CECOS





To be the leading hub of academic excellence and innovation, and to address global challenges of today and tomorrow. **OUR MISSION** To nurture an intellectually stimulating environment that provides rich and holistic educational programmes with world-class research and innovation to produce highly skilled graduates with a strong moral character. We take great pride in contributing to society through the pursuit of our distinctive commitment to ethics, tolerance, social responsibility and academic freedom.

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Engr. Muhammad Tanveer Javed	Engr. Sohaib Tanveer	Prof. Dr. Naseer Ahmed
President	Vice President	Vice Chancellor
Prof. Dr. Irfan Ullah	Prof. Dr. Fazal Subhan	Prof. Dr. Zia Ullah Shah
Dean Facuty of Engineering	Dean - Faculty of Life Sciences	Dean- Post Graduate Studies
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Dean Student Affairs	Registrar	Controller of Examinations
Col Ashfaq Ahmad (R) Director Welfare	Mr. Ashok Kumar Deputy Registrar, Establishment	Mr. Muhammad Imran Deputy Controller of Examinations
Mr. Rustam Ali Nasir Director Finance	Mr. Muhammad Rauf Deputy Registrar, Establishment	Mr. Muhammad Amjad Deputy Controller of Examinations
Dr. Maryam Mahsal Khan	Engr. Saima Hassan	Major. (R) Noor Muhammad
Director QEC	Manager, Human Resource	Deputy Controller of Examinations
Mr. Abdul Hanan	Engr. Zia-ur-Rehman	Umer Mehmood
Director ORIC	Manager Admin & Works	Manager Marketing
Dr. Khalid Rehman	Mr. Shah Raiz Zeb	Prof. Dr. Muhammad Tariq Bashir
Associate Dean, Graduate Studies	Manager, Graduate Studies	HOD Civil Engineering
Engr. Faizan Farid Graduate Studies Coordinator, Departmnet of Civil Engineering	Prof. Dr. Muhammad Iqbal HOD Mechanical Engineering	Engr. M. Imran Hanif Academic Coordinator, Department of Mechanical Engineering
Dr. Azhar Qazi HOD, Electrical Engineering	Dr. Kiran Raheel Graduate Studies Coordinator Department of Electrical Engineering	Ar. Adnan Ahmad Khan HOD Architecture
Ar. Awais Saeed Agha Graduate Studies Coordinator, Department of Architecture	Dr. Tahir Ahmad HOD Comouter Science	Mr. Waqas Nouman Siddiqui Program Manager Department of Computer Science
Dr. Nudrat Aamir	Miss. Faiza Hanif	Dr. Muhammad Aleem
HOD, Basic Sciences & Humanities	Program Manager, Basic Sciences	HOD Management Sciences
Mr. Bashir Akbar Program Maager Department of Management Sciences	Dr. Muhammad Shaid HOD Institute of Integrative Biosciences	Mr. Sulaiman Faisal Graduate Studies Coordinator, IIB



Engr. Muhammad Tanveer Javed President, CECOS University



Engr. Sohaib Tanveer Vice President, CECUS University



Dr. Naseer Ahmed Vice Chancellor, CECOS University



Justice (R) Muhammad Ayub Khan Nominee of Chief Justice Peshawar High Court



Chairman Higher Education Commission



Dr. Lutfullah Kakakhel
Former Vice Chancellor, Kohat University of Science & Technology, Kohat
(Nominee of President, CECOS University)



Dr. Saeed Mahfooz

Professor Computer Science Department, Uop
(Nominee of Board of Directors)



Commander (R) Jamshed Savul Nominee of Board of Governors CECOS University



Dr. Akif Khan (Managing Director, KP Information Technology Board)



Dr. Razia Sultana Shaheed Banazir Bhutto Women University, Peshawar (Nominee of President, CECOS University)



Mudassir Tanveer

Member Board of Directors, CECOS University
(Managing Director, CECOS College London)



(Nominee of Governor, Khyber Pakhtunkhwa)



Dr. Irfan Ullah Dean, Faculty of Engineering (Nominee of Vice Chancellor, CECOS University)



Mr. Khurshid Qasim Marwat Registrar, CECOS University Secretary, BOG

CECOSMILESTONES

2001-2007

- CECO MIXERS Grant of Charter by KP Government (Establishment of CECOS University)
- Recognition by Higher Education Commission
- Accreditation by Pakistan Engineering Council
- Department of Architecture

1995-2000

- CECOS College of Engineering and IT
- · Department of Civil Engineering
- Department of Electrical Engineering
- CECOS College London

1986-1994

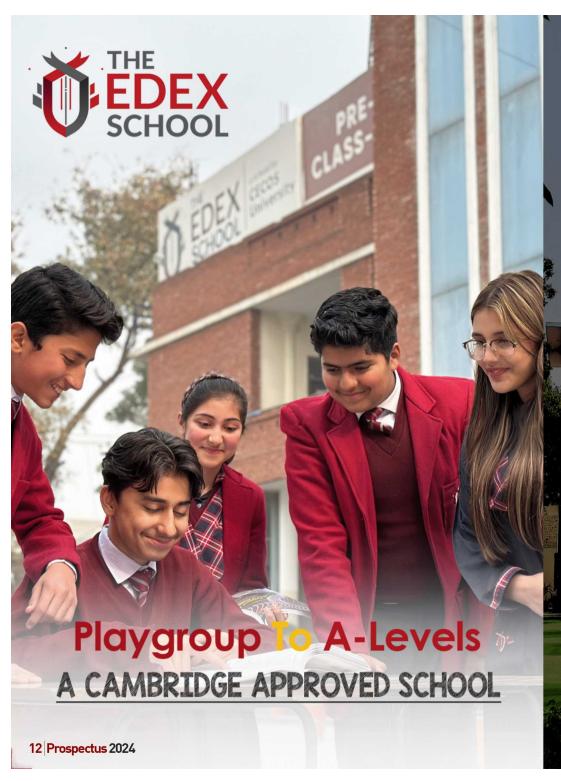
- CECOS Data Institute
- CECOS Frontier College of Business Education
- · CECOS Data College
- Department of Management Sciences
- Department of Computer Science

2015-2023

- Peshawar Light Engineering Centre
- The Edex School Department of Allied Health Sciences
- Accreditation by NCEAC Department of Pharmacy
- NOC by Pharmacy Council of Pakistan
- CECOS Innovations The RAFSAN School

2008-2014

- CECOS Industrial Liaison Centre
- Accreditation by PCATP
- RAFSAN Neuro Rehab Centre
- Department of Mechanical Engineering
- Institute of Integrative Biosciences



THE EDEX SCHOOL

The EDEX School, established by CECOS University in 2017, is an esteemed educational institute dedicated to providing an exceptional education. With highly qualified faculty, the school offers a serene environment conducive to learning and personal growth. The school employs innovative teaching methods, prioritizing a student-centred approach that fosters active participation, critical thinking, and problem-solving skills.



By blending interactive classroom sessions, practical experiments and group discussions, students gain the knowledge and skills necessary to thrive in the modern world. Moreover, through its prestigious collaboration with the University of Cambridge International Examinations, The EDEX School provides students access to a diverse and dynamic curriculum of global standards.



THE RAFSAN SCHOO Counting to 2 orme IM PUBLIS A NON-PROFIT SCHOOL THAT SUPPORTS EDUCATION OF UNDERPRIVILEGED CHILDREN

THE RAFSAN SCHOOL

An institution where we prioritize delivering high-quality education and empowering underprivileged children, while actively promoting social equality. We are committed to recruiting and retaining qualified and passionate teachers who are dedicated to serving underserved communities. Our focus is to create a safe and conducive learning environment, supported by well-equipped facilities including classrooms, libraries, laboratories, and recreational areas.



The curriculum we teach not only meets educational standards but also caters to the specific needs and circumstances of needy students. Moreover, we provide essential resources such as textbooks, learning materials, computers and internet access to enrich the educational experience for our students.





Since our establishment in 1998, CECOS College London has been widely regarded as a highly esteemed institution in the realm of further and higher education in the UK. Our mission is rooted in providing equitable opportunities for personal, professional, and academic growth of students from all walks of life. At CECOS College London, we deliver educational experiences that are characterized by a strong sense of commitment, enthusiasm, effectiveness and creativity. We are dedicated to preparing our students to take on the next phase of their lives. Our programmes are thoughtfully formulated to ensure that our students receive a rigorous and comprehensive education that can withstand the challenges posed by the fast-paced and everchanging contemporary world.



Higher Education Programmes

- Business Management BBA (Hons)
- Health and Social Care BSc (Hons)
- HNC/HND Business
- Diploma in Education & Training (Level 5 Teacher Training)
- Master in Business Administration

Further Education Course

- Basic Skills- English and Maths
- IT & Digital
- Healthcare
- Business

All of our foundation programmes embed essential employability skills and have exceptional progression rates of 92%.

We work with leading awarding and funding bodies including Staffordshire University, Newman University, Greater London Authority, West Midlands Combined Authority, West Yorkshire Combined Authority, Pearson and NCFE.

We have been delivering Higher and Further Education courses since 1998 and are justifiably proud of our achievement rates which are in excess of 92%. Our ethos is to help and support those furthest from the workplace who invariably have been out of learning for a considerable period of time. Our methodology is to deliver in settings convenient to marginalised communities, including community centres, community groups and social venues etc. The qualifications we offer are part of the wider government agenda which focus around jobs



The curriculum we teach not only meets educational standards but also caters to the specific needs and circumstances of needy students. Moreover, we provide essential resources such as textbooks, learning materials, computers and internet access to enrich the educational experience for our students.



At CECOS College we are proud to be firmly embedded within the communities, which we serve and we currently have 4 campuses located in the UK for our FE & HE delivery. Our UK campuses have been specifically selected to be both readily accessible and at the heart of the community:

- Edmonton Green, North London at the heart of the community we serve and the UK Headquarters for CECOS
- Stepney Green, East London conveniently located in the heart of the east end, with road and rail links
- Barford Street, Birmingham based in the heart of this vibrant city and ideally situated to be readily accessible by all our students
- Currer Street, Bradford a key location within the Northern Powerhouse near to the entertainment hub and Bradford Broadway Centre

Staff and student welfare is a prime consideration of CECOS College and therefore we are proud of our student cafes at all of our campuses, together with a breakout room and also a nondenominational prayer room. All locations have an extensive library/resource centre with extended opening hours to fit in with the work and family commitments of our students.

ACCREDITATIONS & PARTNERS

































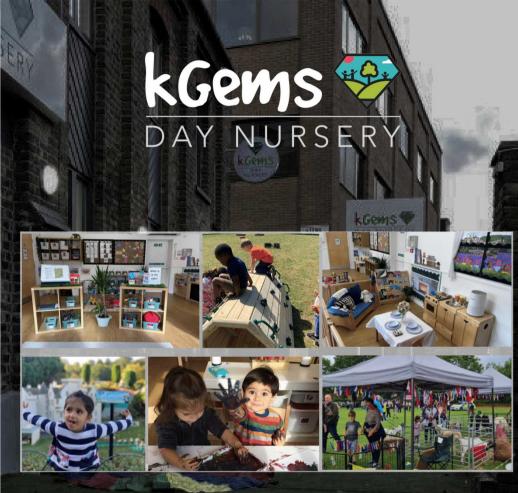












Knowledgems Day Nurseries is another brilliant project by the CECOS group with two campuses located in Valentine Park, Ilford and Clayhall Park, Ilford. The campuses lie in the heart of greenery and offer a refreshing environment for children's learning. Both campuses are beautifully designed throughout with bright, open areas for babies, toddlers and preschoolers. KGems offers high-quality, flexible childcare for children aged 3 months to 5 years. Knowledgems Day Nurseries aims is to create a happy and relaxed atmosphere for all the children, providing children with the freedom to explore the variety of planned activities suited to their needs.

Inspiring young minds to soar beyond limits















21 Prospectus 2024

PESHAWAR LIGHT ENGINEERING CENTER

Peshawar Light Engineering Centre (PLEC) has been established at CECOS Industrial Liaison Centre, Industrial Estate, Peshawar. The PLEC is a joint venture of CECOS and Technology Upgradation and Skill Development Company (TUSDEC) in partnership with the Asian Development Bank (ADB). The Centre is quite in line with the policy of the Government and Higher Education Commission. This Centre is unique of its kind in terms of public-private partnership which is helping in bridging the gap between academia and industry. The PLEC is exclusive for KPK and other industrial resource centers to upgrade skills and enhance their capacity for improving product quality by using this state of the art facility.

This Centre is providing the engineering industry of KP with modern design and fabrication solutions, training, technical assistance and consultancy in product manufacturing. It is working as a Common Facility Centre (CFC), Product Development Institute and Skill Development, Training and Designing Centre. Apart from this, the Centre is also promoting technology and skill development among students and researchers of CECOS University.









The Precision Medicine Lab is a joint initiative by CECOS University and Rehman Medical Institute. Located in Phase-V Biomedical cluster in Hayatabad, Peshawar, the lab is an affiliate of the prestigious National Centre for Big Data and Cloud Computing (NCBC) hosted by the Project Secretariat at LUMS and supported by the Federal Government of Pakistan through the Higher Education Commission in Islamabad.

It aims to develop integrated genomic and health datasets and use computational methods to help improve individual patient outcomes, especially in cancer, and to improve the development of new drugs and provide enabling technology for drug combination studies and targeted drug delivery.



WHY CECOS

Are you looking for an institution that combines academic excellence with a commitment to holistic student growth? Look no further than CECOS University. With a wide range of undergraduate and graduate programs. CECOS offers the academic rigor necessary to succeed in today's job market. The institution places equal importance on creating a welcoming and inclusive campus culture that supports students' personal growth, with extracurricular activities and community service opportunities aimed at developing well-rounded individuals.

If you're looking for a university experience that will help you achieve your career goals while also fostering personal development. CECOS Univeristy is the perfect choice.

PKR 230 Million

Scholarships disbursal during last 5 years

30 +Undergraduate Major



3200+ Students Enrolled



41000+ **Alumni Community**



1000+

Research Papers published





1st Private Sector University

of KPK to offer Accredited Engineering Programs

1st Private Sector University

to set up a dedicated Industrial Liasion Center

1st Private Sector University

to offer Architecture Program in Peshawar



Positions in Workshop on Innovative **Building Facades**

CECOS University excelled at a recent design workshop on innovative building facades at Hazara University securing 1st, 3rd, and 4th places with Assistant Professor Ar. Awais Saeed Agha leading the winning teams. The event aimed to emphasize the significance of facades in addressing climate change and thermal comfort, with CECOS standing out among participants from 12 architecture schools.

RUNNER-UP Position at the "Zindagi Prize

CECOS University students Yaseen Khattak, Nouman Kamal Afridi, Osama Akbar, and Muhammad Fawad clinched the RUNNER-UP position at the "Zindagi Prize" Business Idea Competition hosted by GIKI, outshining participants from 70 universities nationwide. This achievement underscores CECOS' commitment to excellence, providing a nurturing environment where creativity thrives.



Best Delegation Award at IRTIQA'24

The Architecture students at GIKI showcased exceptional dedication and excellence at the prestigious IRTIQA'24 event hosted by the Nagsh Society. Their remarkable talents led to a deserving victory, with Sana Saeed earning the prestigious Best Delegation award. Ghulam Fatima was recognized as the Best Director (Mime), and Huzefa Sadozai secured the top position in Fine Art. These achievements highlight our commitment to nurturing artistic excellence and empowering students to excel on a larger platform.

1 Position in Venture Contest by IPPUS

AsTechSolutions, an innovative venture established by the distinguished CECOS University alumnus Mr. Abdullah Hidayatullah, achieved significant success at the renowned New Venture Contest organized by IPPUS at UET Lahore.





1st MEGA ENGINEERING CAPSTONE EXPO

(FYDP - Final Year Engineering Design Project Exhibition)

The CAPSTONE EXPO held in KPK, Peshawar on July 1, 2024. An initiative by the PEC Pakistan Development Committee (PPDC), showcased 82 projects from 20 universities

CECOS University Department of Mechanical Engineering for the Design and Development of Modular RC Plane for Inflight Multitasking Operations (Supervisor: Engr. M Irfan Khan) won the first prize. Also, CECOS University for the Design and Fabrication of a Smart Intravenous Injection and Vein Detection Device (Supervisor: Engr. M Owais Awan) won second prize.

Kalam Robo Tec 2023

Students of Electrical Engineering Department participated in Kalam Robo Tec 2023. Kalam Robo Tech is a robotic competition in which more than 300 students participated from well known Universities of Pakistan including both private and public sectors, schools and colleges.

Engr Abdul Subhan and Engr Ali Mujtaba Durrani along with students from Electrical and Mechanical Department participated in different modules.

Team Venom from Electrical Engineering participated in Sumo Wrestling Event and stood 2nd among 18 teams.





International Conference on Health Research (ICHR-23)

The Rehman College of Dentistry (RCD) successfully organized the esteemed International Conference on Health Research (ICHR-23) with collaborative partners CECOS University, Khyber Medical University, and HITEC.

Abdul Ahad, a talented student of the 6th Semester from the department of pharmacy, achieved an outstanding second position in the highly competitive Best Poster Presentation Competition and was proudly awarded a shield prize by the President of Pakistan.

HEC Intervarsity Volleyball Zonal Championship 2023-24

The volleyball team from CECOS University recently took part in the HEC Intervarsity Volleyball Zonal Championship 2023-24, held from September 20th to September 25th, 2023. They showcased remarkable performance and teamwork, which led them to the semi-finals.

The CECOS team's exceptional skills and sportsmanship were evident throughout the tournament. The university commends the players for their outstanding achievement, and their hard work and dedication during the game.





National Ideas and Design Competition

A Competition held by Institute of Architects Pakistan - Peshawar Chapter (IAP-PC) in collaboration with the Fanoon Consultants, Entity X-USA and Wadaan Consultants.

CECOS UNIVERSITY is proud to announce that its alumni Mr. Shahzad Khattak - Batch (2012-2017) holds 2nd position and Mr. Abdur Rehman - Batch (2014-2019) holds 3rd position in the competition.

Architects from all over Pakistan Participated in the Competition.

1st Pakistani Institute of Participate & win IGEM's

CECOS University participated in the IGEM (International Genetically Engineered Machines) World Championships held in 2016 and 2017 in Boston, USA.

CECOS teams were awarded a bronze medal in 2016 and a silver medal in 2017. A milestone in the list of achievements, competing against 300 international teams. In the 15-year history of the competition at MIT, this was the first time a team represented Pakistan.



2019

Zohaib Khalid FIFA Champ & Consecutive 8 times country champion

Zohaib Khalid, a 22-year-old software engineering student of CECOS, has conquered the national FIFA gaming realm for eight years, triumphing in over a hundred local tournaments, including the esteemed FIFA Masters.

Now, his exceptional skills have earned him a coveted trial with a renowned gaming team in enchanting Paris, captivating the world with his unrivaled talent.

CECOS Team won Sumo Robot Competition in Youth Robo Tec '22

Youth Robo Tec '22 was organized in UET Peshawar. It was the first National Level event which was funded by Pakistan Science Foundation.

More than 15 Universities and colleges across the country participated in different robotic modules like line follower, obstacle avoiding, project exhibition, sumo robot and robo wars.

A team from the Electrical Engineering Department from CECOS University participated in this mega event and stood 1st in the category of Sumo Robot among 17 teams from all over Pakistan.



BEYOND THE CLASSROOM BUILD YOUR PASSION





University societies are entirely student-run and dedicated to keeping their peers informed about important issues, while also organizing a wide range of events and activities available to all students on the campus. These societies often engage in charitable events or work voluntarily to give back to the community, providing ample opportunities for students to make a difference and help others.









CECOS SOCIETIES

CECOS Entrepreneurial and Startup Initiatives Society

CECOS Better World Society

CECOS Art & Heritage Society

CECOS Health & Physical Society

CECOS Quran Society

CECOS Media Club

CECOS Blood Donar Society

CECOS Sports Society

CECOS Literacy & Acting Society

CECOS Adventure Club

YPDC CECOS Chapter

CECOS Sustainable Community Service Society



Session & Seminar







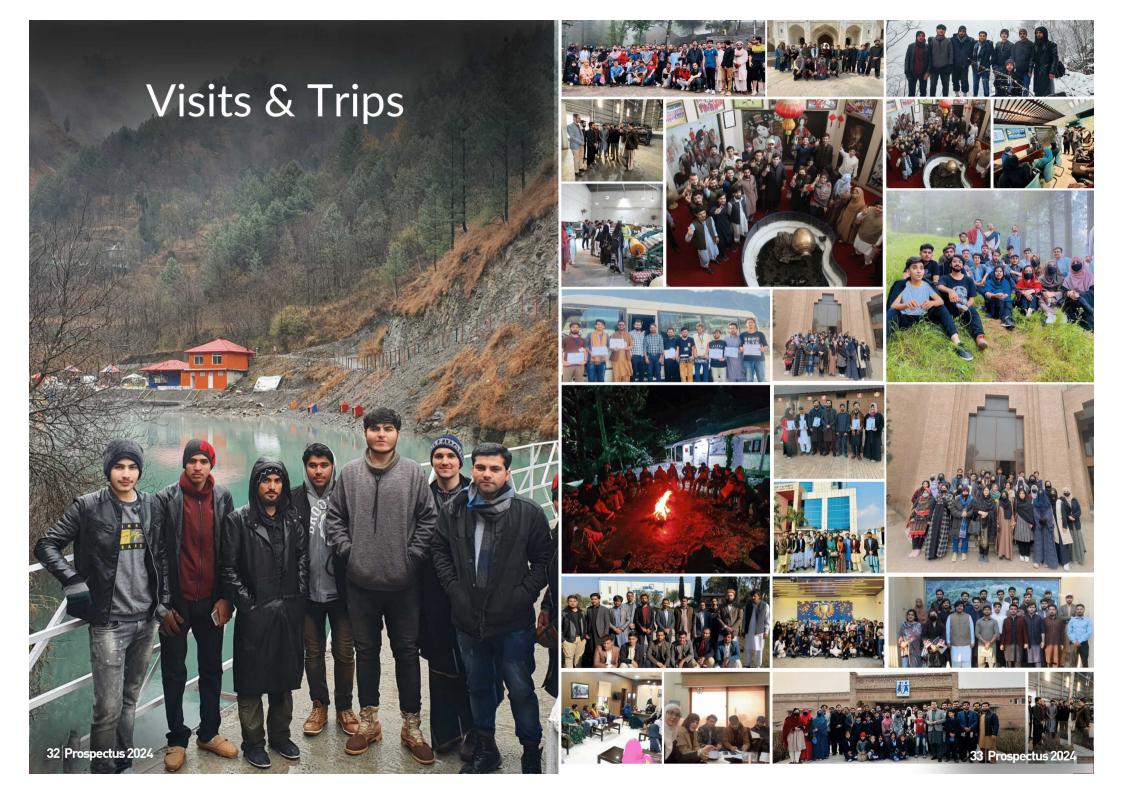






























FACILITIES 1

HOSTELS

CECOS University welcomes students from various regions across the country, acknowledging the need for suitable accommodation. To address this, the university has established well-appointed hostels conveniently located near CECOS. These hostels are thoughtfully designed to provide a comfortable living environment with well maintained commom rooms ensuring that students feel at home during their time at the hostel.

With a focus on student well-being, the university ensures that the hostels are equipped with ample facilities and amenities to cater to their needs. By prioritizing student comfort, CECOS University creates a supportive atmosphere that fosters academic growth and personal development. The provision of comfortable accommodation exemplifies the university's commitment to providing a nurturing and conducive environment for its diverse student community.

TRANSPORT

The University's transportation system is aimed at providing hassle-free, reliable, and convenient transportation services to its students, faculty, and staff. The focus is to ensure efficiency and accessibility of transportation, allowing for easy commuting within and around the campus.

A BRT stop has also been set-up near CECOS, making it easier for students, faculty, and staff to access transportation services.

LIBRARIES

CECOS University boasts of two meticulously curated libraries that offer a diverse range of resources to cater the academic needs of its students. These libraries stand as a beacon of knowledge as they provide access to up-to-date books, journals, and other essential textbooks. The central library is equipped with the latest technologies and research tools, offers students access to online databases, digital archives, and other electronic resources for conducting research. It empowers students to embark on intellectual pursuits and dive into complex coursework or explore new frontiers of knowledge.

CAFETERIA

CECOS University boasts three exquisitely maintained and inviting cafeterias that offer a delectable array of refreshments to its students at exceedingly reasonable prices. These vibrant dining establishments not only fuel their bodies but also serve as dynamic hubs for socialization and intellectual discourse, providing students with a conducive environment to unwind, connect, and exchange ideas during breaks. The lively atmosphere encourages meaningful conversations, expanding students' perspectives, and enriching their educational experience.

Attached Washrooms



Laundry Facility



24/7 Security



Summit Cafe
with Fresh Food



3 Time
Fresh Meal



Wi Fi High Speed

10000+

Books in Libraries



E-Library



Hassle-Free Transportation



Bus Routes

All over the Peshawar



BRT Near CECOS





MESSAGE FROM THE DEAN

Welcome to CECOS University, a place where greatness flourishes and ambitions soar! I'm honored to invite you as the dean of graduate studies so that you can begin an extraordinary academic adventure. We aim to nurture your potential and develop you as a leader in your chosen sectors. Our confidence arises from the cutting-edge environment, outstanding teachers, and advanced facilities that we possess at CECOS. You will find a kind and embracing environment at CECOS that encourages creativity, critical thinking, and a global viewpoint. Join us and discover your potential to change the world forever.

Prof. Dr. Zia Ullah Shah



Embark on a transformative journey of intellectual exploration at CECOS University, where aspiring minds converge to inspire the world. Delve into the realm of boundless possibilities through our trailblazing MS & Ph.D. programs in Architecture, Computer Sciences, Engineering, Life Sciences, and Management Sciences. At the heart of our triumphs lie our exceptional faculty, impassioned students, and visionary University leadership, forming the very essence of our accomplishments. With an unwavering commitment to global excellence and innovation, we forge ahead, empowering the next generation of dynamic professionals and visionary leaders to fearlessly confront real-world challenges, armed with unwavering ethics and unparalleled intellectual rigor. Embark upon this exhilarating educational journey, and prepare to embark upon a fulfilling career that reverberates with honor and dignity, as you become a catalyst for positive change in society.

Engr. Dr. Khalid Rehman PE. MCSE





FACULTY OF CIVIL ENGINEERING

Prof. Dr. Muhammad Tarig Bashir

Head of Department/Professor Ph.D Civil Engineering UPM, Malaysia

Engr. Muhammad Hassan

Assistant Professor B.Sc Mechanical Engineering UET. Peshawar

Prof. Beenish Jehan Khan

Associate Professor Ph.D Geotechnical Engineering **CECOS University**

Engr. Qaiser Jamal

Assistant Professor M.Sc. Structure Engineering UET, Peshawar

Engr. Nasrullah Aziz

Lecturer/Academic Coordinator M.Sc. Water Resource Engineering & Management UET. Peshawar

Engr. Kashif Ali Khan

Lecturer M.Sc. Structure Engineering **CECOS University**

Engr. Faizan Farid

Lecturer M. Sc. Structure Engineering Igra National University, Peshawar

Engr. Hamza Jamal

Lecturer M.Sc. Transportation Engineering UET. Peshawar

Engr. Tayyaba Hamid

Lecturer M.Sc Water Resource UET, Peshawar

Prof. Dr. Bazid Khan

Professor Ph.D Structural Engineering Dokuz Eylul University, Izmir, Turkey

Dr. M. Ali Sikandar

Associate Professor P.hD. Structural Engineering Hanyang University, Seoul, Korea

Dr. Sved Saad

Assistant Professor Ph.D Civil Engineering & Construction Management Universiti Teknologi Petronas

Engr. Zia ur Rehman

Assistant Professor M.Sc. Structure Engineering **CECOS University**

Engr. Muhammad Waleed Sarwar

Lecturer / PG Coordinator MS. Structure Engineering **CECOS University**

Engr. Sultan Shah

Lecturer M.Sc. Construction Management **UET**, Peshawar

Engr. Hamza Qureshi

Lab. Engineer B.Sc Civil Engineering UET, Peshawar

Engr. Asad Jamil

Lab Engineer B.Sc Civil Engineering UET, Peshawar

Engr. Amna Khan

Lab Engineer M.Sc. Structure Engineering UET, Lahore

Col.(R) Engr. Marwat Khan

Professor M.Sc. Structure Engineering UET, Lahore

Prof. Bakht Zamin

Associate Professor Ph.D. Geotechnical Engineering **CECOS University**

Dr. Rakhshanda Rehman

Assistant Professor M. Sc. Environmental Engineering UET, Peshawar

Engr. Mohammad Dawood

Lecturer M. Sc. Environmental Engineering UET. Peshawar

Engr. Muhammad Wagas

M.Sc. Construction Management UET, Peshawar

Engr. Zeeshan Umar

Lecturer M. Sc. Structure Engineering UET. Peshawar

Engr. Muhammad Asadullah

Lecturer M.Sc. Water Resource Engineering UET, Taxila

Engr. Inam Abbas Khan

Lecturer/Exam Coordinator MS Structural Engineering **CECOS University**

Engr. Ijaz Ahmad

Lab Engineer B.Sc Civil Engineering UET. Peshawar

CIVIL ENGINEERING LABORATORIES

Concrete Lab Geotechnical/Soil Lab Transportation Lab

Hydraulics and Fluid Mechanics Lab Material Testing Lab

Surveying Lab

Engineering Mechanics Lab Environmental Engineering Lab

Computer Lab

Drawing Hall























DEPARTMENT OF CIVIL ENGINEERING

The Department offers the following graduate degree programs:

- MS Civil Engineering
- M. Tech. Civil Engineering
- PhD Civil Engineering

MS Civil Engineering

The degree program is of a 2 year duration and spans four 16-18 week semesters. Total credit hours for the program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework Plan- B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

MS Students must accumulate the requaired 30 credit hours as per the following distribution:

30

Plan-A

Credit Hours Category Core Subjects 15 09 **Elective Subjects** 06 Thesis

Plan-B

Category	Credit Hours
Core Subjects	15
Elective Subjects	09
Additional Subjects	06
Total credit hours	30

M. Tech Civil Engineering

Total credit hours

The Masters in Technology in Civil Engineering, students are required to complete a minimum of 24 credit hours of course work, followed by 6 credit hours of industrial training

PhD Civil Engineering

PhD is a 3 year degree program, during which the scholar must successfully complete 54 credit hours (18 credit hours course work and 36 credit hours research) beside other requirements as stipulated by the HEC and the University rules & regulations.

S.No	Mater Degree Specialization	Relevant Bachelor Degrees
1	Structure Engineering	Building Engineering, Transportation Engineering
2	Geotechnical Engineering	Geological Engineering, Agriculture Engineering, Mining Engineering
3	Construction Engineering & Management	Geological Engineering, Mining Engineering, Building Engineering, Transportation Engineering
4	Water Resources & Environmental Engineering	Environmental Engineering, Agricultural Engineering, Chemical Engineering, Water Resources
		Engineering, Urban Infrastructure Engineering

MS / PhD CIVIL ENGINEERING Curriculum for MS/PhD Civil Engineering Program

STRUCTURE ENGINEERING

Core Courses (At least five subjects from this group for MS Program)

Course Code	Course Title	Credit Hours
CE 500	Advanced Structural Analysis (Compulsory)	3
CE 501	Advanced Mechanics of Solids (Compulsory)	3
CE 605	Research Methodology (Compulsory)	3
CE 502	Design of RCC Structures	3
CE 503	Pre-stressed Concrete Theory and Design	3
CE 525	Statistical Methods for Engineering Data Analysis	3
CE 505	Concrete and Supplementary Cementitious Materials	3
CE 600	Analysis and Design of Masonry Structures	3
CE 601	Structural Dynamics	3
CE 602	Advanced Steel Structures	3
CE 603	Finite Element Methods in Structural Analysis	3
CE 700	Structural Optimization	3
CE 701	Design of Tall Buildings and Space Structures	3
CE 702	Theory of Plate and Shell Structures	3
CE 800	Non Linear Structural Analysis	3
CE 801	Reliability Based Structural Design	3

Elective Courses (of most three subjects from this group for MS Program)

Course Code	Course Title	Credit Hours
CE 710	EEarthquake Engineering (Pre-requisite: CE 601)	3
CE 507	Bridge Engineering	3
CE 703	Computer Aided Design and Analysis of Structures (Pre. Requisite: CE 500)	3
CE 704	Experimental Stress Analysis	3
CE 705	Special Topics in Structural Engineering	3
CE 802	Foundation Engineering	3
CE 803	Infrastructure and Facilities Remediation	3
CE 804	Theory of Elasticity	3
CE 805	Fracture Mechanics of Engineering. Materials	3
CE 641	Climate Change Adaptation and Disaster Risk Reduction	3
CE 635	Environmental Impact Assessment	3
CE 644	RS and GIS in Civil Engineering	3
CE 526	Pavement Structure and Design	
CE 623	Rock Mechanics	3
CE 622	Dams Engineering-1	3
CE 626	Design of Hydraulic Structures	3
EM 605	Engineering Project Management	3
CE 529	Asphaltic Concrete Materials and Design	3
CE 723	Soil Structure Interaction	3
CE 610	Construction Planning, Scheduling & Control	3

Fact File Eligibility

- MS Structure Engineering

 Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 16 years of education in the fields mentioned
- · GAT General Test.

PhD Structure Engineering

- · Having M.Phil. / M.S / Equivalent degree from HEC recognized University. In the case of foreign institutions. HEC equivalence certificate must be provided.
- . A minimum CGPA of 3.0 out of 4.0 in the semester system or first division in the annual examination system.
- If the specialization in Master is different from the desired specialization in Ph.D. He / She will be required to pass additional courses of 6 credits from the core courses of the Master programs relevant to their Ph.D. mentioned on page 37

MS / PhD CIVIL ENGINEERING

Curriculum for MS/PhD Civil Engineering Program

WATER RESOURCE AND ENVIRONMENTAL ENGINEERING

Core Courses (At least five subjects from this group for MS Program)

Core Courses	Subject	Core/Elective
CE-537	Wastewater Engineering, Treatment, and Design	3
CE-538	Water Engineering, Treatment and Design (Compulsory)	3
CE-539	Solid Waste Management	3
CE-605	Research Methodology (Compulsory)	3
CE-652	Advanced Fluid Mechanics (Compulsory)	3
CE-653	Graphical Information Systems (GIS) and Remote Sensing (RS) in WREE (Compulsory)	3
CE-654	Fluvial Hydraulics	3
CE-655	Surface water Hydrological Processes	3

Elective Courses (of most three subjects from this group for MS Program)

Core Courses	Subject	Core/Elective
CE-626	Design of Hydraulic Structures	3
CE-635	Environmental Impact Assessment (EIA)	3
CE-636	Air Pollution and Control	3
CE-639	Water Supply and Waste Water Collection Systems	3
CE-540	Principles of Water and Wastewater Treatment Processes	3
CE-642	Environmental Analytical Techniques	3
CE-643	Marine Pollution Monitoring and Control	3
CE-648	Environmental Laws and Policies	3
CE-651	Industrial Waste Water Pollution, Control, and Management	3
CE-656	Sediment Transport	3
CE-657	Groundwater Hydrology	3
CE-658	Hydropower Planning and Management	3
CE-659	Hydrological models	3
CE-712	Membrane Technology for Water and Wastewater Treatment	3

Fact File Eligibility

MS Water Resource & Environmental Engineering

- Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 16 years of education in the fields mentioned on page no 37.
- GAT General Test.

PhD Water Resource & Environmental Engineering

- Having M.Phil. / M.S / Equivalent degree from HEC recognized University. In the case of foreign institutions. HEC equivalence certificate must be provided.
- A minimum CGPA of 3.0 out of 4.0 in the semester system or first division in the annual examination system.
- If the specialization in Master is different from the desired specialization in Ph.D. He / She will be required to pass additional courses of 6 credits from

the core courses of the Master programs relevant to their Ph.D. mentioned on page 37

MS / PhD CIVIL ENGINEERING

Curriculum for MS/PhD Civil Engineering Program

GEOTECHNICAL ENGINEERING

Core Courses (At least five subjects from this group for MS Program)

Core Courses	Subject	Core/Elective
CE 522	Advanced Soil Mechanics-I (Compulsory)	3
CE 523	Advanced Soil Mechanics-II (Compulsory	3
CE 605	Research Methodology (Compulsory)	3
CE 521	Geotechnical Investigation and Instrumentation	3
CE 525	Statistical Methods for Engineering Data Analysis	3
CE 621	Earth Pressures and Retaining Structures	3
CE 622	Dams Engineering-I	3
CE 623	Rock Mechanics	3
CE 721	Structural Geology	3
CE 722	Earth Structures	3
CE 802	Foundation Engineering.	3
CE 821	Dams Engineering-II	3
CE 822	Application of Finite Element Methods in Geotechnical Engineering	3
CE 823	Soil Dynamics (Pre-requisite CE 522)	3
CE 824	Geotechnical Aspects of Earthquake Engineering	3
CE 644	RS and GIS in Civil Engineering	3

Elective Courses (of most three subjects from this group for MS Program)

Core Courses	Subject	Core/Elective
CE 526	Pavement Structure and Design	3
CE 527	Fundamentals of Applied Geophysics	3
CE 528	Ground Water and Engineering Geophysics	3
CE 624	Tunneling	3
CE 625	Construction Methods and Equipment	3
CE 723	Soil Structure Interaction	3
CE724	Under Ground Construction	3
CE 825	Computer Aided Design	3
CE 826	Special Topics in Geotechnical Engineering	3
CE 641	Climate Change Adaptation and Disaster Risk Reduction	3
CE 635	Environmental Impact Assessment	3
CE 505	Concrete and Supplementary Cementitious Materials	3
CE 626	Design of Hydraulic Structures	3
EM 605	Engineering Project Management	3
CE 725	Application of Information Technology in Geotechnical Engineering	3
CE 529	Materials and Design of Asphaltic Concrete	3
MA 514	Applied Mathematics	3
CE 704	Experimental Stress Analysis	3
CE 610	Construction Planning, Scheduling & Control	3

Fact File Eligibility

MS Geotechnical Engineering

- Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 16 years of education in the fields mentioned on page no 37.
- GAT General Test.

PhD Geotechnical Engineering

- Having M.Phil. / M.S / Equivalent degree from HEC recognized University. In the case of foreign institutions. HEC equivalence certificate must be provided.
- A minimum CGPA of 3.0 out of 4.0 in the semester system or first division in the annual examination system.
- If the specialization in Master is different from the desired specialization in Ph.D. He / She will be required to pass additional courses of 6 credits from the core courses of the Master programs relevant to their Ph.D. mentioned on page 37

MS / PhD CIVIL ENGINEERING

Curriculum for MS/PhD Civil Engineering Program

CONSTRUCTION ENGINEERING & MANAGEMENT

Core Courses (At least five subjects from this group for MS Program)

Core Courses	Subject	Credir Hours
CE 530	Construction Project Administration	3
CE 610	Construction Planning, Scheduling & Control	3
CE 532	Safety Management in Construction	3
CE 533	Construction Cost Estimation	3
CE 534	Contract Management	3
CE 535	Economic Decision Analysis in Construction	3
CE 536	Supply Chain Management in Construction Industry	3
CE 625	Construction Methods and Equipment	3
CE 605	Research Methodology (Compulsory)	3

Elective Courses (of most three subjects from this group for MS Program)

Core Courses	Subject	Credit Hours
CE 627	Risk Analysis and Management	3
CE 628	Human Resource Management in Construction	3
CE 629	Building Information Modeling	3
CE 630	Introduction to complex systems and system dynamics	3
CE 631	Construction Claim Management	3
CE 632	Project Evaluation and Feasibility Analysis	3
CE 633	Sustainable Development and Construction	3
CE 525	Statistical Methods for Engineering Data Analysis	3
CE 634	Public Infrastructure Management	3
CE 635	Environmental Impact Assessment	3
CE 641	Climate Change Adaptation and Disaster Risk Reduction	3
CE 644	RS and GIS in Civil Engineering	3

Fact File Eligibility

MS Construction Engineering Management

- Minimum CGPA 2.00 / 4.00 [Semester System] or 60% Marks [Annual System] in 16 years of education in the fields mentioned on page no 37.
- GAT General Test.

PhD Construction Engineering Management

- Having M.Phil. / M.S / Equivalent degree from HEC recognized University. In the case of foreign institutions. HEC equivalence certificate must be provided.
- A minimum CGPA of 3.0 out of 4.0 in the semester system or first division in the annual examination system.
- If the specialization in Master is different from the desired specialization in Ph.D. He / She will be required to pass additional courses of 6 credits from

the core courses of the Master programs relevant to their Ph.D. mentioned on page 37

Master of Technology in Civil Engineering Curriculum for Master of Technology in Civil Engineering Program

STRUCTURAL ENGINEERING

Core Courses (At least five subjects from this group for M-Tech Program)

Core Courses	Subject	Credit Hours
CT 503	Structural Lab-1 (Concrete Testing)	3
CT 504	RCC Design	3
CT 505	Structural Workshop	3
CT 506	Concrete Technology	3
CT 507	Strength of Materials / Mechanics of Solids	3
CT 508	Structural Analysis	3
CT 513	Pre-stressed Concrete	3
CT 514	Steel Structures Design	3
CT 515	Earthquake Engineering	3
CT 517	Bridge Engineering	3
CT 641	Advanced Construction Materials & Applications	3
CT623	Construction Technologies	3
CT 520	Industrial Training / Internship (Compulsory)	6

Electives Courses (of most three subjects from this group for M-Tech Program)

Core Courses	Subject	Credit Hours
CT 502	Construction Management	3
CT 509	Construction Methods and Equipment	3
CT 510	Computer Application in Structural Technology	3
CT 516	Stability of Structures	3
CT 518	Pavement Materials and Analysis	3
CT 651	Environmental Impact Assessment	3
CT 654	Climate Change Adaptation and Disaster Risk Reduction	3
CT 604	Maps and Geospatial Concepts	3
CT 614	GPS Theory and Design	3
CT615	Maintenance and Rehabilitation	3

Fact File Eligibility

M. Tech Structural Engineering

- Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 16 years of education in the fields mentioned on page no 37.
- GAT General Test.

Master of Technology in Civil Engineering

CONSTRUCTION ENGINEERING & MANAGEMENT

Core Courses (At least five subjects from this group for MS Program)

Core Courses	Subject	Credir Hours
CT-601	Contract Management	3
CT-602	Construction Project Administration	3
CT-611	Construction Planning, Scheduling and Control	3
CT-612	Construction Cost Estimation	3
CT-613	Supply Chain Management in Construction Industry	3
CT-621	Safety Management in Construction	3
CT-622	Construction Methods and Equipment	3
CT-632	Building Information Modeling	3
CT-651	Environmental Impact Assessment	3
CT-615	Maintenance and Rehabilitation	3
CT-699	Industrial Training (Compulsory)	6

Elective Courses (of most three subjects from this group for MS Program)

Core Courses	Subject	Credit Hours
CT-603	Project Management Foundation	3
CT-604	Maps and Geospatial Concepts	3
CT-614	GPS Theory and Design	3
CT-631	Project Management Digital Tools (Primavera P6)	3
CT-652	Management of Flood Hazard	3
CT-653	Fundamentals of GIS and RS in Disaster Management	3
CT-654	Climate Change Adaptation and Disaster Risk Reduction	3

Fact File Eligibility

M. Tech Construction Engineering Management

- Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 16 years of education in the fields mentioned on page no 37.
- GAT General Test.

Post Graduate Diploma

Hazards and Disaster Management

1st Semester

2nd Semester

Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
HDM-501	Introduction to Disaster Management	3	HDM-511	Management of Flood Hazard	3
HDM-531	Research Methodology in Disaster Management	3	HDM-512	Climate Change and Disasters	3
HDM-532	Community Based Disaster Risk Management Approaches	3	HDM-513	Management of Desertification Hazard	3
HDM-533	Fundamentals of GIS and RS in Disaster Management	3	HDM-521	Disaster Management and Economy of Pakistan	3
HDM-598	Project-I	3	HDM-599	Project-II	3

Project and Contract Management

1st Semester

2nd Semester

Course Code	Course Title	Credit Hour
PCM-501	Project Management Foundation	3
PCM-511	Project Performance and Integration	3
PCM-521	Contract Rules and Regulations	3
PCM-522	Contract Documents and Guidelines	3
PCM-598	Project-I	3

Course Code	Course Title	Credit Hours
PCM-512	Project Tailoring and Artifacts	3
PCM-523	Practical use of FIDIC Contracts	3
PCM-531	Project Management Digital Tools (Primavera P6, ASANA, JIRA)	3
Elective Course	s	
PCM-322	Project-II	3

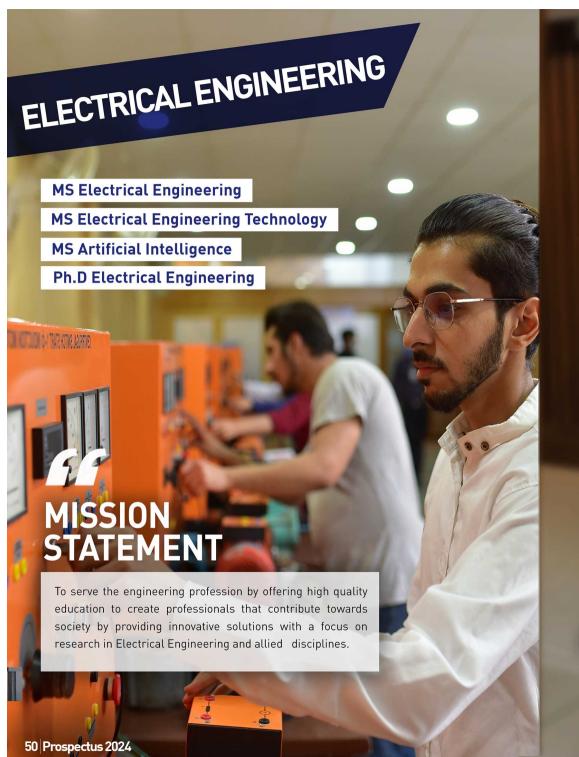
Elective Courses

Course Code	Course Title
PCM 513	Project WBS (Work Break Down Structure)
PCM 514	Project Scheduling
PCM 515	Project Estimating
PCM 516	Project Quality
PCM 524	Construction Contract Administration

Total Course Cr. Hr: 30

Fact File Eligibility

- Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 14 years & 16 years of education.
- Holders of professional degrees.





MESSAGE FROM THE HEAD OF DEPARTMENT

Join the leading private sector university in the region and be a part of the exceptional educational experience offered by the Department of Electrical Engineering at CECOS. Our well-qualified faculty is dedicated to preparing young engineers and technologists for success, with a curriculum that emphasizes hands-on learning in state-of-the-art labs. We equip our students with essential skills like effective communication and problem-solving and offer opportunities for internships and industrial tours. Join us now and enjoy a rewarding journey toward your professional goals.

Dr. Azhar Qazi

Ph.D Electrical Engineering, CECOS University, Peshawar, Pakistan

FACULTY OF ELECTRICAL ENGINEERING

Dr. Azhar Qazi

Head of Depatment / Professor Ph.D Electrical CECOS University, Peshawar

Dr. Zaheer Faroog

Assistant Professor Ph.D Electrical Engineering CECOS University, Peshawar

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Professor Post Doctorate Electrical Engineering New Jersey Institute of Technology, USA

Dr. Khalid Rehman

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Engr. Ali Mujtaba Durrani

Lecturer
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CECOS University, Peshawar
Ph.D (In Progress)
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Col. Ashfaq Ahmad (R)

Associate Professor
M.Sc Computer System Engineering
NUST. Islamabad

Engr. Muhammad Adeel

Lab Engineer
MS Electrical Engineering
CECOS University, Peshawar

Engr. Usman Khan Khalil Lab Engineer MS Electrical Engineering Sarhad University, Peshawar



DEPARTMENT OF ELECTRICAL ENGINEERING

The Department offers the following graduate degree programs:

- MS Electrical Engineering
- M. Tech. Electrical Engineering
- PhD Electrical Engineering

MS Electrical Engineering

The MS degree program is of a 2 year duration and spans four 16-18 week semesters. Total credit hours for the MS program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework Plan-B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

MS Students must accumulate the requaired 30 credit hours as per the following distribution:

Plan-A

Category Credit Hours Core Subjects 12 Elective Subjects 12 Thesis 06 Total credit hours 30

Plan-B

Category		Credit Hours
Core Subjects		12
Elective Subjects		12
Additional Subjects		06
	Total credit hours	30

M. Tech Electrical Engineering

The Masters in Technology in Electrical Engineering students are required to complete a minimum of 24 credit hours of course work, followed by 6 credit hours of industrial training

PhD Electrical Engineering

PhD is a 3 year degree program, during which the scholar must successfully complete 54 credit hours (18 credit hours course work and 36 credit hours research) beside other requirements as stipulated by the HEC and the University rules & regulations.

MS ELECTRICAL ENGINEERING

Curriculum for MS Electrical Engineering Program

COMMUNICATION ENGINEERING

Core Courses

Course Code	Course Title	Credit Hours
EE 501	Advanced Digital Communication	3
EE 502	Advanced Digital Signal Processing	3
EE 503	Antenna Theory and Design	3
EM608	Statistical Methods for Engineering Data Analysis	3
EE 714	Advanced Digital System Design	3
EE 532	Advanced Wireless Communication	3
EE 537	Advanced Cryptography and Network Security	3
EE 506	Advanced Computer Networks	3
EE 514	Adaptive Filter Theory	3
EE 510	Optical Communication Systems	3

Elective Courses

Course Code	Course Title	Credit Hours
EE 509	RF Communication Systems Design	3
EE 508	Mobile and Personal Communication	3
EE 507	Communication Theory	3
EE 512	Advanced Data Communication Systems	3
EE 513	Error Control Coding	3
EE 515 04	Emerging Technologies in Communication Engineering	3
EE 5	Information Communication Technology & Development	3
EE 530	Project Management in ICT Sector	3
EE 536	Research Methodology (Compulsory for Plan-A)	3
EE 538	Advanced Mobile Propagation Channel Modeling	3
EE 539	Special Topics in Communication Engineering	3

Fact File Eligibility

 B.Sc Electrical Engineering (16 years education) in the relevant field with minimum 2.00 CGPA or equivalent duly accredited by PEC.

GAT-General Test

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MS ELECTRICAL ENGINEERING Curriculum for MS Electrical Engineering Program

POWER & CONTROL ENGINEERING

Core Courses

Course Code	Course Title	Credit Hours
EE 516	Linear Control Systems	3
EE 517	Advanced Power System Analysis	3
EE 518	Advanced Electrical Machines and Drives	3
EE 519	Advanced Power Electronics	3
EE 522	Advanced Power System Operation and Control	3
EE 523	High Tension Transmission Lines	3
EE 529	Advanced Power System Protection	3
EE 531	Advanced High Voltage Engineering Methodology	3
EE 526	Fuzzy Control Systems	3
EE 527	Digital Optimal Control	3
EE 740	Distributed Generation	3

Elective Courses

Course Code	Course Title	Credit Hours
EE 501	Advanced Digital Communications	3
EE 521	Advanced Machines	3
EE 524	Adaptive Control	3
EE 525	Robotics	3
EE 533	Smart Grid	3
EE 534	Special Topic in Power & Control Engineering	3
EE 535	Renewable Energy Resources	3
EE 536	Research Methodology (Compulsory for Plan-A)	3
EE 528	Nonlinear Control Systems	3
EE 780	Micro Grid	3
EE 751	Energy Storage	3

Fact File Eligibility BE / B.Sc. Engineering.

GAT-General Test

MS ELECTRICAL ENGINEERING Curriculum for MS Electrical Engineering Program

Artificial Intelligence

Core Courses

Course Code	Course Title	Credit Hours
EE-601	Machine Learning	3
EE-602	Artificial Intelligence	3
EE-603	Mathematical and computational Foundations for Artificial Intelligence	3
EE-604	Statistical Learning Theory	3
EE-605	Knowledge representation and Reasoning	3
EE-606	Advanced Analysis of Algorithms	3

Elective Courses

Course Code	Course Title	Credit Hours
EE-607	Convex Optimization	3
EE-608	Special topics in machine learning	3
EE-609	Intelligent control systems	3
EE-610	Artificial intelligence for robotics	3
EE-611	Special topics in artificial learning	3
EE-612	Aspects of computational intelligence	3
EE-613	Deep learning	3
EE-614	Data Mining	3
EE-615	Information Retrieval	3
EE-616	Advanced Image Processing	3
EE-617	Computer Vision	3
EE-618	Speech Processing	3
EE-619	Data Acquisition and Control	3
EE-620	Robot Motion Planning	3
EE-621	Pattern Recognition	3

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MS ELECTRICAL ENGINEERING Curriculum for MS Electrical Engineering Program

Artificial Intelligence

Elective Courses

Course Code	Course Title	Credit Hours
EE-622	Knowledge Representation and Reasoning	3
EE-623	Neural Networks	3
EE-624	Probabilistic Robotics	3
EE-625	Sensors and Sensing	3
EE-626	Human Robot Interaction	3
EE-627	Simultaneous Localization and Mapping	3
EE-628	Intelligent Systems	3
EE-629	Reinforcement Learning	3
EE-630	Advanced Signal Processing	3
EE-631	Intelligent Transportation Systems	3
EE-632	Social Simulations	3
EE-633	Serious Games	3
EE-634	Ethical Machines	3
EE-635	Evolutionary Algorithms	3
EE-636	Statistical Machine Learning	3
EE-637	Geometric Deep Learning	3
EE-638	Generative Deep Models	3
EE-639	Applied Game Theory	3
EE-640	Cognitive Modeling	3
EE-536	Research Methodology	3

Fact File Eligibility BE / B.Sc. Engineering.

GAT-General Test

PhD ELECTRICAL ENGINEERING

Curriculum for PhD Electrical Engineering Program

COMMUNICATION ENGINEERING

Courses

Course Code	Course Title	Credit Hours
EE 700	Advanced Digital Communications	3
EE701	Advanced Wireless Communications	3
EE702	Satellite Communication	3
EE703	Optical Communication	3
EE704	Digital Image Processing	3
EE705	Mobile and Pervasive Computing	3
EE706	Digital Electronics	3
EE707	Green Communication	3
EE708	Radio Frequency Electronics for Mobile Communication Systems	3
EE709	Wireless Low Power System Architecture	3
EE710	DSP Software System Design	3
EE711	DSP Hardware System Design	3
EE712	Applied Signal Processing	3
EE713	Signal Detection and Estimation	3
EE720	Advanced Computer and Telecommunication Networks	3
EE721	Network Management and QoS Provisioning	3
EE722	Stochastic Processes	3
EE723	Wireless and Optical Communications	3
EE724	Wireless Sensor Networks	3
EE725	Cryptographic Algorithms	3
EE726	Software Quality Assurance and Testing	3
EE727	Artificial Intelligence	3
EE728	Research Methodology	3
EE729	Network and Protocol Simulation	3
EE800	Analysis of wave propagation	3
EE801	Advanced Digital Signal Proccesses	3
EE802	Information Theory and Coding	3
EE803	Transmission and Switching Systems	3
EE804	RF and Microwave Engineering	3
EE805	Modern Navigation and Radar Systems	3
EE806	Antenna Theory and Design	3
EE807	Embedded System Design	3

Fact File Eligibility

B.Sc Electrical Engineering (18 years education) in the relevant field with minimum 3.00 CGPA or equivalent duly accredited by PEC.
 GAT-General Test

PhD ELECTRICAL ENGINEERING Curriculum for PhD Electrical Engineering Program

POWER & CONTROL ENGINEERING

Courses

Course Code	Course Title	Credit Hours
EE808	Optimization Methods for Engineering	3
EE809	Advance Multimedia Communication	3
EE810	Analysis of stochastic Systems	3
EE811	Advance Digital System Design	3
EE812	Adaptive Filter Theory	3
EE813	Multi-rate Systems and Filter Banks	3
EE820	Switch and router architectures	3
EE821	Network Modeling: theory and simulation	3
EE822	Efficient Network Deployment Architecture	3
EE823	Quantum Theory	3
EE824	Cellular Networks Design	3
EE825	Energy Efficient Routing Algorithms For Telecommunication Networks	3
EE826	Operation Research: Theory And Applications To Networking	3
EE827	Model Order Reduction Techniques	3
EE828	Networks Security	3
EE829	Parallel And Distributed Computing	3
EE830	Digital Forensics	3

Fact File Eligibility = MS Electrical Engineering (18 years education) in the relevant field with minimum 3.00 CGPA or equivalent.

GAT-General Test

PhD ELECTRICAL ENGINEERING

Curriculum for PhD Electrical Engineering Program

POWER & CONTROL

Courses

Course Code	Course Title	Credit Hours
EE740	Distribution Generation (Core for MS)	3
EE741	Power System Modeling and Analysis	3
EE742	Renewable Energy Systems	3
EE743	Integration of Power System	3
EE744	Sustainable Power Systems: Planning, Operation and Markets	3
EE745	Computational Methods in Power Engineering	3
EE746	Computer Analysis Methods in Engineering	3
EE747	Statistics in Research	3
EE748	Power System Dynamics	3
EE749	Transients in Power Systems	3
EE760	Nonlinear Control System	3
EE761	Optimal Control System	3
EE762	Fuzzy Control	3
EE763	Adaptive Control System	3
EE764	Discrete Time Control System	3
EE765	Mobile Robotics	3
EE766	System Identification	3
EE767	Robust Control	3
EE768	Modeling and Simulation of Dynamic Systems	3
EE840	Advanced Power System Transmission	3
EE841	Advance Power System Distribution	3
EE842	Advanced Power System Protection	3
EE843	Advanced Topics in Power System	3
EE844	Advanced Topic in Energy	3
EE845	Power Delivery Systems	3
EE846	Smart Grid Design and Operation	3
EE847	Power System Reliability	3
EE848	Hydro Engineering	3
EE849	Power Electronics for Energy Systems	3
EE860	Advanced Digital Control Systems	3
EE861	Control Systems Optimization	3

MS Electrical Engineering (18 years education) in the relevant field with minimum 3.00 CGPA or equivalent.

GAT-General Test Fact File Eligibility

MASTER OF ELECTRICAL ENGINEERING TECHNOLOGY Curriculum for Master of Technology Electrical Engineering Program

Courses

Course Code	Course Title	Credit Hours
EE862	Power System Analysis Engineering Technology	3
EE863	Advance Machine Technology	3
EE864	Digital Optimal Control	3
EE865	Advance Power Electronics	3
EE866	Advanced Topics in Engineering Technology	3
EE867	Transmission Lines and Power System Operation	3
EE868	Advance Power System Protection	3
EE870	Digital Control System	3
EE871	Energy Storage	3







FACULTY OF MECHANICAL ENGINEERING

Dr. Naseer Ahmed

Professor/Vice Chancellor Ph.D Mechanical Engineering Loughborough University, UK

Dr. Muhammad Igbal

Professor / Head of Department Ph.D in Generalized / Finite Elements, Heriot-Watt University, Edinburgh, UK

Engr. M. Zafar Ijaz

Assistant Professor M.Sc Mechanical Engineering Ph.D (In Progress), UET, Peshawar

Dr. Muhammad imran hanif

Assistant Professor M.Sc Industrial Engineering Ph.D, UET, Peshawar

Engr. Umair Ali

Lecturer M.Sc Mechanical Engineering CECOS University, Peshawar

* on Leave

Dr. Irfan Ullah

Professor / Dean Post Doctorate Mechanical Engineering University of Michigan, USA

Dr. Saim Saher *

Professor Ph.D Mechanical Engineering University of Twente, Netherlands

Engr. M. Irfan Khan

Lecturer / Academic Coordinator M.Sc Mechanical Engineering Ph.D (In Progress) UET. Peshawar

Engr. M. Owais Awan

Lecturer M.Sc Mechanical Engineering Sarhad University, Peshawar Ph.D (In Progress), UET, Peshawar

Engr hashim khan

Lecturer
Msc design and manufacturing



DEPARTMENT OF MECHANICAL ENGINEERING

The offers the following graduate degree programs:

- MS Mechanical EngineeringMS Engineering Management

MS Mechanical Engineering / MS Engineering Management

The degree program is of a 2 year duration and spans four 16-18 week semesters. Total credit hours for the MS program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework Plan-B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

MS Students must accumulate the requaired 30 credit hours as per the following distribution:

Plan-A (MS Mechanical Engineering)

Category	Credit Hours
Core Subjects	15
Elective Subjects	09
Thesis	06
Total credit hours	30

Plan-A (MS Engineering Management)

Category	Credit Hours
Core Subjects	18
Elective Subjects	06
Thesis	06
Total credit hours	30

Plan-B (MS Mechanical Engineering)

Category	Credit Hours
Core Subjects	15
Elective Subjects	09
Additional Subjects	06
Total credit hours	30

Plan-B (MS Engineering Management)

Category	Credit Hours
Core Subjects	18
Elective Subjects	06
Additional Subjects	06
Total credit hours	30

MS MECHANICAL ENGINEERING

Curriculum for MS Mechanical Engineering Program

EL FOTUE COURCE

CORE COU	CORE COURSES ELECTIVE COURSES				
Course Code	Course Title	Credit Hours	Course Code	Course Title	Credit Hours
ME-500	Advanced Numerical Analysis	3	ME-546	Advanced Solid Mechanics	3
ME-501	Finite Element Analysis	3	ME-547	Industrial Air Conditioning and Refrigeration	3
ME-502	Experimental Stress Analysis	3	ME-548	Internal Combustion Engines	3
ME-503	Advanced Stress Analysis	3	ME-549	Design of Machine Tools	3
ME-504	Product Design & Development	3	ME-550	Artificial Intelligence in Design and	3
ME-505	Advanced CAD/CAM	3	ME-551	Manufacturing Joining of Advanced Materials	3
ME-506	Computer Integrated Manufacturing	3	ME-552		3
ME-507	Advanced Manufacturing System	3		Automation and Control	3
ME-508	Advanced Metal Forming	3	ME-553	Tribology	
ME-509	Theory of Metal Cutting	3	ME-554	Solar Energy Utilization	3
ME-510	Advanced Mechanical Vibration	3	ME-555	Fracture Mechanics	3
ME-511	Advanced Design of Mechanism	3	ME-556	Manufacturing Design and Cost Analysis	3
ME-521	Advanced Engineering Materials	3	ME-557	Production Management & Control	3
ME-522	Characterization of Materials	3	ME-558	Advanced Mechanical Design	3
ME-523	Materials Thermodynamics	3	ME-559	Engineering Plasticity	3
ME-524	Composite Materials	3	ME-560	Fatigue of Metals and Structures	3
ME-525	Heat Treatment of Metals & Alloys	3	ME-561	Deformation and Failure of Materials	3
ME-526	Polymer Science & Engineering	3	ME-562	Mechanics of Composite Materials	3
ME-527	Biomaterials	3	ME-563	Behaviour of Materials under Impact Loading	3
ME-528	Evaluation Techniques and Instruments	3	ME-564	Computer Application in Mechanical Engineering	3
ME-529	Phase Equilibrium & Microstructures	3	ME-565	Mechanics of Micro Structure	3
ME-530	Application and Selection of Materials	3	ME-566	Optimization of Engineering Systems	3
ME-531	Mechanical Behavior of Materials	3	ME-567	Non Metallic and Composite Materials	3
ME-532	Design of Experiments	3	ME-568	Theory of Elasticity	3
ELECTIVE	COURSES		ME-569	Modeling & Simulation	3
Course Code	Course Title	Credit Hours	ME-570	Robotics	3
ME-540	Engineering Design Optimization	3	ME-571	Modeling of Dynamic System	3
ME-541	Advanced Thermodynamics	3	ME-572	Advanced Control System	3
ME-542	Advanced Fluid Mechanics	3	ME-573	Manufacturing Planning & Control	3
ME-543	Computational Fluid Dynamics	3	ME-574	Fuel Cell and Hydrogen Technology	3
ME-544	Continuum Mechanics	3	ME-600	Advanced Topics in Design and Manufacturing	3
ME-545	Advanced Dynamics	3	ME-601	Advanced Topics in Engineering Materials	3

Fact File Eligibility

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B.Sc Mechanical Engineering (16 years education) with minimum 2.00 CGPA or equivalent duly accredited by PEC. GAT-General Test

MS ENGINEERING MANAGEMENT Curriculum for MS Engineering Management Program

CORE COURSES

Course Code	Course Title	Credit Hours
EM-601	Principles Of Engineering Management	3
EM-602	Advanced Engineering System Optimization And Simulation	3
EM-603	Engineering Management Methods, Data, Information And Modeling	3
EM-604	Engineering Entrepreneurship	3
EM-605	Engineering Project Management	3
EM-606	Economic Analysis of Engineering System	3
EM-607	Methods for Quality Improvement in Engineering Concern	3
EM-608	Statistical Methods for Engineering Data Analysis	3
EM-609	Technology Management	3
EM-616	Accounting and Financial Analysis for Engineers	3

ELECTIVE COURSES

Course Code	Course Title	Credit Hours
EM-610	Risk Analysis And Management	3
EM-611	Production And Operation Management	3
EM-613	Emerging Trends In Services, Management, Engineering And Design	3
EM-614	Construction Planning And Operations	3
EM-615	Creativity, Innovation And Leadership	3

MANAGEMENT ELECTIVE COURSES*

Course Code	Course Title	Credit Hours
ME-580	Industrial Management	3
ME-581	Total Quality Management	3
ME-582	Organizational Behavior for Engineers	3
ME-583	Management in Technical Organization	3
ME-584	Human Resource Management	3

^{*}Any management elective course can be taken if approved by HOD & Coordinator



Bachelor's Degree with minimum CGPA 2.00 in any field of Engineering duly accredited by PEC GAT-General Test





FACULTY OF ARCHITECTURE

Ar. Adnan Ahmad Khan

Head of Department / Associate Professor Bachelor of Architecture (NCA, Lahore) M.Sc Urban and Regional Planning (UET, Peshawar) M.Sc Construction and Project Management (Queen's University Belfast, UK)

Ar. Marwat Khan

Associate Professor Bachelor of Architecture (Dawood Collage, Karachi) Master of Architecture (UET, Lahore)

Ar. Awais Saeed Agha

Assistant Professor / GS Coordinator Bachelor of Architecture (CECOS University, Peshawar) Master of Urban Design (The University of Sydney, Australia) Master of Architectural Science (The University of Sydney, Australia)

Ar. Attique Ur Rehman

Assistant Professor Bachelor of Architecture (CECOS University, Peshawar) Master of Architecture (Bahceshir University Istanbul, Turkey)

Ar. Inayat Ullah

Assistant Professor Bachelor of Architecture (CECOS University, Peshawar) Master of Architecture (CECOS University, Peshawar)

Ar. Farhat Chisti

Assistant Professor Bachelor of Architecture (CECOS University, Peshawar) Master of Architecture (CECOS University, Peshawar)

Ar. Naeem Ullah

Assistant Professor Bachelor of Architecture (UET, Abbottabad) Master Urban Infrastructure Planning (UET, Peshawar)



DEPARTMENT OF **ARCHITECTURE**

The offers the following graduate degree programs:

■ Master of Architecture

Master of Architecture

This degree program is of a 2 year duration and comprises of four 16-18 week semesters. Total credit hours for the program are 40 (i.e., 33 credit hours of coursework plus 7 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 40 credit hours derived from coursework Plan B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

MS Students must accumulate the required 40 credit hours as per the following distribution:

Plan-A

Plan-B

Category	Credit Hours
Core Subjects	12
Elective Subjects	21
Thesis	07
Total credit hours	40

Category	Credit Hours
Core Subjects	12
Elective Subjects	21
Additional Subjects	07
Total Credit Hours	40



MASTER OF ARHITECTURE

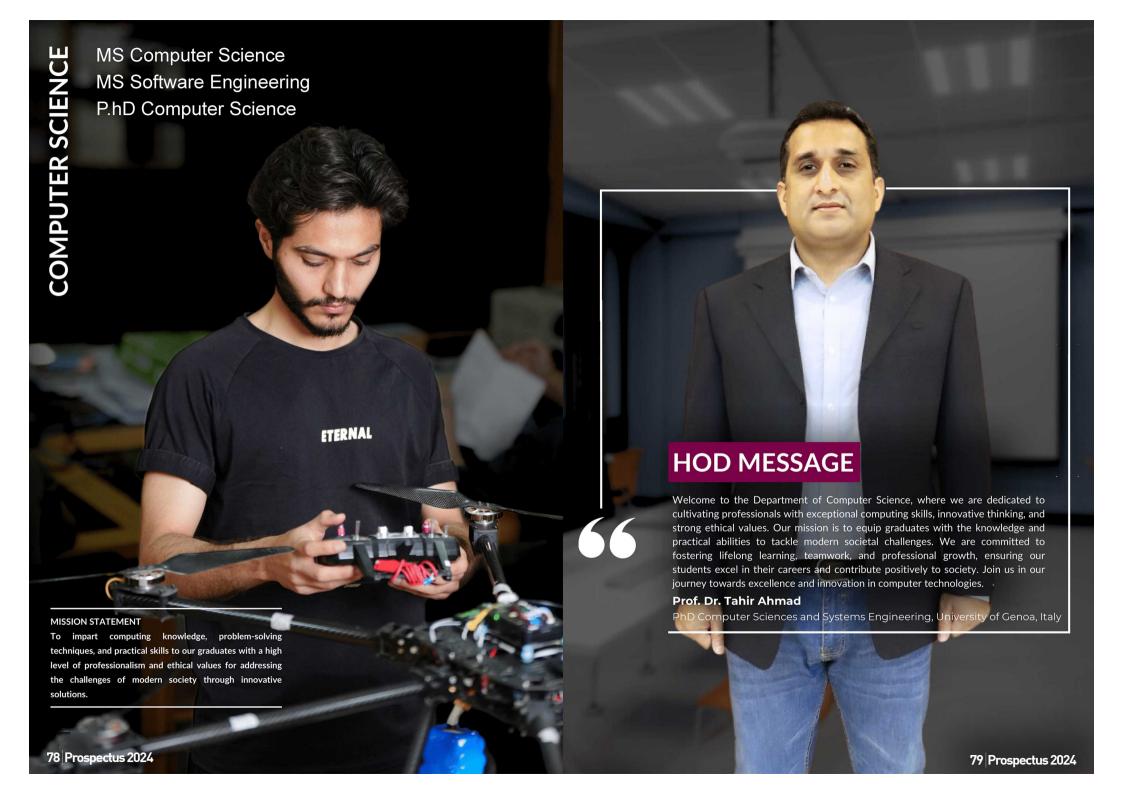
Course Code	Course Title	Credit Hours
	Stream-1 (Urban Design Courses)	
Arch-627	History and Theory of Urban Design	3
Arch-628	Built Form and Regulation	3
Arch-629	Experimental Urban Works	3
Arch-630	Urban Conservation	3
Arch-631	Urban Ecology and Sociology	3
Arch-632	Urban Form Study	3
Arch-633	Urban Economics	3
Arch-634	Urban Management Systems	3
Arch-635	Neighborhood Revitalization	3
Arch-604	Interaction of Social & Built Environment	3
Arch-614	Urban Design	3
S	tream-2 (Sustainable Design Courses	s)
Arch-636	Sustainable Design Theory & Orientation	3
Arch-637	Sustainable Design Case Studies	3
Arch-638	Sustainability Management	3
Arch-615	Energy Efficient Architecture	3
Arch-626	Energy Efficient Building Design	3
Arch-701	Sustainable Development	3
St	ream-3 (Conservation Studies Course	s)
Arch-639	Architectural Conservation	3
Arch-640	Case Studies in Conservation	3
Arch-603	Architectural Heritage	3
Arch-613	Conservation & Preservation of Architectural Heritage	3
Strea	am-4 (Theory History & Criticism Cou	rses)
Arch-641	Meaning in the Built Environment	3
Arch-642	Contemporary Architectural Historiography	3
Arch-643	Mapping Methodologies and Strategies	3
Arch-644	Case Studies in Architectural Analysis	3
Stream-	5 (Architectural Graphics & Visualisation (Courses)
Arch-645	Parametric Design and Fabrication	3
Arch-646	Architectural Construction and Industrialization	3
Arch-647	Design Value and Architecture	3
Arch-648	Advanced Presentation and Visualization Techniques	3
Arch-618	Archtiectural Technology	3

Course Code	Course Title	Credit Hours
Stream-	6 (Architectural Project Management (Courses)
Arch-702	Architectural Project Management	3
Arch-649	Strategic Management	3
Arch-650	Forecasting and Risk Management	3
Arch-651	Professional Communication	3
Arch-652	Agile Project Management	3
Arch-653	Program and Portfolio Management	3
Arch-654	Critical Thinking and System Assessment	3
Arch-655	Organizational Project Management	3
Arch-656	Portfolio and Program Management	3
Arch-657	Risk Management	3
Arch-658	Project Planning and Management	3
Arch-659	Strategic Change Implementation	3
Arch-660	Form Finding and Fabrication	3
Arch-661	Advance Technology	3
Arch-601	Construction Management	3
Arch-605	Architectural Construction Services	3
Arch-611	Project Evaluation	3
Arch-612	Project Planning & Site Management	3
S	tream-7 (Architecture Design Courses	s)
Arch-621	Advance Architecture Design Studio-I	6
Arch-622	Advance Architecture Design Studio-II	6
Arch-625	Advance Architecture Design Studio-III (Plan B)	7
Arch-620	Thesis Dissertationn (Plan A)	7
	Stream-8 (General Studies Courses)	
Arch-602	Research Methodology & Communication skills	3

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Fact File Eligibility Bachelor of Architecture (5 years program) from PCATP recognized institute with minimum 45% marks or at least B Grade in 4th & 5th year (annual system) / minimum 2.00 CGPA

GAT-General Test



FACULTY OF COMPUTER SCIENCE

Dr. Tahir Ahmad

Professor/ Head of Department PhD Computer Sciences and Systems Engineering University of Genoa, Italy

Dr. Kifayat Ullah

Associate Professor PhD Computer Science University of Sao Paulo, Brazil On Study Leave*

Dr. Ghassan Husnain

Associate Professor PhD Intelligent Transportation system **UET Peshawar**

Dr. Mansoor Qadir

Assistant Professor PhD Computer Science Igra National University Peshawar

Dr. Maryam Mahsal Khan

Associate Professor PhD Computer Science University of Newcastle, Australia

Mr. Attiq ur Rehman

Assistant Professor MS Computer Science Agriculture University, Peshawar

Mr. Zahid Sarwar

Assistant Professor MS Computer Science, CECOS University

Mr. Muhammad Shoaib

Lecturer – MS Computer Science Islamia College, Peshawar Phd-In Progress

Mr. Zaheer Aslam

Lecturer - MS Computer Science, Gandahara University Peshawar Phd-In Progress

Miss. Sumaira Imtiaz

Lecturer PhD (in progress), Taiyuan University of Technology, Taiyuan, China



A Signature Event organized by the Department of Computer Science. Dig Tech is Biggest Tech Event of KPK held every year at CECOS

























DEPARTMENT OF

COMPUTER SCIENCE

The Department offers the following graduate degree programs:

- MS Computer Science
- MS Software Engineering
- PhD Computer Science

MS Computer Science

The degree program is of a 2 year duration and spans four 16-18 week semesters. Total credit hours for the program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework Plan-B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

MS Students must accumulate the requaired 30 credit hours as per the following distribution:

Plan-A

Category	Credit Hours	
Core Subjects	18	
Elective Subjects	06	
Thesis	06	
Total credit hours	30	

Plan-B

Category	Credit Hours	
Core Subjects	18	
Elective Subjects	12	
Total credit hours	30	

MS Software Engineering

The degree program is of a 2 year duration and spans four 16-18 week semesters. Total credit hours for the program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework Plan-B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

MS software engineering students must accumulate the required 30 credit hours as per the following distribution:

Plan-A

Category	Credit Hours
Core Subjects	09
Elective Subjects	15
Thesis	06
Total credit hours	30

Plan-B

Category	Credit Hours	
Core Subjects	09	
Elective Subjects	21	
Total credit hours	30	
Total credit flours	30	

PhD Computer Science

PhD is a 3 year degree program, during which the scholar must successfully complete 54 credit hours (18 credit hours course work and 36 credit hours research) beside other requirements as stipulated by the HEC and the University rules & regulations.

MS COMPUTER SCIENCE

Curriculum of MS Computer Science Program

Core Courses

Course Code	Course Title	Credit Hours
CS-702	Advanced Automata Theory	3
CS-703	Advanced Analysis of Algorithms	3
CS-704	Advanced Operating Systems	3
CS-705	Advanced Computer Architecture	3

Mandatory Elective Courses

Course Code	Course Title	Credit Hours
CS-701	Research Methodology	3

Software Engineering Elective Courses

Course Code	Course Title	Credit Hours
CS-710	Software Measurement and Metrics	3
CS-711	Component-Based Software Engineering	3
CS-712	Advanced Formal Methods	3
CS-713	Agile Software Development Methods	3
CS-714	Empirical Software Engineering	3
CS-715	Advanced Software Project Management	3
CS-716	Software Risk Management	3
CS-717	Reliability Engineering	3
CS-718	Design Oriented Programming	3
CS-719	Software Process Improvement	3
CS-720	Safety-Critical Systems	3
CS-721	Global Software Development	3
CS-722	DevOps Practices	3
CS-723	Semantic Web and Ontology Engineering	3
CS-724	Data Science for Software Engineers	3
CS-725	Software Performance Engineering	3

Artificial Intelligence Elective Courses

Course Title	Credit Hours
Topics in Machine Learning	3
Topics in Computer Vision	3
Topics in Knowledge Representation & Reasoning	3
Topics in Artificial Neural Networks & Deep Learning	3
Topics in Artificial Intelligence	3
Topics in Programming for Al	3
Topics in Natural Language Processing	3
Topics in Digital Image and Signal Processing	3
Topics in Reinforcement Learning	3
Topics in Data Science	3
Topics in AI Ethics and Responsible AI	3
	Topics in Machine Learning Topics in Computer Vision Topics in Knowledge Representation & Reasoning Topics in Artificial Neural Networks & Deep Learning Topics in Artificial Intelligence Topics in Programming for Al Topics in Natural Language Processing Topics in Digital Image and Signal Processing Topics in Reinforcement Learning Topics in Data Science

MS COMPUTER SCIENCE

Curriculum of MS Computer Science Program

Computer Networks Elective Courses

Course Code	Course Title	Credit Hours
CS-730	Advanced Computer Networks	3
CS-731	Advanced Network Security	3
CS-732	Topics in Wireless Sensor Networks	3
CS-733	Advanced Internet of Things	3
CS-734	Network Performance and Evaluation	3
CS-735	Software Defined Networks	3
CS-736	Emerging Topics in Computer Networks	3
CS-737	Topics in Distributed Computing	3
CS-738	Topics in Cloud Computing	3
CS-739	Topics in Blockchain Technologies	3
CS-740	Social Network Analysis	3
CS-741	Cyber Physical Systems	3
CS-742	Cognitive Networks	3

^{*}Not limited to the list above, the University may add more courses

Thesis Research

Course Code	Course Title	Credit Hours
CSD-699	Master's Thesis Research	6



Fact File Eligibility

 Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 16 years education in Computer Science / Information Technology / Computer Engineering / Software Engineering or equivalent.
 GAT-General Test

MS SOFTWARE ENGINEERING

Curriculum of MS Software Engineering Program

Core Courses

Course Code	Course Title	Credit Hours
SE-702	Advanced Requirement Engineering	3
SE-703	Advanced Software System Architecture	3
SE-704	Software Testing and Quality Assurance	3

Mandatory Elective Course(s)

Course Code	Course Title	Credit Hours
SE-701	Research Methodology	3

Thesis Research

Course Code	Course Title	Credit Hours
CSE-699	Master's Thesis Research	6

Domain Elective Courses

Course Code	Course Title	Credit Hours
SE-710	Software Measurement and Metrics	3
SE-711	Component-Based Software Engineering	3
SE-712	Advanced Formal Methods	3
SE-713	Agile Software Development Methods	3
SE-714	Empirical Software Engineering	3
SE-715	Advanced Software Project Management	3
SE-716	Software Risk Management	3
SE-717	Reliability Engineering	3
SE-718	Design Oriented Programming	3
SE-719	Software Process Improvement	3
SE-720	Safety-Critical Systems	3
SE-721	Global Software Development	3
SE-722	DevOps Practices	3
SE-723	Semantic Web and Ontology Engineering	3
SE-724	Data Science for Software Engineers	3
SE-725	Software Performance Engineering	3

*Not limited to the list above, the University may add more courses

Fact File Eligibility

- GAT-General Test

Minimum CGPA 2.00 / 4.00 (Semester System) or 60% Marks (Annual System) in 16 years education in Computer Science / Information Technology / Computer Engineering / Software Engineering or equivalent.

PhD COMPUTER SCIENCE

Curriculum for PhD Computer Science Program

Core Courses

Course Code	Course Title	Credit Hours
CS-801	Advanced Research Methods	Non- Credits

Elective Courses

Course Code	Course Title	Credit Hours
CS-810	Advanced Topics in Automata Theory	3
CS-811	Advanced Topics in Analysis of Algorithms	3
CS-812	Advanced Topics in Operating Systems	3
CS-813	Advanced Topics in Computer Architecture	3
CS-814	Advanced Topics in Computer Networks	3
CS-815	Advanced Topics in Network Security	3
CS-816	Advanced Topics in Wireless Sensor Networks	3
CS-817	Advanced Topics in Internet of Things	3
CS-818	Advanced Network Performance and Evaluation	3
CS-819	Advanced Software Defined Networks	3
CS-820	Advanced Emerging Topics in Computer Networks	3
CS-821	Advanced Topics in Distributed Computing	3
CS-822	Advanced Topics in Cloud Computing	3
CS-823	Advanced Topics in Blockchain Technologies	3
CS-824	Advanced Social Network Analysis	3
CS-825	Advanced Cyber Physical Systems	3
CS-826	Advanced Cognitive Networks	3
CS-830	Advanced Requirement Engineering	3
CS-831	Advanced Software System Architecture	3
CS-832	Advanced Software Testing and Quality Assurance	3
CS-833	Advanced Software Measurement and Metrics	3
CS-834	Advanced Component Based Software Engineering	3
CS-835	Advanced Topics in Formal Methods	3
CS-836	Advanced Agile Software Development Methods	3
CS-837	Advanced Empirical Software Engineering	3
CS-838	Advanced Topics in Software Project Management	3
CS-839	Advanced Software Risk Management	3
CS-840	Advanced Reliability Engineering	3
CS-841	Advanced Design Oriented Programming	3
CS-842	Advanced Software Process Improvement	3
CS-843	Advanced Safety-Critical Systems	3
CS-844	Advanced Global Software Development	3
CS-845	Advanced DevOps Practices	3
CS-846	Advanced Semantic Web and Ontology Engineering	3
CS-847	Advanced Data Science for Software Engineers	3
CS-848	Advanced Software Performance Engineering	3

PhD COMPUTER SCIENCE

Curriculum for PhD Computer Science Program

Elective Courses

Course Code	Course Title	Credit Hours
CS-850	Advanced Topics in Machine Learning	3
CS-851	Advanced Topics in Computer Vision	3
CS-852	Advanced Topics in Knowledge Representation & Reasoning	3
CS-853	Advanced Topics in Artificial Neural Networks & Deep Learning	3
CS-854	Advanced Topics in Artificial Intelligence	3
CS-855	Advanced Topics in Programming for Al	3
CS-856	Advanced Topics in Natural Language Processing	3
CS-857	Advanced Topics in Digital Image and Signal Processing	3
CS-858	Advanced Topics in Reinforcement Learning	3
CS-859	Advanced Topics in Data Science	3
CS-860	Advanced Topics in AI Ethics and Responsible AI	3

Thesis Research

Course Code		Credit Hours
CSD-899	PhD's Thesis Research	36

*Not limited to the list above, the University may add more courses



- Having M.Phil/M.S/Equivalent degree from HEC recognized University. In case of foreign institution, HEC equivalence certificate must be provided.
- A minimum CGPA of 3.0 out of 4.0 in the semester system or first division in the annual examination system.

 with minimum 60% or above marks.



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FACULTY OF MANAGEMENT SCIENCES

Dr. Muhammad Aleem

Head of Department Assistant Professor PhD in Management Sciences University of Leicester, United Kingdo and OUSIT, Pakistan

Dr. Shiraz Khan

Associate Professor PhD in Management Sciences CECOS University, Peshawar

Dr. Faroog Shah

Assistant Professor PhD in Management Sciences University of Peshawar

Mr. Ubaid Ullah

Assistant Professor MS in Finance, CECOS University, Peshawar M.Sc. in Statistics, University of Peshawar PhD-In Progress, Qurtaba University, Peshawar

Mr. Imran Siddiqi

Assistant Professor PhD-In Progress, CECOS University, Peshawar

Ms. Farkhanda Tayyab

Lecturer

MS in Finance, CECOS University, Peshawar PhD-In Progress, Qurtaba University, Peshawar

Mr. Bashir Akbar

Lecturer
MS in Finance
Institute of Management Studies
University of Peshawar

Mr. Muhammad Imran

Lecturer

MS in Finance, Institute of Business & Management Sciences (IBMS), Peshawar

Ms. Maria Saeed Khattak

Lecturer

MS in Human Resource Management PhD-In Progress, Qurtaba University, Peshawar

Mr. Naeem Khan

Lecturer

MA English, University of Peshawar

Mr. Syed Jawad Ali Shah

Lecturer

M.Phil in Philosophy, University of Peshawar

Ms. Sana Irshad

Lecturer

MS in Sociology, International Islamic University, Islamabad

Ms. Zainab Khattak

Lecturer

MS in Finance, Institute of Management Studies, University of Peshawar

Mr. Imad Javed

Lecturer

MS in Finance, Institute of Management Sciences, Peshawar

PhD-In Progress, Institute of Management Sciences, Peshawar



A Signature Event is organized by the Department of Management Sciences



















DEPARTMENT OF MANAGEMENT SCIENCES

The Department offers the following graduate degree programs:

- MBA
- MS Management Sciences
- PhD Management Sciences

MRA

This Program spans three 16-18 weeks semester with a total of 30 credit hours (i.e-24 credit hours of coursework plus 6 credit hours of thesis and research in case of Plan-A)

In their 3rd semester, selected students will embark on a thesis project (i.e. on the basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework Plan B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

MS Management Sciences

The degree program is of a 2 year duration and spans four 16-18 week semesters. Total credit hours for the MS program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework Plan-B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

MS/MBA Students must accumulate the required 30 credit hours as per the following distribution:

Plan-A

Category	Credit Hours
Core Subjects	12
Elective Subjects	12
Thesis	06
Total credit hours	30

Plan-B

Category	Credit Hours
Core Subjects	12
Elective Subjects	12
Additional Subjects	06
Total credit hours	30

PhD Management Sciences

PhD is a 3 year degree program, during which the scholar must successfully complete 54 credit hours (18 credit hours course work and 36 credit hours research) beside other requirements as stipulated by the HEC and the University rules & regulations.

MS MANAGEMENT SCIENCES

Curriculum for MS Management Sciences Program

CORE COURSES

Course Code	Course Title	Credit Hours
MS-601	Advanced Strategic Management	3
MS-602	Advanced Research Methodology	3
MS-606	Advanced Quantitative Techniques	3
MS-604	Strategic Marketing	3

Thesis

ı	Course Code	Course Title	Credit Hours
	MGT-699	MS Thesis	6

Specialization/Elective Courses

Course Code	Course Title	Credit Hours
MS-610	Portfolio Management	3
MS-611	Advanced Corporate Finance	3
MS-612	Financial Risk Management	3
MS-613	International Banking & Finance	3
MS-614	Islamic Financial System	3
MS-615	Advance Financial Statement Analysis	3
MS-603	Strategic Finance	3
MS-623	Corporate Governance	3
MS-621	Staffing & Performance Management	3
MS-622	Human Behavior in Organization	3
MS-624	Change Management	3
MS-625	Human Resource Development	3
MS-626	Strategic Human Resource Management	3
MS-627	International Labor Law	3
MS-628	Conflict Management	3
MS-631	Trends in Global Marketing	3
MS-632	Ethics in Marketing	3
MS-633	Customer Relationship Management	3
MS-634	Advanced Sales Management	3
MS-635	Services Marketing	3
MS-636	Contemporary Issues in Marketing	3
MS-642	Supply Chain Management	3
MS-643	Issues in Digital Marketing	3
MS-661	Sociology and Human Behavior	3
MS-662	Advance Econometrics	3
MS-663	Contemporary issues in Management	3
MS-664	Organization Theory and Design	3
MS-665	Mathematical Modeling for Management	3
MS-666	Emerging Issues in Leadership and Motivation	3
MS-667	Financial Institutions & Markets	3
MS-668	Qualitative Research Methods	3
MS-669	Corporate Ethics and Social Responsibility	3
MS 670	Marketing Strategy and Management	3
IS-1	Independent Study-I	3
IS-2	Independent Study-II	3

Specialization / Elective courses are not limited to the above courses can be offered based on market demand and resource availability.



- Minimum CGPA 2.00 I 4.00 (Semester System) or 60% Marks (Annual System) in BBA (Hons)/ BS Commerce/ BS Accounting & Finance/ MBA (2 Years)/MPA (2 Years)/M. Com/ICMA (16 years education)
- Passing GAT General Test or CECOS Test

MASTER OF BUSINESS ADMINISTRATION (MBA)

Curriculum for MBA Program

CORE COURSES

Course Code	Course Title	Credit Hours
MS-601	Advanced Strategic Management	3
MS-602	Advanced Research Methodology	3
MS-606	Advanced Quantitative Techniques	3
MS-604	Strategic Marketing	3

Thesis

Course Code	Course Title	Credit Hours
MGT-699	MBAThesis	6

Specialization/Elective Courses

Course Code	Course Title	Credit Hours
MS-610	Portfolio Management	3
MS-611	Advanced Corporate Finance	3
MS-612	Financial Risk Management	3
MS-613	International Banking & Finance	3
MS-614	Islamic Financial System	3
MS-615	Advance Financial Statement Analysis	3
MS-603	Strategic Finance	3
MS-623	Corporate Governance	3
MS-621	Staffing & Performance Management	3
MS-622	Human Behavior in Organization	3
MS-624	Change Management	3
MS-625	Human Resource Development	3
MS-626	Strategic Human Resource Management	3
MS-627	International Labor Law	3
MS-628	Conflict Management	3
MS-631	Trends in Global Marketing	3
MS-632	Ethics in Marketing	3
MS-633	Customer Relationship Management	3
MS-634	Advanced Sales Management	3
MS-635	Services Marketing	3
MS-636	Contemporary Issues in Marketing	3
MS-642	Supply Chain Management	3
MS-643	Issues in Digital Marketing	3
MS-661	Sociology and Human Behavior	3
MS-662	Advance Econometrics	3
MS-663	Contemporary issues in Management	3
MS-664	Organization Theory and Design	3
MS-665	Mathematical Modeling for Management	3
MS-666	Emerging Issues in Leadership and Motivation	3
MS-667	Financial Institutions & Markets	3
MS-668	Qualitative Research Methods	3
MS-669	Corporate Ethics and Social Responsibility	3
MS 670	Marketing Strategy and Management	3
IS-1	Independent Study-I	3
IS-2	Independent Study-II	3

Specialization / Elective courses are not limited to the above courses can be offered based on market demand and resource availability.



- Minimum CGPA 2.00 I 4.00 (Semester System) or 60% Marks (Annual System) in BBA (Hons)/ BS Commerce/ BS Accounting & Finance/ MBA (2 Years)/MPA (2 Years)/M. Com/ICMA (16 years education)
- Passing GAT General Test or CECOS Test

PhD MANAGEMENT SCIENCES

Curriculum for PhD Management Sciences Program

Core Courses (at least 3 courses)

Course Code	Course Title	Credit Hours
MGT-906	Doctoral Seminar on Corporate Governance	3
MGT-907	Seminar on Advance Strategic Management	3
MGT-910	Advanced Business Research Methods	3
MGT-912	Advanced Quantitative Research Methods	3
MGT-913	Advanced Strategic Marketing	3
MGT-915	Advanced Qualitative Research Methods	3

Thesis

Course Code	Course Title	Credit Hours
MGT-899	PhD Research Thesis	36

Elective Courses

Course Code	Course Title	Credit Hours
MGT-704	Strategies in Global Marketing	3
MGT-708	Behavioral Finance	3
MGT-715	Organizational Change & Transformation	3
MGT-800	Strategic Brand Management	3
MGT-805	Doctoral Seminar on Advance Corporate Finance	3
MGT-815	Leadership and Organizational Theory	3
MGT-819	Managing Entrepreneurial Organizations	3
MGT-820	Intellectual Capital and Knowledge Economy	3
MGT-825	Advanced Readings in Management	3
MGT-822	Issues in Corporate Social Responsibility	3
MGT-823	Sociology & Human Behavior in Organizations	3
MGT-920	Advanced Strategic Financial Management	3
MGT-921	Advanced Financial Risk Management	3
MGT-922	Advanced Financial Institutions and Markets	3
MGT-923	Security Analysis and Portfolio Management	3
MGT-924	Advanced Change Management Practices	3
MGT-925	Advanced Conflict Resolution Techniques	3
MGT-926	Advanced Strategic Human Resource Management	3
MGT-927	Advanced Services Marketing and Management	3
MGT-928	Advanced Customer Relationship Management	3
MGT-929	Selling and Sales Management	3
MGT-930	Ethical Branding and Marketing	3

Elective courses are not limited to the above courses can be offered based on market demand and resource availability.

Fact File Eligibility MS Management Sciences (18 years education) in the relevant field with minimum 3.00 CGPA or equivalent.

GAT-General Test /CECOS Test



FACULTY OF BASIC SCIENCES & HUMANITIES

Prof. Dr. Nudrat Aamir

Associate Professor/ Dean of Student Affairs HoD BS&H PhD Applied Mathematics, University of Essex UK

Dr. Muhammad Ibrahim

Assistant Professor Post Doc Mathematics, UCAS Chnia

Dr. Muhammad Jamshaid

Assistant Professor Doctorate, Islamic Studies Qurtaba University of Science and Information Technology Peshawar

Mr. Sajjad Ahmad

Lecturer
MS English (Literature), Islamia College
University Peshawar

Dr. Zaheer-ud-Din

Associate Professor Doctorate, Applied Mathematics UET Peshawar

Mr. Naeem Khan

Lecturer MS English University of Peshawar

Molana Faiz ur Rehman

Lecturer Master, Islamiat & Arabic University of Peshawar

Mr. Adnan Hussain

Lecturer M. Phil (PhD in progress), English Qurtaba University of Science and Information Technology Peshawar

Ms. Rimsha Gillani

Lecturer, MPhil, Mathematics Islamia College University Peshawar

Mr. Naveed Ahmad

Lecturer M. Phil (PhD in progress) Applied Mathematics Abdul Wali Khan University

Ms. Sana Irshad

Lecturer MS Sociology, IIU Islamabad

Dr. Farah Jaffar

Assistant Professor Doctorate, Applied Mathematics Shaheed Benazir Women University Peshawar

Mr. Haroon Niaz

Lecturer
MS (PhD in progress)
Applied Mathematics, University of Peshawar

Mr. Sved Jawad Ali Shah

Lecturer M.Phil, Philosophy University of Peshawar

Muhammad Shahkar Khan

Lecturer MS (PhD in progress), Applied Mathematics University of Peshawar

Ms. Arfa Noor

Lecturer, MPhil, English Qurtaba University of Science and Information Technology Peshawar

Mr. Muhammad Ilyas

Senior Instructor Master (MS in progress), Pakistan Studies University of Peshawar

Ms. Shadab Aziz Qureshi

Lecturer, MPhil, English (Literature) Qurtaba University of Science and Information Technology Peshawar













DEPARTMENT OF BASIC SCIENCES & HUMANITIES

The department offers the following graduate degree programs:

- MS Mathematics
- PhD Mathematics

MS Mathematics

The degree program is of a 2-year duration and spans for 16-18 weeks semesters. Total credit hours for the program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research Plan-A).

In Year-II, selected students will embark on a thesis project (i.e., on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e., all 30 credit hours derived from coursework Plan-B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

Scheme of Studies

MS students must accumulate the required 30 credit hours as per the following distribution:

Plan-A

Catagory	Cr.Hrs
Core Subjects	12
Elective Subjects	12
Thesis	06
Total credit hours	30

Plan-B

Catagory	Cr.Hrs
Core Subjects	12
Elective Subjects	12
Additional Subjects	06
Total credit hours	30

PhD Mathematics

PhD is a 3 year degree program, during which the scholar must successfully complete 54 credit hours (18 credit hours course work and 36 credit hours research) beside other requirements as stipulated by the HEC and the University rules & regulations.

First Semester

in st semester		
Course Code	Course Title	Credit Hours
MATH-XXX	Course I	3
MATH-XXX	Course II	3
MATH-XXX	Course III	3
	Total	09

Second Semester

Course Code	Course Title	Credit Hours
MATH-XXX	Course IV	3
MATH-XXX	Course V	3
MATH-XXX	Course VI	3
	Total	09

(Third To Sixth Semester)

Course Code	Course Title	Credit Hours
MATH- 800	Ph.D Thesis	36
MATH- 700	Research Methodology	Non Credited Course

CURRICULUM OF MS MATHEMATICS

Core Courses

Course Code	Course Title	Credit Hours
MATH-501	Fluid Dynamics	3
MATH-502	Topological Groups	3
MATH-503	Theory of Spline Functions I	3
MATH-504	Advanced Numerical Analysis	3
MATH-505	Advanced Mathematical Physics	3

Optional Courses

Applied Mathematics

5.00		
Course Code	Course Title	Credit Hours
MATH-601	General Relativity-I	3
MATH-602	General Relativity-II	3
MATH-603	Cosmology	3
MATH-604	Relativistic Astrophysics	3
MATH-605	Classical Field Theory	3
MATH-606	Electrodynamics-I	3
MATH-607	Electrodynamics-II	3
MATH-608	Magnetohydrodynamics-l	3
MATH-609	Magnetohydrodynamics-II	3
MATH-610	Elasto dynamics	3
MATH-611	Plasma Physics	3
MATH-612	Advanced Course in Plasma Physics	3
MATH-613	Quantum Field Theory	3

Computational Mathematics

Course Code	Course Title	Credit Hours
MATH-621	Theory of Spline Functions II	3
MATH-622	Theory of Spline Functions III	3
MATH-623	Subdivision Schemes	3
MATH-624	Approximation Theory	3
MATH-625	Graph Theory	3
MATH-626	Design Theory	3
MATH-627	Mathematical Modeling-I	3
MATH-628	Mathematical Modeling-II	3
MATH-629	Minimal Surfaces	3
MATH-630	Computer Graphics	3

CURRICULUM OF MS MATHEMATICS

Pure Mathematics

Course Code	Course Title	Credit Hours
MATH-641	Rings and Modules	3
MATH-642	Lie Algebras & Lie Groups	3
MATH-643	Field Extensions & Galois Theory	3
MATH-644	Linear Groups & Group Representations	3
MATH-645	Homotopy Theory	3
MATH-646	Topological Groups	3
MATH-647	Homological Theory	3
MATH-648	Lattice Theory	3
MATH-649	Representation Theory	3
MATH-650	BCK Algebra	3
MATH-651	BCI Algebra	3
MATH-652	Advanced Theory of Rings and Modules	3
MATH-653	Spectral Theory in Hilbert spaces – I	3
MATH-654	Spectral Theory in Hilbert spaces – II	3
MATH-655	Harmonic Analysis	3
MATH-656	Banach Algebras-I	3
MATH-657	Banach Algebras-II	3
MATH-658	Advanced Measure Theory	3
MATH-659	Advanced Number Theory	3
MATH-660	Combinatorics	3

Reading and Research

Course Code	Course Title	Credit Hours
MATH-	Reading & Research-MATH1	3
MATH-	Reading & Research-MATH2	3
MATH-	Reading & Research-MATH1	3
MATH-	Reading & Research-MATH2	3
MATH-	Reading & Research-MP1	3
MATH-	Reading & Research-MP2	3

Non-Credit Courses

Course Code	Course Title	Credit Hours
MATH-	Seminar Attendance	3
MATH-	Seminar Delivered-G	3
MATH-	Seminar Delivered-T	3
MATH-	Seminar Delivered-R	3

M.Phil Thesis

Course Code	Course Title	Credit Hours
MATH-	Thesis	6

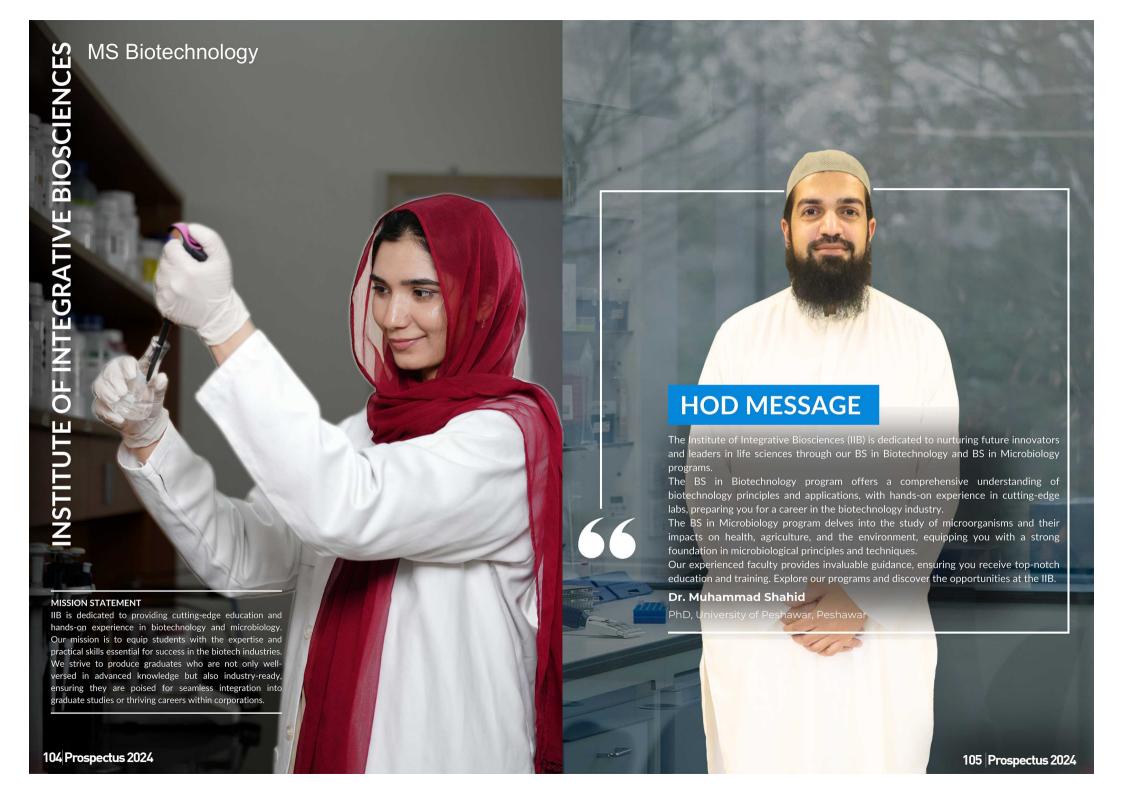
CURRICULUM OF PhD MATHEMATICS

Core Courses

Course Code	Course Title	Credit Hours
MATH-701	Advanced Algebra	3
MATH-702	Advanced Functional Analysis	3
MATH-703	Advanced Graph Theory	3
MATH-704	Advanced Mathematical Statistics	3
MATH-705	Advanced Partial Differential Equations	3
MATH-706	Algebraic Number Theory	3
MATH-707	Numerical Linear Algebra	3
MATH-708	Numerical Solutions of Ordinary Differential Equations	3
MATH-709	Numerical Solutions of Partial Differential Equations	3
MATH-710	Theory of Fluids	3
MATH-711	Integral Transforms and their Application	3

Optional Courses

Course Code	Course Title	Credit Hours
MATH-801	Advanced Fluid Dynamics	3
MATH-802	Advanced Mathematical Methods	3
MATH-803	Advanced Plasma Physics	3
MATH-804	Advanced Probability and Probability Distributions-I	3
MATH-805	Advanced Probability and Probability Distributions-II	3
MATH-806	Advanced Ring Theory	3
MATH-807	Algebraic Topology	3
MATH-808	Analytical Dynamics-I	3
MATH-809	Analytical Dynamics-II	3
MATH-810	Applied Functional Analysis	3
MATH-811	Applied Graph Theory	3
MATH-812	Banach Algebra	3
MATH-813	Computational Methods	3
MATH-814	Integral Equations	3
MATH-815	Large Scale Scientific Computation	3
MATH-816	Mathematical Techniques for Boundary Value Problems	3
MATH-817	Multivariate Analysis	3





Dr. Muhammad Shahid

Head of Institute of Integrative Biosciences Associate Professor PhD, University of Peshawar, Peshawar

Dr. Faisal F. Khan

Assistant Professor D.Phil. Systems Biology & Cell Biology Oxford University, UK

Ms. Maryam Anwar

Lecturer **FYP Coordinator** MS Healthcare Biotechnology Atta Ur Rahman School of Applied Biosciences, National University of Science & Technology,

Mr. Zubair Khan

Islamabad

Lab Technologist BS Biotechnology Institute of Integrative Biosciences CECOS University, Peshawar

Mr. Muhammad Aamir Wahab, Gold Medalist

M.Phil. Biotechnology & Genetic Engineering Institute of Biotechnology & Genetic Engineering The University of Agriculture Peshawar (On Study Leave)

Mr. Sulaiman Faisal

Lecturer Coordinator Post Graduate Studies M.Phil. Biotechnology Institute of Biotechnology & Genetic Engineering The University of Agriculture Peshawar

Ms. Mushkbar Fatima

Lecturer Academic Coordinator MS Industrial Biotechnology Atta-Ur-Rahman School of Applied Biosciences National University of Science & Technology, Islamabad

Ms. Laleen Saeed

Lecturer

MS Healthcare Biotechnology Atta-Ur-Rahman School of Applied Biosciences National University of Science & Technology, Islamabad

11B Activities

- TRAININGS
- SESSIONS
- BOOTCAMP























DEPARTMENT OF BIOTECHNOLOGY

The Department offers the following graduate degree programs:

■ MS Biotechnology

MS Biotechnology

The degree program is of a 2 year duration and spans four 16-18 week semesters. Total credit hours for the program are 30 (i.e., 24 credit hours of coursework plus 6 credit hours of thesis and research in case of MS by research – Plan A).

In Year-II, selected students will embark on a thesis project (i.e. on basis of their CGPA, as well as synopsis defence); others will have to opt for the non-thesis track (i.e. all 30 credit hours derived from coursework – Plan B). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track.

SCHEME OF STUDIES

The MS degree program is of 02 years and spans four semesters, each of which is of 16-18-week duration. Total credit hours for the MS program are 30 (i.e., 24 credit hours of course work plus 06 credit hours of thesis and research in case of MS by research). This structure follows the HEC criteria for MS.

In Year-II, selected students will embark on a thesis (Plan A) project (i.e., based on CGPA, minimum 3 in 06 courses as well as synopsis defense); others will have to opt for the non-thesis (Plan B) track (i.e., all 30 credit hours derived from coursework). Students with unsatisfactory performance in their thesis research will be shifted to the non-thesis track (Plan B).

Plan-A

Category Credit Hours Core Subjects 12 Elective Subjects 12 Thesis 06 Total credit hours 30

Plan-B

Category	Credit Hours
Core Subjects	12
Elective Subjects	12
Additional Subjects	06
Total credit hours	30



MS BIOTECHNOLOGY

LIST OF CORE AND ELECTIVE COURSES

A student must pass at least 4 (of 10) core courses; additional core courses may be taken but these will be counted as electives.

Core Courses

ore courses	
Course Title	Credit Hours
Advanced Molecular Biology	3
Applied Biostatistics	3
Recent trends in Biotechnology	3
Techniques in Molecular Biology	2+1
Scientific Writing and Communication	3
Gene Expression and Regulation	3
Advanced Virology	3
Human Physiology	3
Advances in Developmental Biology	3
Advanced Bioinformatics	3

Non Credit Courses

Course Title	Credit Hours
Fundamentals of Biology (for CS students)	3
Biochemistry (for CS students)	3
Introduction to Biotechnology (for non-Biotech BG)	3

Elective Courses

Licetive courses	
Course Title	Credit Hours
Bioprocess Technology	3
Nanobiotechnology	3
Biology of Cells and Viruses	3
Advances in RNA Biology	3
Drug Targeting Strategies	3
Research Methodology Involving the Use of Standard Laboratory Animals	3
Cancer Biology	3
Food Security	3
Genetic Resources, Evolution, and Conservation	3
Synthetic Biology	3
Bioentrepreneurship	3
Biosensors in Diagnostics	3
Bioethics and Biosafety	3
Disease Onset, Diagnosis, and Prevention	3
Pathophysiology and Pharmacological Management of selected Chronic Diseases	3
Drug Discovery and Development	3
Pharmacology	3
Global Biotechnology Industry	3
Plant Physiology, and Pathology	3

Fact File Eligibility

- 4-Years BS or equivalent in Bioinformatics/Biological Sciences/Biotechnology/ Microbiology/Genetics/ Molecular Biology/Biochemistry or any other relevant discipline.
- Students with 4 year BS in CS are also eligible for admission in MS in Biotechnology, though they have to take extra non credit courses.
- Minimum 2nd Division or 2.00 CGPA
- GAT-General Test & Interview

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HOW TO APPLY

You Can Apply for Admission in CECOS University Through Any of the Following Processes

1.ONLINE APPLICATION

You can apply online from anywhere, through the online form available at the University website www.cecos.edu.pk.

ONLINE FORM FILLING

- a. Kindly click on APPLY NOW button to create your login
- b. Click on the new user account and create your login.
- c. Deposit Rs.1500/- for BS programs & Rs.2000/- for MS programs in any of the following bank accounts of CECOS
- d. Login with your credentials and select your program preferences & submit the application.

2. PAPER APPLICATION

Interested candidates can obtain the University Prospectus and Admission form from the Main Campus of the University

The candidates have to follow instructions given on the admission form and prospectus, fill in the form, and submit the same in the Admission Cell by hand before the closing date.

3. VISIT CAMPUS OR CONTACT US FOR QUERIES

In case of any query, you can contact the CECOS admission team on 091-5860291-3 (Ext: 195-196)

OR

The CECOS Admissions Team will be available to guide you to complete all the formalities.



FEE STRUCTURE 2024 GRADUATE PROGRAMS

MS Engineering (Civil, Electrical, Mechanical), MS Architecture, MS Engineering Management

Admisions Fee	Semester Registration Fee	Per Subject Fee	Thesis Fee
Rs. 20,000	Rs. 5000	Rs. 30,000	Rs. 55,000

MS Management Sciences / MBA/MS Computer Science / MS Software Engineering

Admisions Fee	Semester Registration Fee	Per Subject Fee	Thesis Fee
Rs 20,000	Rs 5000	Rs 25,000	Rs 55,000

M. Tech (Civil, Electrical)

Admisions Fee	Semester Registration Fee	Per Subject Fee	Thesis Fee
Rs 20,000	Rs 5000	Rs 20,000	Rs 55,000

MS Biotechnology/MS Mathematics

Admisions Fee	Semester Registration Fee	Per Subject Fee	Thesis Fee
Rs 20,000	Rs 5000	Rs 25,000	Rs 55,000

PhD Electrical/Civil/Management Sciences/Computer Science/Mathematics

Admission Fee	Semester Registration Fee (Minimum 6 Semesters)	Tuition Fee (Minimum 6 Semesters)	Research Bench Fee (Minimum 4 Semesters)
Rs. 20000 (Once)	Rs. 5000 Per Sem (2nd Sem Onnards)	Rs. 30000 Per Course at CECOS University	Rs. 80000 Per Semester

Thesis Fee	Foreign Thesis Evaluators Fee	Local Thesis Evaluators Fee
Rs. 20000	Minimum \$300 Per Thesis Evalvator	Rs. 30000 Per Thesis Evalvator

Note:

- 1- The fee structure is subject to change on inflationary basis/other reasons.
- 2-The fee structure is exclusive of levies and taxes.
- 3- Fine will be imposed on submission of fee after due date.
- 4- There will be separate fee structure (in US Dollars) for foreign nationals, for each degree programmes.

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RULES & REGULATIONS

RULES & REGULATIONS FOR MS PROGRAMS

TIME LINES & TRACKS

Duration of MBA program is of 1.5 years (i.e., 3 semesters) whereas for other MS degree programs it is 2 years (i.e., 4 semesters). These timelines are extendable only under exceptional circumstances but will not exceed 4 years. All students must meet minimum residency requirement which is 1.5 years for MBA, and 2 years for all others.

MS programs are comprised of two tracks: 1. Course work plus thesis [Plan-A]; and 2. Course work only [Plan-B]. Plan A is comprised of 24 credit hours of courses and 6 credit hours of research; Plan B is based on 30 credit hours of course work.

1 ADMISSION PROCESS

- 1.1 Applicants seeking admission to any of the Master's programs must have a Bachelor's degree (at least 16 years of education) in the relevant discipline/field.
- 1.2 Complete applications must be submitted to the Admissions Office before the deadline. Incomplete applications or those submitted after the application deadline will not be processed.
- 1.3 To be eligible, applicants must pass the Graduate Admission Test (GAT) with minimum 50% marks. GAT is administered by CECOS University or any other testing body authorized by the University.
- 1.4 All applications will be processed by the Admissions Committee and their recommendations duly approved by the Vice Chancellor.
- 1.5 The admission of candidates shall be confirmed only after they have deposited their fee within the period specified for this purpose.
- 1.6 If any of the particulars given by a student in his/her application form is found incorrect, their admission will be cancelled. Such cancellation can also occur after the student is admitted.
- 1.7 No student will be admitted after two weeks of the start of classes.
- 1.8 The Office of Graduate Studies shall forward to the Controller of Examination (CoE) particulars of each student admitted for the first time within a period of 30 days of admission. CoE will assign a registration number to each of the students.
- 1.9 Admission of any student can be cancelled at any stage if their conduct is found unsatisfactory.
- 1.10 An applicant who is already a bona fide full time student in another institution is not eligible to apply for admission. If such case is detected his/her admission shall be cancelled at any stage of the program.

- 1.11 Students shall not be allowed to participate in any political or union activities.
- 1.12 Only limited hostel accommodation is available for graduate students.
- 1.13 At the time of admission, selected students shall submit an undertaking to abide by the Rules and Regulations of CECOS University. This shall be according to the prescribed proforma on a non-judicial stamp paper worth Rs. 100/- and duly attested by a gazetted officer/Oath Commissioner. Master's students shall also be bona fide students of the University and as such all rules and regulations regarding discipline and other provisions applicable to other students, shall be equally applicable to them.

2 MEDIUM OF INSTRUCTION AND EXAMINATIONS (Also, applicable to PhD students)

- 2.1 Medium of instruction in all graduate courses shall be English. All examinations (written and oral) will be conducted in English. Foreign students will be required to satisfy their respective department about their proficiency in English language before registration.
- * Also aplicable to PhD students.

3 REGISTRATION/WITHDRAWAL/CHANGE OF COURSE(S)*

- 3.1 A list of courses to be offered in each semester shall be displayed on the Graduate Studies noticeboard one week before the registration to facilitate students in choosing courses.
- 3.2 Students must register in their courses prior to start of each semester.
- 3.3 Students can take courses offered by another Department as advised by their Departmental Graduate Studies Coordinator. Prior permission of the Office of Graduate Studies is required.
- 3.4 For a course to be offered, a minimum of 5 students must register in it. If the course is dropped, fee will either be refunded or adjusted in the subsequent semester.
- 3.5 Students can add or drop a course within 14 days of the commencement of semester. This requires permission of the Office of Graduate Studies.
- 3.6 Students may withdraw from one or more courses with the approval of the Office of Graduate Studies before the 6th week of semester. This decision will be communicated to the Controller of Examinations immediately. No fee will be refunded/adjusted for the withdrawn course(s).
- 3.7 Withdrawal of a course will appear on the transcript with letter grade "W". However, a student may take another subject in place of course withdrawn.
- 3.8 A student who does not withdraw from a course and remains absent will be given "F" grade

4 TRANSFER OF CREDIT(S)*

A student from another University seeking admission in Master's program at CECOS University can transfer up to a maximum of 6 credit hours provided that:

(a) They have passed these two courses with at least "B" grade within two (2) years of the date of admission at CECOS University.

- (b) The courses completed are equivalent to the courses offered by the University (decision to be made by subject expert)
- (c) Transfer of credits will only be for taught courses (i.e., not for research)
- (d) Transferred credit hours shall not be counted for calculating CGPA.

5 REPEAT COURSES*

- 5.1 A student who fails a course must repeat the same course whenever it is offered; their new grade will replace the earlier "F" grade.
- 5.2 A student who secures "C" grade or below but not "F" grade in subject(s), may be given one chance to improve their grade by repeating the same subject within the prescribed time; in case of nonimprovement, the old grade will stand. Maximum of two subjects can be allowed for grade improvement.
- 5.3 A student is allowed to replace a maximum of two subjects, if s/he is in the final semester or has completed the course work.
- 5.3.1 A student can replace failed subject(s) as well as the subject(s) in which s/he secures "C" grade or below and the subject(s) which s/he wants to replace is not offered in that semester.
- 5.3.2 Students who have attained CGPA of 2.5 or greater but less than 3.0 from the eight (8) courses they have taken and wish to pursue their PhD degree are allowed to replace subject(s) in which s/he got above "C" grade. This is subjected to the condition that s/he has not replaced the subject(s) under clause 5.3.
- 5.4 If any failed subject is replaced, the new grade will be used in computing the CGPA replacing the "F" grade. If any subject is replaced for improvement of grade, the improved grade will be used for computing CGPA; in case of non-improvement, the old grade will be used in computing the CGPA.
- *Also applicable to PhD students
- 5.5 In case of replacement, both the subjects including previously taken subject(s) and replaced subject(s) will be mentioned on the transcript.
- 5.6 A non-core subject will be allowed to be replaced with both core and non-core subjects, whereas, the core subject must be replaced with core subject only. However, core course(s) may be allowed to be replaced with a non-core /elective course(s) provided minimum core courses requirement has been fulfilled. (Not applicable to PhD students)
- 5.7 The improvement/replacement of subject(s) shall only be allowed during the course of studies before issuance of transcript/ degree and within maximum duration of the relevant program. (Not applicable to PhD students)

6 ATTENDANCE

- 6.1 A student must have attended at least 75% of the classes held in a course in order to be eligible to appear in the final term examination.
- 6.2 A student with class attendance less than 75% in a particular course will not be allowed to appear in the exam and will be required to repeat the course as and when offered again.
- 6.3 If a student changes a course or takes additional course at a later stage, clause 6.1 and 6.2 will also apply.
- 6.4 If a student gets late admission, he/she will need to complete 75% attendance based on the total lectures delivered in each course after his/her admission.
- 6.5 Willful absence from all classes for a period of four weeks at a stretch during a regular/summer semestershall result in automatic cancellation of the registration of a student from all courses in that semester.

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7 WORK LOAD

7.1 A student can take up to 12 credit hours (maximum 3 subjects) course work per semester. (Also, applicable to PhD students)

7.2 In order to complete Master's degree program in 4 semesters, it will be essential requirement on the part of all the students to take three courses in 1st and 2nd semesters, and two courses in 3rd semester along with research to complete his/her degree by the end of 4th semester for Plan A and pursuing 2 additional courses for Plan B.

8 EXAMINATION (Also, applicable to PhD students)

- 8.1 A student will be eligible to appear in examination provided s/he has been on the rolls of university during that semester, cleared all the dues and fees, and met the attendance requirements.
- 8.2 For each course, a student is required to take all instruments that are used to calculate the final grade. Such instruments include quizzes, midterm and final examination, presentations, participate in group discussions and submission of project/assignments. The distribution of marks for each course is as follows:

Quizzes/Assignments/Presentations/Projects: 25%

Mid-Term Exam: 25% Final Exam: 50%

Distribution of marks for laboratory courses is as follows:

Lab work* 30% Mini Project: 20% Lab Exam: 50%

- * Includes assessment, attendance, quizzes and assignments
- 8.3 In case a student joins a course after it has already started, s/he will be responsible for any missed quizzes, assignments and lectures. Zero marks will be given for all missed quizzes, tests, assignments and labs etc.
- 8.4 If a student fails to appear in the final examination of a course(s) s/he will be treated as absent and given an automatic zero for that exam.
- 8.5 There will be no supplementary/special exam. Thus, if a student fails a course s/he will have to repeat it.
- 8.6 In case of any litigation pending (involving the student and University) regarding a course, the final result will not be declared until after the dispute has been fully resolved.

9 POLICY FOR MS THESIS RESEARCH

- 9.1 Students enrolled in MS programs shall be allowed to opt for Plan-A (research-based) only after they have successfully passed 6 courses (18 credit hours) with a 3.0 CGPA. However, they can start working on their research proposal before the completion of 6 courses.
- 9.2 Plan-A students must successfully defend their research proposal prior to starting the 3rd semester.
- 9.3 If defense of research proposal is unsuccessful, student will be moved to Plan-B (non-thesis option)

9.4 Appointment of Supervisor

To be eligible, the appointed supervisor (PhD or MS) must be a full-time member of faculty. A co-supervisor may be appointed as needed.

- 9.5 Departmental Graduate Studies Committee (DGSC)
- (a) Each department shall have its own Departmental Graduate Studies Committee (DGSC) comprised of following members:
- 1. Head of Department
- 2. Graduate Studies Coordinator
- 3. One PhD-level faculty member from the Department
- 4. One PhD-level faculty member from another Department of CECOS University
- 5. MS Thesis Research Supervisor
- 6. External Member (optional)
- (b) Members 3 & 4 shall be appointed by the Dean, Graduate Studies in consultation with the Graduate Studies Coordinator of the relevant Department.
- 9.6 Process of Thesis Proposal Defense
- 1. Research proposal shall be prepared by MS student in consultation with his/her supervisor in a prescribed format/template which can be obtained from the office of Graduate Studies.
- 2. The proposal shall be initially examined and vetted by the supervisor and forwarded to the Committee Members for their comments.
- 3. The Committee's decision shall be forwarded to the Office of Graduate Studies. Supervisor (as well as student) will be officially informed of the outcome. If successful, student will then pursue their work on the approved research topic.
- 4. Research proposal and thesis shall be presented to BoAS&R for concurrence.

9.7 Thesis Defence Examination Committee (TDEC)

- (a) TDEC will be comprised of the following members:
- . Supervisor
- . Internal Examiner (PhD/MS in relevant field, from CECOS University)
- . External Examiner (PhD in relevant field from outside the University)
- (b) Supervisor will recommend three names each for Internal Examiner and External Examiner in the relevant field to the Office of Graduate Studies through HoD. One Internal Examiner and one External Examiner will be selected from the proposed list.
- (c) Examination Committee will be appointed by Vice Chancellor as per the recommendation of Office of Graduate Studies. Supervisor shall act as Convener of Examination Committee. The evaluation shall be based on the quality of thesis as well as performance in viva-voce. The examination result will be communicated (via Graduate Studies Coordinator) to the Office of Graduate Studies.
- (d) If quality of thesis is satisfactory, candidate shall appear in viva voce examination which will be conducted by the Examination Committee.

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(e) If thesis (written and/or data) is of poor quality, it may be referred back to the student for revision and resubmission within the given specified period. Only one chance of re-submission shall be allowed to a candidate. If the resubmission is unsatisfactory, then student will be placed in Plan-B.

[f] If the candidate is unsuccessful in their oral examination, s/he will be permitted to retake it within a one month period. Only one chance shall be given to a candidate to reappear in the oral examination. If s/he fails their oral exam again, then student will be placed in Plan-B.

10 GRADES (Also applicable to PhD student except 10.5)

10.1 The University Grading Policy for all MS degree programs is as follows:

Letter Grade	Grade Point	Marks Range (for Absolute Grading)
A	4.00	85 & Above
A-	3.67	80 - 84
B+	3.33	75 - 79
В	3.00	71 - 74
B-	2.67	68 - 70
C+	2.33	64 - 67
С	2.00	61 - 63
C- (Below Average)	1.67	58 - 60
D+	1.33	54 - 57
D (minimum Acceptable)	1.00	50 - 53
F (Failure)	0.00	Below 50
W (Withdrawn)		
S (Satisfactory)	For thesis only	
U (Unsatisfactory)	For thesis only	
I(Incomplete)		
Imp (Improvement)		

10.2 There shall be no other grade point values except those listed above. Only letter grades and grade points will be mentioned on the transcript. Percentage marks shall not be reported on transcripts. Relative grading system shall be followed if the number of students appeared in the final term examination of a subject are twenty (20) or more; absolute grading system will be followed if the student number is less than 20.

10.3 Grade point average (GPA) shall be calculated and rounded up to two decimal places. In case of close competition between/amongst students for merit position, the third decimal place (i.e., 0.00N) will be considered.

10.4 Computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) Semester grade point average (GPA) and cumulative grade point average (CGPA) will be calculated as follows:

SGPA = <u>Sum of courses in a semester (course credit hours x grade point earned</u>

Total semester credit hours

CGPA= Sum of all courses taken in all semesters (course credit hours x grade point earned

Total credit hours taken in all semesters

*Also aplicable to PhD students.

10.5 The minimum CGPA required for the award of Master Degree will be 2.5 in course work and satisfactory grade (S) in research. Grade points are assigned as shown in the Table above.

11 DEGREE REQUIREMENTS

- 11.1 A total of 30 credit hours are required to complete Master of Science degree program in all disciplines except for Architecture (M. Arch) for which 40 credit hours are needed. Both Plan A (thesis-based) and Plan B (course-based) are offered to students. Under Plan A students must accumulate 24 credit hours from course work and 6 credit hours from thesis research; under Plan B, students must accumulate all of their 30 credit hours from course work. For Master of Technology (M.Tech) program, students must complete 24 credit hours from courses and obtain the remaining 6 credit hours from Industrial Training/Internship(s). For the Master of Architecture degree program, students must complete a total of 40 credit hours that include 7 credit hours for their thesis research.
- 11.2 A student can take up to 2 courses (6 credit hours) offered by another Department. For this, permission of Graduate Studies Coordinator as well as Office of Graduate Studies is necessary (before enrolling in a course).
- 11.3 On the completion of research (in Plan-A), the student shall submit three (3) hard copies of the final thesis to the Office of Graduate Studies. One such copy will be kept in the University library.
- 11.4 Minimum duration for completion of MS (or equivalent) degree program shall be 2 years whereas it will be 1.5 years for MBA.
- 11.5 Further extension in completion of MS degree programs shall only be considered under exceptional circumstances.
- 11.6 For Plan-A students, submission of one research paper from MS thesis duly endorsed by the Departmental Graduate Studies Committee and acknowledgment from editor of publishing organization (Journal / Conference / etc.) regarding receipt/processing of research paper is compulsory for the award of MS degree. The submission must show that the student is affiliated with CECOS University.
- 11.7 The University shall award the degree of Master of Science to a student who has completed the following requirements:
- a) For Plan-A: Passed 24 credit hours course work with CGPA of at least 2.5; successfully completed 6 credit hours research work and passed their Thesis Defence Examination; submitted their research paper from MS thesis work.
- b) For Plan B: Passed 30 credit hours course work with CGPA of at least 2.5.

12 CANCELLATION OF ADMISSION

12.1 If a student fails to attend two consecutive semesters, his/her admission shall be cancelled automatically without any notice. This decision will be communicated to the parent/guardian of student through registered post/courier service. No fee shall be refunded in such case.

13 FREEZING OF SEMESTER

13.1 A student can freeze his/her semester up to a maximum period of one year. Applications for freezing of semester must be submitted to the Office of Graduate Studies through Head of Department before the commencement of semester, otherwise the application shall not be entertained. During the freezing period, students are required to pay the prescribed registration fee in order to maintain their "active student status". No freezing of the first semester will be allowed. The maximum duration for completion of MS degree will include the period of freezing and no relaxation/time extension shall be given on the basis of freezing period.

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14 DISCIPLINE

14.1 All MS and PhD students must observe the rules and regulations of the University. Any violation of these rules will lead to strict disciplinary action which includes separation from the degree program.

15 GRADUATE ASSISTANTSHIPS

A limited number of Graduate Assistantships are available for outstanding students which carry a monthly stipend of Rs 15,000 per month.

16 ELIGIBILITY OF CANDIDATES FOR AWARD OF DISTINCTION

- 16.1 Passed all the University examinations in their first attempt and completed their course work within three [3] regular semesters for Plan-A and within four [4] regular semesters for Plan-B after joining.
- 16.2 Secured a CGPA that is greater than or equal to 3.67.
- 16.3 A graduate who has been penalized by University Discipline Committee/UFM Committee/Appellate Committee shall not be eliqible for the award of Gold Medal.
- 16.4 Students who have transferred course(s) under clause 4.1, are also eligible for this award provided they passed those two transferred courses in their first attempt at parent institute and fulfilled all degree requirements as mentioned in 16.1 16.3.

17 SCHOLASTIC RECORD

17.1 The Controller of Examinations maintains the scholastic record of graduate students provided by the Office of Graduate Studies. Faculty offering graduate courses shall send award list of grades to the Office of Graduates Studies through the Head of the Department within one week of final examination. Students shall be notified about their final grades by the Office of Graduate Studies.

18 ELIGIBILITY OF CANDIDATES FOR GOLD MEDAL

The gold medal shall be awarded to a graduate in each batch of all the disciplines who fulfills the following conditions:

- 18.1 Passed all the University examinations in their first attempt and completed the course work within three regular semesters for Plan-A and within four regular semesters for Plan-B after joining.
- 18.2 Obtained first position among all the passed students.
- 18.3 Secured CGPA that is greater than or equal to 3.67.
- 18.4 For determination of positions, CGPA shall be calculated and rounded up to two decimal places. In case of tie between/amongst students, the third decimal place will be considered.
- 18.5 Defended Thesis/Internship/Research Project within six (6) months after completion of course work (applicable to Plan-A).
- 18.6 Any graduate who has been penalized by the University Discipline Committee/UFM Committee/Appellate Committee shall not be eligible for the award of Gold Medal.
- 18.7 One Gold Medal will be awarded to all the batches of the same course commenced within six months duration.

- 18.8 There should be minimum five regular/active students in the last/final semester examination of the class for the award of gold medal to a student, if otherwise eligible.
- 18.9 Gold Medal will not be awarded for students enrolled in the PhD program.
- 18.10 Gold Medal will be awarded on the occasion of convocation only.

19 RE-CHECKING (Also, applicable to PhD students)

- 19.1 Irrespective of the marks s/he has been awarded, a student may apply for rechecking within one week of declaration of result on payment of prescribed fee per theory paper. Practical laboratory work, viva voce, sessional marks and projects cannot be rechecked. The rechecking shall be done by the Controller of Examinations to verify that:
- (a) the script belongs to the applicant.
- (b) no extra sheets claimed to have been attached are lost or detached.
- (c) no question has been left unmarked.
- (d) marks awarded for each question have been correctly stated on the cover, and
- (e) the total of all the marks awarded is correct.
- 19.2 In no case of rechecking of a paper, where remarking is sought in essence, would be allowed and the marks already given by earlier paper checker shall be final.
- 19.3 The President/Vice Chancellor may however sanction re-marking of a given group of at least 50% or more of the total strength of students in a given class/subject when the circumstances so require.

20 RULES AGAINST USE OF UNFAIR MEANS (UFM) IN THE TESTS AND EXAMINATIONS (Also, applicable to PhD students)

- 20.1 If a student is found using unfair means in an examination, the Superintendent of the Examination Centre will report it in writing to the Controller of Examinations along with the details of the unfair means case and supporting evidence, if any.
- 20.2 The Controller of Examinations will refer the case to the Unfair Means Committee for necessary action under the Rules.
- 20.3 The Committee shall inform the student concerned about the report against him/her and provide him/her the opportunity to explain his/her position.
- 20.4 If the student is found guilty of the offence, the Committee will decide to award one or more of the following punishments in accordance with the nature/seriousness of the case:
- (a) Expulsion from the Institution/University
- (b) Rustication for a specific period
- (c) Cancellation of paper script
- (d) Cancellation of Examination(s)
- (e) Cancellation of particular question (s)
- (f) Imposition of fine
- (g) Warning
- 20.5 The aggrieved student can file an appeal to the Appellate Committee against the punishment awarded by the University Discipline Committee on submitting the prescribed fee. The Appellate Committee can review the decision of the University Discipline Committee.

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20.6 If dissatisfied with the review decision of the Appellate Committee, a student can submit representation to the President, whose decision shall be final.

20.7 Appeal under clause 20.5 and representation under clause 20.6 supra can be filed within 07 days of the earlier decision.

21 CHANGE/CORRECTION/ADDITION/DELETION OF STUDENT NAME/FATHER'S NAME (Also, applicable to Ph.D students)

- 21.1 When a student wishes to change his/her name as originally entered in the University record, s/he shall proceed as under:
- (a) S/he shall apply to the Registrar Office through the concerned Head of Department.
- (b) S/he shall submit the revised SSC & HSSC documents.
- (c) S/he shall submit copy of notice reflecting change of name that has been published in at least one well circulated daily newspaper.
- (d) S/he shall support his/her application with an affidavit on a non-judicial stamp paper (not less than Rs. 50/-) duly sworn before Notary Public/Oath Commissioner by the student him/herself with signatures of the respectable witnesses thereon.
- 21.2 When a student wishes to get his/her name corrected on his/her SSC documents, s/he shall be required to comply with para 21.1(a) above only.
- 21.3 The procedure for change/correction of student's father name or other factual entries shall be same as provided in paragraph 21.1 and 21.2 supra.
- 21.4 For change/correction of entries, the student may be required to furnish good cause together with necessary proofs, if any.

22 SPECIAL PROVISION

- 22.1 In all cases where these regulations are silent, the decision of the President shall be final.
- 22.2 The University authorities reserve the right to make any change in the rules, regulations, fee structure and courses of study that may be considered necessary at any time without prior notice.

RULES & REGULATIONS FOR PH.D PROGRAMS

The PhD degree program is offered on full time basis which shall spread normally over a period of four years with a maximum of eight years under exceptional circumstances. The student has to meet minimum residency requirement of 3 years during the course of his/her studies at CECOS University. The PhD Degree Program offered in various disciplines will comprise of a total of 54 credit hours, which includes 18 credit hours of course work and 36 credit hours of research. In addition, the students shall also need to pass any deficiency courses, if the admission committee deems it necessary for a particular student. All Research work will be carried out at CECOS University; however, students may pursue course or research work outside the University on the recommendations of the Supervisor which will be approved by the Vice Chancellor through Dean, Graduate Studies.

The required coursework as stipulated by admission committee, comprehensive exam, and defense of synopsis/research proposals should be completed within the 1st six semesters of the registration into a PhD program. In case of noncompliance, the registration shall be cancelled and transcripts for completion of coursework may be issued to the student.

RULES & REGULATIONS

1. ADMISSION PROCESS

- 1.1. PhD Degree Program is open to candidates who possess a minimum CGPA of 3.0 (out of 4.0 in the semester system) or 60% (in the annual system) in the MS/MPhil/equivalent degree, whether such degree was obtained from Pakistani or foreign universities. In case of foreign qualification, HEC equivalence shall be mandatory. If the CGPA/Percentage is not mentioned on the transcript, the candidate must produce equivalent weightage from the parent university.
- 1.2. Students having strong demonstrated interest in pursuing PhD degree, with a CGPA below 3.00 (out of 4.0 in the semester system) or 60% marks (in the annual system) in the most recent degree obtained, can be admitted to PhD program after fulfilling the following requirements. The minimum CGPA threshold of 2.5/4.0 for admission to doctoral degree programs shall however be satisfied.
- a. Studying additional courses of 9-12 CH of MS/MPhil/equivalent level by taking a zero semester at CECOS university having a minimum score of 3.00 out of 4.00 GPA in the courses, and
- b. The admission committee is satisfied that the applicant's knowledge of primary area (MS/MPhil/equivalent) sufficiently prepared him or her to undertake the course of studies of the doctoral program.
- 1.3. Candidates having completed their MS/MPhil or equivalent degree program by coursework are eligible to apply for admissions in PhD degree programs. However, such candidates must have a paper publication as first/corresponding author in a HEC recognized Journal.
- 1.4. The candidate must have passed GRE/HAT General test conducted by the university with at-least 60% marks. The GRE/HAT General or equivalent test (with at-least 60% marks) conducted by testing bodies accredited by HEC will also be acceptable.
- 1.5. The candidate(s) shall apply on a prescribed form duly filled along with Statement of Purpose, Curriculum Vitae and list of any previous research publications, two reference letters, official result of GRE/HAT-General Test, copies of SSC, HSSC, BS and MS degrees along with their transcripts on or before the last date prescribed by the university, after which no application shall be entertained.
- 1.6. The Statement of Purpose submitted by the candidate among other details must include the following:
- a. Title of the potential research proposal
- b. Clear articulation of the current understanding of the intended field and ideas for potential research
- c. Explanation of the intended impact of the proposed research

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- 1.7. The PhD Admission Committee will scrutinize the application(s) and conduct interviews of the applicant(s) to ascertain their preparedness, interest and motivation in pursuing doctoral studies in the chosen field.
- 1.8. The applicant(s) selected for admission in the PhD Program will be informed by the concerned Head of Department and their names will be notified on the notice boards of the concerned Department as well as Office of Graduate Studies. A PhD Supervisor and Co-Supervisor (wherever required) will be assigned to each doctoral student which will be duly notified by the Office of Graduate Studies.
- 1.9. The admission of applicant(s) shall be confirmed after depositing the prescribed fee within the period specified for this purpose.
- 1.10. No student will be admitted after two weeks of the start of the classes.
- 1.11. The Office of Graduate Studies will forward the particulars of newly admitted students to the Controller of Examination within a period of 30 days of the completion of admission process. The Controller of Examination shall assign registration number to each student, if not already registered.
- 1.12. Admission of any student is liable to be cancelled if his/her conduct at any stage is found unsatisfactory.
- 1.13. If a student wants to change the research topic after selecting a topic, he/she will submit his/her request to Research Supervisory Committee (RSC), which will decide about such cases keeping in view the availability of Research Supervisor for the selected field and other related issues.
- 1.14. Students registered for PhD program shall not be allowed to participate in any political or union activities.
- 1.15. The facility of hostel accommodation to PhD students shall be provided subject to availability.
- 1.16. The admission shall be denied to an applicant if any of the given particulars in the application form are found incorrect or facts suppressed. If any incorrect or false statement or suppression of fact is detected after a student has been granted admission, his/her admission shall be cancelled, and he/she will be expelled from the University by the Vice Chancellor at any time during the course of his/her studies.
- 1.17. An applicant who is already a bonafide full time student in some other institution is ineligible to apply for admission. If such case is detected, his/her admission shall be cancelled.
- 1.18. At the time of admission, selected applicant(s) shall submit an undertaking to abide by the Rules and Regulations of the University. This shall be according to the prescribed proforma on a non-judicial stamp paper and duly attested by a gazetted officer/Oath Commissioner. The PhD students shall also be bonafide students of the University and as such all rules and regulations regarding discipline and other provisions applicable to other students shall be equally applicable to them.
- 1.19. All the rules and regulations for MS Program marked with "Also, applicable to PhD students" mentioned under the heading "Rules & Regulations for MS Program" shall be equally applicable to PhD students.

2.PHD COURSEWORK

After being admitted in the PhD program, the student on the advice of PhD supervisor must complete minimum 18 Credit hour Course work securing minimum 3.00 CGPA in overall subjects with minimum "C" grade in each course. During the course of doctoral studies at CECOS University, the student has to register for each semester on a prescribed form which should include all the details related to courses and research. The student has to pay the prescribed registration fee for each semester, whether or not any courses are studied in that semester, to become a bonafide doctoral student in addition to the fee prescribed by the university for arrangement of processes related to research progress and dissertation evaluation etc.

3. QUALIFYING EXAMINATION

- 3.1. Following the completion of coursework, every PhD student will be required to pass the comprehensive examination to be granted candidacy as a PhD candidate.
- 3.2. Only one chance will be given to reappear in PhD Comprehensive Examination and if a student fails to pass the PhD comprehensive Examination for the 2nd time, his/her admission will be cancelled.
- 3.3. The comprehensive exam will be based on recapitulation of the conceptual knowledge of discipline to which the student is admitted.
- 3.4. The comprehensive exam will cover the courses studied, preferably at the graduate level, and will be conducted on one composite question paper.
- 3.5. The evaluation of comprehensive exam will be on an aggregate basis, expressed in terms of pass/fail and shall not be graded.
- 3.6. The respective HoD shall nominate Comprehensive Examination Committee comprising of three internal PhD faculty members and seek its approval from the Vice Chancellor through the Dean, Graduate Studies.
- 3.7. The committee shall preferably include the supervisor of the student and teachers with whom the student has studied his PhD courses.
- 3.8. The committee shall conduct both the written and oral comprehensive examinations of the student
- 3.9. After conducting both the written and oral part of the examination, the committee shall submit its result in terms of PASSED or FAILED to the OGS through respective HoD.

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4. RESEARCH SUPERVISORY COMMITTEE (RSC)

4.1. Composition

Soon after passing the Qualifying Examination, the PhD Supervisor will constitute the Research Supervisory Committee (RSC) which will be approved by the Vice Chancellor through Dean, Graduate Studies. The Research Supervisory Committee will comprise of the following members:

- a. PhD Supervisor/Convener of RSC: PhD faculty member from relevant department of CECOS University.
- b. Subject Expert 1: PhD in the relevant field- from within CECOS University or outside CECOS University.
- c. Subject Expert 2: PhD in the relevant field- from outside CECOS University
- d. Subject Expert 3: MS/ PhD (Preferable) from research organization/industry.

4.2. Role of Research Supervisory Committee (RSC)

The Research Supervisory Committee (RSC) will supervise the progress of PhD candidate throughout his/her PhD research and shall meet at least once per semester. It will also act as Examination Committee in PhD Viva-Voce Examination.

5. PHD RESEARCH PROPOSAL DEFENCE EXAMINATION

Based on extensive literature survey, the PhD candidate shall prepare a detailed research proposal and will defend it in front of Research Supervisory Committee within six months of passing PhD Comprehensive Examination. It will be an oral examination. In case of failure, only one chance will be given within next six months.

6. DOCTORAL RESEARCH MONITORING

Upon entering in PhD research phase, the research scholar has to prepare a road map in consultation with his/her Supervisor for undertaking research and specify time line for achieving various research targets. In addition to presenting his progress in front of RSC, the candidate shall submit biannual progress reports to the DGSC. The DGSC upon unsatisfactory progress shall evaluate the reasons, suggest remedial measures and/or may impose fine upon the student that shall not exceed the registration fee of a semester. During PhD Program, the students will be required to attend seminars, conferences, symposia and publish papers in HEC approved Journals. It will also be compulsory that the students shall attend the in-house Seminars and Symposia arranged by the University from time to time.

7. EXTERNAL EVALUATION OF PHD DISSERTATION

- 7.1. After completion of research work and its satisfactory report issued by RSC, the draft thesis shall be checked and cleared for plagiarism as prescribed by Higher Education Commission (HEC).
- 7.2. Upon completion of PhD Thesis writing, the External Thesis Evaluators will be approved by the Vice Chancellor chosen from the list submitted by the Supervisor through Dean Graduate Studies.
- 7.3. After approval of the thesis draft by the RSC for external evaluation and after clearing plagiarism check, the same draft shall be submitted to external evaluators by the OGS.
- 7.4. Satisfactory incorporation of external evaluators' suggestion in the thesis shall also be vetted by the RSC.

- 7.1. After completion of research work and its satisfactory report issued by RSC, the draft thesis shall be checked and cleared for plagiarism as prescribed by Higher Education Commission (HEC).
- 7.2. Upon completion of PhD Thesis writing, the External Thesis Evaluators will be approved by the Vice Chancellor chosen from the list submitted by the Supervisor through Dean Graduate Studies.
- 7.3. After approval of the thesis draft by the RSC for external evaluation and after clearing plagiarism check, the same draft shall be submitted to external evaluators by the OGS.
- 7.4. Satisfactory incorporation of external evaluators' suggestion in the thesis shall also be vetted by the RSC.
- 7.5. The PhD dissertation shall be evaluated by
- a. At least two external experts who shall be:
- i. PhD faculty member from the world top 500 universities ranked by the Times Higher Education or QS World Ranking in the year corresponding to dissertation evaluation year.

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ii. Pakistan-based Distinguished National Professors, Meritorious Professors from any national university; or professors from top universities ranked by HEC; or professors from any Pakistani University having a minimum H-Index 30 for Sciences, 15 for Social Sciences or 8 for Art & Humanities as determined by Web of Science.

OR

b. At least one external expert qualifying any one of the conditions mentioned at 'a' above if the PhD candidate publishes dissertation research in a peer-reviewed journal that is classified by the HEC in category W for Sciences and X or above for Social Sciences.

8. RESEARCH PUBLICATION

For award of PhD degree, a PhD candidate will have to publish research articles meeting the following criteria:

- 8.1. The article shall be published in a relevant research journal.
- 8.2. At least:
- a. One research article in W category journal or two research articles in X category journals, for Science disciplines
- b. One research article in X category journal or two research articles in Y category journals, for Social Science disciplines
- 8.3. A research article appearing online with valid DOI on website of an HEC's recognized research journal shall be considered published w.e.f. the date it appeared online with DOI.
- 8.4. The PhD candidate shall be the first author of these publications.
- 8.5. The research article shall be relevant to the PhD research work of the PhD candidate.
- 8.6. The article shall be published after approval of the research synopsis and before PhD Dissertation Public Defense Examination.
- 8.7. Category of the publication shall be based on its categorization in HJRS at the time of acceptance of the research article.

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9. PLAGIARISM

- 9.1. Under no circumstances shall a dissertation based on plagiarized research be acceptable. It is the primary responsibility of both PhD researchers and their supervisors to prevent plagiarism.
- 9.2. For Plagiarism COPE guidelines must be followed.
- 9.3. If a PhD dissertation is found to be plagiarized, it will be handled in accordance with the Anti-Plagiarism Policy of the university/issued by the Higher Education Commission, Pakistan, as updated from time to time.
- 9.4. A similarity test, in accordance with the University/HEC's Anti-Plagiarism Policy, must be conducted on the dissertation before its submission to the external experts by the student.

10. PHD DISSERTATION DEFENCE EXAMINATION

There will be announcement for PhD Dissertation Public Defence Examination after the satisfactory report from external evaluators along with each member of Research Supervisory Committee on the prescribed form. The Research Supervisory Committee will finally conduct the Viva-Voce Examination and submit its final report to the Dean, Graduate Studies who will notify the decision accordingly.

11. PHD DEGREE AWARDING REQUIREMENTS

In order to become eligible for the award of PhD degree, the student has to have passed the following:

- a. 6 courses with minimum 3.00 CGPA and not less than C grade in any subject.
- b. Any other courses made compulsory by Admission Committee
- c. PhD Comprehensive Exam
- d. External Thesis Evaluation
- e. PhD Dissertation Public Defense and Viva-Voce Examination
- f. Publication of research Paper(s) as mentioned above in clause "8. Research Publication"

12. GRIEVANCES

- 12.1. Grievances of the students related to academic matters, non-academic matters, assessment, victimization, discipline committee decision, harassment, the conduct of examinations and any other grievances shall be resolved and disposed off at departmental / faculty levels.
- 12.2. If the grievances have not been resolved at the departmental/ faculty levels, the Students Grievance Committee (SGC) will be authorized to consider and hear or otherwise dispose of students' grievances which may be determined by the competent authority.

13. RESEARCH/TEACHING ASSISTANTSHIP

A PhD student/candidate facing financial hardship may be offered a job as Research/Teaching assistant with reasonable monthly remuneration, subject to availability of relevant vacancy as per the university policy.

14. LEAVE OF ABSENCE

The student/candidate can avail leave in PhD studies with prior approval and subject to the condition that the he/she should not extend his/her PhD studies beyond maximum permissible period. He/she will have to apply for freezing the semester after paying the prescribed fee per semester. The maximum duration for completion of PhD degree will include the period of absence and no relaxation/time extension shall be given on the basis of leave of absence. No leave of absence shall be allowed for of the first semester.

15. SPLIT PHD DEGREE PROGRAM

The student can be admitted in Split PhD Program and rules for this purpose will be followed based on the collaboration with the relevant university abroad and/or following HEC criteria.

16. SPECIAL PROVISION

The President/Competent Authority of the University can relax certain Rules as and when required on the recommendations of the Statutory Bodies.

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Highly Ranked Government Chartered University of KPK



















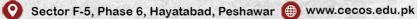






















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