. Mathematics, Universiti Teknologi Malaysia M.Sc. Economics, University of Peshawar



Dr. Taza Gul

Associate Professor

Ph.D. Mathematics, Abdul Wali Khan University, Mardan



Ph.D. Mathematics, University of Engineering & Technology, Peshawar





Dr. Sami Ullah

Assistant Professor

Ph.D. Mathematics, COMSAT, Islamabad



Lecturer/Coordinator

MS Mathematics, City University of Science & IT. Peshawar





Ms. Madeha Gohar

Lecture

MS Mathematics, City University of Science & IT, Peshawar

Mr. Anees Imtiaz

Junior Lecturer/MS Coordinator

MS Mathematics, City University of Science & IT, Peshawar





Mr. Muhammad Bilal

Junior Lecturer/Teacher Assistant

MS Mathematics (in-progress). City University of Science & IT, Peshawar

# **BS MATHEMATICS**

0256 BS Mathematics

Shift : Morning

Duration: 4 Years, 8 Semesters, 130 Credit Hours

Eligibility: Intermediate or equivalent qualification with Mathematics as a major subject with atleast 50%

marks from any recognized board.

#### 1st Semester

Course	Course Title	Credit Hours
	Quantitative Reasoning-I	
	Art & Humanities -I	
	Natural Science-I	
	Social Science-I	
	Expository Writing -I	

#### 2nd Semester

Course	Course Title	Credit Hours
	Quantitative Reasoning-II	
	Art & Humanities -II	3
	Natural Science-II	3
	Social Science-II	3
	Expository Writing -II	3

#### **3rd Semester**

Course	Course Title	<b>Credit Hours</b>
MTS-125	Elements of Set Theory &	
	Mathematical Logics	
MTS-101	Calculus - I	
	Civilization Course-I	
	Civilization Course-II	
	Expository Writing -III	

#### 4th Semester

Credit Hours
3
3
3
3
3

#### **5th Semester**

Course	Course Title	Credit Hours
MTS-424	Topology-II	3
MTS-125	Discrete Mathematics	3
MTS-309	Group Theory-II	3
MTS-201	Calculus II	3
MTS-	Elective-I	3
MTS-	Elective-II	3

#### **6th Semester**

Course	Course Title	Credit Hours
MTS-212	Ordinary Differential Equations	3
MTS-220	Differential Geometry and	3
	Tensor Analysis	
MTS-401	Real Analysis- I	3
MTS-409	Numerical Analysis-l	3
MTS-209	Calculus-III	3
MTS-	Flective-III	3

#### **7th Semester**

Course	Course Title	Credit Hours
MTS-405	Real Analysis-II	3
MTS-310	Partial Differential Equations	3
MTS-429	Integral Equations	3
MTS-412	Numerical Analysis-II	3
MTS-503	Functional Analysis-I	3
MTS-403	Complex Analysis-I	3

#### 8th Semester

Course	Course Title	Credit Hours
MTS-507	Functional Analysis-II	3
MTS-407	Complex Analysis-II	3
MTS-	Elective-IV	3
MTS-	Elective- V	3
	Project	3



# TWO YEAR ASSOCIATE DEGREE PROGRAM

0222 Two Year Associate Degree Program

Shift : Morning

Duration: 2 Years, 4 Semesters, 66 Credit Hours

Eligibility: B.Sc. Mathematices or equivalent qualification with Mathematics as a major subject with at least

45% marks from any recognized board.

#### **1st Semester**

Course	Course Title	<b>Credit Hours</b>
	Quantitative Reasoning-I	
	Art & Humanities -I	
	Natural Science-I	
	Social Science-I	
	Expository Writing -I	

#### 2nd Semester

Course	Course Title	Credit Hours
	Quantitative Reasoning-II	3
	Art & Humanities -II	3
	Natural Science-II	3
	Social Science-II	3
	Expository Writing -II	3

#### **3rd Semester**

Course	Course Title	Credit Hours
MTS-125	Elements of Set Theory &	
	Mathematical Logics	
MTS-101	Calculus - I	3
	Civilization Course-I	3
	Civilization Course-II	3
	Expository Writing -III	3

#### 4th Semester

Course	Course Title	Credit Hours
MTS-406	Classical Mechanics	3
MTS-222	Group Theory-I	3
MTS-404	Topology-I	3
MTS-301	Linear Algebra	3
MTS-451	Research Methodology	3





## **MASTER MATHEMATICS**

0222 Master of Science in Mathematics

Shift : Afternoon

Duration : 2 Years, 4 Semesters, 66 Credit Hours

Eligibility: B.Sc. Mathematics or equivalent qualification with Mathematics as a major subject with at least

45% marks from any recognized board.

#### 1st Semester

Course	Course Title	Credit Hours
MTS-402	Group Theory	
MTS-419	Advanced Calculus	
MTS-404	Topology-I	
MTS-408	Mathematical Statistics-I	
MTS-403	Complex Analysis-I	
MTS-423	Mathematical Tools	

#### 2nd Semester

Course	Course Title	Credit Hours
MTS-421	Real Analysis	
MTS-413	Mathematical Statistics-II	3
MTS-505	Topology-II	3
MTS-407	Complex Analysis-II	3
MTS-521	Ordinary Differential Equations	3
MTS-513	Linear Algebra	3

#### **3rd Semester**

Course	Course Title	Credit Hours
MTS-409	Numerical Analysis-I	
MTS-503	Functional Analysis-I	
MTS-517	Rings & Fields	
MTS-411	Number Theory	3
MTS-515	Measure Theory/Vector	3
	& Tensor Analysis	

#### 4th Semester

Course	Course Title	Credit Hours
MTS-412	Numerical Analysis-II	3
MTS-507	Functional Analysis-II	3
MTS-514	Mathematical Modeling	3
MTS-515	Partial Differential Equations	3
MTS-516	Dynamics	3









# MS/Ph.D MATHEMATICS

0316 MS Mathematics

Shift : Afternoon

Duration : 2 Years, 4 Semesters, 30 Credit Hours

Eligibility : M.Sc/BS Mathematics or equivalent qualification with Mathematics as a major subject with

at least 50% marks or CGPA 2.50/4.00 from any HEC recognized university and GAT test

obtaining at least 50% marks/ university test with a 50% score.

#### **1st Semester**

Course Title	Credit Hours
Core Course-I	3
Core Course-II	3
Elective-I	3
Elective-II	3
	Core Course-I Core Course-II Elective-I

#### **2nd Semester**

Course	Course Title	Credit Hours
MTS-6XX	Core Course-III	3
MTS-6XX	Elective-III	3
MTS-6XX	Elective-IV	3
MTS-6XX	Elective-V	3

#### **3rd Semester**

Course	Course Title	<b>Credit Hours</b>
MTS-699	Research Thesis-I	3

#### 4th Semester

Course	Course Title	Credit Hours	
MTS-699	Research Thesis-II	3	

0404 Ph.D Mathematics

Shift : Afternoon

Duration: 3 Years, 6 Semesters, 36 Credit Hours

Eligibility: MS Mathematics with research thesis in relevant field or equivalent qualification with

Mathematics as a major subject with at least 60% marks or CGPA 3.00/4.00 from any HEC recognized university and achieved NTS GAT subject with 60% or ETS GRE subject

with a 50% score.

#### 1st Semester

Course	Course Title	<b>Credit Hours</b>
MTS-7XX	Elective-I	3
MTS-7XX	Elective-II	3
MTS-7XX	Elective-III	3

#### 1st Semester

Course	Course Title	Credit Hours
MTS-7XX	Elective-IV	3
MTS-7XX	Elective-V	3
MTS-7XX	Elective-VI	3

#### **3rd to 6th Semesters**

Course	Course Title	Credit Ho	urs
MTS-799	Ph.D Thesis	18	





### **EVENTS AND ACHIEVEMENTS**





**Visit to Sargodha University** 





International Conference on Emerging Trends in Engineering, Management & Sciences (2018)



Dr. Farhad Ali Best Researcher Award of the Year 2017



Mr. Anees Imtiaz Young Researcher Award of the Year 2019





**Seminars and Presentaions** 

# CU-CSR

#### Establishment of the "City University-Consultancy Services & Research" Islamabad

City University established an independent subsidiary company for Consultancy Services & Research in Islamabad in 2015 with an aim to bridge industry-academia gap through interactions with industry people, CUSIT students and faculty members. Their involvement in industry needed applied research, their engagements as resource persons and interns in industries, capacity building of students towards market related employability, skills for becoming job-ready-resource, working with partners to arrange corporate training and efficient solution oriented services for public consumption. Recently, a sub-suit has been added to this platform as City-Soft' to develop software applications for open consumer markets with the help of university students and graduates.

#### Vision

To improve lives of learners through continuous learning to contribute in national development.

#### Mission

To enable effective human resource development through focused training and consultancy support for supplying workable solutions to industries and institutions.

#### **Primary Objective**

This centre works to look after the welfare of university students, faculty members, and administrative managers/staff to help develop their linkages and capacities for engagements with wider community circles, including industry, general services and academia.

#### **Other Key Objectives**

- To train students develop industry skills.
- To organize alumni gatherings and keep follow up.
- To link students in internships and training opportunities.
- To link students with industry for applied research.
- To arrange managerial staff training.
- To arrange faculty development sessions.
- To provide leadership development training for corporate clients.
- To form an Industry-Advisory Board to advise on bridging the gaps between industry and academia.
- To sign up innovative partnerships with key players in new learning areas and innovative technologies and solutions for wider usage at community levels.

#### **Key Interventions and Services**

- Industry-Academia Support Services.
- Accreditation and Policy Support for CUSIT.
- Establishment of Industry Advisory Board of CUSIT.
- Survey for market needed research topics for final year students.
- Capacity and skills training courses for students, faculties and managerial staff.
- Students Internships.
- Market/corporate training programs of capacity building.
- Partnerships for promoting learning fabric and opportunities for all interested.

### **CU-CSR**

### Key Activities Spotlights

- Several students career planning and training sessions held at Peshawar and Islamabad in routine
- Several internship batches organized and completed at Peshawar and Islamabad in routine
- Mentorship roles opted for US-PAUN Mentorship Program each year for USGRAD Scholars in routine
- Several Training and Capacity Building Sessions for PMEIs Principals, Vice Principals and Senior Staff arranged in Peshawar and Islamabad in routine
- Several Faculty Development and Motivation Sessions arranged for university faculties with several industry and academia leaders from Pakistan and abroad
- Several guest speakers and industry practitioners enabled to meet CUSIT students for motivational interactions for learning and development
- Twenty weeks long leadership & Managerial Capacity Building Program' for Senior Production Managers of 'Nishat Textile Group' arranged and completed at Nishat Mill site in Lahore
- Three weeks long leadership and Management Development course in project design, Management and Monitoring arranged and completed for Local Government & Rural Development Directorate Staff of Gilgit-Baltistan in CUSIT, Peshawar.
- An association signed with 'Google Educator Groups Lead' to organize and execute Google Educator Groups Pakistan Summit in fall of 2017 in six major cities of Pakistan as lead partner
- Several internship attachments arranged for CUSIT students internally and externally
- Several short training courses held at Islamabad for market and industry professionals including the themes of Project Management, Procurement & Contract Management, Entrepreneurship Management, Scrum Masters, and other related soft skills topics
- Supported PMEIs in designing and launching its Franchise School Model System
- Support to CUSIT in several ways towards improving quality and work efficiency of various work pieces
- Signed several MOUs and agreements with different organizations to launch innovative activities and efforts to promote healthy environments, including launching of first KPK Healthy Kids Program with NESTLE, launching of first Healthy Women Program in KPK with NESTLE, Launching of Women Digital League Program in Peshawar with WDL
- Arranging and executing a mega job fair for CSUIT students in Peshawar
- Participation in several national events and conferences in Peshawar, Islamabad and Lahore
- Advisory and technical back-stopping support to PMEIs in several ways for various developments and enhancements
- An agreement signed and executed with All World Network [AWN] USA to promote Pakistan fast Growth Program for Growing Enterprises during 2015-2016

#### Establishment of City Soft

- To work on industry-academia linkage.
- To polish the skills of CUSIT graduates.
- To prepare graduates for competitive industry.





### **CDC**

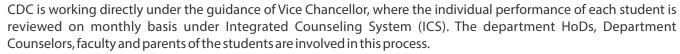
#### **City University Career Development Centre (CU-CDC)**

The continuous assessment, counseling and development of students and staff are precursors of high quality education and research. The City University Career Development Centre (CU-CDC) has been established mainly with the following objectives:

- To provide Career Development Services to students, Alumni and staff, enabling them to make effective career choices.
- To explore opportunities for staff, students and Alumni for exploring and fostering strong professional networks with employers and other institutions
- The centre will assess the training needs of students and staff for their development in their career paths.

#### The centre will function under following sections:

- Students Support Section
- Students Counseling and Wellness (SCWO) Section
- Internship, Placement & Alumni (IPA) Section
- Industry Liaison Section



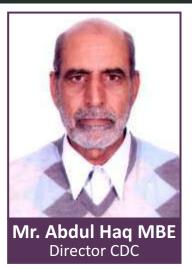
The Internship and Placement section plans various courses and trainings for the students in the areas of personal development, communication presentation skills, and interview skills etc. The section is also connects students and graduates with the employers, through internships and job placements. It also involves them in various curricular & co-curricular activities, alumnifeedback and curriculum review meetings.

The Industrial Liaison Section collaborates with industies at local and national levels. Visits of students to industries and sites are arranged. They also interact with industry and business concerns for identifying areas of common interest including areas of research, staff development etc. They also undertake MoUs with various industries and international universities and HEIs in consultation with Director ORIC.









### Office of Research Innovation &

**Commercialization (ORIC)** 

#### Introduction

In line with the policy of HEC and in pursuance of Vice Chancellor's directives for streamlining the management of research initiatives and programs. There was a need to re-enforce the existing Research and Development Centre already working at City University of science & IT Peshawar, for not only sustaining but also improving the trends of the research activities having an impact for the improvement of areas concerning economic, industrial, social and academic development and their accelerated advancements for achieving the national objectives.



Assoc. Prof. Dr. Farhad Ali Director





#### Mission

The mission of ORIC is to develop, expand, enhance and manage the university's research programs and to link research activities directly to the educational, social and economic priorities of the university and its broader community. ORIC is also responsible for assuring the quality of research at highest international standards and advances the stature of the university among the world's best research institutions.

ORIC also positively contributes in developing research leadership to play their singular role in transforming the economic focus of the country through internationally recognized research outcomes and in line with the on-going policy of "National Research Program for the Universities" for building the national economy.



The faculty members, MS and Ph. D scholars of CUSIT, have published more than 140 research papers in different international well reputed journals in the last year.

#### **International Conference**

CUSIT organized the 3rd International Conference on Emerging Trends in Engineering, Management and Sciences (ICETEMS-2018) 18-19 October 2018. Researchers and industrialists from different countries participated and about 300 research papers were presented in the core areas of the conference by academia, professionals, practitioners and industrialists.







# Office of Research Innovation & Commercialization (ORIC)

#### **Collaborations**

Department of Mathematics, CUSIT take a leading role in Computational Analysis Research Group funded by TDT University, Vietnam.

City University signed letter of collaboration with UTM, Malaysia for joint research. Under the agreement, both the Universities will collaborate in the areas of joint research, faculty development, graduate research supervision, joint teaching in the areas of Computer Science, Engineering, Management Sciences, Social Science and Humanities.

City University in collaboration with PEC, successfully completed 3 week training program for Engineers of Local Govt. and Rural Development Department of GB.









### **Quality Enhancement Cell (QEC)**



**Dr. Muhammad Nauman Habib,** Director QEC / Assistant Professor Ph.D (Management Sciences) IMSciences, Peshawar MS (HRM), IMSciences, Peshawar

**Sohrab Arshad,** Deputy Director, QEC **Muhammad Shakir,** Deputy Director, QEC **Tahir Nigah,** Office Assistant

#### **Vision**

QEC (CUSIT) aspires to be a distinguished cell to ensure excellence in quality assurance instruments and viable procedures for assurance and enhancement of excellent quality delivery of educational services to the university students

#### Mission

QEC, CUSIT mission is to coordinate and evaluate quality assurance processes in teaching and support services aimed at achieving the university goals. It delivers services with accuracy, consistency, elasticity, reviewing and improving the work processes involving all stakeholders for continuous quality improvement and perpetuation of academic standards. Excellence is the commitment of QEC towards teaching and educational services.

#### **Objectives**

- To arrange faculty development programs as per need and requirements.
- To monitor and review the internal academic activities through self-assessment.
- To improve the quality of teaching, research, and development facilities.
- To achieve the academic standards by implementing proposed criteria and ensure that all the programs meet their objectives and institutional goals.
- Obtaining the feedback from all stakeholders for quality assurance of academic programs.
- To promote public confidence that the quality and standards of the award of degrees are enhanced and safeguarded.
- To equip the students for international competition in academics and serving the society.























#### **DEPARTMENT OF MANAGEMENT SCIENCES**

BS

Accounting & Finance With 09 Exemptions in (ACCA)

**C** ✓ Economics Social Science

**BBA** 

**MBA** 

MS-MS

M.Phil (Economics)

Ph.D **Management Sciences** 

#### DEPARTMENT OF ENGLISH

#### **DEPARTMENT OF ARCHITECTURE**

**B.**Architecture

#### **DEPARTMENT OF COMPUTER SCIENCE**

**BS-CS** 

BS-SE

Computer Science

**Software Engineering** 

MS-CS

MS-SE

Ph.D

#### **DEPARTMENT OF HEALTH SCIENCES**

**Doctor of Physical Therapy** 

**Medical Laboratory Technology** 

Microbiology

**Dental Technology** 

BS

#### **DEPARTMENT OF MATHEMATICS**

Mathematics

#### **DEPARTMENT OF ENGINEERING TECHNOLOGY**

**Electrical Engineering Technology** 

**Civil Engineering Technology** 

#### **DEPARTMENT OF ELECTRICAL ENGINEERING**

**B.Sc Electrical Engineering** 

**Electrical Engineering** 

**Electrical Engineering** 

#### **DEPARTMENT OF** CIVIL ENGINEERING

**B.Sc Civil Engineering** 

#### **DEPARTMENT OF HINDKO**

### SCHOLARSHIPS AVAILABLE

As per University Policy

For Online Registration: cu.edu.pk/admissions

SPECIAL SCHOLARSHIP FOR FEMALE ONLY