The faculty has thrived to nurture an environment of discourse, engagement, and rooted connections with academia, industry, and other organizations. Our faculty and students have represented their research and knowledge through numerous scholarly, industry, and technical publications. Furthermore, our faculty pedagogy took on new and unique forms, including the introduction and implementation of Outcome Based Education (OBE).

We are fully delved into fostering a culture of continued reflection, learning, and action towards yielding inclusive and empowered graduates. There is still much work left to do and our commitment to transformative action will continue. Our academic staff is highly qualified, well equipped with international exposure and are involved in cutting edge research.

The vigor at Faculty of Engineering & Technology continues to inspire me each day. I am grateful for the work and support of our students, faculty, staff, alumni, and friends. Your contribution is what makes our progress possible. As we step confidently into the future, I look forward to introducing new programs, offerings, and ways of strengthening our faculty. I welcome you to join me as we open this next chapter of Faculty of Engineering & Technology's history together – one that will be full of growth and opportunity.

Prof. Dr. Engr. Intesar Ahmed
Dean Faculty of Engineering & Technology

FACULTY OF ENGINEERING & TECHNOLOGY

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DEPARTMENT OF ARCHITECTURE

DEGREE PROGRAM OFFERED

- B-Arch (5 years)
- Postgraduate Diploma in Heritage Management (1 Year-Evening Program)

OVERVIEW

A standardized built environment owns the potential to improve the quality of life, produces a sense of identity, and creates cultural values. Training an architect requires knowledge in a broad range of subjects in order to develop the ability to solve complex problems through creativity and design. Trained architects create spaces that function efficiently, brings all kinds of benefits for their users and value for their clients while responding to the local climate and culture. Architects and planners work with government and municipal authorities to help develop built environment policy with public and private sector clients to design and deliver individual projects and with local Page 2 of 9 communities to help realize their ambitions for the places in which they live. Their domain covers, National & Regional Planning, Master Planning of cities and towns, local areas / municipal planning etc. Architects deal with all types of building designs, urban design & regeneration, interior and landscapes etc. The promising projects initiated by Govt of Pakistan which includes Naya Pakistan Housing Schemes and Ravi Front by Urban Development Authority; are the new opportunities provided by the current Government in order to produce socially responsible & responsive construction trends for the larger segment of our country. In order to maintain the requirements and promotion of architectural education, Pakistan Council of Architects & Town Planners has always played an active role. The council is responsible for accreditation of Architecture School and standards and codes to retain the quality of architects and to ensure the credibility. Architect's License Examination has been introduced for the integrity and this Examination is taken by the PCATP for assessing applied knowledge and skill in relation to professional conduct and competence to practice as an Architect after they graduate and complete internship periods at registered architecture firms. In this regard Architecture Department at LCWU fulfills all the criterias and thus beholds an excellent record of collaboration with PCATP , IAP & HEC.

B-Arch Degree Program

- The name of the program is Bachelor of Architecture (B. Arch)
- The program is of five years duration (10 semesters)
- The medium of instructions is English

Achievements:

The Department of Architecture at LCWU has made a successful portfolio to standout in the architectural academia of the country with not just its urge for betterment in instilling the best into its students but also in engaging with the community at global level. The range of achievements isn't just restricted to the extraordinary response from the community for its pioneer batches but the collaborations with other institutions are also something

which the team of Architecture Department LCWU is proud of:
- MOU Signing with Hazara University, Hazara
- MOU Signing with Disaster Risk Mitigation Unit, PBSA Manilla, Phillipines
- Securing prominent positions within the Architectural Industry
- International Webinars in the times of pandemic
- Management of completely online mode of studies with excellence.

Post Graduate Diploma in Architectural Heritage Management

1 Year Program comprising 02 semesters will be an accomplished qualification for the candidates to secure jobs in public and private sector related to cultural heritage industry, tourism and conservation of architectural monuments.

OBJECTIVE:
- The main objective of this Postgraduate Diploma in Heritage Management is to advance existing and aspirant /architects/heritage practitioners'/archaeologists knowledge of heritage management at both institutional and community level.
- It will enable them to conceptualise, design and manage the rejuvenation and expansion of heritage as a vital component of Architecture & Archaeology Management.
- A focus of the course is to generate revenue on work or placement-based learning, i.e. the everyday practices and projects of heritage practitioners.
- The course will introduce participants to relevant theory and research to enable them to theorise and critique everyday heritage management practices, and conceptualise innovation worldwide.

OUTCOMES:
After engagement with the course processes and materials, students should be able to:
- Articulate a nuanced understanding of the social and historical embedding of heritage in a variety of institutional, local and global contexts.
- Be able to contribute with national and international (UNESCO) heritage policy environments and legislative frameworks, and demonstrate awareness of their impact on definitions of heritage and management thereof.
- Participate in key areas of practice in contemporary heritage management, including legal compliance, managing a team, curatorship, and grant applications.
- Show competence in implementing and analysing heritage impact assessments within the framework of heritage legislation and administration locally or globally.

COURSE STRUCTURE:
- Course duration: 1 year (Evening Programme)
- Number of Semesters: 2
- Total Credit Hours: 12 Cr Hrs. per Semester
- Course will run as 1 year evening program engaging students for 4 days a week subject to time table for almost 3 – 5 hours per day in a week.

ADMISSION REQUIREMENT:

Minimum 16 years of formal higher education in following degrees/disciplines from an HEC recognized institution.

1. B-Arch 5 Years
2. BSc Architectural Engineering
3. Bach. Archaeology

NATIONAL & INTERNATIONAL COLLABORATIONS:

Regular seminars and workshops are arranged by Department of Architecture in collaboration with academic and industry partners. The following national level partners have been eminent in this regard:

1. Directorate of Building & Research Station , C& W Govt. of Punjab
2. Overseas Pakistani Commission , Govt. of Punjab
3. Directorate of Archeology , Govt. of Punjab
4. TEVTA Secretariat , Govt. of Punjab
5. Punjab Disaster Management Authority , Govt. of Punjab

A strategic collaboration amongst Architecture Department , DRMU PSBA and Quezon City Govt was established producing a tri-party forum offering 02 scholarships for Masters in Architecture at University of Philippines , sponsored by PSBA to graduates of Architecture Department LCWU ; in addition to the 06 months paid internship program for under graduate students of Architecture Department at QCG Mayor Office , Manilla , Philippines.

- Disaster Mitigation visit conducted to Oversees Pakistanis Commission Office where the Vice Chairman Ch. Waseem Akhtar Raamay enlightened students with the upcoming measures and strategies to mitigate floods and other disasters in the Punjab region. Provincial Minister of Punjab for housing, urban development and public health engineering also joined and discussed about various aspects of the River Ravi Front Urban Development project in detail.
- Lahore College for Women University takes pride in conduction of the juries as per the guidelines of our council to provide a better insight to the students about their work. Not only in final year but the years that prior to its students are trained to present their project in professional way through these juries.

Eligibility Criteria for Admissions

- A Levels (Pre-Engineering)
- F.Sc (Pre- Engineering)
- Intermediate with Physics, Mathematics and Computer Science
- Minimum 60% marks in Intermediate
- Aptitude test (English, Mathematics, Drawing and Creative skills)
- It is mandatory for the students to pass the test with 50% marks.

List of Permanent Faculty:

- **Ar. Yasmeen Abid Maan,** Incharge, (MPCATP) (Associate MIAP) Ph.D. (PU) -Masters in Architecture (PU) Bachelors in Architecture (UET,Lahore)
- **Ar. Maliha Khalid,** Asst. Professor, (MPCATP), Masters in Architecture (PU), Bachelors in Architecture (UET, Lahore)
- **Ar. Asia Jabeen,** Asst. Professor, (MPCATP), Ph.D. (Department of Architecture, UET) – On-going Masters in Architecture (UET) Bachelors in Architecture (UET, Lahore)

- **Ar. Beenish Usman,** Lecturer (MPCATP)M.S in Environmental Design (Allama Iqbal Open University) Bachelors in Architecture (UET,Lahore)
- **Ar. Nida Qanber Abbasi,** Lecturer, (MPCATP) (MIAP), Masters in Architecture (PU) Bachelors in Architecture (COMSATS, Lahore)
- **Ar. Maryam Jamil,** Lecturer, (MPCATP) (MIAP), Masters in Architecture (UET, Lahore) Bachelors in Architecture (UET, Lahore)
- **Ar. Khizra Shahzad,** Lecturer, (MPCATP), Masters in Architecture (PU, Lahore) on-going Bachelors in Architecture (LCWU)

List of Visiting Faculty:

- **Prof Dr. Abdul Rehman,** Professor, (MPCATP),(MIAP), Former-Chairman - (UOG) Former-Director: (School of Architecture & Design, UET, Lahore), Ph. D: 'Ion Mincu' Institutul de of Arhitectura, Bucharest, Romania. Author of Doxiadis Dynapolis: Architecture and Planning of Islamabad. Habib ur Rehman Research Foundation, Maryland, 2020
- **Ar. Sana Aleem, Lecturer,** (MPEC), M.Sc. in Architecture and Environmental Design (University of Westminster, UK), B.Sc. Architectural Engineering (UET, Lahore) Architect at Zamana Studios
- **Ar. Amna Bashir,** Lecturer, (MPCATP), M-Arch (UET, Lahore) on-going, Bachelors in Architecture (LCWU)
- **Ar. Fareena Shahid,** Lecturer, (MPCATP), M-Arch (UET, Lahore) on-going Bachelors in Architecture (LCWU), Architect at Designs-Architects, Engineers, Designers.Digital Artist (Illustrations and Visual Arts, 2020)
- **Ar. Usman Kazmi.** Lecturer, (MPCATP), Bachelors in Architecture (UET, Abbotabad) M.Arch (UET, Lahore)

HONORARY FACULTY

- **Prof Dr. Tabasum Raza,** Associate Dean of Graduate School of Business (GSB) Director of Disaster Risk Management Unit, GSB, Philippines School of Business Administration (PSBA) - Manila, Philippines.
- **Prof Dr. Siddiq A Akbar,** Professor, (Life Member-PCATP), Ex-Chairman University of Engineering and Technology, Lahore.
- **Prof. Dr. Nobert Lechner,** Professor Emeritus in the College of Architecture, Design, and Construction at Auburn University, Alabama USA

NON TEACHING STAFF

- Mr. M. Safeer (Lecturer Assistant)
- Mr. Hamza Hussain (Architecture Lab Supervisor)
- Kashif (Naib Qasid)
- Irfan (Naib Qasid)
- Shabana (Lab Attendant)
- Waqas (Lab Attendant)

Contact Details:

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DEPARTMENT OF CITY & REGIONAL PLANNING

DEGREE PROGRAM OFFERED

- BS City & Regional Planning (BS, Regular)
- BS City & Regional Planning (BS Self-Supporting Program)
- BS Disaster Management Program (BS Self-Supporting Program)

OVERVIEW

City and Regional Planning (CRP) Department is first department of its kind in a Women University in Pakistan with broader objective of mainstreaming gender in development. The establishment of the CRP Department at LCWU was recommended by the National Curriculum Review Committee (NCRC) on City and Regional Planning in its meetings held at Higher Education Commission (HEC), Regional Office, Karachi. The recommendation to establish CRP department at LCWU was presented by Dr. M. Atiq ur Rahman which was endorsed by the representatives of Pakistan Council of Architecture and Town Planning (PCATP) in NCRC-CRP. As an outcome of the recommendation of NCRC-HEC, the Syndicate of LCWU approved the establishment of CRP Department in the year 2012. The department is accredited by Pakistan Council of Architects & Town Planners (PCATP) vide letter number NO.PCATP/LCWU-CRP-LHR/10/16 dated October 24, 2016. The department has produced 148 qualified Town Planners and aims to add around of 200 Town Planners by the year 2025 as a contribution to strengthen national human resource in the field of City and Regional Planning. Most of the graduates are doing jobs in public and private sector and many are pursuing higher studies in the field of City and Regional Planning in institutions such as NUST, PU, UET and abroad. The Department has established a new program of BS Disaster Management. Under this program, the department aims to produce qualified Disaster Managers having scope of job opportunities in Rescue 1122, National Disaster Management Authority (NDMA), Provincial Disaster Management Authority (PDMA) and other NGOs as well as private sector.

Overview of Disaster Management Program:

Disaster management is an emerging discipline and Pakistan lacks qualified Disaster managers and professionals for future needs.

Besides that the International Conference held in Sendai, Japan has formulated a new framework for Disaster Risk Reduction (SFDRR) which has superseded the Hyogo Frame work for Action (HFA).The close inter-linkages between sound Disaster Risk Reduction,environmental management and climate change impacts and land useplanning require a more systematic and comprehensive approach to disaster management. Considering the importance of Disaster Management for all professions (Doctors, Engineers, Planners, Military officers, Social Scientists, Logisticians, Risk Managers, Decision Makers, etc.) proper education and training is required.

There is a severe shortage of qualified and trained professionals in this field besides that gender mainstreaming also very important aspect of the discipline therefore it was highly recommended by the international community where the role of women must be of prime importance. Hence, the recommendation to establish disaster management self-Supporting) department at LCWU was given by Prof. Dr. M. Atiq Ur Rahman endorsed by Syndicate of LCWU in its 71st meeting held on 6th–August-2019 vide letter Reg/LCWU/1992/Dated 23-August-2019. HEC also Comments in favor of LAUNCH OF BS DISASTER MANAGEMENT PROGRAM IN LCWU vide letter no.HEC/ACAD/LCWU/BS: DM/2020 July 17, 2020. Disaster Management is an inter-disciplinary and multi-disciplinary academic field devoted to various aspects of disaster management across societies and cultures. This program aspires to provide disaster management professionals and specialists for public and private sector Organizations, Institutions and Authorities who can plan, manage, and evaluate interventions in the field of disaster management.

International Linkages:

- Prof. Dr. Tatsuro Sakano-Lab, School of Environment and Society, Tokyo Institute of Technology (TITECH), Japan.
- Prof. Dr. Hideharu Morishita-Lab, Department of Policy Studies, Aichi Gakuin University (AGU), Japan
- Prof. Dr. Takeshi Komai-Lab, Department of Environmental Studies, Graduate School of Environmental Studies, Tohoku University, Sendai, Japan
- Philippine School of Business Administration (PSBA), Manila, Philippines (Included in World Higher Education Database (WHED) and listed in United Nations Educational, Scientific and Cultural Organization's (UNESCO) and the International Association of Universities (IAU) i.e. IAU/UNESCO List)
- School of Urban and Regional Planning (SURP), University of the Philippines
- International Society of City and Regional Planners (ISoCaRP), Netherlands
- Prof. Dr. Dietwald Gruehn, Chair of Landscape Ecology and Landscape Planning School of Spatial Planning, TU Dortmund University, Dortmund, Germany

The Department has also initiated collaborative academic activities with the respective faculty/members of the following local and international institutions:

- National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan
- School of Spatial Planning, TU Dortmund University, Dortmund, Germany
- University of Western Sydney, Australia
- International Center for Literacy and Culture (ICLC), Tokyo
- Asian Institute of Technology (AIT), Bangkok, Thailand
- United Nations Development Program (UNDP), Islamabad
- Federal Ministry of Climate Change, Islamabad
- Institute of City and Regional Planning, Japan
- SHARP-SOLAR, Japan
- National Disaster Management Authority (NDMA), Islamabad
- Provincial Disaster Management Authority (NDMA), Punjab
- UK Emergency Response Team, UK
- Rescue 1122
- Japan International Cooperation Agency (JICA), Islamabad
- UNHABITAT, Islamabad

Learning Objectives

Following are the major objectives of the City and Regional Planning department that will be implemented at LCWU in the light of NCRC-CRP-HEC approved curriculum:

Vision:

Contribute towards enhancing the quality of life and environment of diverse populations from varied human settlements through participatory, equitable and inclusive sustainable development

Mission:

- Impart knowledge and skills to produce empowered, creative, values driven and motivated City and Regional Planners capable of meeting the challenges of contemporary and future human settlements thereby adding to knowledge economy within local and global context.
- Develop ability to deal with the emerging planning problems and development issues at the urban and regional scales while considering ground realities.
- Inculcate skills of leadership, entrepreneurial creativity, cost benefit analysis, planning and spatial data analysis, equity, ethics, decision making, advocacy and public involvement.
- Equip the students with theoretical knowledge and field experience so that they can pursue career in planning and development sectors at national and international levels and promote sustainable development.

Learning Outcomes

The graduates of City and Regional Planning are associated with International Society of City and Regional Planners (ISoCaRP) for international exposure and professional practice at national and international level. Our graduates have secure career path with maximum employment opportunities at local, provincial and federal level in different ministries and departments as well as in international development agencies and private sector. The department also assists to arrange foreign funded scholarships and international training opportunities for brilliant and talented students for higher education abroad.

BS CRP Program

Eligibility Criteria

- F.Sc.(Pre Engineering)/ICS/General Science(Statistics, Math and Economics)
- Admission is based on Open Merit and Eligibility Criteria is minimum of 60% marks. Department may conduct its own entry test/interview if required. Entry Test of UET is acceptable, but it is not a compulsory requirement.

Duration: 4 years   **Total Credit Hours:** 133 (Th. 82 & Pr.51)

Learning Objectives/ Learning Outcomes of Disaster Management

Following are the major objectives of the disaster management department that will be implemented at LCWU in the light of HEC approved curriculum:

- To inculcate the ability to apply knowledge of science to the solution of complex disaster problem
- Students must be able to design solutions for prevention, preparedness, mitigation and response to disaster situations.
- To know how to carry out vulnerability and risk assessments in a methodical way?
- To create, select and apply appropriate techniques, resources, and modern tools to complex disaster activities.
- To work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

- To communicate effectively, orally as well as in writing on complex disaster management projects with the community and society at large.
- To demonstrate management skills and apply disaster management knowledge to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.
- To apply ethical principles and commit to professional ethics and responsibilities and norms of disaster management practices.

BS (04 YEARS) PROGRAMME Disaster Management

Eligibility

FSc. (Pre-Engineering and Pre Medical) OR FA with Mathematics, Biology, Statistics, Computer Science, Geography, Economics and Commerce

Duration

4-year programme spread over 8 semesters

Degree Requirement

Minimum of 124 credits are required to complete 4 years BS in Disaster Management.

List of Permanent Faculty:

- **Prof. Dr. M. Atiq ur Rahman,** (Chairperson/Professor)
- **Ms. Attiya Haseeb,** Assistant Professor (on study leave)
- **Ms Siddiqa Amin,** Assistant Professor
- **Ms Maria Ali,** Lecturer
- **Hafiza Saba Islam,** Lecturer
- **Ms Faryal Khalid,** Lecturer
- **Ms Arwa Tariq,** Lecturer
- **Ms Iqra Ismail,** Lecturer
- **Ms Amna Shoaib,** Lecturer
- **Ms Atia Saleemi,** GIS Analyst
- **Ms Kashmala Tahir,** Teaching Assistant

List of Visiting Faculty:

- **Prof. Dr. Shaker Mahmood Mayo,** (Chairman/ Professor, City and Regional Planning (CRP), UET, Lahore)
- **Prof. Dr. Ijaz Ahmad,** (Professor, City and Regional Planning (CRP), UET, Lahore)
- **Syed Nadeem Akhter Zaidi,** (Visiting Assistant Professor), Chief Town Planner (LDA) M.Sc. Urban Design, University of Hong Kong
- **Muhammad Nadeem,** (Visiting Assistant Professor), M.Sc. Rural and Regional Development Planning, Asian Institute of Technology (AIT), Bangkok, Thailand.

List of Honorary Faculty (National)

- **Prof.A.Sattar Sikandar,** (Ex-Dean, Faculty of Architecture and Town Planning, University of Engineering and Technology (UET), Lahore)
- **Prof. Dr. Qamar ul Islam,** (Ex-Chairman, CRP Department, UET, Lahore/ APA Planning Ambassador USA)
- **Plnr. Aslam Mughal,** (Ex-President, Institute of Planners, IPP, Pakistan)
- **Plnr. Waheed Ahmad Butt,** Ex-Chief Metropolitan Planner (CMP), (LDA), Lahore
- **Plnr. Khalid Mahmood Sheikh,** Ex-Chief Town Planner, (LDA), Lahore

- **Plnr.Mubashar Hussain,** Manager-Disaster Risk Reduction (DRR), National Disaster Risk Management Fund (NDRMF), Islamabad
- **Mr.Zia ul Haq,** Ex-Regional Director, Pakistan Council of Research on Water Resources (PCRWR), Govt. of Pakistan.
- **Brigadier (Retired) Syed Fiaz Hussain Shah,** Senior Capacity Building Specialist (SCBS), National Institute of Disaster Management (NIDM), Islamabad.
- **DR. RIZWAN NASEER(Sitara-e-Imtiaz),** Founder Director General, Punjab Emergency Services (Rescue 1122)
- **Nisar Sani,** Project Director at the World Bank, Director Operations Provincial Disaster Management Authority, Govt of the Punjab.
- **Prof. Dr. Nasim H. Ansari,** Ex-Chairman, Department of City and Regional Planning (CRP), (UET), Lahore.
- **Prof. Tariq Habib Malik,** Ex-Faculty, Department of City and Regional Planning (CRP), (UET), Lahore

List of Honorary (Foreign)
(Lectures through Video conferencing)

- **Prof. Dr. Tatsuro Sakano,** Tokyo Institute of Technology (TITECH), Japan
- **Prof. Dr. Hideharu Morishita,** Aichi Gakuin University (AGU), Japan
- **Prof. Dr. Takeshi Komai,** Tohoku University, Tohoku, Sendai, Japan
- **Prof. Dr. Chihiro Inoue,** Tohoku University, Tohoku, Sendai, Japan
- **Prof. Dr. Shigemochi Hirashima,** Professor Emeritus, Meiji-Gakuin University, Japan; Visiting Senior Advisor, Japan International Cooperation Agency (JICA).
- **Shoji Hasegawa,** Expert on Disaster Management at NDMA, Japan International Cooperation Agency (JICA), Islamabad
- **Dr. Tabassam Raza,** Associate Dean and Director of R&E, Planning and International Linkages (PIL), Philippine School of Business Administration (PSBA), Philippines
- **Mr. Ricardo R. Abreu,** Vice Dean, Undergraduate Studies, Philippine School of Business Administration (PSBA), Philippines
- **Ms. Liwag Carmelita Rosario,** School of Urban and Regional Planning (SURP), The University of Philippines, Manila
- **Prof. Dr. Dietwald Gruehn,** Chair of Landscape Ecology and Landscape Planning, Adjunct Professor MSU (USA), CNU (Korea), School of Spatial Planning, TU Dortmund University, Dortmund Germany.
- **Dr. Shinji Tajima,** Ex-JICA Advisor (for Govt. of Pakistan), Executive Director, International Center of Literacy and Culture (ICLC), Tokyo, Japan
- **Prof. Dr. Mario R. Delos REYES,** Dean, School of Urban and Regional Planning, University of the Philippines
- **Dr. Awais Latif Paracha,** New South Wales University, Australia

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DEPARTMENT OF COMPUTER SCIENCE

DEGREE PROGRAM OFFERED

- BS Computer Science (Regular Morning & Self-Supporting Evening)
- MS Computer Science (Regular Morning & Self-Supporting Evening)
- Ph.D. Computer Science

OVERVIEW

The history of the Department of Computer Science dates back to 1996 when it was started as a computer centre by the grant provided by Ministry of Social Work and Women Development. The Department started ICS classes in 1997 in addition to offering Short Courses and Diplomas. The Lab facilities were extended with the grant from Punjab Information Technology Board and started BCS classes in 1999. The Department started 4 year BSCS degree program in 2000 and expanded its facilities in 2001 with the funding provided by Higher Education Commission. MSCS degree program was introduced in 2002. The Department was shifted in its new building in 2005. The Department started PhD degree program in 2011. The Department expanded its infrastructure further with the construction of a new block funded by Ministry of Information Technology and Telecommunication in 2015 to offer students a nurturing innovative environment. BSCS and MSCS self-support evening degree programs were started in 2020. Currently, the Department is equipped with high speed internet of 400 MB bandwidth supported by fibre backbone, and video conferencing facility. There are a total of 07 Computer Labs. Departmental library has over 15000 books. Moreover, the Department has access to international journals and scholarly publications through HEC Digital Library.

Learning Objectives:

The Department strives to produce highly skilled professionals who apply specialist skills and knowledge to everyday workplace situations. Besides having highly developed technical abilities, they are expected to carry out research and to keep their knowledge continually up-to-date. Most importantly, they are required to have excellent communication skills.

Outcomes:

To set pace in the field of technology, the Department has designed several degree courses that provide balanced coverage of the various aspects of Computer Science.

- Depth and breadth of knowledge in computer science as evidenced by an understanding of computing systems and science coupled with the capacity to produce feasible and responsible solutions to complex computing problems.
- Literacy as evidenced by skills in writing, reading, speaking, and listening.
- Critical thinking as evidenced by skills in interpretation, analysis, evaluation, inference, argumentation, and reflection.

- Values as evidenced by the ability to make reasoned and ethical choices and to accept responsibility for them.
- Interpersonal skills as evidenced by leadership ability, appreciation for diversity, and the capacity to work effectively with others.
- Life-long learning skills as evidenced by the ability to adapt to innovation and change.

BS Computer Science

The BS Computer Science is a four year Degree Program, comprising of 133 Credit Hours.

Learning Objectives:
- To produce quality graduates equipped with a wide breadth of knowledge
- To develop strong critical, analytical and logical thinking in the graduates
- To establish effective communication and interpersonal skills in the graduates

Outcomes:
- The program will establish foundations for further learning and education
- The program will prepare such professional as to fulfill the need of industry
- The program will produce graduates with convincing capabilities

Eligibility Criteria for BS Computer Science:
Intermediate or equivalent with Mathematics or Computer Science subject. Equivalence must be from IBCC.

MS Computer Science

The MS Computer Science is a two year Degree Program, comprising of 31 Credit Hours.

Learning Objectives:
- To produce quality graduates equipped with a focused depth of a specialized domain of computing knowledge
- To establish effective communication and interpersonal skills in the graduates
- To develop a strong and critical reasoning necessary for research

Outcomes:
- The program will prepare such professional as to uplift the economic situation of the country
- The program will strengthen the foundations for further learning and research
- The program will produce graduates with convincing capabilities

Eligibility Criteria for MS Computer Science:
- BSCS (4 Years) or B. Sc. Computer Science (Hons.) (4 Years) or MCS or MIT or M. Sc. Computer Science or Equivalent. Equivalence must be from HEC.
- The candidates must have obtained 2.5/4.00 CGPA in semester system or 50% marks in annual system.
- Entry test (50% qualifying marks) and interview organized by university is mandatory for admission.
- All other requirements as per university policy (Please see University admission criteria for MS).

Ph.D. Computer Science

The Ph.D. Computer Science Degree Program comprises of 18 Credit Hours of Course Work, and Research Work.

Eligibility Criteria for Ph.D. Computer Science:
- Minimum CGPA 3.0 (out of 4.0 in the Semester System) or 1st Division in Annual System) in MS / M.Phil / Equivalent degree in Computer Science. Equivalence must be from HEC.
- Entry test (70% qualifying marks) and interview organized by university is mandatory for admission in Ph.D. program.

- Candidates working in Government/semi-government institutions have to submit NOC from concerned organization.
- All other requirements as per university policy (Please see university admission criteria for Ph.D).
- Admissions in Ph.D. program will be carried out twice a year, in spring and in autumn depending on the availability of seats.

List of Faculty:

- **Dr. Muhammad Abuzar Fahiem,** Professor, Ph.D.
- **Dr. Nadia Kanwal,** Associate Professor, Ph.D (on Leave)
- **Dr. Saima Farhan,** Associate Professor & Chairperson of Department, Ph.D.
- **Dr. Huma Tauseef,** Associate Professor, Ph.D.
- **Dr. Mariam Nosheen,** Assistant Professor, Ph.D.
- **Dr. Ayesha Iqbal,** PhD, Assistant Professor
- **Dr. Maria Saleemi,** Assistant Professor, Ph.D.
- **Dr. Komal Bashir,** Assistant Professor, Ph.D.
- **Ms. Humaira Kauser,** Assistant Professor, MS.
- **Dr. Faria Kanwal,** Assistant Professor, Ph.D.
- **Dr. Maria Anjum,** Assistant Professor, Ph.D.
- **Dr. Fahima Tahir,** Assistant Professor, Ph.D.
- **Dr. Ayesha Afzaal,** Assistant Professor, Ph.D.
- **Dr. Fatima Anjum,** Assistant Professor, Ph.D.
- **Ms. Sidra Rafique,** Lecturer, MS.
- **Ms. Rabia Javed,** Lecturer, MS (on Leave)
- **Ms. Khansa Atif,** Lecturer, MS.

Support Staff

- **Ms. Wajeeha Malik,** Computer Instructor, MS.
- **Ms. Ambreen Amna,** Computer Instructor, MS.
- **Ms. Attia Anis,** Computer Instructor, MS.

Technical Staff

- **Mr. Syed Sibtain ul Hassan,** Web Administrator
- **Mr. Taimur Salam,** System Administrator
- **Dr. Usman Ahmad,** Assistant Database Administrator
- **Ms. Syeda Saira Kazmi,** Web Coordinator
- **Mr. Muhammad Javed Iqbal,** Assistant Data Processor
- **Mr. Irfan Ghaffar,** LAN Technician
- **Ms. Rabia Zahoor,** Computer Lab Supervisor
- **Ms. Amna Alamgir,** Computer Lab Supervisor
- **Ms. Affifa Gul,** Computer Lab Supervisor
- **Mr. Muhammad Naeem,** Computer Lab Supervisor
- **Mr. Muhammad Asim,** Computer Lab Supervisor
- **Mr. Muhammad Athar,** Computer Lab Supervisor
- **Mr. Shakeel Zada,** Computer Lab Supervisor
- **Ms. Qurat ul Ain,** Computer Operator/ Data Entry Operator
- **Mr. Mussadiq Karim,** Junior Computer Operator
- **Mr. Ahmad Anwer,** Junior Computer Operator

Contact Details:

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DEPARTMENT OF ELECTRICAL ENGINEERING

DEGREE PROGRAM OFFERED
- Bachelor in Electrical Engineering (B.E. Electrical)
- Masters in Electrical Engineering (MS-EE)

OVERVIEW

Department of Electrical Engineering (DEE) at Lahore College for Women is providing quality education to produce qualified female engineers who can address the modern challenges and excel at national and international level. The department has successfully obtained accreditation from Pakistan Engineering Council (PEC) from first batch starting in 2004-2008 till 2016-2020. DEE has implemented the Outcome Based Education (OBE) system in fall 2018 as per the requirement of Pakistan Engineering Council. Current strength is about 200 students who are pursuing bachelor's degree in Electrical Engineering. Since 2013, MS Electrical Engineering has been started and running successfully. Our graduates are working in the National and International Organizations successfully. Many are providing their services in Telecommunication, Electronics, Academics, Management and Power Sector.

Department Mission

To be one of the leading programs of Electrical Engineering education, research and innovation that produces quality female graduates who are capable of taking leadership positions in broader aspects of Electrical Engineering and can exhibit excellence in academia, industry, technology, economics and social enrichment of community at large.

Program Educational Objectives (PEOs)

The educational Objectives are to prepare graduates through a continued learning process for the broad range of opportunities available in industrial, commercial and academic organizations. The Program Educational Objectives are:

Table 1. Program Educational Objectives for DEE

PEO1 Professionals – Acquire learning concepts, techniques, skills and tools for designing electrical engineering systems.

PEO2 Problem solvers –Enhancement of professional skills through formal education which enables problem solving at industrial level and a sharpened ability to successfully pursue graduate study and research.

PEO3 Team Players – An ability to work independently as well as collaboratively with others, and to have demonstrated leadership, accountability and initiative responsibility.

PEO4 Intellectuals - A commitment to ethics, social and environmental responsibility, lifelong learning attitude with efficiency and effectiveness.

Learning Outcomes

The following are the Program Learning outcomes of the DEE opted from Pakistan Engineering Council.

Table 2. Program Learning Outcomes for DEE

PLO1 Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO2 Problem Analysis: An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO3 Design/Development of Solutions: An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO4 Investigation: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

PLO5 Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO6 The Engineer and Society: An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

PLO7 Environment and Sustainability: An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

PLO8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO9 Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

PLO10 Communication: An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions

PLO11 Project Management: An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO12 Lifelong Learning: An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

B.E. Electrical Engineering

Eligibility Criteria for the degree program BE. Electrical

- F.Sc (Pre-Engineering) / DAE (Electronics/Electrical) / B.Sc. (Math, Physics, and Chemistry) with 60% are eligible to apply.

Merit Criteria

Merit Criteria for B.E. Electrical

Criteria	Merit Aggregate
Combined Entry Test Conducted by UET, Lahore 2021 (Subjects: Math, Physics, Chemistry, English)	30%
Intermediate Marks	70%

Note: UET Entry Test Result for the year 2021 must be attached with the submitted form. Admission will be made on open merit (Punjab domicile). Reserved seats will be included as per university criteria.

Duration: 4 years   **Credit hours:** 130-136 CH

MS Electrical Engineering MS-EE

Eligibility criteria for the degree program MS-EE

- 16 years of education in Electrical/Electronic Engineering (securing a minimum of 60% marks / CGPA of 2.5/4.00)
- Candidate must have valid PEC registration number
- Entry Test with 50% qualifying marks and interview organized by department is mandatory for admission.
- Merit is constituted based on Academic-60%, Test-25% and Interview-15%.

Duration: 2 years   **Credit Hours:** 30 CH , **with Thesis work:** (24+06)
                                                              without Thesis work: (30)

List of Permanent Faculty:

- **Prof. Dr. Intesar Ahmed,** Professor, Dean, Faculty of Engineering and Technology, Ph.D. (Adelaide University, Australia)
- **Dr. Sadia Murawwat,** Chairperson of the Department, Associate Professor, Ph.D. (BIT, P.R China)
- **Dr. Aqsa Shabbir,** Associate Professor, Ph.D. (Ghent University, Belgium & LMU Munich, Germany)
- **Mr. Sajjad Rabbani,** Assistant Professor, Ph.D. (UCP, Lahore)(Cont.)
- **Ms. Nausheen Bilal,** Assistant Professor, PhD (NUST, Islamabad)(Cont.)
- **Dr. Taskeen Raza,** Assistant Professor (TTS), Ph.D. (PIEAS), Islamabad
- **Mr. Umar Rana,** Lecturer, BS.c (UOL, Lahore)
- **Ms. Faiza Iftikhar,** Lecturer, Ph.D. (LUMS, Lahore)(Cont.)
- **Ms.Ahlam Jameel,** Lecturer, Ph.D. (UCP, Lahore)(Cont.)
- **Ms. Aisha Jilani,** Lecturer, MS (LCWU)
- **Ms. Ismat Hira,** Lecturer, MS (UET, Lahore)
- **Ms. Asima Kiran,** Lecturer, MS (LUMS, Lahore)
- **Ms. Fatima Qazi,** Lecturer, MS (UET, Lahore)
- **Ms. Ayesha Tariq,** Lab Engineer, MS (LCWU)
- **Ms. Rimsha Musharraf,** Lab Engineer, MS (UMT, Lahore)(Cont.)

Contact details:

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DEPARTMENT OF SOFTWARE ENGINEERING

DEGREE PROGRAM OFFERED

- Bachelor of Science in Software Engineering (BS-SE)

OVERVIEW

The vision of Department of Software Engineering, Lahore College for Women University Lahore is to empower the females by making them technically strong in the various disciplines of Software Engineering, so that they could contribute effectively and efficiently towards the nation and the society with their state-of-the-art ideas, up-to-date research, entrepreneurship, leadership and a vigorous positive learning attitude.The mission of the Department of Software Engineering, Lahore College for Women University Lahore is to excel in the field of software engineering by making significant research contributions and software development activities to international standards to recognize the department at various levels. The department is also very keen to provide an opportunity to female students to get research oriented degrees. Software engineers apply the principles and techniques of computer science, engineering, and mathematical analysis to design, develop, test, and evaluate software systems. Department of Software Engineering at Lahore College for Women University Lahore offers a comprehensive undergraduate curriculum that will formulate female students to be industry leaders in computing or software engineering. In the recent world, the current demand for software engineers is quite high. It is because of the advancement and needs of computer systems in all aspects of life.

Learning Objectives:

Software plays a central and underpinning role in almost all aspects of daily life: communications, government, manufacturing, banking and finance, education, transportation, entertainment, medicine, agriculture, and law. The number, size, and application domains of computer programs have grown dramatically; as a result, huge sums are being spent on software development. Most people's lives and livelihoods depend on this development's effectiveness. Software products help us to be more efficient and productive. They provide information, make us more effective problem solvers, and provide us with safer, more flexible, and less confining work, entertainment, and recreation environments. Software Engineering is the application of a systematic, disciplined and quantifiable approach to the design, development, operation, and maintenance of software systems. It is in fact the practice of designing and implementing large, reliable, efficient and economical software by applying the principles and practices of engineering. The department aims to train students in all aspects of the software life cycle from specification through analysis and design to testing, maintenance and evolution of software products. The Department of Software Engineering is committed to producing highly qualified female software engineers with strong analytical and development skills to deal with the recent challenges in real life and play an effective role in the development of the information technology sector of the country.

The Department of Software Engineering at LCWU Lahore is committed to empowering women and giving them an opportunity to become highly professional software engineers who can cope with modern challenges by providing them with an excellent learning and research environment. The faculty of the Department of Software Engineering graduated from renowned national and foreign universities. They are all experts in various core areas of software engineering and leave no stone unturned to empower software engineering students to cope with the current challenges of the software industry. The experience of the faculty members in software development and their linkage in various industries will also play an important part in grooming the capabilities and morale of female students according to the recent trends of the software market.

Outcomes

Knowledge application of mathematics,science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems. Learn to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences. Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety,cultural,societal,and environmental considerations. Investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

Enable students to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations. Learning the application of reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems. Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development. Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

Work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings. Communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.Demonstration of management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment. Recognizing the importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

Bachelor of Science in Software Engineering (BS-SE)
Eligibility Criteria

The minimum requirements for admission in a Bachelor degree program in Software Engineering, is at least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics certified by IBCC.

Program Duration: 4 Years (8 Semesters)   **Total Credit Hours:** 130

List of Specialized Courses

Sr. No.	Specialized Courses	Credit Hours
1	Agent-based Software Engineering	3-0
2	Big Data Analytics	3-0
3	Cloud Computing	3-0
4	Computer Graphics	3-0
5	Data Encryption and Security	3-0
6	E-Commerce	3-0
7	Game Application Development	3-0
8	Global Software Development	3-0
9	Information System Audit	3-0
10	Management Information Systems	3-0
11	Mobile Application Development	3-0
12	Multimedia Communication	3-0
13	Natural Language Processing	3-0
14	Real Time Systems	3-0
15	Semantic Web	3-0
16	Software Engineering Economics	3-0
17	Software Metrics	3-0
18	System Programming	3-0
19	Topics in Software Engineering	3-0
20	Visual Programming	3-0

List of Permanent & Visiting Faculty:

- **Dr. Muhammad Mohsin Nazir**, In charge, Associate Professor, PhD (AIT, Thailand)
- **Ms. Aasma Akram,** Lecturer
- **Ms. Ayesha Rafique,** Lecturer

Contact Details:

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