PROSPECTUS
2016-17
DISCOVER YOURSELF
INSPIRE POSTERITY

THE UNIVERSITY OF LAHORE

www.uol.edu.pk
WELCOME
We welcome you all to visit and become part of the fastest growing private sector multi-discipline chartered university of Pakistan. The University of Lahore was established in 1999 and received its charter in 2002, since then, it has become the largest private sector University of Pakistan with more than 150 degree programs. The University offers a place for all who have the desire to learn the most contemporary programs available in Pakistan. The University holds a high international ranking with largest international student body from across 15 countries.

VISION
The University of Lahore aspires to become a nationally and internationally recognized university that distinguishes itself as an imbedding center for outstanding ethical and moral values, teaching quality, learning outcomes, and richness of the student experience. The University of Lahore envisions a transformative impact on society through its continual innovation in education, creativity, research, and entrepreneurship.

MISSION
The University of Lahore represents excellence in teaching, research, scholarship, creativity, and engagement. Its mission is to produce professionals outfitted with highest standards in creativity, transfer and application of knowledge dissemination to address issues of our time. The UOL sculpts its graduates to become future leaders in their fields to inspire the next generation and to advance ideas that benefit the world.

ACCREDITATION
Higher Education Commission - HEC
Pakistan Engineering Council - PEC
Pakistan Medical & Dental Council - PMDC
Pakistan Bar Council - PBC
Pakistan Nursing Council - PNC
Pharmacy Council of Pakistan - PCP
Pakistan Council of Architects & Town Planners - PCATP
National Computing Education Accreditation Council - NCEAC
National Business Education Accreditation Council - NBEAC

Find Out More: www.uol.edu.pk
The University of Lahore believes in delivering excellence in research and learning. Our ability to add to your academic and social skills will allow you to lead in your professional career. We aim to create high-quality graduates who are practically skilled to enter the world of work.

The University of Lahore is recognised as the largest private sector university of Pakistan, and there is no better time to join the university when it is expanding internationally with campuses and networks being developed across the world.

We believe in commercialisation and entrepreneurship and have invested in the establishment of enterprises in order to ensure that our students gain hands-on experience that actually matters for graduating students.

Our academic standards are high and we believe in encouraging independent thought driven by creativity and critical insight. You will experience our faculty that is one of the best in Pakistan and believe in research and expression in academic terms.

The experience at a university for a student is not only driven by the excellence in academics and research but the entire experience of being involved in the projects that the university takes on, as well as the experiences that a student gains outside the classroom. We have extensive activities ranging from sports to cultural events, media and society events etc that keep you engaged and entertained across the year.

The University of Lahore has now expanded internationally with its first move to Uganda providing support to setup a medical school. We believe that internationalisation is an important step towards ensuring that experiences are shared both academically and intellectually. We also have the largest international community in a private sector university with students from 15 different countries currently enrolled with us.

We provide extensive support to our students including preparing for career, mentoring, personal and financial support. Your success at The University of Lahore will be the measure of our success in delivering high quality education. I look forward to welcoming you to The University of Lahore.

We know your time at university shall make your future. Our mission is to help you realize your potential.

Chairman Message

Awais Raoof
Chairman, Board of Governors

The University of Lahore offers you the best training in your chosen field whether you intend to become a teacher or a scientist, a medical doctor or a social worker, technologist or engineer. At the UoL, you will be taught by dedicated professors who are determined that you become competent as a professional in order to assume a leadership role with qualities that should distinguish you from any graduate of any other university in the world. We believe that it is not enough that you are equipped with skills to do your duties professionally; you should also stand out among your peers as a professional who has confidence, courage and compassion to lead people in the workplace and the community at large.

As a UoL graduate, you will be technologically connected to knowledge through the best available computer networks. As a UoL graduate, you will be marked by openness to new ideas and being constantly on the lookout for novel ways of doing things. This university is about students, and I will be actively involved in your academic lives. Our student services are attuned to the needs of students, and we will not only teach you but support you, advise you, and direct you during your years of study at this great university.

We take pride in ourselves on being a community where all staff and students are valued.

Rector Message

Prof. Dr. Asrar Ul Haq Sheikh
Rector (Ph.D., Life Fellow IEEE, FIET)
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THE UNIVERSITY OF LAHORE

- History
- University Campuses
- Academic Services
- Campus Life
- Student Life at UOL
- International Students of UOL
- Quality Enhancement Cell (QEC)
- UOL Relief
The University of Lahore is the largest private sector university in Pakistan with more than 25,000 students and 7 campuses. The University was established in 1999 and has since then been offering courses in the fields of Medicine & Dentistry, Engineering, Arts, Sciences and Social Sciences. With strong emphasis on balanced progress and focus on human capital, the University has grown to 11 faculties and 35 departments.

The quality of the teaching facility and research excellence has also earned its international recognition, placing the university amongst the top 6 first Pakistani Universities to be ranked in the 2012 QS Asia Ranking. The Higher Education Commission (HEC) recognizes the University of Lahore at its highest “W4” category of universities reserved for those institutions that fulfill all criterion of an International Quality University. The University of Lahore has special focus on Professional and Technical Education as it is an instrument of growth & development of any country’s economy. We are proud of the well-equipped state of the art labs in the programs of Medicine & Dentistry, Public Health, Electrical Engineering, Civil Engineering, Mechanical Engineering, Pharm-D, Nursing and Law.

Strong linkages with the industry are of paramount importance for any higher education institution and The University of Lahore enjoys excellent links with international universities. We also have a wide range of knowledge sharing and human resource development programs with major multinationals organizations. The students at the university can expect excellent internship and skill development programs during the course of their studies.

HISTORY

The University of Lahore

Students Body

Registered Students

Academic Faculty & Staff

Academic Faculty

Taught Courses

Degree Programs

Academic Departments

Faculties

Research Centres

Technology Parks

Campuses

Alumni Network

26935

69%

1235

150+

35

11

02

03

07

19,000+

QUICK FACTS

COMMERCIALIZATION AND ENTERPRISE

We believe in teaching through practice and therefore the university has already invested heavily in SOCA. Additionally there is a gaming and animation house at the university delivering the needs of commercial consumers across the world. The University intends to further invest in a medical park and an IT innovation centre in order to commercialize technologies developed at the University and learning for students. The premises will also encompass three technology parks.

TEACHING EXCELLENCE

UOL has developed an excellent teaching and learning environment and has achieved strong results in teaching assessments with the largest international student body in a private sector university in Pakistan.

EXCELLENT FACILITIES

The University has invested extensively in new teaching facilities. With the new facilities for computer sciences and the up-coming engineering facilities at Lahore, the University will invest in providing the best teaching and learning environment in Pakistan. The Teaching Hospital at the campus also adds value to the Medical programs. The University has also invested in the School of Creative Arts (SOCA), where students are now engaged in the activities of the Media Group housed within the facilities of the School, therefore giving them the experience of newspaper, television and film production skills. SOCA is the only facility in Pakistan with two commercial studios, latest in cinematic and television equipment and a sound studio delivering commercial film sound production.
The University’s Main Campus on Defence Road is built near the prime Defence Road area just 1 KM Defence Road and consists of a purpose built facility spanning 100 Acres which houses the University College of Medicine & Dentistry, School of Nursing, Faculty of Pharmacy, Lahore Business School, Institute of Molecular Biology and Biotechnology, Faculty of Allied Health Sciences, Faculty of Law and School of Creative Arts.

The Campus on Raiwind Road spans 4 Acres & 7 Kannals and houses the Engineering Technology, Sciences, Social Sciences, Languages faculties and University College of Dentistry. The facility features a comprehensive library, a spacious cafeteria and fully equipped laboratories and IT infrastructure.

The facility features a lush park with fountains and flower gardens and an inner courtyard, which provides ample space for students to rest and recuperate. Additional facilities include a four floor student center, a purpose built library, on premises hostels with concierge and laundry and spacious auditoriums. The premises also encompass three technology parks.

• The Media Technology Park, The Creative Village (A premier facility for professional media content)
• Agri-Technology Park
• Biotechnology Park (CRiMM)

A beautiful mosque on campus which is an integral part of life for our students faculty and staff members. It is this diversity that makes it such a unique and interesting place to be. We have all the facilities of a modern, well-equipped mosque including separate prayer and washing facilities for male and female. The atmosphere of the mosque is also a suitable area for study for our students.

A comprehensive sports complex for male and female students is also available at the campus. Each year competitive sports for both male and female students are organized at inter-departmental and inter-university levels in a variety of sports indoor and outdoor like hockey, football, cricket, athletic, badminton, Volleyball, Chess, Snooker, etc. To encourage development of sports, scholarships are awarded to the outstanding players, and winners of the sporting events are awarded prizes, trophies and medals.
ISLAMABAD

Islamabad Campus which was established in 1998 is the mother campus of The University Lahore (UOL) and is being served by a fully developed infrastructure for Civil Engineering, Electrical Engineering, Computer Sciences, Pharmacy, Management Sciences and Allied Health Sciences. The dedicated and competent faculty delivers the curriculum, both for technical and professional disciplines.

STUDENT SERVICES

LABORATORIES

For Civil Engineering, Electrical Engineering, Mechanical Engineering, Pharmacy, Physical Therapy and Dietetic and Nutritional Sciences full equipped laboratories are built at the new Campus. These Labs are served by trained professional.

LIBRARY

Professional library staff are managing the libraries. The libraries contain more than 20,000 books covering all disciplines. In addition, the libraries are maintaining book banks for use of the students on all subjects being covered by the university. In addition an access to HEC Digital Library is also available at both the Campuses.

TRANSPORT

Islamabad Campus is maintaining a large fleet of modern buses to provide pick & drop facility, to student and those faculty members who are not maintaining their personal transport. The transport facility is also provided to hostel residents. A micro-bus/coaster is also available for the faculty members. Transport between the campuses is available to the students as a regular feature.

HOSTEL FACILITY

Boarding and lodging facilities for both the campuses are available at the hostels managed and administered by the University at Islamabad. Meanwhile, a new Hostel for 400 students is under construction at the new Campus.

IT SERVICES

State of the art IT Labs with free Internet service are available to the faculty and students at both Campuses.

CAMPUS LIFE

The Office of Student Affairs, a department in Islamabad Campus is a central provider of resources and experiences designed to supplement students’ classroom learning and to contribute significantly to their personal development. Through our programs, advising resources and services, and various forms of advocacy, OSA support students in their growth as leaders and builders of a strong UOL community.

The following courses are being offered at Islamabad campus:

<table>
<thead>
<tr>
<th>ENGINEERING</th>
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</thead>
<tbody>
<tr>
<td>ELECTRICAL ENGINEERING</td>
</tr>
<tr>
<td>• BS Electrical Engineering</td>
</tr>
<tr>
<td>• MS Electrical Engineering</td>
</tr>
<tr>
<td>CIVIL ENGINEERING</td>
</tr>
<tr>
<td>• BS Civil Engineering</td>
</tr>
<tr>
<td>MECHANICAL ENGINEERING</td>
</tr>
<tr>
<td>• BS Mechanical Engineering</td>
</tr>
<tr>
<td>ELECTRONICS</td>
</tr>
<tr>
<td>• BS Electronic and Electrical Systems</td>
</tr>
<tr>
<td>• MS Electronic and Electrical Systems (MSEE)</td>
</tr>
<tr>
<td>COMPUTER SCIENCES</td>
</tr>
<tr>
<td>• BS Computer Science</td>
</tr>
<tr>
<td>• BS Software Engineering</td>
</tr>
<tr>
<td>• Master of Computer Science (MCS)</td>
</tr>
<tr>
<td>• MS Computer Science (MSCS)</td>
</tr>
<tr>
<td>MANAGEMENT SCIENCES</td>
</tr>
<tr>
<td>• BBA (Hons.)</td>
</tr>
<tr>
<td>• MBA (2.5 Years)</td>
</tr>
<tr>
<td>• MBA Executive (1.5 to 2 Years) (Training Program)</td>
</tr>
<tr>
<td>• M.Phi Management Sciences</td>
</tr>
<tr>
<td>PHARMACY</td>
</tr>
<tr>
<td>• Doctor of Pharmacy (5 Years)</td>
</tr>
<tr>
<td>• M.Phi Pharmacy (Pharmaceutica)</td>
</tr>
<tr>
<td>ALLIED HEALTH SCIENCES</td>
</tr>
<tr>
<td>• Doctor of Physical Therapy (5 Years)</td>
</tr>
<tr>
<td>• Doctor of Diet &amp; Nutritional Sciences (5 Years)</td>
</tr>
<tr>
<td>• Doctor of Medical Laboratory Sciences (5 Years)</td>
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<tr>
<td>INFRASTRUCTURE</td>
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</tbody>
</table>

The University of Lahore started its operation in Islamabad at a Campus located at Jinnah Avenue, Blue Area. To achieve the vision, UOL has created its new educational faculty called New Campus (Sihala). The new Campus has purpose-built class rooms and laboratories for all disciplines of Engineering, Pharmacy, Physical Therapy and Medical Laboratory Sciences. At the Campus site, a hostel for 400 students, Gymnasium and Cafeteria is under construction.

The Office of Student Affairs serves as a primary source of information and advice about co-curricular opportunities and resources. Staff members assist the students in becoming involved in campus life, conduct leadership development programs, provide continuity for organizations from year to year, educate students about the University policies, mediate disputes, advise event planners, and help the students to put classroom learning into practice through the techniques of experiential education.

The following are some of the activities managed under OSA at campus:

• Sports
• Club & Societies activities
• Study tours
• Seminars & workshops
• Welcome Functions
• Annual Dinner
SARGODHA

In this short span of time the university has created its name in the field of higher education at National and International level. In pursuit of excellence the university has developed its original core values at Sargodha Campus.

STUDENT SERVICES

A professional librarian is managing the library. The library contains over 4,000 books covering all disciplines. In addition the library maintains book banks for use of the students on all subjects. An access to HEC digital library is also available.

TRANSPORT

The Sargodha Campus has an independent bus service to facilitate the students and faculty members from Sargodha City and surroundings.

HOSTEL FACILITY

We have also hostel facilities for male and female students and faculty also.

IT SERVICES

The state of the art Information Technology Laboratories at the Gujrat campus are being marinated with top of the line computing systems and high speed internet facility. Furthermore, we are planning to add two more IT labs and 20 Mbps internet connection.

CAMPUS LIFE

The Office of Student Affairs is the central provider of resources and experiences designed to supplement students’ classroom learning and to contribute significantly to their personal development. Through our programs, advising resources and services, and various forms of advocacy, OSA support the students in their growth as leaders and builders of a strong UOL community.

MANAGEMENT SCIENCES

• BBA
• MBA 3.5
• MBA 1.5
• MBA Executive - 2 Year
• M.Phil Management Sciences
• M.Com
• B.Com (2 Year)

ECONOMICS

• B.Economics
• M.Sc.Economics
• M.Phil Economics

COMPUTER SCIENCES

• BCS
• BS IT
• MS IT
• BBTN
• BSSE
• MCS
• M.T.
• M.SCS

PHYSICS

• BS Physics
• M.Sc Physics
• M.Phil Physics

MATHEMATICS

• BS Mathematics
• M.Sc Mathematics
• M.Phil Mathematics

STATISTICS

• M.Sc Statistics
• M.Phil Statistics

CHEMISTRY

• BS Chemistry
• M.Sc Chemistry
• M.Phil Chemistry

BOTANY

• BS Botany
• M.Sc Botany
• M.Phil Botany

ZOOLOGY

• BS Zoology
• M.Sc Zoology
• M.Phil Zoology

PHYSICS

• BS Physics
• M.Sc Physics
• M.Phil Physics

MATHEMATICS

• BS Mathematics
• M.Sc Mathematics
• M.Phil Mathematics

STATISTICS

• M.Sc Statistics
• M.Phil Statistics

CHEMISTRY

• BS Chemistry
• M.Sc Chemistry
• M.Phil Chemistry

BOTANY

• BS Botany
• M.Sc Botany
• M.Phil Botany

ZOOLOGY

• BS Zoology
• M.Sc Zoology
• M.Phil Zoology

ALLIED HEALTH SCIENCES

• DPT

SPORTS SCIENCES

• M.Sc Sports Sciences
• M.Phil Sports Sciences

PSYCHOLOGY

• BS Psychology
• M.Sc Psychology
• M.Phil Psychology
• MS Clinical Psychology

EDUCATION

• BS Education
• MA Education
• M.Phil Education
• MA Special Education
• M.Phil Special Education

URDU

• MA Urdu
• M.Phil Urdu

ENGLISH

• BS English
• MA English
• M.Phil English (Literature, Linguistics)

LAW

• LLM

ISLAMIC STUDIES

• MA Islamic Studies
• M.Phil Islamic Studies

EDUCATION

• BS Education
• MA Education
• M.Phil Education
• MA Special Education
• M.Phil Special Education

INFRASTRUCTURE

The Sargodha campus at Lahore Road, Sargodha is spread over 99 kanals of area. The facilities like library, classrooms, laboratories, canteen, Playgrounds, faculty offices have all been catered at the campus. We endeavor to provide all possible facilities to students and staff for Research and development in their fields of education.
GUJRAT

Since its establishment in 1999 as a degree-awarding institute, The University of Lahore has always been at the forefront of innovation. In a short span of time, it has played a proactive role in shaping and accelerating the modern day higher education spectacle in Pakistan. From the academic Year 2013-2014 Gujrat campus has started its classes. Served by an experienced and competent faculty and supported by the requisite infrastructure, the students are getting quality education at an affordable cost.

STUDENT SERVICES

LIBRARY
We have state of the art library having 5000 books on different subjects. Furthermore, we are adding about 5000 more books covering all the subjects being offered at our campus.

TRANSPORT

Gujrat Campus is maintaining a fleet of modern busses to provide pick and drop facility to students and faculty members. Transport facility between the campus and adjacent cities and towns is available to the students as a regular feature.

COMPUTER SCIENCES

• BS Computer Science (BSCS)
• BS Software Engineering (BSSE)
• BS Information Technology (BSIT)
• MS Computer Science (MSCS)
• MS Software Engineering (MSSE)
• MS Information Technology (MSIT)

MANAGEMENT SCIENCES

• BBA-Hons
• MBA 3.5Years
• MBA-Executive
• M.Phil in Management Sciences
• M.Phil in Accounting & Finance

TECHNOLOGY

• BS Civil Technology (BS Tech Civil)
• BS Computer Science (BSCS)
• BS Software Engineering (BSSE)
• BS Information Technology (BSIT)
• MS Computer Science (MSCS)
• MS Information Technology (MSIT)

ALLIED HEALTH SCIENCES

• Doctor of Physical Therapy (DPT)
• Doctor of Dietetics & Nutritional Sciences (DDNS)
• Doctor of Medical Laboratory Sciences (DMLS)
• Medical Imaging Doctor (MID)

PHARMACY

• Doctor of Pharmacy (Pharm-D)

ENGLISH

• Master of Arts in English Language Teaching & Linguistics (MAETL)
• M.Phil in English Literature
• M.Phil in Applied Linguistics

LAW

• Master of Laws (LLM)

HOSTEL FACILITY

Gujrat Campus is in the process of constructing hostels for male and female students and soon will be available to prospective students.

IT SERVICES

We have state of the art IT lab having latest IT equipment. 10 Mbps internet connection available at the campus. Furthermore, we are planning to add two more IT labs and 20 Mbps internet connection.

CAMPUS LIFE

The Office of Student Affairs, a department in Gujrat Campus, serves as a primary source of information and advice about co-curricular opportunities and resources. Staff members assist students in becoming involved in campus life, conduct leadership development programs, provide continuity for organizations from year to year, educate students about University policies, mediate disputes, advise event planners, and help students put classroom learning into practice through the techniques of experiential education.

The following courses are being offered at Gujrat campus:

INFRASTRUCTURE

The Gujrat campus is spread over 3.5 acres of land with a purpose built area of over 75,000 sq-ft. The campus is in the heart of Gujranwala division and is less than one hour drive from all the districts, main cities and towns of the division, which is one of the most densely populated in our country.
PAKPATTAN

Since its inception i.e. Fall 2013, Pakpattan Campus is offering BS, Master & M.Phil. programs but in Fall Semester 2016, Uol Pakpattan Campus planned to offer more subjects in the faculty of Science, Engineering, Law and Social Sciences as per the demand of the market. The elite of the city and other prominent organizations highly appreciated the gesture of UOL for setting up Pakpattan Campus in such a remote area to provide higher education at their door step.

STUDENT SERVICES

LIBRARY

We have state of the art library having over 3500 books on different subjects. Furthermore, we are adding about 5000 more books covering all the subjects being offered at our campus.

TRANSPORT

Presently, we have 5 mini buses for transportation of the students and faculty members coming from adjacent areas of Pakpattan.

COMPUTER SCIENCES

• BS Computer Science
• BS Software Engineering
• MCS
• MS Computer Science

MANAGEMENT SCIENCES

• BBA (Hons.)
• MBA 3.5 Years
• M.Phil Management Sciences

LAW

• LL.M

MATHEMATICS

• BS Mathematics
• M.Sc Mathematics
• M. Phil Mathematics

ENGLISH

• BS English
• MA English
• M. Phil English

TECHNOLOGY

• BS Civil Technology

ECONOMICS

• M.Sc Economics
• M.Phil Economics

EDUCATION

• MA Education
• M.Phil Education

URDU

• M.Phil Urdu

ISLAMIC STUDIES

• M.Phil Islamic Studies

The following courses are being offered at Pakpattan campus:

HOSTEL FACILITY

Presently, we have three hostels to facilitate our faculty and students (Male and Female). Also, we facilitate our students by providing accommodation for weekend classes.

IT SERVICES

We have state of the art IT lab having the latest IT equipment. 10 Mbps internet connection available at the campus. Furthermore, we are planning to add two more IT labs and 20Mbps internet connection.

CAMPUS LIFE

The Office of Student Affairs (OSA) serves as a primary source of information and advice about co-curricular opportunities and resources.

OSA is is the central provider of resources and experiences designed to supplement students’ classroom learning and to contribute significantly to their personal development. Through our programs, advising resources and services, and various forms of advocacy, OSA support students in their growth as leaders and builders of a strong UOL community.

The following are some of the activities managed under OSA at campus:

• Sports
• Club & Societies activities
• Study tours
• Seminars & workshops
• Welcome Functions
• Annual Dinner

INFRASTRUCTURE

The Pakpattan Campus sits on 400 canals of land on main Pakpattan Sahiwal road having state of the art infrastructure, educational facilities and highly qualified faculty.
You can look forward to more than just studying at the University of Lahore with extensive facilities and campus life; you will never forget this experience.

**ACADEMIC SERVICES**

**LIBRARY FACILITIES**

The university’s library resources include books, journals, and e-books. The University of Lahore currently houses four well equipped libraries with cumulatively more than 35,000 books catering to a wide range of subjects. The university also has access to 72 Mbps Pakistan Educational Research Network (PERN) facility, E-Library, OPAC, mini labs, HEC digital library as well as international online libraries and journals. The University of Lahore has subscription of World Class Turnitin services for Plagiarism check.

**IT FACILITIES**

The University boasts of excellent IT facilities with dedicated PC and Mac labs on premises. 72 Mbps internet is available to students in labs as well as the new wireless service on the Defence Road Campus. All students will get the following services:

- A dedicated computer login
- Student information login (SIS)
- University Email - ID
- The students information is stored and accessed via sophisticated University Management System (UMS) for making UOL a forerunner in modernizing student data management services within Pakistan.

**IT HELPDESK**

IT helpdesk office has maintained a portal named “IT Support” to facilitate the students, faculty and staff across the University. Software’s are remotely installed in computers. The IT helpdesk also provides wifi facility to laptops of students and faculty. The IT helpdesk is also responsible for answering queries of students.
TRANSPORT SERVICE

The University of Lahore (UOL) has its own large fleet of buses, mini buses and vans that provide pick and drop facility to its various campuses and around the city. The University also provides shuttle bus services to its staff & faculty members from one campus to another. A detailed transport plan along with specified routes can be obtained from the transport office of UOL. Transport facilities are also available to adjacent cities of Lahore.

HOSTELS / ACCOMMODATION

The University of Lahore provides hostel facilities to both male and female students. The Defence road campus of the University features a facility of three hostels for females for about 1600 students in it.

- Razia Hall
- Fatima Hall
- Shahida Hall

The students are provided with accommodation, mess, high speed internet. The hostels have a gym and a swimming pool, where you will be able to benefit from expert fitness advice and take training classes.

CATERING & CAFETERIA

The University houses dedicated student center and four floors of self-service cafeterias serving delicious continental cuisine, snacks through kiosks at Defense Road Campus. Events management, guest house dining and hostel dining is also provided by the food and lodging department.

MEDICAL AND DENTAL HEALTH

The University of Lahore has invested in extensive health and dental facilities. This includes a 300 bed teaching hospital located at defence road campus and a dental hospital located at Rawwind Road Campus. The University has a Teaching Hospital, Dental Hospital and a Physical Therapy and Radiology Diagnostic Centre situated at the Rawind Road Campus with state of the art equipment and experts for facilitating the faculty and students.

SPORTS FACILITIES

We firmly believe that a healthy body is a key to a healthy mind. In this regard, the UOL has invested in purpose built sports and recreational facilities which include spaces for table tennis, swimming, cricket and football. A FIFA grade football field and track is also being developed along with separate gymnasiums for both male & female students. Sports at the University are managed by a dedicated department of sports.

CLUB UOL (Gym & Swimming Pool)

The University has an on campus gym, where you will be able to benefit from expert fitness advice & training classes at a much discounted rate only for students and faculty members at the University.
STUDENT LIFE AT UOL

UOL has more than 25,000 students and to ensure that every individual who comes to the university gets all the support they need we have a dedicated Office of Student Affairs. The well-being of our students is our primary concern. The Office of Student Affairs (OSA) ensures just that by providing you support and guidance in matters that require professional help.

OSA is the student’s point of contact for all administrative needs, including questions about finance, immigration, student cards, exams or graduation. You can visit OSA in person or email your enquiry. You will also be able to book accommodation and sports and gym facilities through OSA and get advice on careers and placements.

Within this portal you will find services, applications, and solution to your academic & non-academic issues during your time here at UOL. Academic services handle queries regarding student’s letters, semester freeze/withdrawal, issuance of interim/final transcript, examination, issuance of different certificates.

STUDENT CLUBS AND SOCIETIES

There are 29 societies currently registered and operated in UOL. The societies are performing well by executing events related to their respective fields.

SPORTS AND RECREATIONAL ACTIVITIES

The Sports and Wellness Department maintains sports facilities and organizes events with wide participation.

CAREER SERVICES

The career service is here to help you find full-time work and internships as well as offering support with career planning.

COUNSELING SERVICES

During your time at the University of Lahore you may find yourself in a challenging situation that is unfamiliar to you. Our trained staff will help you in:

- CV writing
- Preparing for interviews
- Personal grooming
- Self enhancement

FINANCIAL & SCHOLARSHIPS

Ibadat Educational Trust offers liberal scholarships for the benefit of needy students. Total financial assistance provided to students in the academic year 2014-15 was Rs.83,287,000.

Note: Further information can be obtained from the finance office. Financial services will deal with the students who are seeking help on financial matters like semester fee installments, concession, fines, etc.
MISSION

The international office is designed and dedicated to look after the international relations and accreditation of the university worldwide.

We look forward to providing maximum help to our international students including their accommodation, visa & residential permit process and follow up till they graduate.

The University of Lahore is host to students from Palestine, Sudan, Yemen, Turkey, Syria, Somalia, Afghanistan, Nepal, Oman, Kingdom of Saudi Arabia, South Korea, Jordan, UAE, India, Uganda amongst others. The University of Lahore has a dedicated International Students Cell which manages the applications for study vacancies of the International students, processes their admission, HEC NOC, Visa processing as well as settling the International students into the cultural diversity of the University of Lahore. The University of Lahore believes in organizing healthy cultural activities for local as well as International Students.

INTERNATIONAL CULTURAL DAY

Every year The University of Lahore organizes International Student’s Cultural Day for the students of different nationalities. Youngsters belonging to various countries and nationalities represent their culture and traditions at this event. Stalls at the event are also of great attraction to the guests and people.

INTERNATIONAL STUDENTS ADMISSIONS

For international students applying to The University of Lahore, an application needs to be submitted to:

International Student Office
international.students@osa.uol.edu.pk

INTERNATIONAL STUDENTS AT UOL

The University is proud to have over 15 nationalities currently studying in different departments.

QUALITY ENHANCEMENT CELL (QEC)

The QEC at university of Lahore Made a major development to enhance the quality of both education and services provided across the university, in compliance with the policies put forward by the HEC.

Maintaining the momentum of Quality consciousness is crucial in Higher Education Institutions (HEIs).Quality Enhancement Cell in UOL is an internal Quality Assurance and enhancement mechanism of the institution. QEC at University of Lahore is tasked with planning, guiding and monitoring Quality Assurance (QA) and Quality Enhancement (QE) activities of the institution. The QEC at university of Lahore channelizes and systematizes the efforts and measures of the university towards academic excellence by being a facilitative and participative organ of the institution. It has become a driving force for ushering in quality by working out intervention strategies to remove deficiencies and enhance quality by methods of analysis, reporting and when needed experimental incubations. At university of Lahore QEC was established in May, 2010. Since then, the cell has been working effectively. Not only to enhance quality but also continuously maintain and improving on it.

In 2015, 56% of the Total Published research was indexed in ISI Web of Knowledge.

SCOPE OF QEC

Annual Monitoring and Evaluation of academic Program, Faculty and Student’s

- Quality assurance of all undergraduate as well as postgraduate degree programs.
- Evaluation and analysis of quality standards of teaching and learning in each subject area.
- Build up program specifications and quality assurance processes.
- Evaluate department and institutional assessment.
- Developing Evaluation methods.
- Ensure the Quality and the standard of the degree awarded.
- Analyze and review academic affiliation with governing bodies and institutions.
- Ensure that the services provided at the HEI are compatible with the standards and the bench marks set forth by the university management.
UOL Relief has been at the forefront of providing emergency relief and rehabilitation during times of natural disasters since 2005.

UOL Relief works in a wide variety of sectors, however our main goal is always to provide emergency relief to communicates affected by natural disasters with the aim of helping them cope with the situation. This is then achieved by a careful planning of social and culture approach to housing, medical care, and education among many ways. This approach has led us to not only be respected by the local communities, but also trusted by them. Enabling us to work longer with them for a sustainable growth and improvement in the lives of the people in question.

2005 EARTHQUAKE

UOL Relief efforts in 2005 Earthquake not only made a strong network of the students but also showed to everyone involved what they are truly capable of doing. With 40 houses constructed, a functioning primary and higher secondary school, 3,000 temporary shelter tents, 12,500 family food packs, 8,500 quilts & blankets, 1,000 sets of kitchen utensils, and over 2,000 set of warm clothes, medical Care centre, over 25,000 KG cooking oil was distributed, 190 tents were weather insulated, 130 widows were taken care of in respect of food and shelter. This project finally concluded in 2006, but the medical camps have continued till 2012.

2009 IDPS CRISES

Next test of this resolve and feeling came when the whole Swat valley was engulfed in flames of terrorism.

This and the subsequent operation of the Pakistan Army to expel these miscreants led to the biggest Internally Displaced People (IDP) crisis Pakistan had ever seen. UOL Relief sprang into action to provide food support in Mardan district. Over 2,000 families were supported in this program of food and other basic supplies for over 3 months time at 15 days interval until the crisis subsided and the people started returning to their homes. The mission was not to insult their honour by neither turning them into beggars or treating them like ones, but to assist them to cope with their lives.

2010 FLOOD

This time UOL Relief decided to further test her capabilities and her young volunteers’ resolve by operating in not only much larger geographical area but also in diverse locations. In the next two years UOL Relief took on a mammoth task of running operations in three different provinces at the same time. With Charsadda in Khyber Pakhtunkhawa, Rajapur in Punjab, Chilas, Tato Valley, Thalay-Nala at Khaplu in Gilgit Baltistan by providing food support, basic necessities of life, reconstruction support and material, a bridge, water channels and even a primary school still run to this day by the UOL Relief. Known as the super flood by the experts, it swept any infrastructure in its way. This is also when UOL Relief constructed infrastructure including a bridge to connect tourist destination of Fairy Meadows with the rest of the country bringing the very needed tourism based income back into the local economy.

In 2011, where the country did not face any national catastrophe, UOL Relief while working in the area saw a tragedy unfold. Overnight an artificial dam formed on the river at Talis near Khaplu; it started to swell up. Local youth stood near the dam keeping an eye on the flow. As it burst they started raising alarm on bugs which alerted the people of the village. Unfortunately two of the deaf inhabitants of the village lost their life. With almost all of the houses lost in this mud flood, UOL Relief took upon herself the responsibility to construct over 25 houses beside giving them cooking utensils and other basic necessities of life.

BAIT-U’L-NISHAT (SHELTER HOME)

In 2012, UOL Relief brought her attention closer to home where it collaborated with a local NGO for Deaf and Dumb vulnerable children, Voice. UOL Relief helped them establish a Shelter Home for these children many of them were also mentally or physically handicapped and often abandoned by their poor families. This two years long project led to establishing of the Shelter Home in Lahore and with our planning, support and strategic advice it is now a fully self-sustained operation. Starting from 12 male and 5 female children today it is taking care of over 40 children.

GUNARFARAM

(UGILIT-BALTISTAN 2013)

The UOL Relief provides shelter, Food and Education Support Program to the families of Widows in Gilgit Baltistan. Apart from the UOL Relief initiative which heavily relies on support and voluntarism of our University students and alumni – UOL’s students are also engaged in various social initiatives inside & outside the University campuses. In last one year UOL has become part of international Universities Search and Rescue Council, Cyprus. Conducted Environmental and Social issue seminars/workshops to raise student awareness on these vital topics. UOL’s services to the society in time of crisis have been recognized by UN, various International NGOs and Pakistan Government/Army 2014

FLOOD 2014

Unfortunately tragedy again struck Pakistan with massive floods of 2014. A large area of the country was again under water. Instead of becoming part of the conversation to fix blame on poor management of flood water, UOL Relief decided to become part of the positive change again. It took on to providing for poorest of the poorest area by focusing on areas on the Rohdu Sultan and Alhara Hazari on the South-Western side of River Chenab. What we witnessed there was heart breaking. When people told us about their losses they had nothing, the fact was they actually had nothing beside the pair of clothes they had on their body and two utensils for the food. UOL Relief took care of providing for the food, house construction, basic necessities and clothes. With slow speed of receding water, UOL Relief provided 5,000 mosquito nets to help avert some diseases in those desperate times. UOL Relief also constructed 25 houses while providing over 1,000 food packages to local families.

2015 EARTHQUAKE

UOL Relief is presently supporting the people affected by the October 2015 Earthquake in the area of Shangla Hills in Khyber Pakhtunkhwa.

UNIVERSITY OF LAHORE
• Electrical Engineering
• Mechanical Engineering
• Civil Engineering
• Computer Engineering
• Technology
• Electronics and Electrical System
MISSION STATEMENT
The mission of the department of electrical engineering is to prepare a pool of human resource that could contribute in the development and progress of the nation in the broad area of electrical engineering. To be able to meet this end, we expect our graduates to possess sufficient breadth in electrical engineering and in-depth knowledge and training in one or more of the areas such as power and electrical machines, electronics, computer, communications, signal processing, control system and industrial automation.

INTRODUCTION
The Department of Electrical Engineering was established in year 2000. Our undergraduate program, BS Electrical Engineering got accreditation from Pakistan Engineering Council, first time in year 2007 effective from year 2003. Since then we have been getting our program reaccredited every year. In addition to the evaluation of the program by PEC, HEC has also started getting an annual report duly monitored by QEC created under HEC regulation. The engineering program is run according to the directive of PEC on the minimum requirement credit hours while keeping teaching quality high and student-teacher ratio within a recommended limit. In year 2008, the department launched MS Electrical Engineering program also under the guideline of HEC. This is a two year evening program with thesis. In Spring-2014 semester, the department launched its PhD (Electrical Engineering Program). This is again evening program 48 credit hours (with thesis 30 credit hours).

DEGREES OFFERED
- BS Electrical Engineering (BSEE)
- MS Electrical Engineering (MSEE)
- PhD Electrical Engineering
BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING (BSEE)

INTRODUCTION
The undergraduate electrical engineering program focuses on building a solid foundation in mathematics, physical sciences and computer programming to ensure the students are equipped with professional skills, rational critical thinking, analytical skills and lifelong learning techniques. The program provides a broad engineering knowledge that enables the students to communicate and interact effectively with other engineers and technologist who have specialized in different technical discipline and to make decisions with confidence. On successful completion of the degree program, the students will possess the ability to understand, identify problems and formulate their solutions and implementations.

CAREER PROSPECTS
Electrical engineers are in demand with employers in Pakistan and overseas. The major employment areas include electrical power generation, supply and distribution, power systems, the installation, design of electrical machines electronics and communication engineering.

RECOGNIZED BY
Higher Education Commission | Pakistan Engineering Council

PROGRAM FACTS
- Program Duration
  4 Years, (Credit Hours 138)
- Timing
  Morning 8:00 AM - 5:00 PM (Monday to Friday)
- Entry Requirements
  12 Years of Education, FSc (Math, Physics and Chemistry), DAE Telecom, DAE Electronics, DAE Instrumentation, DAE Electrical A-Level or Equivalent with Minimum 60% Marks. UOL Entry Test is mandatory
- Location
  Defence Road Campus, Lahore.

ROAD MAP

<table>
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<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
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<td>Basic Mechanical Engineering</td>
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<td>Applied Thermodynamics</td>
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<td>DC &amp; AC Machines</td>
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<td>Circuits Analysis -I</td>
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<td>Computer Programming</td>
<td>3</td>
<td>Complex Variables &amp; Transforms</td>
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<td>Digital Design Lab</td>
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<td>Applied Physics</td>
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<td>Data Structures</td>
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<td>Linear Algebra</td>
<td>3</td>
<td>Electrical Engineering Workshop</td>
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<td>Signals &amp; Systems</td>
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<td>Logic Design &amp; Switching Theory</td>
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<td>Solid State Geometry and Multivariate Calculus</td>
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<td>Circuits Analysis -II</td>
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<td>Social Science</td>
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<td>Electronic Devices &amp; Circuits</td>
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<td>Network Analysis</td>
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<th>SEMESTER 7</th>
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<th>SEMESTER 8</th>
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<tr>
<td>Electromagnetic Field Theory</td>
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<td>Communication Systems</td>
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<td>Technical Elective-II (Power Electronics)</td>
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<td>Final Project - II</td>
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<tr>
<td>Microprocessor Based Embedded Systems</td>
<td>4</td>
<td>Control Systems</td>
<td>4</td>
<td>Entrepreneurship</td>
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<td>Technical Elective-IV</td>
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<tr>
<td>Probability &amp; Stochastic Processes</td>
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<td>Numerical Analysis</td>
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<td>Final Project - I</td>
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<td>Breadth Core I</td>
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<td>Breadth Core II</td>
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<tr>
<td>Technical Report Writing</td>
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ELECTIVE COURSES
- Power distribution & utilization (breadth core-I)
- Instrumentation & measurement (breadth core-II)
- Communication network (breadth core-I)
- Electronic circuits design (breadth core-II)
- Power systems
- Power system analysis
- Power system operations and control
- Power system protection
- Power plants
- High voltage engineering
- Electrical machines design
- Data and computer communication
- Mobile communication
- Wireless communication
- Advanced network
- Embedded systems design
- Digital control systems
- Control of AC & DC drives
- Telecom system analysis & design
- Telecom switching
- Filter theory & design
- Introduction to RF/IC design
- Electromagnetic compatibility
- Antenna engineering
- Satellite communication

AREAS OF SPECIALIZATION
- Power
- Communication
- Electronics
INTRODUCTION
The program is structured around a core of knowledge related to analytical and management tools, supplemented by advanced technical electives in the areas of power engineering and electronics and communication engineering. The students must study eight subjects of 3 credit hours each. In addition, he/she will submit a research thesis of weight 6 credit hours. The detail of the program is given in the curriculum.

CAREER PROSPECTS
This program has been designed for working professionals who wish to enhance their technical skills for career advancement. Students will gain ability to use advance mathematics and stochastic processes for analysis of engineering problems, acquire understanding and appreciation of concepts related to quality, information management and the ability to synthesize knowledge. This program enhances the strength of the students in the area of their choice and makes them prepared better to compete in higher intellectual and academic pursuits such as PhD programs.

RECOGNIZED BY
Higher Education Commission

POWER SYSTEM ENGINEERING

CORE COURSES
- Mathematical methods for Engineer
- Power system Quality & Reliability
- Advance Power system Protection
- Power circuit breaker and substation
- Advance High voltage engineering

ELECTIVES
- Transient in power
- Insulation coordination of power system
- Power system stability and load flow analysis
- Power system operation and control
- Power system planning
- Power distribution, automation and control.

ELECTRONICS & COMMUNICATION

CORE COURSE
- 1-Mathematical methods for Engineer
- Stochastic Process
- Advance Computer network
- Digital Communication system
- Advance signal processing

ELECTIVES
- Information theory and coding
- Introduction to cryptography
- Mobile and wireless communication
- Advance communication network
- Performance evaluation of communication network
- Real time embedded system
- Switched mode power supply

NOTE
List of electives is not exhaustive. More subjects can be added keeping in view the market requirement.
INTRODUCTION
Ph.D degree is the highest degree program offered by the Electrical Engineering Department. It is organized according to HEC guidelines and is recognized by HEC. The program is divided into four main streams: Communication, Control, Power system, and Signal processing. The program of 48 credit hours requires completion of 18 credit hours of course work and 30 credit hours of research thesis. Four courses are designated as mandatory.

CAREER PROSPECTS
The graduates of this program will find positions primarily in academic institutions and universities, research institutes, research laboratories, consulting companies, also employ graduate with this degree.

CORE COURSE
- Mathematical methods in Engineering
- Optimization Techniques
- Probability and stochastic process
- Research methods

ELECTIVES
- Linear control system
- Optimal control theory and application
- Advance digital control system
- Power system steady state analysis
- Power system dynamic analysis
- Power system planning
- Digital signal processing
- Speech and audio processing
- Real time systems
- Radiation and propagation of electromagnetic waves.
- Antennas theory and applications.
- Digital communication
- Advance signals processing

PROGRAM FACTS
- Program Duration
  3-5 Years (Credit Hours 48)
- Timing
  Evening 6:00 PM - 9:00 PM (Monday to Friday)
- Entry Requirements
  18 Years of Education, MS (Electrical Engg, Electronics Engg, Telecom Engg, Computer Engg, Communication Engg) from PEC recognized university with CGPA of 3 and above (Semester System) or 60% and above Annual System. UOL Interview and entry test or GAT validity two years arranged by NTS are mandatory.
- Location
  Raiwind Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

ROAD MAP

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<td>Research methods in Electrical Engineering</td>
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<td>Elective Course - 3</td>
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<td>Research Thesis</td>
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MISSION
Department is committed to prepare graduates who can work cooperatively and professionally with other scientists and engineers to develop innovative solutions to complex problems in the field of engineering. Mission is to serve the profession by providing high quality education. Intersection of science and technology has always been sole objective of the Department.

INTRODUCTION
Department of Mechanical Engineering was permitted to induct its 1st batch in 2008 by Pakistan Engineering Council (PEC). Accreditation has been granted from PEC for Batches 2008-2012. In fall 2014, Department started its MS and Ph.D. Programs which were approved in November-2013 by the Academic Council of the University. Department provides a sound foundation in Science, Computational skills and Mathematics to solve engineering problems in areas such as Thermodynamics, Fluid Mechanics, Applied Mechanics, Design, Manufacturing Systems and Engineering Management & Economics.

DEPARTMENT OF MECHANICAL ENGINEERING

DEGREES OFFERED
• BS Mechanical Engineering
• MS Mechanical Engineer
• Ph.D Mechanical Engineering
BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (BSME)

INTRODUCTION
BSME at the University of Lahore emphasizes in Thermal Sciences, Manufacturing & Production Engineering, Mechanics, Design & Vibrations, Fluid Mechanics, Control Engineering, Power, Energy and Quality Control. It offers students an opportunity to study in a wide variety of subjects with practical training. This 4-years program requires the completion of 140 credit hours, including 06 credit hours project work. Moreover, the program also includes the industrial tours, schedule of prestigious industries and organizations of public/private sectors, to enhance student exposure and experience. The curriculum includes Analytical tools, Creative Thought, Communication Skills and their exposure and experience. The curriculum includes Analytical tools, Creative Thought, Communication Skills and their exposure and experience.

CAREER PROSPECTS
Mechanical Engineering has a diversity of applications in almost all industries in any part of the world. In Pakistan, different kinds of industries and organizations need mechanical engineers abundantly e.g. Heavy Mechanical Complex, NDC, Suparco, PMO, Pak Air Force, Pakistan Army, PLA, Nuclear Energy Commission and many industries in private sector.

CORE COURSES
- Applied Chemistry
- Applied Mathematics
- Applied Physics
- Computer System & Programming
- Engineering Drawing & Graphics
- English
- Applied Mathematics II
- Communication Skills
- Engineering Materials
- Engineering Statics
- Islamic Studies
- Thermodynamics I
- Thermodynamics II
- Fluid Mechanics I
- Mechanics of Materials I
- Mechanics of Materials II
- Psychology & Human Behavior
- Applied Mathematics IV
- Heat and Mass Transfer
- Machine Design & CAD I
- Precision Engineering & Metrology
- Technical Writing & Presentation Skills
- Fluid Mechanics II
- Machine Design & CAD I
- Mechanics of Materials II
- Machine Design & CAD II
- Precision Engineering & Metrology
- Technical Writing & Presentation Skills
- Fluid Mechanics III
- Applied Mathematics III
- Electronics
- Fluid Mechanics II
- Machine Design & CAD I
- Mechanics of Materials II
- Machine Design & CAD II
- Precision Engineering & Metrology
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- Mechanics of Materials II
- Machine Design & CAD II
- Precision Engineering & Metrology
- Technical Writing & Presentation Skills

ROAD MAP

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<td>Engineering Materials</td>
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<td>Engineering Drawing &amp; Graphics</td>
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<td>Mechantronics</td>
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<td>Total Quality Management</td>
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<td>Project</td>
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ELECTIVE COURSES

LIST TECHNICAL
- Mechatronics
- Power Plant Engineering
- Renewable Energy Resources
- Tribology
- Maintenance Engineering
- Finite Element Analysis
- Computational Fluid Dynamics
- Fluid Power Hydraulics & Pneumatics
- Gas Dynamics
- Aerodynamics

LIST MANAGEMENT
- Total Quality Management
- Industrial Management
- Project Management
- Operations Management
- Business & Entrepreneurship
- Safety, Health & Environment Management
INTRODUCTION

MSME is specifically designed for the professionals working in the industry willing to boost their technical skills and knowledge for their career advancements. It also serves the individuals concerned in harnessing their potential for PhD studies. The degree program primarily focuses on developing advance modeling skills and enhancing engineering knowledge in the areas of Thermal & Fluid Sciences, Manufacturing & Production, and Mechanical Design & Analysis. For the program minimum credit hours earned by a student shall be 30, with minimum 06 credit hours requirement of research, and 24 credit hours (i.e. 3 credit hours per course) for coursework.

CAREER PROSPECTS

The students of graduate program will be well-equipped with the knowledge of modeling, analyzing and solving Mechanical Engineering problems, and are expected to be an active part of R & D sector of government organizations and private industries. They will be capable enough to develop their own consultancy firms, be engaged with research centers, and will provide consultancy services to public and private Sectors. The program focuses to enhance the research skills of students, and makes them better prepared for pursuing higher studies (i.e. PhD) at the prestigious national and/or international universities.

COURSES LIST

- Advanced Numerical analysis
- Advanced Engineering Materials
- Advanced CAD/CAM
- Finite Element Analysis
- Computer Integrated Manufacturing
- Theory of Elasticity
- Experimental Stress Analysis
- Product Design & development
- Advance Mechanical Vibration
- Engineering Design Optimization

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
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- Robotics
- Advance Thermodynamics
- Advance Fluid Mechanics
- Advance Heat Transfer
- Experimental Methods in Fluid mechanics
- Operations Research
- Advanced Metal Forming
- Human Factor Engineering
- Advanced Stress Analysis
- Modal Analysis
- Continuum Mechanics
- Total Quality Management
- Advanced Automatic Control Systems

INTRODUCTION

MSME is specifically designed for the professionals working in the industry willing to boost their technical skills and knowledge for their career advancements. It also serves the individuals concerned in harnessing their potential for PhD studies. The degree program primarily focuses on developing advance modeling skills and enhancing engineering knowledge in the areas of Thermal & Fluid Sciences, Manufacturing & Production, and Mechanical Design & Analysis. For the program minimum credit hours earned by a student shall be 30, with minimum 06 credit hours requirement of research, and 24 credit hours (i.e. 3 credit hours per course) for coursework.

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COURSES LIST

- Advanced Numerical analysis
- Advanced Engineering Materials
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- Finite Element Analysis
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RECOGNIZED BY

Higher Education Commission

- Robotics
- Advance Thermodynamics
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- Experimental Methods in Fluid mechanics
- Operations Research
- Advanced Metal Forming
- Human Factor Engineering
- Advanced Stress Analysis
- Modal Analysis
- Continuum Mechanics
- Total Quality Management
- Advanced Automatic Control Systems
INTRODUCTION
PhD degree is the highest degree program offered by the Mechanical Engineering Department, in compliance with HEC guidelines; and is recognized by HEC. Currently PhD program is being offered in Mechanical Engineering emphasizing the fields of Thermal & Fluid Sciences, Manufacturing & Production and Mechanical Design & Analysis. The program of 48 credit hours requires completion of 18 credit hours (i.e. 3 credit hours per course) of course work along with passing of a comprehensive examination, and 30 credit hours of research dissertation.

CAREER PROSPECTS
The graduate of this program will primarily find position in the academic universities of public and/or private sectors. Moreover, Government R & D institutions and consultancy firms also employ graduate of this program.

COURSES LIST
- Advanced Numerical analysis
- Advanced Engineering Materials
- Advanced CAD/CAM
- Finite Element Analysis
- Computer Integrated Manufacturing
- Theory of Elasticity
- Experimental Stress Analysis
- Product Design & development
- Advance Mechanical Vibration
- Engineering Design Optimization
- Robotics
- Advance Thermodynamics
- Advance Fluid Mechanics
- Experimental Methods in Fluid mechanics
- Operations Research
- Advanced Metal Forming
- Human Factor Engineering
- Advanced Stress Analysis
- Modal Analysis

PROGRAM FACTS
- Program Duration
  3 Years, (Credit Hours 48)
- Timing
  Evening 8:00 AM - 6:00 PM (Friday, Saturday & Sunday)
- Entry Requirements
  18 Years of Education, MS/M.Sc Mechanical Engineering degree from PEC recognized university with minimum 3.0 CGPA (Semester System) or First Division (Annual System).
  UOL Interview and entry test are mandatory. University Departmental Committee may conduct the test at par with GAT subject test, and qualifying score for this will be 70%.
  Note: The subject test conducted by the National Testing Service (NTS) or ETS, USA in the area of specialization chosen at the PhD level must be cleared. In the case of GAT Subject test (http://www.nts.org.pk/GAT/GATSubject.asp) a minimum of 60% marks is required to pass the test. In the case GRE subject test, the minimum percentile score of 60% will be accepted.
- Location
  Raiwind Road Campus, Lahore.

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- Higher Education Commission

ROAD MAP

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DOCTOR OF PHILOSOPHY IN MECHANICAL ENGINEERING (Ph.D)
MISSION STATEMENT
The Department of Civil Engineering is established to train the students to become competent professionals and researchers through its eminent faculty, state of the art laboratories and infrastructure. The department continues to promote research activities to find innovative solutions of pragmatic engineering problems by using research facilities of international standards.

INTRODUCTION
The department has internationally trained faculty, well equipped labs and infrastructure facilities, in line with the Pakistan Engineering Council (PEC) and Higher Education Commission (HEC) requirements.

The Civil Engineering program is fully accredited by Pakistan Engineering Council (PEC). The two batches of students have graduated and the forth batch will be graduating, Insha Allah, in July, 2016. Having worked for more than 40 years with international organizations and institutions (e.g. World Health Organization) in various capacities such as Director, Advisor, Professor and Researcher it is my ut-most desire and hope to make this department, as one of the best in the country, known for its academic excellence and high quality graduates.

DEGREES OFFERED
- BS Civil Engineering
- MS Civil Engineering
- Ph.D Civil Engineering
INTRODUCTION
Civil engineering deals with development in terms of conceiving, planning, designing, executing, managing, maintaining and rehabilitating infrastructure and building facilities. This is a diversiﬁ ed discipline which deals with all types of human endeavors related to the growth of civilization in the shape of buildings, transportation systems, industry, power systems, water resources, environment and geo sciences. Civil Engineers play a vital role to execute the visualization and routinely faced multi-faceted, dynamic challenges on projects in various roles as client, consultant, contractor and related ﬁ elds.

The Department of civil engineering is providing excellence to its students by improving competencies in novel techniques and methods to fulﬁ ll the needs of a sustainable built environment. This diverse platform has been established to provide quality engineering education which will allow its students to acquire the most advanced knowledge. Civil Engineering is a challenging profession which requires knowledge of mathematics, applied sciences and computation skills to solve civil engineering problems. The curriculum is designed to nurture students to latent capabilities. Advanced engineering theoretical knowledge and skills are instilled in students by utilizing state of the art lab equipment to learn the engineering profession and utilize it in the development of the society.

CAREER PROSPECTS
The Civil Engineering graduates can look for jobs in various projects i.e. roads, buildings, sewerage/water supply, consultancy ﬁ rms, quality testing laboratories or housing societies. Civil Engineers have good prospects of ﬁ nding consultancy ﬁ rms, quality testing laboratories or housing societies. Civil Engineering graduates can go in for research and take up teaching or they can open their own independent ﬁ rms for consultancy or construction services.

Program Facts
- Program Duration
  4 Years, (Credit Hours 140)
- Timing
  Morning 8:00 AM - 5:00 PM (Monday to Friday)
- Entry Requirements
  12 Years of Education, FSc (Math, Physics and Chemistry) , DAE (Civil A Level) or Equivalent with Minimum 60% Marks. UOL Entry Test is mandatory
- Location
  Raiwind Road Campus, Lahore.

Recognized by
Higher Education Commission | Pakistan Engineering Council

Road Map

Semester 1
- English Language Skills
- Computer Programming
- Engineering Mechanics
- Engineering Drawing
- Basic Electrical Engineering
- Basic Engineering Mechanics
- Applied Calculus (Math-I)
- Engineering Drawing
- Applied Calculus (Math-II)

Semester 2
- Computer Programming
- Engineering Mechanics
- Advanced Engineering Surveying
- Basic Electrical Engineering
- Fluid Mechanics
- Mechanics of Solids-I
- Advanced Fluid Mechanics
- Mechanics of Solids-II

Semester 3
- Engineering Mechanics
- Advanced Engineering Surveying
- Fluid Mechanics
- Mechanics of Solids-I
- Mechanics of Solids-II

Semester 4
- Engineering Mechanics
- Advanced Engineering Surveying
- Fluid Mechanics
- Mechanics of Solids-I

Semester 5
- Probability Method in Engineering (Math-IV)
- Plan & Reinforced Concrete-I
- Architecture & Town Planning
- Structural Engineering
- Mechanical Engineering
- Plan & Reinforced Concrete-I

Semester 6
- Advanced Fluid Mechanics
- Plan & Reinforced Concrete-II
- Geotechnical and Foundation Engineering
- Highway & Traffic Engineering
- Social Sciences
- Geo Informatics

Semester 7
- Structural Analysis - I
- Geotechnical and Foundation Engineering
- Highway & Traffic Engineering
- Disaster Management
- Project (Part-A)

Semester 8
- Structural Analysis - II
- Geotechnical and Foundation Engineering
- Highway & Traffic Engineering
- Disaster Management
- Project (Part-B)
INTRODUCTION
Master of Science in Civil Engineering is designed to produce graduates with enhanced knowledge in the fields of:
- Structural Engineering
- Geotechnical Engineering
- Hydraulics and Irrigation Engineering
- Environmental Engineering

The degree program focuses on providing skills required in different fields of Civil Engineering. The students will study eight subjects consisting of four from each core and elective courses, in addition to a six credit hours research thesis mentioned in the curriculum approved by the academic council.

The program shall have a minimum of three year supervised study period that may be extended to a maximum of seven years towards successful completion of all requirements and award of the Master’s Degree. Under the program, student is required to undertake minimum of 24 credit hours of course work and 6 credit hours of research depending upon the area of specialization thus making a total of minimum 30 credit hours while Maximum of 6 credit hours shall be allowed per year towards successful completion of all requirements and study period that may be extended to a maximum of seven years.

CAREER PROSPECTS
The students of the graduate program will be well equipped with the knowledge of Civil Engineering and research jobs in Government and Public Sector, industries, research centers and technical institutions. They will be capable enough to develop their own firms, research centers and technical institutions. They will be capable enough to develop their own firms, research centers and technical institutions.

PROGRAM FACTS
- Program Duration
  2-3 Years, (Credit Hours 30)
- Timing
  Evenings 06:00 PM - 9:00 PM (Monday to Friday)
- Entry Requirements
  16 Years of Education, BS (Civil Engineering) from PEC recognized university with 2.5 CGPA (Semester System) or 60% Annual System. However for the Environmental Engineering program, students with Bachelor's degree in engineering from other disciplines such as environmental, chemical and other related may be considered on case-to-case basis. UOL Interview and entry test & GAT validity two years arranged by NTS
- Location
  Raiwind Road Campus, Lahore.

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Higher Education Commission

MASTER OF SCIENCE IN
CIVIL ENGINEERING (MSCE)

CAREER PROSPECTS
The students of the graduate program will be well equipped with the knowledge of Civil Engineering and research jobs in Government and Public Sector, industries, research centers and technical institutions. They will be capable enough to develop their own firms, research centers and technical institutions. They will also provide consultancy services to Government and Private sectors.

INTRODUCTION
Master of Science in Civil Engineering is designed to produce graduates with enhanced knowledge in the fields of:

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CAREER PROSPECTS
The students of the graduate program will be well equipped with the knowledge of Civil Engineering and research jobs in Government and Public Sector, industries, research centers and technical institutions. They will be capable enough to develop their own firms, research centers and technical institutions.

PROGRAM FACTS
- Program Duration
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- Timing
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RECOGNIZED BY
Higher Education Commission

MASTER OF SCIENCE IN
CIVIL ENGINEERING (MSCE)

CAREER PROSPECTS
The students of the graduate program will be well equipped with the knowledge of Civil Engineering and research jobs in Government and Public Sector, industries, research centers and technical institutions. They will be capable enough to develop their own firms, research centers and technical institutions.
**HYDRAULIC & IRRIGATION ENGINEERING**  
**CORE COURSES**  
(Minimum any Four of the following)  
• Hydraulic Structures  
• Advanced Fluvial Hydraulics  
• Hydro Power Engineering  
• Irrigation Engineering and Practice  
• Applied Hydrology  
• Sediment Transport  
• Fluid Mechanics  
• Application of RS & GIS in Civil Engineering

**ELECTIVE COURSES**  
(Maximum any Four of the following)  
• Drainage Engineering  
• Computer Aided Design of Hydraulic Structures  
• River Engineering & Flood Management  
• Soil Erosion & Watershed Management  
• Hydrological Modeling  
• Water Resources Planning and Management  
• Ground Water Engineering  
• Reinforced Concrete Structures  
• Property of Structural Materials  
• Prestressed Concrete  
• Seismic Design of Structures  
• Bridge Engineering  
• Advanced Soil Mechanics  
• Foundation Engineering-I  
• Dam Engineering  
• Geotechnical Investigations  
• Soil Improvement Techniques  
• Earth Retaining Structures  
• Environmental Geo-Techniques  
• Numerical Methods in Engineering  
• Environmental Management and Impact Assessment  
• Industrial and Hazardous Waste Management  
• Water Supply and Wastewater Collection System  
• Environmental Chemistry and Microbiology  
• Solid Waste Management

**ENVIRONMENTAL ENGINEERING**  
**CORE COURSES**  
(Minimum any Four of the following)  
• Environmental Management and Impact Assessment  
• Physical-Chemical Processes in Environmental Systems  
• Wastewater Treatment and Design  
• Experimental Methods in Environmental Engineering  
• Industrial and Hazardous Waste Management  
• Water Supply and Wastewater Collection System  
• Environmental Chemistry and Microbiology  
• Solid Waste Management

**ELECTIVE COURSES**  
(Maximum any Four of the following)  
• Air and Noise Pollution Control  
• Ecology and Risk Assessment  
• Environmental Health and Safety  
• Water Quality Modeling  
• Marine Pollution and Control  
• Modeling of Environmental System  
• Agricultural Pollution and Control  
• Environmental Pollution Control  
• Hydraulic Structures  
• Applied Hydrology  
• Soil Improvement Techniques  
• Environmental Geo-Techniques  
• Property of Structural Materials  
• Thesis

**THE UNIVERSITY OF LAHORE**

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INTRODUCTION
The Department of Civil Engineering has started Ph.D program in Civil Engineering by offering courses in the following four areas of interest:

• Structural Engineering
• Geotechnical Engineering
• Hydraulics and Irrigation Engineering
• Environmental Engineering

The student must select one of the above mentioned areas of interest and complete 18 credit hours in that area by selecting courses from only one of the specified lists. Basically, subjects may be selected by mutual consultation of the scholar and his PhD supervisor. The subjects have to be passed obtaining accumulative CGPA 3.0. It is a mandatory to get at least CGPA 3.0 out of 4.0 as required by HEC to appear in Ph.D comprehensive exam, otherwise the candidate will not be eligible to continue further Ph.D research studies. The student must follow the Higher Education Commission (HEC) Rules and Regulations.

CAREER PROSPECTS
The graduates will be fully equipped with the skills and knowledge in various areas of Civil Engineering to deal with issues and challenges in research, industries, etc. in both public and private sector within and outside Pakistan. They will be capable to develop their own think tanks, research centers and academic institutions as well as make positive contribution to national development through practical and innovative solutions.

ROAD MAP

<table>
<thead>
<tr>
<th>PROGRAM FACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Program Duration</td>
</tr>
<tr>
<td>3-5 Years (Credit Hours 48)</td>
</tr>
<tr>
<td>• Timing</td>
</tr>
<tr>
<td>Evening 5:00 PM to 9:00 PM (Monday to Friday)</td>
</tr>
<tr>
<td>• Entry Requirements</td>
</tr>
<tr>
<td>18 Years of Education, M.S./M.Sc. Civil Engineering degree from PEC recognized university with minimum 3.0 CGPA (Semester System) or First Division (Annual System) UOL Interview and entry test are mandatory. University Departmental Committee may conduct the test at par with GAT subject test, and qualifying score for this will be 70%.</td>
</tr>
<tr>
<td>Note: The subject test conducted by the National Testing Service (NTS) or ETS, USA in the area of specialization chosen at the PhD level must be cleared. In the case of GAT Subject test (<a href="http://www.nts.org.pk/GAT/GATSubject.asp">http://www.nts.org.pk/GAT/GATSubject.asp</a>) a minimum of 60% marks is required to pass the test. In the case GRE subject test, the minimum percentile score of 60% will be accepted.</td>
</tr>
<tr>
<td>• Location</td>
</tr>
<tr>
<td>Raiwind Road Campus, Lahore.</td>
</tr>
</tbody>
</table>

RECOGNIZED BY
Higher Education Commission

COURSES LIST
AREAS OF SPECIALIZATION

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
<th>SEMESTER 5</th>
<th>Cr. Hr.</th>
<th>SEMESTER 6</th>
<th>Cr. Hr.</th>
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<tbody>
<tr>
<td>Core Course-1</td>
<td>3</td>
<td>Core Course-3</td>
<td>3</td>
<td>Core Course-5</td>
<td>3</td>
<td>Core Course-2</td>
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<td>Core Course-6</td>
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<td>Core Course-4</td>
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<td>Elective Course-4</td>
<td>3</td>
<td>Elective Course-5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Environmental Geo Techniques</td>
</tr>
<tr>
<td>• Rock Engineering</td>
</tr>
<tr>
<td>• Soil Dynamics</td>
</tr>
<tr>
<td>• Numerical Methods in Engineering</td>
</tr>
<tr>
<td>• Geotechnical Engineering in Professional practice</td>
</tr>
<tr>
<td>• Properties of Structural Materials</td>
</tr>
<tr>
<td>• Seismic Design of Structures</td>
</tr>
<tr>
<td>• Stability of Structures</td>
</tr>
<tr>
<td>• Bridge Engineering</td>
</tr>
<tr>
<td>• Seismology and Earthquake Engineering</td>
</tr>
<tr>
<td>• Coastal Engineering</td>
</tr>
<tr>
<td>• Advanced Materials of Construction</td>
</tr>
<tr>
<td>• Environmental Management and Impact Assessment</td>
</tr>
<tr>
<td>• PhD Thesis</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL
Six courses from the following list not previously studied:

• Environmental Management and Impact Assessment
• Physico-Chemical Processes in Environmental Systems
• Wastewater Treatment and Design
• Experimental Methods in Environmental Engineering
• Industrial and Hazardous Waste Management
• Water Supply and Wastewater Collection System
• Environmental Chemistry and Microbiology
• Solid Waste Management
• Air and Noise Pollution Control
• Ecology and Risk Assessment
• Environmental Health and Safety
• Water Quality Modeling
• Marine Pollution and Control
• Modeling of Environmental Systems
• Agricultural Pollution and Control
• Environmental Pollution and Control
• PhD Thesis

GEOTECHNICAL
Six courses from the following list not previously studied:

• Advanced Soil Mechanics
• Foundation Engineering-I
• Foundation Engineering-II
• Dam Engineering
• Geotechnical Investigation
• Soil Improvement Techniques
• Earth Retaining Structures

HYDRAULIC AND IRRIGATION
Six courses from the following list not previously studied:

• Design of Hydraulic Structures
• Advanced Fluvial Hydraulics
• Hydropower Engineering
• Irrigation Engineering and Practices
• Applied Hydrology
• Sediment Transport
• Fluid Mechanics
• Application of RS & GIS in Civil Engineering
• Drainage Engineering
• Computer Aided Design of Hydraulic Structures
• River Engineering and Flood Management
• Soil and Water Management
• Hydrological Modeling
• Water Resources Planning and Management
• Ground Water Engineering
• Flood Risk Management
• Applied Hydraulics
• Statistical Hydrology
• Reinforced Concrete Structures
• Advanced Materials of Construction
• Computer Aided Design of Hydraulic Structures
• Soil Improvement Techniques
• Experimental Methods in Environmental Geotechnical Investigation
• Earth Retaining Structures
• Rock Engineering
• Environmental Management and Impact Assessment
• PhD Thesis

LECTURE NOTES

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
<th>SEMESTER 3</th>
<th>SEMESTER 4</th>
<th>SEMESTER 5</th>
<th>SEMESTER 6</th>
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<td>Core Course-3: 3</td>
<td>Core Course-5: 3</td>
<td>Core Course-2: 3</td>
<td>Core Course-4: 3</td>
<td>Core Course-6: 3</td>
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<tr>
<td>Core Course-2: 3</td>
<td>Elective Course-1: 3</td>
<td>Elective Course-3: 3</td>
<td>Elective Course-2: 3</td>
<td>Elective Course-4: 3</td>
<td>Elective Course-5: 3</td>
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<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
<th>SEMESTER 3</th>
<th>SEMESTER 4</th>
<th>SEMESTER 5</th>
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<td>Core Course-2: 3</td>
<td>Core Course-4: 3</td>
<td>Core Course-6: 3</td>
</tr>
<tr>
<td>Core Course-2: 3</td>
<td>Elective Course-1: 3</td>
<td>Elective Course-3: 3</td>
<td>Elective Course-2: 3</td>
<td>Elective Course-4: 3</td>
<td>Elective Course-5: 3</td>
</tr>
</tbody>
</table>
MISSION
The mission of the Department of Computer Engineering is to construct and sustain a high quality and broad-based teaching and research program for the graduates so that they may maximize their potential, develop their skills and improve their performance for successful professional careers and to provide service to the community.

INTRODUCTION
Welcome to the newly established “Department of Computer Engineering” at the University of Lahore, one of the largest university in private sector. The Department is offering Bachelors of Science in Computer Engineering program. The curriculum formulated by HEC and PEC is followed. The department actively organizes special lectures, seminars, trainings, tutorials, and workshops for its students. The Department of Computer Engineering is dedicated towards providing the students the best quality of teaching, state of the art lab facilities, research and development environment. Our main incentive is to improve and develop the professional and technical skills of our students.

DEGREE OFFERED
- BS Computer Engineering
INTRODUCTION
The Bachelor of Science in Computer Engineering provides the students the opportunity to achieve comprehensive engineering skills of software and hardware and making them capable of designing and implementing computer and digital systems. The program highlights the concepts of digital logic design, digital systems design, computer organization, embedded systems design, discrete mathematics, microprocessors, high-level programming and interfacing of processors to other circuits; high-level digital design languages (HDL) and Field Programmable Gate Arrays (FPGA’s), Very Large Scale Integrated (VLSI) circuit design, telecommunication, fundamental electrical engineering, mathematics and science.

CAREER PROSPECTS
After completion of this degree, the graduating engineers will have bright careers in industry, academia and banking in areas of Computer controlled systems, power management systems, Engineering project management, Smart Grids, System Programming, Software Quality assurance and testing, Robotics, Artificial Intelligence, Automation, Biomedical, Networking, Telecom and Electronics.

ROAD MAP

| SEMESTER 1 | Cr. | Hr. | SEMESTER 2 | Cr. | Hr. | SEMESTER 3 | Cr. | Hr. | SEMESTER 4 | Cr. | Hr. | SEMESTER 5 | Cr. | Hr. | SEMESTER 6 | Cr. | Hr. | SEMESTER 7 | Cr. | Hr. | SEMESTER 8 | Cr. | Hr. |
|------------|-----|-----|------------|-----|-----|------------|-----|-----|------------|-----|-----|------------|-----|-----|------------|-----|-----|------------|-----|-----|------------|-----|-----|------------|-----|-----|
| Calculus and Analytical Geometry | 3   |     | Linear Algebra | 3   |     | Complex Analysis and Transform Methods | 3   |     | Differential Equations | 3   |     |
| English Language Proficiency | 3   |     | Communication Skills | 3   |     | Pakistan Studies | 2   |     | Microprocessor Systems | 4   |     |
| Introduction to Computing | 3   |     | Computer Programming | 3   |     | Object Oriented Programming | 4   |     | Data Structure and Algorithms | 4   |     |
| Applied Physics | 4   |     | Electrical Network Analysis | 4   |     | Electronics Devices and Circuits | 4   |     | Signals and Systems | 4   |     |
| Linear Circuit Analysis | 4   |     | Digital Logic Design | 4   |     | Computer Architecture and Organization | 4   |     | Probability methods in Engineering | 3   |     |
| Engineering Drawing | 1   |     | Work Shop Practice | 1   |     | | | | | |

<table>
<thead>
<tr>
<th>COURSES LIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTIVES</td>
</tr>
<tr>
<td>• VLSI Design</td>
</tr>
<tr>
<td>• Medical Electronics</td>
</tr>
<tr>
<td>• Digital Control Systems</td>
</tr>
<tr>
<td>• Introduction to Nano Technology</td>
</tr>
<tr>
<td>• Industrial Electronics</td>
</tr>
<tr>
<td>• Optoelectronics</td>
</tr>
<tr>
<td>• Other Topics</td>
</tr>
<tr>
<td>• Introduction to Micro mechanical system (MEMS)</td>
</tr>
<tr>
<td>• Simulation and Modeling</td>
</tr>
<tr>
<td>• System Programming</td>
</tr>
<tr>
<td>• Software Quality Assurance</td>
</tr>
<tr>
<td>• Parallel Distributed Computing</td>
</tr>
<tr>
<td>• Digital Signal Processing</td>
</tr>
<tr>
<td>• Computer Graphics</td>
</tr>
<tr>
<td>• Artificial Intelligence</td>
</tr>
<tr>
<td>• Digital System Design</td>
</tr>
<tr>
<td>• Communication System</td>
</tr>
<tr>
<td>• Switching Theory</td>
</tr>
<tr>
<td>• Digital Image Processing</td>
</tr>
<tr>
<td>• Robotics</td>
</tr>
<tr>
<td>• Nural Networks</td>
</tr>
<tr>
<td>• Optical Fiber</td>
</tr>
<tr>
<td>• Wireless Communication</td>
</tr>
<tr>
<td>• Fault Tolerant Computing</td>
</tr>
<tr>
<td>• VLSI Design</td>
</tr>
</tbody>
</table>

PROGRAM FACTS
- **Program Duration**: 4 Years (Credit Hours 139)
- **Timing**: Morning 8:00 AM - 5:00 PM (Monday to Friday)
- **Entry Requirements**: 12 Years of Education, FSc (Math, Physics and Chemistry), DAE (Telecom, Electronics, Electrical, Computer), ICS, A-Level or Equivalent with Minimum 60% Marks.
- **UOL Entry Test is mandatory**
- **Location**: Defence Road Campus, Lahore.

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Higher Education Commission | Pakistan Engineering Council

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING (BSCOMP)

64 The University of Lahore

Engineering and Technology 66
DEGREES OFFERED

• BS Mechanical Technology
• BS Civil Technology
• BS Electrical Technology

MISSION
To produce hand on skills technical manpower for meeting the current and future demands of industry to recognize education and research in close interaction with industry with emphasis on the development of leadership qualities in aspirants. To generate innovative knowledge by engaging in cutting edge research and to promote academic growth by offering state-of-the-art undergraduates and postgraduate programs.

INTRODUCTION
The BS-Tech program is an off shoot of general engineering in Electrical, Mechanical and Civil sector and is geared towards production and catering for the needs of the industry. The design of technology courses is oriented towards learning professional skills. Realising continuous improvement of existing standard the department has remodeled its curriculum and other facilities. In this regard a new strategy is devised for learning process by providing exclusive industrial training to the students. The University management understands these challenges, and is striving to provide the required skills for technology graduates to fit into all the industries of today and tomorrow.
INTRODUCTION
The mechanical development is a measure of progress of a country. With an ever increasing complexities of technologies, the world is facing an acute shortage of able technologists. The BS-Tech Mechanical program provides a sound grounding of principles and fundamentals through practical work and problem solving activities. We provide our students a blend of technical and managerial skills coupled with tips for maximum effectiveness in productivity.

CAREER PROSPECTS
This course is designed to prepare students for a career as technologists within a broad range of mechanical and manufacturing industries. Employers of our graduates include consultancy services, small enterprise companies and large volume manufacturers. Students are encouraged to undertake projects according to the current industrial needs. The Department organizes project exhibitions for technological exposure which are highly appreciated by the students and visitors from industry.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Comprehension</td>
<td>3</td>
<td>Communication Skills</td>
<td>3</td>
<td>Applied Mathematics III</td>
<td>3</td>
<td>Industrial Electronics</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Drawing I</td>
<td>3</td>
<td>Engineering Drawing II</td>
<td>3</td>
<td>Computer Programming</td>
<td>3</td>
<td>Mechanics of Machines I</td>
<td>3</td>
</tr>
<tr>
<td>Applied Chemistry</td>
<td>3</td>
<td>Applied Mechanics</td>
<td>3</td>
<td>Industrial Materials</td>
<td>3</td>
<td>Fluid Mechanics</td>
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<tr>
<td>Applied Physics</td>
<td>3</td>
<td>Applied Thermodynamics</td>
<td>3</td>
<td>Auto CAD</td>
<td>3</td>
<td>Applied Mathematics IV</td>
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<tr>
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<td>3</td>
<td>Applied Mathematics II</td>
<td>3</td>
<td>Mechanics of Materials</td>
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<td>Machining Processes</td>
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<tr>
<td>Computer Application</td>
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<td>Machine Design</td>
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</table>

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<tr>
<th>SEMESTER 5</th>
<th>Cr. Hr.</th>
<th>SEMESTER 6</th>
<th>Cr. Hr.</th>
<th>SEMESTER 7</th>
<th>Cr. Hr.</th>
<th>SEMESTER 8</th>
<th>Cr. Hr.</th>
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</thead>
<tbody>
<tr>
<td>Engineering Economics</td>
<td>3</td>
<td>Hydraulic Machinery</td>
<td>3</td>
<td>Material Handling</td>
<td>3</td>
<td>Heat Transfer</td>
<td>3</td>
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<tr>
<td>Machine Design II</td>
<td>3</td>
<td>Introduction to Mechatronics</td>
<td>3</td>
<td>Metal Cutting and Machinery Tools</td>
<td>4</td>
<td>Power Plant Engineering and Energy Resources</td>
<td>3</td>
</tr>
<tr>
<td>Advance Thermodynamics</td>
<td>3</td>
<td>Installation, Testing and Maintenance of Machine</td>
<td>3</td>
<td>I/C Engines</td>
<td>3</td>
<td>Environmental Technology for Industries</td>
<td>2</td>
</tr>
<tr>
<td>Mechanical Vibration</td>
<td>3</td>
<td>Refrigeration and Air Conditioning</td>
<td>3</td>
<td>Automation and Control</td>
<td>3</td>
<td>Islamic and Pakistan Studies</td>
<td>3</td>
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<tr>
<td>Industrial Management</td>
<td>3</td>
<td>Quality Control and Assurance</td>
<td>3</td>
<td>Project</td>
<td>3</td>
<td>Occupational Health Safety and Environment</td>
<td>3</td>
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<td></td>
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<td></td>
<td>Training Program 1</td>
<td>4</td>
<td>Training Program 2</td>
<td>4</td>
</tr>
</tbody>
</table>

PROGRAM FACTS
- **Program Duration**
  4 Years, [Credit Hours 133]
- **Timing**
  Morning 08:00 AM to 05:00 PM (Monday-Friday)
  Evening 05:00 PM to 10:00 PM (Monday-Friday)
- **Entry Requirements**
  12 Years of Education, F.Sc (Pre-Engineering), D.A.E (Mechanical), D.A.E (Production) D.A.E (Refrigeration and Air Conditioning), D.A.E (Auto Diesel), D.A.E (Metallurgy) A-Level or Equivalent with Minimum 45% Marks.
  UOL Entry Test is mandatory
- **Location**
  Raiwind Road Campus, Lahore.

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Higher Education Commission

BACHELOR OF SCIENCE IN MECHANICAL TECHNOLOGY (BS-TECH MECHANICAL)
INTRODUCTION
The main emphasis of BS Civil Technology Program is to provide the students with a sound foundation of mathematics and other sciences to utilize their knowledge in solving problems of structure, irrigation and hydraulics, soil mechanics, foundations, highways transportation and environmental engineering. It enables the students to know about the operation and maintenance of projects and gives them on-job training to work independently as well as team member on projects like infrastructure development and repair works of civil engineering. Our students are also trained to use the modern engineering softwares for construction industry.

CAREER PROSPECTS
Students are educated in manner to face various challenges of the modern construction industry utilizing techniques, skills, latest equipment and softwares. Graduated technologists of the department are able to apply their knowledge and skills in firms providing consultancy, construction and designing services and execution of infrastructure projects. Our graduates are in great demand in local as well as foreign construction projects.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
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</thead>
<tbody>
<tr>
<td>Computer Applications</td>
<td>3</td>
<td>Applied Mathematics-II</td>
<td>3</td>
<td>Repair and Maintenance of Structures</td>
<td>3</td>
<td>Structural Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>Materials and Methods of Construction</td>
<td>3</td>
<td>Engineering Geology</td>
<td>3</td>
<td>Fluid Mechanics</td>
<td>4</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>Engineering Drawing</td>
<td>3</td>
<td>Communication Skills</td>
<td>3</td>
<td>Applied Mathematics-III</td>
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<td>Applied Mathematics-IV</td>
<td>3</td>
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<tr>
<td>Applied Mathematics-I</td>
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<td>Construction Surveying</td>
<td>4</td>
<td>Computer Programming</td>
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<td>Technical Report Writing</td>
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</tbody>
</table>

PROGRAM FACTS
- **Program Duration**: 4 Years, (Credit Hours 130)
- **Timing**: Morning 08:00 AM to 05:00 PM (Monday-Friday)
  Evening 05:00 PM to 10:00 PM (Monday-Friday)
- **Entry Requirements**: 12 Years of Education, F.Sc (Pre-Engineering), DAE, (Mining / Civil /Architecture), A Level / ICS (Math and Physics), FA (Math and Physics) A-Level or Equivalent with Minimum 45% Marks. UOL Entry Test is mandatory
- **Location**: Raiwind Road Campus, Lahore.

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Higher Education Commission

BACHELOR OF SCIENCE IN CIVIL TECHNOLOGY (BS-TECH CIVIL)

SEMINAR 5
- Water Supply and Wastewater Management | 3 |
- Hydrology | 4 |
- Irrigation and Hydraulic Structures | 4 |
- Traffic Engineering | 3 |
- Steel Structures | 3 |
- Engineering Economics | 3 |
- Total Quality Management | 3 |
- Foundation and Pavement Technology | 4 |
- Application of GIS in Civil | 3 |
- Architecture and Town Planning | 3 |
- Pre-stressed and Pre-cast Concrete Technology | 4 |
- Computer Aided Analysis and Design | 3 |
- Concrete Technology-I | 3 |
- Concrete Technology-II | 3 |
- Highway and Transportation Technology | 4 |
- Training Program 2 | 4 |
- Environmental Management | 3 |
- Project Management | 3 |
- Final Year Project | 3 |
- Training Program 1 | 4 |
BACHELOR OF SCIENCE IN ELECTRICAL TECHNOLOGY (BS-TECH ELECTRICAL)

INTRODUCTION
The undergraduate BS-Tech Electrical program is based on solid foundation of all electrical, computer and electronics systems. Successful completion of the program equips the students with the ability to grow as professionals and develop rational and analytical skills. The program provides a broad technological core competence which enables students to contribute in various electrical and related fields. On successful completion of this program, the student will be able to solve integrated problems, analyze hypothesis testing and implement modern technological systems.

CAREER PROSPECTS
BS-Technology (Electrical) is suited to those wishing to pursue a career in telecommunication, power, networking, and other sub categories of these fields. The electrical technologists are in great demand with employers within Pakistan and abroad. Within Electrical Technology, the main employment areas include Electrical Power (generation, transmission and distribution), Power Systems, Electrical Machinery (installation and design), Telecommunication industry, Media like TV and Radio.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
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<th>SEMESTER 2</th>
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<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
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</thead>
<tbody>
<tr>
<td>Applied Calculus</td>
<td>3</td>
<td>Linear Algebra and Differential Equations</td>
<td>3</td>
<td>Complex Variables and Transforms</td>
<td>3</td>
<td>Solid State Geometry and Multivariate Calculus</td>
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<tr>
<td>Computer Fundamentals</td>
<td>3</td>
<td>Network Analysis I</td>
<td>3</td>
<td>Computer Programming</td>
<td>3</td>
<td>Microprocessor Theory and Interfacing</td>
<td>3</td>
</tr>
<tr>
<td>Linear Circuits Analysis</td>
<td>3</td>
<td>Engineering Drawing</td>
<td>3</td>
<td>Digital Electronics</td>
<td>4</td>
<td>Electronics Devices and Circuits</td>
<td>3</td>
</tr>
<tr>
<td>Applied Physics</td>
<td>3</td>
<td>Basic Mechanical Technology</td>
<td>3</td>
<td>Network Analysis II</td>
<td>3</td>
<td>Measuring Instruments and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>English Comprehension</td>
<td>3</td>
<td>Communication Skills</td>
<td>3</td>
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PROGRAM FACTS
- Program Duration
  4 Years, (Credit Hours 132)
- Timing
  Morning 08:00 AM to 05:00 PM (Monday-Friday)
  Evening 05:00 PM to 10:00 PM (Monday-Friday)
- Entry Requirements
  12 Years of Education, F. Sc. (Pre-Engineering), ICS (Math and Physics), F.A. (Math and Physics), DAE (Electronics, Electrical, Instrumentation, Telecommunication, Computer Technology), A-Level or Equivalent with Minimum 45% Marks.
  UOL Entry Test is mandatory
- Location
  Raiwind Road Campus, Lahore.

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Higher Education Commission
MISSION
In partnership with our students, the mission of our department is to:
• Provide quality course and lab work that meets international educational standards.
• Provide an environment where students feel free to gain knowledge without gender and racial discrimination under the umbrella of the ethics of Islam.
• Critically examine and refine knowledge to transfer it in practice through electronics and electrical systems.
• Provide a learning environment that motivates students for Research and Development (R&D).

INTRODUCTION
This Department is one of the primary departments of the University of Lahore. Its initial setup was laid when this University opened its gate for students to learn and grow.

DEGREES OFFERED
• BS Electronics and Electrical Systems
• BS Power and Energy Systems
• BS Electronics and Communication
• BS Communication and Information Technology
• MS Electronics and Electrical Systems

The course work here is based upon the latest technologies and learning tools. Students are directed towards research and innovation. Our top-notch faculty is well-versed in their respective fields and our teaching methods comply with international standards.
INTRODUCTION
In order to keep pace with the rapid changes in an ever-growing industry, this program is designed to equip students with state-of-art skills. The program also enables students to understand the basic concepts and to handle practical issues in related fields through comprehensive teaching based on solving open ended problems using software as well as hardware experiments in the lab.

The BSEES degree program is designed specifically for students with average background knowledge in the field of sciences.

CAREER PROSPECTS
After completion of this degree program, the graduating students could develop careers in Power, Energy, Communication, Electronics, Electrical and Automation industry or even in Microwave engineering.

RECOGNIZED BY
Higher Education Commission

PROGRAM FACTS
- Program Duration: 4 Years (Credit Hours 135)
- Timing: Morning 08:00 AM to 05:00 PM (Monday-Friday)
- Entry Requirements: 12 Years of Education, F.Sc. (Pre-Engineering), ICS (Math and Physics), F.A. (Math and Physics), DAE (Electronics, Electrical, Instrumentation, Telecommunication, Computer Technology) A-Level or Equivalent with Minimum 45% Marks. UOL Entry Test is mandatory
- Location: Raiwind Road Campus, Lahore.

COURSES LIST
COMMUNICATION
- Digital communication
- Introduction to telecom systems
- Electromagnetic compatibility
- Antenna engineering
- Optical fiber communications
- Telecom switching
- Advanced network
- Mobile communication
- Embedded systems design
- Microwave engineering i
- Microwave engineering ii
- Wireless communication
- Digital image processing
- Medical electronics

POWER
- Power systems
- Power system protection
- Power system analysis
- High voltage engineering
- Industrial electric power systems
- Electric power quality
- Power system stability
- Power system dynamics
- Power plants
- Nuclear power systems

ROAD MAP

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<th>SEMESTER 1</th>
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INTRODUCTION
Bachelor of Science in Power and Energy Systems is a technical degree in the field of power and energy systems. Different countries in the world have different infrastructures, demands and opportunities regarding power and energy systems. Power and Energy Systems program is designed to provide skills to develop as a professional who specializes in dealing with the breadth of energy systems used to generate, convert, transmit and manage energy throughout multiple networks, including electrical power. In addition, they will have the opportunity to participate in the activities of different university societies, attend departmental seminars, and contribute to the departmental governance.

CAREER PROSPECTS
Power and Energy sector is one of the most rapidly growing and ever green sectors in the economy. Clearly this sector will continue to change, and powerfully impact the way we conduct our lives. Bachelor of Science in Power and Energy prepares students for professional careers across the country.

PROGRAM FACTS
- **Program Duration**: 4 Years, [Credit Hours 135]
- **Timing**: Morning 08:00 AM to 05:00 PM (Monday-Friday)
- **Entry Requirements**: 12 Years of Education, F. Sc. (Pre-Engineering), ICS (Math and Physics), F.A. (Math and Physics), DAE (Electronics, Electrical, Instrumentation, Telecommunication, Computer Technology) A-Level or Equivalent with Minimum 45% Marks. UOL Entry Test is mandatory
- **Location**: Raiwind Road Campus, Lahore.

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Higher Education Commission

POWER SYSTEM
- Industrial electric power systems
- Electric power quality
- Power system stability
- Power system dynamics
- Smart grids
- Nuclear power systems
- High voltage engineering

ENERGY SYSTEM
- Hybrid Energy Systems
- Air Pollution And Global Warming
- Geothermal Reservoirs Systems
- Emerging Energy Technologies
- Fuel Cell Fundamentals

COURSES LIST

ROAD MAP

BACHELOR OF SCIENCE IN POWER AND ENERGY SYSTEMS (BSPES)
**BACHELOR OF SCIENCE IN ELECTRONICS AND COMMUNICATION (BSEC)**

**INTRODUCTION**
This program is a unique blend of Electronics and Communication curricula. The aim of this program is to equip students with state of the art skills and to produce graduates who would excel in an ever-growing industry of telecommunication and nanotechnologies. Students would be taught the core principles of Electronics field along with the key concepts of communication such as Signal Processing, Modulation techniques, GSM and Optical communication principles. This will help students to produce the software based as well as hardware based solutions to the vast industry of Electronics, Automation (Control Systems and Embedded Systems Design) and Communication.

**CAREER PROSPECTS**
The career scope of this degree program is really wide based on the selection of specialization courses taught in the program. After completion of this degree program, the graduating students could develop careers in the field of Communication Technologies, Electronics and Automation industry or even in RF Planning and Antenna Engineering.

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Higher Education Commission

**PROGRAM FACTS**
- **Program Duration**
  4 Years, (Credit Hours 135)
- **Timing**
  Morning 08:00 AM to 05:00 PM (Monday-Friday)
- **Entry Requirements**
  12 Years of Education, F. Sc. (Pre-Engineering), ICS (Math and Physics), F.A. (Math and Physics), DAE (Electronics, Electrical, Instrumentation, Telecommunication, Computer Technology) A-Level or Equivalent with Minimum 45% Marks. UOL Entry Test is mandatory.
- **Location**
  Raiwind Road Campus, Lahore.

**COURSES LIST**

**ELECTRONICS & COMMUNICATION**
- Digital Communication
- Introduction to Telecom Systems
- Antenna Engineering
- Optical Fiber Communication
- Telecom Switching
- Advance Networks
- Mobile Communication
- Embedded Systems Design
- Microwave Engineering-I
- Microwave Engineering-II
- Wireless Communication
- Digital Image Processing
- Medical Electronics

**ROAD MAP**

**SEMESTER 1**
- Introduction To Computing: 4 Cr. Hrs.
- Computer Programming: 4 Cr. Hrs.
- Data Structures: 4 Cr. Hrs.
- Introduction To Electrical Machines: 4 Cr. Hrs.

**SEMESTER 2**
- Circuit Analysis-I: 4 Cr. Hrs.
- Introduction To Solid State Devices: 3 Cr. Hrs.
- Digital Logic Design: 4 Cr. Hrs.
- Multivariable Calculus: 4 Cr. Hrs.

**SEMESTER 3**
- Calculus: 4 Cr. Hrs.
- Linear Algebra and Differential Equations: 4 Cr. Hrs.
- Circuit Analysis-II: 4 Cr. Hrs.
- Signals And Systems: 4 Cr. Hrs.

**SEMESTER 4**
- Islamic and Pakistan Studies: 3 Cr. Hrs.
- Mechanics: 4 Cr. Hrs.
- Complex Variables and Transforms: 4 Cr. Hrs.
- Microprocessor and Computer Architecture: 3 Cr. Hrs.

**SEMESTER 5**
- Communication Skills: 3 Cr. Hrs.
- Engineering Software Lab-I: 1 Cr. Hrs.
- Electrical Engineering Workshop: 1 Cr. Hrs.
- Economics: 3 Cr. Hrs.

**SEMESTER 6**
- Introduction To Computing: 4 Cr. Hrs.
- Circuit Analysis-I: 4 Cr. Hrs.
- Calculus: 4 Cr. Hrs.
- Linear Algebra and Differential Equations: 4 Cr. Hrs.

**SEMESTER 7**
- Probability and Stochastic Processes: 3 Cr. Hrs.
- Communication Systems-I: 3 Cr. Hrs.
- Digital System Design: 2 Cr. Hrs.
- Technical Elective: 3 Cr. Hrs.

**SEMESTER 8**
- Microelectronics-I: 4 Cr. Hrs.
- Microelectronics-II: 4 Cr. Hrs.
- Control Systems: 3 Cr. Hrs.
- Technical Elective: 3 Cr. Hrs.
INTRODUCTION
The Bachelor of Science in Communication and Information Technology is a professional four year degree that will provide students with solid skills and a knowledge base in communication, networking and IT applications areas of Communication and Information Technology (CIT). As well as the ability to apply practical solutions across the CIT arena. It will also allow students to develop skills in application development, program design, systems analysis and design, networks, web design, and the implementation of technology. As a graduate of the Bachelor of Science in CIT, you will be able to Investigate, Integrate and Innovate.

CAREER PROSPECTS
As CIT graduate, you can look forward to career opportunities such as network administrator or engineer, RF engineer, smart mobile communication devices and networks, digital TV and radio broadcasting optical fiber networks for high-speed internet services flight control and safety systems for aircraft, systems developer, and information systems manager.

PROGRAM FACTS

- Program Duration
  4 Years, [Credit Hours 135]
- Timing
  Morning 08:00 AM to 05:00 PM (Monday-Friday)
- Entry Requirements
  12 Years of Education, F.Sc. (Pre-Engineering), ICS (Math and Physics), F.A. (Math and Physics), DAE (Electronics, Electrical, Instrumentation, Telecommunication, Computer Technology) A-Level or Equivalent with Minimum 45% Marks. UOL Entry Test is mandatory
- Location
  Raiwind Road Campus, Lahore.

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BACHELOR OF SCIENCE IN COMMUNICATION AND INFORMATION TECHNOLOGY (BSCIT)

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COMMUNICATION

- Wireless communication
- Telecom switching
- Mobile communication
- Optical fiber communications
- Microwave engineering i
- Microwave engineering ii
- Digital communication
- Medical electronics
- Introduction to telecom systems

INFORMATION TECHNOLOGY

- Distributed database systems
- Artificial intelligence
- Mobile application development
- Web programming
- Advance networks
- Embedded system design
- Object oriented analysis and design
- System programming

COURSES LIST

COMMUNICATION

- Wireless communication
- Telecom switching
- Mobile communication
- Optical fiber communications
- Microwave engineering i
- Microwave engineering ii
- Digital communication
- Medical electronics
- Introduction to telecom systems

INFORMATION TECHNOLOGY

- Distributed database systems
- Artificial intelligence
- Mobile application development
- Web programming
- Advance networks
- Embedded system design
- Object oriented analysis and design
- System programming
INTRODUCTION
The MSEES program offered at the University of Lahore has been designed for professionals working in the industry willing to enhance their technical skills and knowledge for career advancement. It prepares individuals to apply advanced Mathematical and Scientific principles to the design, development and operational evaluation of electronics and communication systems. The degree program focuses on developing the skills required to design electronics & communication solutions that meet industrial, military and international technical standards. Students are required to design, manufacture and deliver a working product that meets these industry standards.

CAREER PROSPECTS
After completing the degree, student can work in Mobile Services Provider, Internet Services Providers, Network Operators, R.F Planning and Optimization, TV Channels, Research and Development Organizations.

PROGRAM FACTS
- Program Duration
  2 Years, (Credit Hours 30)
- Timing
  Evening 6:00 PM - 9:00 PM (Monday to Friday)
- Entry Requirements
  16 Years of Education, BS (Electrical Engg. Electronics Engg. Telecom Engg. Computer Engg. Communication Engg). BS Electronics / BS Telecom / B.Tech (Hons)/BS Computer Science from HEC recognized university with 2.5 CGPA (Semester System) or 60% Annual System. UOL Interview and entry test & GAT validity two years arranged by NTS
- Location
  Raiwind Road Campus, Lahore.

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CORE COURSES
COMMUNICATION
- Mathematical methods for engineers
- Stochastic processes
- Digital communication system
- Advanced digital signal processing
- Advanced computer network
- Research thesis

POWER SYSTEM
- Mathematical methods for engineers
- Advanced power system protection
- Power system quality, reliability and planning
- Power circuit breakers and substations
- Advanced high voltage engineering
- Research thesis

ELECTIVE COURSES
COMMUNICATION
- Information theory and coding
- Introduction to cryptology
- Mobile and wireless communication
- Advance communication network
- Performance evaluation of communication network
- Real time embedded system
- Switched mode power supply
- Digital speech processing

POWER SYSTEM
- Transient in power
- Insulation coordination of power system
- Power system stability and load flow analysis
- Power system operation and control
- Power system planning
- Power distribution, automation & control

ROAD MAP

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<td>Core Course - 2</td>
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<td>Elective Courses - 1</td>
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<td>Research Thesis</td>
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</table>
• Computer Science and Information Technology
MISSION STATEMENT
Our mission is to provide outstanding education to its undergraduate and graduate students in accordance with the principles of the University mission. We strive for excellence in creating, applying, and imparting knowledge in computer science and Information Technology through comprehensive educational programs and research base teaching. We expect our graduates to provide a service to professional societies, the community, and the nation.

INTRODUCTION
Our department is committed to offer high-tech courses with research based teaching. We believe that our well structured and carefully planned courses enable students to improve their skills and place them competitive positions in the market. Moreover, we believe that the students acquire true knowledge with intelligence which gives them the leadership skills to take-on the technical challenges at national and international level. Our curriculum focuses on computational thinking, examining the strengths and limitations of computers in terms of what can be computed, developing programming knowledge and skills and enhancing the understanding of computer based problem solving techniques.

We make sure that our students have acquired the necessary skills and knowledge to produce computer-based optimal solutions to the problems from the areas such as computer science, artificial intelligence, management, engineering, telecommunication, networking, transportation etc.

DEGREES OFFERED
• BS Computer Science (BSCS)
• BS Software Engineering (BSSE)
• MS Computer Science (MSCS)
• Ph.D Computer Science
INTRODUCTION
The Bachelor of Science in Computer Science is the first professional degree aimed at producing the undergraduates for the job market as Software Engineers, IT Administrators, entrepreneur, academia professionals and the like. This program is tailored to introduce, prepare, develop and ingrain the understanding of computing discipline in students. We offer market oriented courses, as indicated in the program course description, to achieve the objective of producing highly talented computer professionals. Our program inculcates in the students the problem-solving abilities for the industry and government sectors. It enables students to analyze the real life problems and transform them into a suitable abstract model, design an optimal algorithm and successfully implement them using latest tools and technologies.

CAREER PROSPECTS
The typical jobs for the BS Computer Science graduates include software engineering, database designers and administration, web development, quality assurance and testers, IT consultants and computer professionals in various government or private organizations.

PROGRAM FACTS
- **Program Duration**: 4 Years, (Credit Hours 134)
- **Timing**: 08:00 am – 05:00 pm (Monday to Friday)
- **Entry Requirements**: 12 Years of Education, Intermediate, FA / F.Sc / ICS / I.Com, A-Levles, DAE or equivalent (Minimum 50% marks)
- **Location**: Defense Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission
National Computing Education & Accreditation Council (NCEAC)

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
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<th>SEMESTER 4</th>
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<tr>
<td>Introduction to Information &amp; Communication Technologies</td>
<td>3</td>
<td>Basic Electronics</td>
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<td>Object Oriented Programming</td>
<td>4</td>
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<td>Digital Logic Design</td>
<td>3</td>
<td>Data Communication &amp; Computer Networks</td>
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<td>Calculus and Analytical Geometry</td>
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<td>Technical &amp; Business Writing</td>
<td>3</td>
<td>Multivariate Calculus</td>
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<td>Microprocessor &amp; Assembly Language</td>
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<td>English Composition &amp; Comprehension</td>
<td>3</td>
<td>Probability &amp; Statistics</td>
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<td>Communication Skills</td>
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<td>Differential Equations</td>
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<td>Pakistan Studies</td>
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<td>Professional Practices</td>
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<td>University Elective-I</td>
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<td>University Elective-II</td>
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<td>University Elective-III</td>
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<tr>
<td>Database Systems</td>
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<td>Compiler Construction</td>
<td>3</td>
<td>Final Year Project-I</td>
<td>3</td>
<td>Final Year Project-II</td>
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<td>Design and Analysis of Algorithm</td>
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<td>Numerical Computing</td>
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<td>Artificial Intelligence</td>
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<td>Information Security</td>
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<td>Theory of Automata</td>
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<td>Human Computer Interaction</td>
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<td>Linear Algebra</td>
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<td>Operating Systems</td>
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<td>CS Elective-III</td>
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<td>CS Elective-VI</td>
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<tr>
<td>Computer Architecture &amp; Organization</td>
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<td>CS Elective-IV</td>
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<td>CS Elective-II</td>
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</table>

ELECTIVE COURSES
- Advance Software Engineering
- Java Software Paradigm
- Software Testing & Implementation
- Software Project Management
- Data Warehousing & Data Mining
- Database Application Design
- Distributed Database Systems
- Database Operations & Maintenance
- Data & Network Security
- Wireless Networks
- Internet Architecture & Protocol
- Digital Image Processing
- Expert Systems
- Artificial Neural Networks
- Intelligent Systems
- Computer Graphics
- Multimedia
- Technical Game Design
- Mobile Application Development
- Financial Accounting
- Financial Management
- Human Resource Management
- Principle of Marketing
- Economics
- Psychology
- International Relations
- Foreign/Regional Language (French, German, Sindhi, Punjabi, Urdu etc.)
- Philosophy
- Principle of Management
- Organization Behavior and Culture
- Geographical Information Systems
- Introduction to Graph Theory
- Business Intelligence
- Enterprise Resource Planning
- Entrepreneurship
- Financial Accounting
- Financial Management
- Software Design & Architecture
- Information to Semantic Technologies
- Data Mining
ELECTIVE COURSES

- Software Metrics
- Software Engineering Economics
- Information System Audit
- Business Process Automation
- Design Patterns
- Software Testing & Implementation
- Formal Methods
- PSP and TSP
- Distributed Computing
- Introduction to Soft Computing
- Real-time systems
- Data Warehousing and Data Mining
- Artificial Intelligence
- Data Security and Encryption
- Automata Theory and Formal Languages
- Microprocessor Interfaceing
- Analysis of Algorithms
- Principles of Programming Languages
- Computer Graphics
- Real-time systems
- Artificial Neural Networks
- Advance Database Management Systems
- Bio-informatics
- Web Engineering
- Advanced Calculus
- Numerical and Symbolic Computing
- Stochastic Processes
- Physics-II (Mechanics)
- Bio-Chemistry
- Biology/ Genetics
- Digital Electronics
- Software Engineering Economics

SOFTWARE ENGINEERING (BSSE)

BACHELOR OF SCIENCE IN

INTRODUCTION
Software engineering program is a systematic and disciplined approach to developing software. It applies both computer science and engineering principles and practices to the creation, operation, and maintenance of software systems.

This program has the vision to advance the technologies, expertise, and skills of its student and equipped them with creative brilliance & state-of-the-art research. To make our graduates well equipped with the new and advanced technologies we have three core values:

2. Collaboration & Co-operation – bringing together the theoretical and practical work found in IT industry.
3. Development and Demonstration – developing new creative and innovative ideas and presenting their utility through trial application and prototypes.

CAREER PROSPECTS
This program is designed to prepare our students for a career as Software Engineers; System Analysts, Software Architects, Quality Analysts, and Project Managers. Software Engineers help develop software for telecommunications, financial systems, banking and various government organizations.

RECOGNIZED BY
Higher Education Commission

PROGRAM FACTS

- Program Duration
4 Years (Credit Hours 136)
- Timing
08:00 am – 05:00 pm (Monday to Friday)
- Entry Requirements
12 Years of Education, Intermediate, FA / F.Sc / ICS / I.Com, A-Levels, DAE or equivalent (Minimum 50% marks)
- Location
Defence Road Campus, Lahore.

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
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<td>Introduction to Computing</td>
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<td>Basic Electronics</td>
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<td>Digital Logic and Design</td>
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<td>Programming Fundamentals I</td>
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<td>Technical &amp; Business Writing</td>
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<td>Introduction to Database Systems</td>
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<td>Software Verification &amp; Validation</td>
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<td>Professional Practices</td>
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<td>SE Application Domain Elective - II</td>
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<td>SE Elective – V</td>
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<td>Software Requirement &amp; Specification</td>
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<td>Theory of Automata &amp; Formal Languages</td>
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<td>Foreign/Regional Language (French, German, Sindhi, Punjabi, Urdu etc.)</td>
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<td>Design and Analysis of Algorithms</td>
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<td>Digital Image Processing</td>
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<td>Philosophy</td>
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<td>Compiler Construction</td>
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<td>Organization Behavior and Culture</td>
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<td>Computer Architecture</td>
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<td>Mobile Application Development</td>
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<td>Personal Growth &amp; Development</td>
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</table>

The University of Lahore
INTRODUCTION

This program is designed to produce graduates with specialized knowledge in Computer Science. Therefore, the masters program in Advanced Computer Sciences covers the major topics in Computer Science. The course work is a right mix of theoretical and practical work which is aimed at providing its graduates the necessary skills in Computer Sciences to excel in their professional lives. It is our mission that the department must serve a wide stream of students, which will undoubtedly be arriving with varying backgrounds and objectives. For this reason, the program proposed herein has been stretched out to cover most of the important areas of computer science including Software Engineering, Computer Networks, Database Systems, Advanced Algorithms, Programming Languages, Computer graphics, Artificial Intelligence and Research Methodologies.

CAREER PROSPECTS

The successful graduates have the option of serving in the industry as well as joining academia. While in academia they can transfer their knowledge to youngsters and continue their studies towards a PhD degree. They can also become a useful resource for industry as software engineer, database administrators and designers, e-commerce specialists, network specialists, and software project managers.

PROGRAM FACTS

- **Program Duration**: 2 Years (Credit Hours 30)
- **Timing**: 06:00 pm – 09:00 pm (Monday to Friday)
- **Entry Requirements**:
  - BSCS 4 years degree program (minimum 130 credit hours) from HEC recognized University/Institute
  - MCS/M.Sc-IT, M.Sc-Computer Science or equivalent examination in a relevant field from HEC recognized University/Institute
  - 16 years engineering graduates in a relevant field (min 130 credit hours) from HEC recognized University/Institute
  - Minimum of 2.50/4.00 CGPA for semester system. In case of percentage/annual system, minimum 60% aggregate

- **Location**: Defence/Raiwind Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission

ROAD MAP

<table>
<thead>
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<td>Thesis – I</td>
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</tbody>
</table>

LIST OF COURSES

**CORE COURSES**

- Advanced Algorithm Analysis
- Advanced Theory of Computation

**ELECTIVE COURSES**

- Software System Design & Architecture
- Topics in Software Engineering
- Object Oriented Software Engineering
- Software Quality Assurance
- Advance Computer Networks
- Network Security & Cryptography
- Internet Technologies & Protocols
- Advanced Database
- Object Oriented Database
- Data Mining
- Advanced Wireless Networks
- Software Evolution & Maintenance
- Advanced Software Engineering
- Advanced Operating Systems
- Research Methods
- Advanced Requirement Engineering
- Theory of Programming Languages
- Machine Learning
- Semantic Technologies
- Advanced Artificial Intelligence
- Formal Methods
- Advanced Human Computer Interaction
- Human Factors and Ergonomics
INTRODUCTION
The Doctor of Philosophy (PhD) degree program in computer science prepares students for research and teaching careers in academia and for research and technical careers in industry and government. This program provides the students with an opportunity to solve complex problems in their area of interest. It is divided up into a series of milestones which every student progresses through on the way to the degree.

COURSES LIST
- Multi Agent Systems
- Formal Methods
- Advance Topics in Software Engineering
- Evolutionary Network
- Software Evolution and Maintenance
- Information and Coding Theory
- Software Process Engineering and Improvement
- Advance Wireless Networks
- Software Architecture and Design
- Research Methods
- Network Security
- Network Planning and Management
- Heuristic Search Methods
- Advanced Requirement Engineering
- Semantic Technologies
- Global Software Engineering
- Machine Learning
- Advanced Human Computer Interaction

ROAD MAP

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<td>Elective-III</td>
<td>3</td>
<td>Thesis – IV</td>
<td>6</td>
</tr>
</tbody>
</table>

Program Facts
- **Program Duration**: 3-5 Years (Credit Hours 48)
- **Timing**: 06:00 pm – 09:00 pm (Tuesday to Saturday)
- **Entry Requirements**: MSc, MPhil (15 years of education) or equivalent degree in the relevant field from HEC recognized University/Institute. CGPA 3.0 (out of 4.0 in the Semester System) or First Division (in the Annual System).

Note: Subject Test
A subject test conducted by the National Testing Service (NTS) in the area of specialization chosen at the PhD level must be cleared prior to admission for the PhD Program or the candidate may appear in the following test scheduled:

a. In the case of GAT Subject test a minimum of 60% marks is required to pass the test.
b. In the case GRE subject test, a minimum 60% Percentile Score is required to pass the test.
c. If the Test is not available in NTS subject list, then a University Committee consisting of at least 3 Ph.D faculty members in the subject area and approved by the HEC will conduct the Test at par with GRE Subject Test and qualifying score for this will be 70% score.

- **Location**: Defence/Raiwind Road Campus, Lahore.
MISSION STATEMENT
The School’s approach holds a sharp focus on coaching our business graduates to innovate and handle complexity in a changing business landscape. We build capacities of future leaders in character and values by inculcating personal and shared ethics. Our prime and distinct endeavor is to foster students with a holistic pursuit of excellence by leveraging teaching, research, and entrepreneurial orientation for innovative productivity gains in all areas of education, social and economic domains.

INTRODUCTION
We welcome you to Lahore Business School (LBS) at the University of Lahore. Since its establishment in 1999, LBS has achieved impressive milestones by producing accomplished professionals who have made a best fit with public and corporate world in a highly professional manner. We, at LBS, believe in applied learning experience and development of hands-on problem solving skills, which make our degree programs challenging, interesting, and rewarding. All degrees at LBS are accredited by National Business Education Accreditation Council (NBEAC). We have a state-of-the-art library with 8000 books and a sizable quantity of academic journals. In addition, we have access to the best on-line research portals to help our students in their research. LBS has strength of over 1500 students in undergraduate, graduate and postgraduate business and research programs. We have professional and highly qualified faculty with academic and industrial experience. We are committed to academic excellence in transforming the business education and preparing our students to briskly fit into a variety of emerging leadership roles with a knack to tackle critical issues that intrigue the management arena in the contemporary business world. We invite you to come in LBS and see what we are doing for excellence of our youth. We also welcome you in this journey of learning for joining hands with us to bring prosperity to our nation.

DEGREES OFFERED
Bachelor of Business Administration - BBA (4 Years)
Specialization
• Marketing
• Finance
• Human Resource Management
• Supply Chain Management

Master of Business Administration - MBA (3.5 Years)
Specialization
• Marketing
• Finance
• Human Resource Management
• Supply Chain Management
• Consulting Management & Strategy
• Project Management

Master of Business Administration - MBA (1.5 Year)
Specialization
• Marketing
• Finance
• Human Resource Management
• Supply Chain Management
• Innovation & Entrepreneurship

Master of Business Administration (2 Years)
MBA Executive Specialization
• Marketing
• Finance
• Human Resource Management

Master of Business Administration (2 Years)
Specialization
• Marketing
• Finance
• Human Resource Management
• Supply Chain Management
• Consulting Management & Strategy
• Project Management
• Innovation & Entrepreneurship

Ph.D Management Sciences
Note for M.Phil & Ph.D:
The student can write thesis in any field of management in consultation and permission of synopsis committee / the supervisor
BACHELOR OF BUSINESS ADMINISTRATION (BBA)

INTRODUCTION
The Bachelor of Business Administration is designed to give students a general business degree with the option of specialization in the chosen area of interest. Year one introduces students to the fundamental management principles and how these are applied in a working environment. Year two will introduce students to marketing, human resource management and finance principles. With year three and four focusing on specialization, and more advanced courses in management, marketing, finance and entrepreneurship. Specialization options currently include Finance, Marketing & Human Resource. You will have an opportunity to deepen your understanding of business ventures in the Entrepreneurship course, which introduces setting up of new business.

CAREER PROSPECTS
Graduates of the BBA Honours program tend to work their way up in organizations, joining at junior management/management trainee positions. A degree in business can be applied to any industry and can be used to help you start your own business. Many of our students also choose to carry on completing MBA.

ELECTIVE COURSES

HUMAN RESOURCE MANAGEMENT
- Leadership and Change Management
- Reward and Compensation Management
- Labor Law and Legal Issues in HR
- Training and Employee Development
- Organization Behavior
- Human Resource Information System
- Employee Performance Management
- Conflict Management
- Negotiation and Counselling

FINANCE
- Corporate Finance
- Financial Statement Analysis
- Portfolio Theory and Management
- Financial Markets and Institutions
- Islamic Banking and Finance
- International Finance
- Financial Risk Management
- Security Analysis
- Entrepreneurial Finance
- Audit and Assurance
- Performance Management

MARKETING
- Brand Management
- New product Development
- Advertising and Promotional Strategy
- Product and Pricing Strategy
- Media Marketing
- International Marketing
- Industrial Marketing
- Entertainment Marketing

SUPPLY CHAIN MANAGEMENT
- Logistics and Shipping Management
- Procurement Management
- Storage and Warehousing Techniques
- Material Handling and Inventory Planning
- Transportation Techniques and Management
- Distribution Network Designing
- Globalization and Outsourcing
- Supply Chain Design and Performance

Note: Summer Semester Internship (Credit Hours 4)

Program Facts
- Program Duration: 4 Years (Credit Hours 136)
- Timing: 08:30 am – 05:00 pm (Monday to Friday)
- Entry Requirements: 12 Years of Education, FA / FSc. / ICom or equivalent GCE. A Level with at least three subjects, with an average of C grade, from HEC recognized university / college Minimum 2nd division
- Location: Defence Road Campus, Lahore.

Recognized By
- Higher Education Commission
- National Business Accreditation Council

Program Road Map

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Cr. Hr.</th>
<th>Semester 2</th>
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<th>Cr. Hr.</th>
<th>Semester 4</th>
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<td>Human Resource Management</td>
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<td>Consumer Behavior</td>
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<td>Business Statistics</td>
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<td>Principles of Marketing</td>
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<th>Semester 7</th>
<th>Cr. Hr.</th>
<th>Semester 8</th>
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<td>Fundamentals of Project Management</td>
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<td>Corporate Social Responsibility &amp; Business Ethics</td>
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<td>Skill Development Workshop</td>
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<tr>
<td>Financial Management</td>
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<td>Fundamentals of Supply Chain Management</td>
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ROAD MAP

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The University of Lahore
Management Sciences
INTRODUCTION
The 3.5 years MBA program helps students develop knowledge and key business skills. MBAs are therefore able to give strategic direction, influence people and make good use of financial, technical and human resources. Our MBA program will help you develop critical and creative thinking skills that enable you to challenge your abilities, and realize your maximum potential. You will receive a comprehensive business education and choose a core business area of specialization.

CAREER PROSPECTS
The Master of Business Administration is one of the most sought after qualification in the industry. Professionals in the field of engineering, science, arts, commerce, medical, etc aspire for this qualification. MBA is designed to equip students with managerial and leadership skills, and enhance the skills required by business firms. MBA graduates are generally required by organizations for entry-level as well middle management positions in finance, human resource management and marketing and operations departments.

ELECTIVE COURSES

AREAS OF SPECIALIZATION

HUMAN RESOURCE MANAGEMENT
- Organizational Dynamics
- Job Analysis Practices
- Industrial Relations
- Human Resource System Development
- Industrial Psychology
- Global Human Resource Management
- Human Resource Analytics - Investing in People
- Safety and Health Management at Workplace

MARKETING
- Integrated Marketing Communication
- Marketing Planning and Program
- Retail Marketing
- Strategic Brand Management
- Real Estate Marketing
- Global Marketing
- Online and Social Media Marketing
- Tourism, Sports and Leisure Marketing

FINANCE
- Strategic Finance
- Risk Management and Derivatives
- Issues in Financial Reporting
- International Financial Management
- Behavioral Finance
- Valuation
- Investment Analysis & Portfolio Management
- Mergers and Acquisitions
- Advance Audit and Assurance
- Advance Performance Management
- Finance for Entrepreneurs

SUPPLY CHAIN MANAGEMENT
- Supply Chain Quality Assurance
- Shipping and Maritime Management
- Strategic Distribution Networks
- Logistics Management
- Vendor Management
- Strategic Supply Chain
- Demand Operations and Inventory Planning
- Lean Operations

INNOVATION AND ENTREPRENEURSHIP
- Social Entrepreneurship
- Entrepreneurship: Technology and Non-Technology Fields
- Entrepreneurship: New Venture Valuation
- Business Incubation and Innovation

CONSULTING MANAGEMENT AND STRATEGY
- Strategic Human Resource Management
- Multinational National Enterprises and Trading Environment
- E Business Strategy
- Intellectual Property and Business Strategy
- Entrepreneurial Financial Management
- Business Value and Consulting Service

PROJECT MANAGEMENT
- Leading and Managing Project Teams
- Project and Portfolio Management in Organizations
- Planning for Risk, Uncertainty and Complexity
- Project Cost and Benefit Analysis
- Project Total Quality Management
- Project Appraisals and Selection
- Spreadsheet Modelling and Advance Decision Analysis
- Project Monitoring and Evaluation

PROGRAM FACTS
- Program Duration
  3.5 Years (Credit Hours 102)
- Timing
  08:30 am – 05:00 pm (Monday to Friday)
- Entry Requirements
  14-15 Years of Education, 2/3 year BBA / BS / BA / B.Com or equivalent degree from HEC recognized university / college. Minimum 2nd Division.
- Location
  Defence Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission
National Business Accreditation Council

ROAD MAP

SEMMESTER 1  Cr. Hr.  SEMESTER 2  Cr. Hr.  SEMESTER 3  Cr. Hr.  SEMESTER 4  Cr. Hr.
Principles of Management 3  Leadership & Organizational Behavior 3  Business Decision Analysis 3  Consumer Behavior 3
Financial Accounting 3  Marketing 3  Business Finance 3  Innovation & Entrepreneurship 3
Business Communication 3  Cost Accounting 3  Human Resource Management 3  Operations Management 3
Business Computing & Information Systems 3  Micro Economic Analysis 3  Macro Economic Analysis 3  Consulting Management 3

SEMMESTER 5  Cr. Hr.  SEMESTER 6  Cr. Hr.  SEMESTER 7  Cr. Hr.
Project Management 3  Presentation & Interview Skills 3  Business & Corporate Strategy 3
Advance Financial Management 3  Corporate Law & Taxation 3  Electives-III 3
Strategic Marketing 3  Elective-I 3  Electives-IV 3
Supply Chain Management 3  Elective-II 3  Thesis-II 3
Marketing Research 3  Thesis-I 3

The University of Lahore
The MBA, after 4 years bachelors in business studies or commerce, is designed to develop business administration skills in students. The MBA program develops business leaders, through knowledge and key skills that form part of the course. MBAs are therefore able to give strategic direction, influence people and make good use of financial, technical and human resources.

**CAREER PROSPECTS**

The MBA 1.5 years is an extensive course driven degree program that can lead to Ph.D. It is designed to equip students with advanced knowledge of core areas of management, HRM, marketing and finance. Graduates of this program find themselves at the upper management positions.

**ELECTIVE COURSES**

**AREAS OF SPECIALIZATION**

**HUMAN RESOURCE MANAGEMENT**
- Organizational Dynamics
- Job Analysis Practices
- Industrial Relations
- Human Resource System Development
- Industrial Psychology
- Global Human Resource Management
- Human Resource Analytics - Investing in People
- Safety and Health Management at Workplace

**MARKETING**
- Integrated Marketing Communication
- Marketing Planning and Program
- Retail Marketing
- Strategic Brand Management
- Real Estate Marketing
- Global Marketing
- Online and Social Media Marketing
- Tourism, Sports and Leisure Marketing

**FINANCE**
- Strategic Finance
- Risk Management and Derivatives
- Issues in Financial Reporting
- International Financial Management
- Behavioral Finance
- Valuation
- Investment Analysis & Portfolio Management
- Mergers and Acquisitions
- Advanced Audit and Assurance
- Advance Performance Management
- Finance for Entrepreneurs

**SUPPLY CHAIN MANAGEMENT**
- Supply Chain Quality Assurance
- Shipping and Maritime Management
- Strategic Distribution Networks
- Logistics Management
- Vendor Management
- Strategic Supply Chain
- Demand Operations and Inventory Planning
- Lean Operations

**INTRODUCTION**

**Program Facts**

- **Program Duration**
  1.5 Years (Credit Hours 36)

- **Timing**
  08:30 am – 05:00 pm (Monday to Friday)
  Evening 6:00 PM-9:00 PM (Monday to Friday)

- **Entry Requirements**
  16 Years of Education, 4 year BBA / B.Com or equivalent business studies or commerce degree from HEC recognized university / college. Minimum CGPA 2.50 or 1st division

- **Location**
  Defense Road Campus, Lahore

**RECOGNIZED BY**

Higher Education Commission
National Business Accreditation Council

**ROAD MAP**

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<th>SEMESTER 1</th>
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<td>Business &amp; Corporate Strategy</td>
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<td>Supply Chain Applications</td>
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<td>Interview &amp; Presentation Skills</td>
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<td>Electives-I</td>
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</tbody>
</table>
INTRODUCTION
The fundamentals of entrepreneurship and innovation are the vital tools to succeed in the business world. This program provides students with a valuable insight into the theory and practice of entrepreneurship and innovation, consulting management, project management, entrepreneurial finance and research. Additionally, students will also cover applicable elements to starting their own ventures, ranging from the idea generation to commercialization. The goal of this program is for the students to learn, create, build and operate profitable and feasible business idea.

CAREER PROSPECTS
The program prepares students for successful careers in innovation-related roles in established organizations, entrepreneurial finance, or in the creation of new ventures. The top executives from the leading companies recognize the need for the employees who can evaluate opportunities and manage the process of innovation in positions such as strategic management, project management, entrepreneurial finance, or in the creation of new ventures. Students will have a portfolio of much sought-after recognized skills highly-valued in today’s business world. The goal of this specialized Master is to train students in corporate consulting and intervention professions. Those responsible for planning and implementing large-scale projects for businesses must have both organizational and managerial expertise, and also the capacity to build a clear strategic vision for the company in an innovative context. The Strategy Concentration is designed to equip students with the core concepts, frameworks and techniques of strategic management that are essential to a career in consulting and beneficial to a leadership role in any field. Courses are analytical and focus on senior management decisions that enhance profit maximization while taking into account the competitive response to those decisions.

ELECTIVE COURSES
- Social Entrepreneurship
- Entrepreneurship Technology and Non-Technology Streams
- Intrapreneurship
- New Venture Valuation
- Business Incubation and Innovation

the Business Idea Competitions and participate in the LBS Innovation and Incubation Centre activities.

ROAD MAP

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<td>New Product Management</td>
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<td>Elective I</td>
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</table>

PROGRAM FACTS
- **Program Duration**: 1.5 Years (Credit Hours 36)
- **Timing**: Morning, 8:30 AM-5:00 PM (Monday to Friday) Evening 6:00 PM-9:00 PM (Monday to Friday)
- **Entry Requirements**: 16 Years of Education, 4 year BBA / B.Com or equivalent business studies or Commerce degree from HEC recognized university / college. Minimum CGPA 2.50 or 1st division
- **Location**: Defence Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission National Business Accreditation Council

The University of Lahore
INTRODUCTION
MBA Project Management degree program at LBS, provides the foundation focusing on problem solving skills. The program develops the organizational and leadership skills to manage projects and people and act decisively and strategically in real world scenarios. Students can gain practical experiences that can be applied to the demands of a business setting, including professional communication, corporate team building and business analysis. A degree in Project Management indicates a valuable skill set to any business striving to become more efficient and maintain profitability.

CAREER PROSPECTS
An MBA in Project Management is a good degree option for a number of reasons. It is particularly attractive for employers in engineering, information technology, healthcare, pharmaceuticals, marketing, construction, to name a few. The program educates students in planning for and achieving the most streamlined applications for a company. Global industries need people who understand on-the-ground issues and can demonstrate communication skills required to lead productivity. Simply put, project management is all about setting reasonable and attainable goals. Unlike business managers who oversee a specific functional area, project managers orchestrate all aspects of time-limited, discrete projects.

ELECTIVE COURSES
- Leading and Managing Project Teams
- Project and Portfolios Management in Organizations
- Planning for Risk, Uncertainty and Complexity
- Project Cost and Benefit Analysis
- Project Total Quality Management
- Project Appraisals and Selection
- Spreadsheet Modeling and Advance Decision Analysis
- Project Monitoring and Evaluation

ROAD MAP

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INTRODUCTION
The MBA after 4 years bachelors is designed to develop advanced skills in students. The MBA program develops business leaders, through knowledge and key skills that form part of the course. MBAs are therefore able to give strategic direction, influence people and make good use of financial, technical and human resources.

CAREER PROSPECTS
The Master of Business Administration is one of the most sought after qualification in the industry. Professionals in the field of engineering, science, arts, commerce, medical, etc aspire for this qualification. MBA is widely recognized qualification in management and business, and will help you launch a successful career. MBA is designed to equip students with managerial and leadership skills, and enhance the skills required by business firms. MBA graduates are generally required by organizations for entry-level as well as middle management positions in finance, human resource management, marketing, Supply Chain departments.

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ELECTIVE COURSES

AREAS OF SPECIALIZATION

HUMAN RESOURCE MANAGEMENT
- Organizational Dynamics
- Job Analysis Practices
- Industrial Relations
- Human Resource System Development
- Industrial Psychology
- Global Human Resource Management
- Human Resource Analytics - Investing in People
- Safety and Health Management at Workplace

MARKETING
- Integrated Marketing Communication
- Marketing Planning and Program
- Retail Marketing
- Strategic Brand Management
- Real Estate Marketing
- Global Marketing
- Online and Social Media Marketing
- Tourism, Sports and Leisure Marketing

FINANCE
- Strategic Finance
- Risk Management and Derivatives
- Issues in Financial Reporting
- International Financial Management
- Behavioral Finance
- Valuation
- Investment Analysis & Portfolio Management
- Mergers and Acquisitions
- Advance Audit and Assurance
- Advance Performance Management
- Finance for Entrepreneurs

SUPPLY CHAIN MANAGEMENT
- Supply Chain Quality Assurance
- Shipping and Maritime Management
- Strategic Distribution Networks
- Logistics Management
- Vendor Management
- Strategic Supply Chain
- Demand Operations and Inventory Planning
- Lean Operations

INNOVATION AND ENTREPRENEURSHIP
- Social Entrepreneurship
- Entrepreneurship Technology and Non-Technology Streams
- Entrepreneurship
- New Venture Valuation
- Business Incubation and Innovation

CONSULTING MANAGEMENT AND STRATEGY
- Strategic Human Resource Management
- Multinational National Enterprises and Trading Environment
- E Business Strategy
- Intellectual Property and Business Strategy
- Entrepreneurial Financial Management
- Business Value and Consulting Service

PROJECT MANAGEMENT
- Leading and Managing Project Teams
- Project and Portfolio Management in Organizations
- Planning for Risk, Uncertainty and Complexity
- Project Cost and Benefit Analysis
- Project Total Quality Management
- Project Appraisals and Selection
- Spreadsheet Modeling and Decision Analysis
- Project Monitoring and Evaluation

RECOGNIZED BY
- Higher Education Commission
- National Business Accreditation Council
- National Management Sciences Council
- Islamabad Policy Research Institute
INTRODUCTION
The MBA Executive program gives working executives an opportunity to complete MBA in 2 years, while working full time. The MBA Executive is designed for those who already have some exposure to management in industry or other organizations. MBA Executive develops skills to deliver strategic direction, understand people skills and utilize financial, technical and human resources in the best possible way to achieve departmental or organizational targets.

CAREER PROSPECTS
Our experience shows that majority of working executives, who earn an Executive MBA, benefit with career advancement, compensation, promotions, increased responsibility and immediate benefits. The program provides graduates with strategic vision and skills that can be applied immediately to their current position and result in professional advantage.

PROGRAM FACTS
• Program Duration
  2 Years (Credit Hours 66)
• Timing
  Evening 6:00 PM-9:00 PM (Monday to Friday)
• Entry Requirements
  14 years of education. At least four year of Job/work experience at Managerial Cadre. A minimum of 2nd division in a 2/3 year BBA / BIS / BA / B.Com or or equivalent degree from HEC recognized university / college
• Location
  Defence Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission
National Business Accreditation Council

ROAD MAP

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<thead>
<tr>
<th>SEMESTER 1 Cr. Hr.</th>
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<th>SEMESTER 3 Cr. Hr.</th>
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<tr>
<td>Principles of Management 3</td>
<td>Human Resource Management 3</td>
<td>Business Policy 3</td>
<td>Entrepreneurship 3</td>
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<td>Business Communication 3</td>
<td>Business Law &amp; Taxation 3</td>
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<td>Financial Management 3</td>
<td>Sales Management 3</td>
<td>Elective-IV 3</td>
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<td>Development Economics 3</td>
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<td>Computing &amp; Research Methods 3</td>
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SUMMER SEMESTER Cr. Hr. 3
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<tr>
<td>Strategic Marketing 3</td>
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<tr>
<td>Cost &amp; Management Accounting 3</td>
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ELECTIVE COURSES

HUMAN RESOURCE MANAGEMENT
• Organizational Dynamics
• Job Analysis Practices
• Industrial Relations
• Human Resource System Development
• Industrial Psychology
• Global Human Resource Management
• Human Resource Analytics - Investing in People
• Safety and Health Management at Workplace

MARKETING
• Integrated Marketing Communication
• Marketing Planning and Program
• Retail Marketing
• Strategic Brand Management
• Real Estate Marketing
• Global Marketing
• Online and Social Media Marketing
• Tourism, Sports and Leisure Marketing

FINANCE
• Strategic Finance
• Risk Management and Derivatives
• Issues in Financial Reporting
• International Financial Management
• Behavioral Finance
• Valuation
• Investment Analysis & Portfolio Management
• Mergers and Acquisitions
• Advance Audit and Assurance
• Advance Performance Management
• Finance for Entrepreneurs
MASTER OF PHILOSOPHY IN MANAGEMENT SCIENCES (M.Phil)

INTRODUCTION
The M. Phil program is designed to ensure that students develop strong research and analytical skills that would not only help them carry out future research but also think and act critically. The first year of the M. Phil program introduces students to the key concepts in management research, research methods, business theories and strategic development. Focus in the second year is on the student carrying out supervised research in their area of interest. The objective is to develop research and analytical skills in students that will help them in conducting independent research in different management related areas for effective decision making.

CAREER PROSPECTS
M. Phil graduates usually pursue academic career and go on for Ph.D in their area of interest. There are opportunities in the corporate sector for the graduates, and recent industry trends show that organizations are now interested in hiring M. Phil graduates and personnel that have acquired deeper insight into management research, strategies, structures, and processes.

PROGRAM FACTS
- **Program Duration**: 2 Years (Credit Hours 30)
- **Timing**: Afternoon 2:00 PM-5:00 PM (Monday to Friday)
- **Entry Requirements**: 16 years of education, BBA (Hons) / MBA / Business Administration/Management Sciences from a chartered university with a minimum of 1st division or 3.0 CGPA.
- **Location**: Defence Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

Note: The students can write thesis in any field of management in consultation and permission of synopsis committee / supervisor.

ROAD MAP

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<td>Advanced Research Methodology</td>
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<td>Statistical Inferences &amp; Data Analysis</td>
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<td>Organizational Theory &amp; Design</td>
<td>3</td>
<td>Advanced Strategic Management</td>
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<td>Thesis (Cont’d)</td>
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<tr>
<td>Elective – II</td>
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</tr>
<tr>
<td>Research Work / Thesis</td>
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</table>

DOCTOR OF PHILOSOPHY IN MANAGEMENT SCIENCES (Ph.D)

INTRODUCTION
LBS Ph.D in Management program concentrates on defining and preparing professionals for management thinking. The research program focuses on developing skills and resourcefulness to generate concepts and ideas for new and emerging challenges. The research degree offers outstanding scholars an opportunity to make a significant and lasting contribution to the field of management research. The program is challenging and opens the door to intellectual fulfillment and exciting career opportunities in research and teaching. Ph.D scholars are expected to meet the challenges of research and will work directly with distinguished faculty members, and become part of a vibrant, academic community that is committed to creating new business management knowledge. Doctoral scholars will be engaged in serious research with faculty after completion of course work and will be required to publish articles in approved academic journals. The research degree requires course work of 21 credit hours followed by research proposal writing, comprehensive examination, and a dissertation of 30 credit hours. The first year will be devoted to course work, presented in the form of a series of weekly seminars. On successful completion of comprehensive exam after year one, candidates will be allowed to submit research proposals for dissertation.

PROGRAM FACTS
- **Program Duration**: 3-5 Years (Credit Hours 51)
- **Timing**: Evening 6:00 PM-9:00 PM (Monday to Friday)
- **Entry Requirements**: MBA 3.5 years with thesis, M. Phil / MS degree or 18 years of education in business with thesis in administration/management sciences from a chartered university with a minimum of 1st division or 3.0 CGPA.
- **Location**: Defence Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

CAREER PROSPECTS
Ph.D in Management is focused on developing research skills as well as in-depth knowledge and practice in the management field. The focus of Ph.D program is on fundamental and applied research in management and organizations. Participants will be educated in academic, writing skills, literature review and methodology and management theories. Ph.D research degree is aimed at providing an innovative contribution to changing organizational responsibilities in the ever-changing business environment.

Note: The students can write thesis in any field of management in consultation and permission of synopsis committee / supervisor.

ROAD MAP

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<td>Economic Theory</td>
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<td>Research Work / Thesis</td>
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<td>Organization and Management Theory</td>
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<td>Contemporary Methods in Data Analysis</td>
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<td>Elective – I</td>
<td>3</td>
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<td>Elective – II</td>
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MISSION
The mission of the Lahore School of Aviation is:
To pursue excellence in providing quality education for our students and to prepare students to meet the demands of the national aviation system by preparing them academically and intellectually, by exposing them to real world experiences, and by introducing them to the people who can provide them with real world information. To engage in applied aviation research and scholarly endeavors that may benefit government, industry, general aviation, the public and our students To provide leadership, expertise, and professional development opportunities for aviation professionals and to promote a greater understanding of aviation among the general public.

INTRODUCTION
The University of Lahore visions to achieve excellence in Higher Education, is dedicated to expand its academic programs through introducing new programs that are high demanding and having a great impact on the sustainable development of Pakistan. As a result, we are privileged to offer our aspiring students, our future leaders a new program, Bachelor of Science in Aviation Management that will help them to lead their way to their ambitions and goals. If the sky is the limit for your ambition, we are there to help you manage your career and way to the limit. As a student, you are a valuable asset of our program and we care about your professional as well as personal development.

Lahore School of Aviation is committed to excellence and meeting your Aviation needs. Our Faculty comes from a variety of Aviation backgrounds, including retired Pakistan Air Force Instructors, Senior Airline professionals, Air-traffic Controllers, foreign trained Aviation Professors as well as Managers of General Aviation.

DEGREES OFFERED
• BS Aviation Management
• BS Aircraft Maintenance Technology
INTRODUCTION
The Bachelor of Science in Aviation Management degree is designed for students pursuing to lead and succeed in the world of aviation. Harmonizing basic aviation concepts with innovative business ideas and strategy, the programme provides students a rock-solid foundation of aviation knowledge, industry standards, principles of management, and leadership. The programme explores all façades of aviation management, including airport planning and management, airline fleet management, fiscal aspects of aviation, aviation marketing, and health and safety environment in aviation, aviation safety, aviation security, and global aviation business strategies.

This approach to aviation education gives the student added value over other aviation programs by focusing on the skills and knowledge required by today’s fast-growing aviation industry.

CAREER PROSPECTS
The BS Aviation Management degree prepares students for professional careers in the following areas:

- Airline management
- Airline flight operations
- Airline ground operations
- Airport management
- Airport operations
- Airport planning
- Aviation consultancy firms
- Aviation charter firms
- Air services
- Aviation regulatory and safety services
- Aviation safety authorities

RECOGNIZED BY
Higher Education Commission

PROGRAM FACTS
- Program Duration
  4 Years (Credit Hours 130)
- Timing
  08:00 am – 05:00 pm (Monday to Friday)
- Entry Requirements
  12 years of education (Higher Secondary School Certificate/Intermediate) with at least second Division
- Location
  Defence Road campus, Lahore

ROAD MAP
INTRODUCTION

BS Aircraft Maintenance Technology (AMT) program is a Bachelor of Science program that prepares students to enter technical positions in the aerospace industry. The designed curriculum focuses on aircraft structures and system design, operation, test, and inspection. These skills and knowledge joined with a solid science foundation prepares the students for employment in a wide range of aircraft maintenance, manufacturing, and aviation support careers. The Bachelor of Science degree places our graduates for technology leadership roles in the future. We foresee our graduates amongst the managers, directors, vice presidents and CEO’s of aerospace companies worldwide.

CAREER PROSPECTS

The BS Aircraft Maintenance Technology (AMT) degree prepares students for professional careers in the following areas:

- Aircraft Machinist Technician
- Aviation Maintenance Instructor
- Aircraft Load Master Technician
- Aircraft fuel system technician
- Hydraulic Mechanic
- Landing Gear Mechanic
- Aircraft Body and Bonded Structure Repairer
- Aircraft Maintenance Planner
- Aircraft Air Conditioning Mechanic
- Aircraft Restorer
- Aircraft Rigging and Controls Mechanic
- Aircraft Steel Fabricator
- Aircraft Structure Mechanic
- Airplane Tester
- Experimental Aircraft Mechanic

PROGRAM FACTS

- Program Duration
  4 Years (Credit Hours 126)
- Timing
  08:00 am – 05:00 pm (Monday to Friday)
- Entry Requirements
  12 years of education (Higher Secondary School Certificate/Intermediate) with at least second Division
- Location
  Defence Road campus, Lahore

RECOGNIZED BY

Higher Education Commission

ROAD MAP

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<td>AC Circuit Analysis</td>
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<td>Electrical Machines Fundamentals</td>
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<td>Physics-I</td>
<td>3</td>
<td>Physics-II</td>
<td>3</td>
<td>Mechanics of Materials</td>
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<td>Aircraft Materials and Hardware</td>
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<td>Introduction to IT</td>
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<td>Basis Electrics</td>
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<td>Aircraft Engines</td>
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<td>Workshop Technology</td>
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<td>Aeronautics</td>
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<td>Communication Skills</td>
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<td>Turbine Engine Systems</td>
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<td>Introduction to Aviation</td>
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<td>Thermodynamics</td>
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<td>Pakistan Studies</td>
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<th>SEMESTER 7</th>
<th>Cr.</th>
<th>SEMESTER 8</th>
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<td>Solid State Devices</td>
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<td>3</td>
<td>Basic Digital Circuit Design</td>
<td>3</td>
<td>Digital Aircraft Systems</td>
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<td>Aviation Legislation</td>
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<td>Elementary Statistics</td>
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<td>Aircraft Structures</td>
<td>3</td>
<td>Airframe Systems-I</td>
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<td>Airframe Systems-II</td>
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<td>Principles of Marketing</td>
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<td>Aviation Project Management</td>
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<td>TQM in Aviation</td>
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<td>Engineering Economics</td>
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<td>Internship-I</td>
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<td>Internship-II</td>
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</table>
• Faculty of Pharmacy
DEGREES OFFERED

- Doctor of Pharmacy
- M.Phil Pharmacy (Pharmaceutics)
- M.Phil Pharmacy (Pharmaceutical Chemistry)
- M.Phil Pharmacy (Pharmacology)
- M.Phil Pharmacy (Pharmacognosy)
- Ph.D Pharmacy (Pharmacology)
- Ph.D Pharmacy (Pharmaceutical Chemistry)

MISSION

The mission of Faculty of Pharmacy, University of Lahore, is to play a pivotal role in the development and advancement of healthcare professionals by educating them with quality education and providing ample opportunities to learn and explore in order to meet the challenges related to healthcare needs of nation, state, and all over the world. This will be accomplished by motivating the students to render their services in order to play a pivotal role in the health care system in Pakistan with full devotion, commitment and dedication. Our vision is to be recognized globally for excellence in innovation, professionalism, education and health related research.

INTRODUCTION

University of Lahore, is consisting of over 70 teachers who are competent to impart professional and technical education to pharmacy students. Four of them are holding Ph.D degree and more than six are enrolled in Ph.D program in Pakistan and abroad. Majority of the rest of the faculty members are either M.Phil. or pursuing the syllabi/research for obtaining degree Master of Philosophy in any of the Pharmacy disciplines. Faculty members are striving to the best of their ability to prepare the students for future challenges through the development of communication, problem solving skills, caring, professionalism, innovation, productivity and moral ethics among students.
INTRODUCTION
The objective of this 5 years undergraduate degree program is to train pharmacy practitioners to possess leadership qualities, advanced expertise and clinical experience that enable them to be at the forefront of the pharmacy profession and health care in a variety of settings; institutional, community practice, government, academia, and industry and drug development. The curriculum emphasizes a patient centered course of study and involves a structure that will enable students to develop into reflective practitioners with skills and attitudes to evaluate critically and modify practices in a timely and effective manner.

CAREER PROSPECTS
The approved Pharm.D curriculum has been designed/ formulated to prepare Quality Pharmacists who will have the capacity, up to date knowledge, strong ethical values, behavior, communication, writing & social skills that will enable them to pursue careers in:

- Pharmaceutical care in health systems & community environments where appropriate medication usage and patient’s safety is paramount.
- Pharmaceutical Industry & its quality systems.
- Pharma covigilance / Patient safety & safe medication usage in community & health care systems.
- Academia and Research.
- Managed Patient Care as a member of multidisciplinary health care team.
- Keeping stakeholders in the pharmaceutical sector up to date on the implications of WTO TRIPS.

RECOGNIZED BY
Higher Education Commission | Pharmacy Council of Pakistan

PROGRAM FACTS

| • Program Duration | 5 Years, (Credit Hours 192) |
| • Timing | 8:30 AM - 5:00 PM (Monday to Friday) |
| • Entry Requirements | 12 Years of Education, F.Sc Premedical (Bio, Physics and Chemistry), A-Level or Equivalent with Minimum 60% Marks. UOL Entry Test is mandatory |
| • Location | Defence Road Campus, Lahore |

ROAD MAP

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<td>Pharmacognosy-I A (Basic)</td>
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<td>Pharmacognosy-II A (Dosage FormScience)</td>
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<td>Pharmacy Practice-I B (Hospital Pharmacy)</td>
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<tr>
<td>Pharmacology and Therapeutics-IA</td>
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<td>Pharmacology and Therapeutics-II B (Biochemistry)</td>
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<td>Pharmacy Practice-VA (Clinical Pharmacy)</td>
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<td>Pharmacology and Therapeutics-IA (Biopharmaceutical Pharmacokinetics)</td>
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</table>
INTRODUCTION
Evolutionary as well as revolutionary changes are visible and experienced all over the world in the field of pharmacy education and research. The need, desire and significance of knowledge, skills and new techniques are reshaping education in pharmacy. In this era of globalization, there is a dire need to take the full benefits from recent advances as well as developments taking place in more developed countries offering high quality education in pharmacy.

The Faculty of Pharmacy, University of Lahore, believes in the notion “Think Globally, Act Locally”. The post graduate M.Phil programme has been launched by the Faculty of Pharmacy in four disciplines, namely, Pharmaceutics, Pharmaceutical Chemistry, Pharmacology, and Pharmacognosy, with the main aim of working in line with the mission of the Higher Education Commission (HEC): “To facilitate institutions of higher education to serve as an engine of growth for the socio-economic development of Pakistan”. The Faculty of Pharmacy University of Lahore is fully capable of meeting the three key challenges (a) Quality, (b) Access & (c) Relevance to ensure innovative teaching, service and quality research, with the aim of becoming a premier Faculty of Pharmacy Awarding M.Phil Degrees

CAREER PROSPECTS
High quality higher pharmacy education delivered in a safe, professional and easy environment at the Faculty of Pharmacy, The University of Lahore will produce high quality, problem solving pharmacy professionals well equipped with the knowledge, skills and abilities to deliver appropriate, effective and efficient pharmacy services for improving patient care and quality of life by offering workable solutions to problems / major issues in the Health Care System, the Pharmaceutical Industry and its Quality Systems, Academia and Research in the Pharmaceutical Sector.

ROAD MAP

M.PHIL PHARMACEUTICS

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<tr>
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<td>Microbiology &amp; Molecular Biology (Theory/Practical)</td>
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<td>Research Methodology and Special Problems</td>
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M.PHIL PHARMACEUTICAL CHEMISTRY

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M.PHIL PHARMACOLOGY

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M.PHIL PHARMACOGNOSY

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Note: Comprehensive written & oral examination is taken at the end of 2nd semester for all disciplines
INTRODUCTION
The Doctor of Philosophy (Ph.D.) degree program is the highest academic degree that requires extended study, innovation, creative and intellectual effort. The need, value and worth of knowledge, expertise, professional skills and new research techniques are going to reshape the pharmacy education. In this era, this is a paramount requirement to gain full benefits from the advancement and development of research.

The Faculty of Pharmacy, University of Lahore, offers Doctor of Philosophy (Ph.D.) in Pharmacology. Pharmacology, backbone of pharmacy curriculum is the study of drugs and chemicals on living organisms. Pharmacology today is multidisciplinary, is based on the knowledge of physiology, biochemistry, cell biology and molecular biology. Pharmacology with its various subdivision links to other mainstreams of biomedical disciplines that are of immense importance in drug designing and therapeutics.

CAREER PROSPECTS
Higher Pharmacy Education (Pharmaceutical Chemistry) is delivered in professional and practical environment. The University of Lahore will produce such professionals who possess a comprehensive understanding of the discipline of Pharmaceutical Chemistry and well equipped with knowledge, innovation and expertise in Drug Development that will contribute to significant improvement in health care system.

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Higher Education Commission

PROGRAM FACTS

- **Program Duration**
  3-5 Years (Credit Hours 48)
- **Timing**
  2:30 am to 6:00 pm (Monday to Friday)
- **Entry Requirements**
  18 Years of Education / M.Phil in relevant field Minimum 3.0 (4.00) CGPA.
- **Location**
  Defense road campus, Lahore.

ROAD MAP

### Ph.D PharmaCoLogy

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### Ph.D PharmaCeutical Chemistry

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</table>

### Road Map Diagram

- **Semester 1**: Introduction to Pharmacology, Advanced Pharmacology, Research Methodology, Drug Discovery, Biological Membranes.
- **Semester 3**: Metabolic Disorders, Seminar, Statistical/ Computer Applications.
- **Semester 4**: Role of Herbal/ or Alternative Therapies, Literature Retrieval/ Learning of Synopsis writing, Seminar.

The University of Lahore
• Physics
• Chemistry
• Environmental Sciences
• Mathematics
• Molecular Biology & Biotechnology
• Center for Research in Molecular Medicine
MISSION STATEMENT
The Department of Physics imparts high quality education in the discipline of Physics, its sub-fields and some inter-disciplinary fields. It aims to produce well-groomed graduates who are self-assured in their abilities, have good understanding of physical concepts as well as complete training of the laboratory and computational techniques that aid the physical understanding. The Faculty of Science also promotes research and creative activities of the faculty and students. The Faculty inculcates wider understanding of the nature of physical and allied sciences through quality teaching, technical expertise and research-oriented atmosphere.

INTRODUCTION
Department of Physics offers undergraduate and graduate degree programs in the subjects of Pure and Applied domains of Physics as well as several inter-disciplinary areas. Special focus is placed on preparing graduates equipped with basic concepts and hands-on laboratory training at undergraduate and graduate level. Students are specially exposed to practical training in the scientific organizations and industry through a meaningful internship program. They are fully trained to join the job market as a valuable asset soon after completion of their degree or to take up further study without any difficulty. Post graduate teaching and research programs cover fundamental and applied fields incorporating recent trends in various specializations of Physics.

DEGREES OFFERED
- BS Physics - 4 Years
- BS Physics (Computational Physics) - 4 Years
- BS Physics (Biophysics) - 4 Years
- BS Physics (Engineering Physics) - 4 Years
- BS Physics (Medical Physics) - 4 Years
- BS Physics (Geophysics) - 4 Years
- BS Physics (Environmental Physics) - 4 Years
- M.Sc Physics (2 Years)
- M.Phil Physics (2 Years)
- Ph.D Physics (3 Years)
**BACHELOR OF SCIENCE IN PHYSICS (PURE PHYSICS)**

**INTRODUCTION**
The aim of BS Physics is to provide students with essential skills necessary for professional work as a physicist, and is the first step to graduate work in Physics. This degree can lead to specialization in various other fields interconnected with Physics such as medical physics, solid state physics, nuclear physics etc. Over the course of four years, students learn new ways and techniques to solve problems and learn to predict the behavior of various systems. They also understand the physical laws that govern the universe and eventually are able to contribute towards answering the unanswered questions.

**CAREER PROSPECTS**
Depending on the concentration that a student selects during study, various job opportunities are available after completion of the degree. Our graduates are well established and successful in their professional lives being employed by internationally recognized industries and companies or they have started up their own initiatives. Some of most visible career options are in Forensic Science, Medical Physics, Education Sector, Consultancy, Research Organizations and many others. Career prospects are unlimited in each and every field.

**ROAD MAP**

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<td>Mechanics-II</td>
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<td>Electricity &amp; Magneton-II</td>
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<td>Heat and Thermodynamics</td>
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**PROGRAM FACTS**
- **Program Duration**: 4 Years (Credit Hours 133)
- **Timing**: 8:30 am to 5:00 pm (Monday to Friday)
- **Entry Requirements**: 12 Years of Education/Intermediate, F.Sc (Pre-Engg)/ICS/DAE/A-Level or Equivalent (Physics & Mathematics Combination), Minimum 45% marks
- **Location**: Raiwind Road Campus, Lahore.

**RECOGNIZED BY**
Higher Education Commission

Note: Detail of the elective courses is available with the department, specialized courses are offered in semester 5th to 8th.
INTRODUCTION

Computational Physics extends theoretical Physics beyond the limitation of analytical techniques. This extension has become essential to advance in many different subfields of Physics as systems of interest have become complex, moving from a few degrees of freedom to many degrees of freedom. During the study of this period, students learn new ways to solve problems that were thought not to be solvable some time ago and also predict the behavior of various systems. This degree focuses on the use of Computational Techniques to aid the solution of theoretical problems and analysis in detail. The students gain extensive programming skills and at the end of degree they are able to develop their own computational applications and data models.

CAREER PROSPECTS

A computational physicist who is competent in physical science, mathematical modeling and informatics has unlimited career options. With the background of solving large numerical projects, computational physicists are more likely to go out into private or public sector as a researcher, engineer, operation leader etc. becoming part of huge projects in every area and offering solutions to the problems faced.

ROAD MAP

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Note: Detail of the elective courses is available with the department, specialized courses are offered in semester 5th to 8th.

PROGRAM FACTS

- **Program Duration**: 4 Years (Credit Hours 133)
- **Timing**: 8:30 am to 5:00 pm (Monday to Friday)
- **Entry Requirements**: 12 Years of Education/Intermediate, F.Sc (Pre-Engg)/ICS/DAE/A-Level or Equivalent (Physics & Mathematics Combination), Minimum 45% marks
- **Location**: Raiwind Road Campus, Lahore.

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Higher Education Commission
INTRODUCTION
Biophysics offers you a multi-disciplinary field spanning Physics, Biology, Chemistry and Medicine. From understanding kinetics and energy distribution at cellular level to developing mathematical models of the dynamics of cells and tissues, this degree will let students delve into the variety and complexity of life and explain it with simple physical laws to gain powerful insight. The classroom teaching is supplemented with laboratory techniques and computing skills to make students an expert on a broad range of techniques like spectroscopy, electrophysiology, computational modeling and cutting-edge technologies like x-ray crystallography, laser light spectroscopy and several others. Not being offered anywhere else in Pakistan, the University of Lahore becomes the first place to offer this unique and fast advancing program.

CAREER PROSPECTS
Biophysics has become a highly emerging field throughout the world. Graduates of this program would be able to develop both the tools and understanding for treating various diseases. They will have the insight and technology to find the solution for our big problems like energy crisis, clean resources, defining new and better drugs with target specificity and developing new nanotechnologies. From pharmaceutical companies to related fields of applied research, the career options are unlimited. Being relatively new field in Pakistan, graduates can become a part of already started projects or take initiatives on their own.

ROAD MAP

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Nota: Detail of the elective courses is available with the department, specialized courses are offered in semester 5th to 8th.
INTRODUCTION
A graduate degree in Medical Physics will offer you an understanding of the physical principles that make the basics of medical technology. Magnetic Resonance imaging, Ultrasound, Nuclear Medicine, X-rays, Computer Tomography and several other imaging modalities are being employed and improved all around the world for treatment and diagnosis of diseases. The new technologies are being introduced and developed at a fast pace. This degree bridges the gap between Physics and Medicine in a challenging, research oriented and extensive four years program with main focus of making graduates creative and passion driven. Throughout the coursework, students will take six specialized courses in the field of Medical Physics.

CAREER PROSPECTS
Medical Physicists apply their technical skills and background in Physics in diagnosing and treating diseases and health conditions. The graduates will be able to develop and test new equipment used in radiotherapy, nuclear medicine, laser technology, ultrasound and other imaging modalities. They would also be able to work with lasers and X-rays in diagnosis and therapy. With more and more use of radiation-based techniques in health care, there is a growing need of skilled medical physicists in the health sector.

ROAD MAP

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<th>SEMESTER 1</th>
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<td>Mechanics-II</td>
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<td>Electricity &amp; Magnetism-I</td>
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<td>Electricity &amp; Magnetism-II</td>
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<td>Advance Computer Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Detail of the elective courses is available with the department, specialized courses are offered in semester 5th to 8th.

PROGRAM FACTS
- **Program Duration**: 4 Years (Credit Hours 133)
- **Timing**: 8:30 am to 5:00 pm (Monday to Friday)
- **Entry Requirements**: 12 Years of Education/Intermediate, F.Sc (Pre-Engg)/ICS/DAE/A-Level or Equivalent (Physics & Mathematics Combination), Minimum 45% marks
- **Location**: Raiwind Road Campus, Lahore.

RECOGNIZED BY
- Higher Education Commission

BACHELOR OF SCIENCE IN PHYSICS (MEDICAL PHYSICS)

<table>
<thead>
<tr>
<th>SEMESTER 5</th>
<th>Cr. Hr.</th>
<th>SEMESTER 6</th>
<th>Cr. Hr.</th>
<th>SEMESTER 7</th>
<th>Cr. Hr.</th>
<th>SEMESTER 8</th>
<th>Cr. Hr.</th>
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<tbody>
<tr>
<td>Classical Mechanics</td>
<td>3</td>
<td>Thermal and Statistical Physics</td>
<td>3</td>
<td>Elective – I</td>
<td>3</td>
<td>Applied Nuclear and Particle Physics</td>
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<tr>
<td>Quantum Mechanics I</td>
<td>3</td>
<td>Electromagnetic Theory -I</td>
<td>3</td>
<td>Electromagnetic Theory -II</td>
<td>3</td>
<td>Solid State Physics -II</td>
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<tr>
<td>Physics Lab V</td>
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<td>Digital Electronics</td>
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<td>Solid State Physics -I</td>
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<td>Elective-II</td>
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<td>Electrons</td>
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<td>Quantum Mechanics II</td>
<td>3</td>
<td>Computational Physics</td>
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<td>Elective - III</td>
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<td>Mathematical Method of Physics I</td>
<td>3</td>
<td>Physics Lab VI</td>
<td>2</td>
<td>Physics Lab VII</td>
<td>2</td>
<td>Physics Education</td>
<td>3</td>
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<tr>
<td>Mathematical Method of Physics II</td>
<td>3</td>
<td>Atomic and Molecular Physics</td>
<td>3</td>
<td>Elective - IV</td>
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</table>

Note: Details of the elective courses are available with the department, specialized courses are offered in semester 5th to 8th.
INTRODUCTION
Engineering Physics offers you an opportunity to develop a deeper understanding of the fundamentals of rapidly changing technology through an extensive physics and mathematics program in an engineering context. With electives and laboratory courses, you can easily combine this enhanced knowledge with the practical aspects of conventional engineering disciplines. This degree emphasizes the basic physics underlying most engineering developments, and mathematical tools vital to all engineers and scientists. The program is challenging, up-to-date and designed to stretch the mind. The students take up six specialized courses in the course of four years.

CAREER PROSPECTS
In view of the versatile nature of this degree, graduates will be able to fill up the gap between Physics and Engineering with better understanding of Physics. They will be suitable for job-market in teaching, research as well as industry. They will also be welcomed for higher studies in foreign universities. In view of the growing needs of Engineering Physicists in industry, the graduates are expected to be taken up as soon as they graduate.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
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PROGRAM FACTS
- **Program Duration**
  4 Years (Credit Hours 133)
- **Timing**
  8:30 am to 5:00 pm (Monday to Friday)
- **Entry Requirements**
  12 Years of Education/Intermediate, F.Sc (Pre-Engg)/ICS/DAE/A-Level or Equivalent (Physics & Mathematics Combination), Minimum 45% marks
- **Location**
  Raiwind Road Campus, Lahore.

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Higher Education Commission

Note: Detail of the elective courses is available with the department, specialized courses are offered in semester 5th to 8th.
INTRODUCTION

Environmental Physics offers you a clear understanding of Earth’s environment, using techniques, methods and analytical skills in Physics. The oceans, ice sheets, atmosphere, space environment are all governed by physical laws. Advances in Physics have helped us to determine which factors have impact on Earth’s water, air and land resulting in a collaborative effort to improve our surroundings. Recent research includes application of laser Physics and computing techniques to control air pollutants, creating more efficient energy generation methods, developing new cleanup technologies and understanding global weather and climate change. This degree is most suitable for those with strong interest in applied Physics and its application to Environmental issues.

CAREER PROSPECTS

Graduates from the Program of Environmental Physics will have excellent analytical and technical skillset to be a part of environmental research projects. These include technical positions in the fields of remote sensing, atmospheric modeling, air quality control, and climate study. Other options include following a career in teaching or taking up a position in industry. Some Engineering positions are always open in the fields of energy conservation, waste disposal, remediation of contaminated water, air and soil.

Note: Detail of the elective courses is available with the department, specialized courses are offered in semester 5th to 8th.
BACHELOR OF SCIENCE IN PHYSICS (GEOPHYSICS)

INTRODUCTION
This degree focuses on the composition, structure and other physical attributes of the earth. After extensive four years of training, students are prepared to master the techniques of extraction of materials, ground water and petroleum and also detect and monitor magnetic, thermal, electrical and oceanographic activity. The graduates have full command over complex equipment used to collect data and required skills to analyze and interpret it. The laboratory trainings and computational techniques instill in them over the course of four years make them able to quickly and independently solve problems and contribute towards a better future of our earth.

CAREER PROSPECTS
The graduates of this program are expected to gain employment with geoscience and environmental industries. As we move towards seeking sustainable resources for the world, mitigate the dangers of climate change and understand our earth in a better way, the truly interdisciplinary nature of this degree makes our graduates highly sought after by employment sectors. Graduates may also continue their higher studies with ease or they may take up their own projects, initiatives and entrepreneurial activities and work towards betterment of our future in the long run. Depending on the students’ interests and plans, career options are diverse and many.

Note: Detail of the elective courses is available with the department, specialized courses are offered in semester 5th to 8th.

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PROGRAM FACTS
- **Program Duration**
  4 Years (Credit Hours 133)
- **Timing**
  8:30 am to 5:00 pm (Monday to Friday)
- **Entry Requirements**
  12 Years of Education/Intermediate, F.Sc (Pre-Engg)/ICS/DAE/A-Level or Equivalent (Physics & Mathematics Combination), Minimum 45% marks
- **Location**
  Raiwind Road Campus, Lahore.

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Higher Education Commission

BACHELOR OF SCIENCE IN PHYSICS (GEOPHYSICS)
MASTER OF PHYSICS (M.Sc)

INTRODUCTION
For the students who have completed fourteen years of education, department of Physics offers postgraduate program in Physics with several specialization including Medical Physics, Computation Physics, High Energy Physics and several others. This degree focuses on preparing the students for their professional life with huge emphasis on teacher training, web learning and Physics education. The students, coming from diverse backgrounds, are prepared for problem solving, conceptual learning and are taught new techniques and methodologies in research over the course of two years.

CAREER PROSPECTS
The graduates of this program are equipped with necessary training required to excel in their fields. They are prepared to continue their education in world-class institutions without any difficulty or start professional in industry. The career prospects depend on the field of interest of the students. Education sector, industrial start-ups, projects initiatives are some of the options graduate students choose and creates a learning centered environment which enables the students to have unlimited career options once they graduate. The quality academic training received over the course of two years distinguishes our graduates from others once they enter their professional lives.

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ROAD MAP

PROGRAM FACTS
• Program Duration
  2 Years (Credit Hours 66)
• Timing
  8:30 am to 5:00 pm (Monday to Friday)
  9:00 am to 10:00 pm (Saturday & Sunday)
• Entry Requirements
  14 Years of Education B.Sc (Physics, Math & A&B/Physics, Chemistry, Math/Physics, Computer, Math/Physics, Economics, Math/Physics, Math, Statistics) Minimum 45%
• Location
  Raiwind Road Campus, Lahore.

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Note: List of electives is available with the department.

ROAD MAP

MASTERS OF PHILOSOPHY IN PHYSICS (M.Phil)

INTRODUCTION
This degree is designed to provide students facility to concentrate on their research area and gain deeper understanding and expertise in it. The teaching culture developed at graduate level is highly research-oriented with focus on research methodologies, computational skills and problem solving techniques. The department of Physics has internationally recognized faculty with vast exposure in latest trends in research in their respective domains. Students are encouraged to participate in conferences and present their research work. On average, passing out students publish at least one paper in internationally recognized journals.

CAREER PROSPECTS
Depending on the concentration that a student selects during study, various job opportunities are available after degree completion. Some of most visible ones are Forensic Science, Software Development, Medical Physicist, Education Sector, Consultants and many more. With this extensive background and training, students who want to continue their studies and increase their expertise in their fields can very well do so, with ease.

RESEARCH GROUPS
• Material Physics
• Computational Physics
• Computational Solid State Physics
• Computational Fluid Dynamics
• Biophysics/Medical Physics
• Theoretical/Experimental High Energy Physics

ELECTIVE COURSES
• Object Oriented Programming
• Nano Technology
• Advanced Techniques of Experimental Physics
• Group Theory
• Quantum Field Theory – I
• Quantum Field Theory – II
• Solid State Theory
• Material Science – I
• Advanced Nuclear Theory – I

Note: Degree is designed as per HEC’s approved format. Detail of the elective courses is available with the department, these courses can be changed as per department’s requirement. More courses can be offered in semester 3rd to 4th.

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Note: List of electives is available with the department.

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They are prepared to continue their education in world-class institutions without any difficulty or start professional in industry. The career prospects depend on the field of interest of the students. Education sector, industrial start-ups, projects initiatives are some of the options graduate students choose and creates a learning centered environment which enables the students to have unlimited career options once they graduate. The quality academic training received over the course of two years distinguishes our graduates from others once they enter their professional lives.

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Note: List of electives is available with the department.

ROAD MAP
INTRODUCTION
The Department of Physics offers PhD programs for those who aspire to extend their knowledge and research in their particular areas of interest. The goal of the program is to prepare the graduates according to international standards, and instill the qualities of leadership in them. The department offers challenging coursework, highly qualified internationally renowned faculty, well-equipped laboratories and an ideal environment to motivate and inspire the researchers. Over the course of their degree, the students master their research skills, deepen their knowledge and understanding, learn new methodologies and bring out their best. A number of publications in renowned journals every year are an evidence of quality of research in the department.

CAREER PROSPECTS
The graduates who pass out are prepared to do world-class research and excel in both academic and professional life. Due to the collaborations of the department with other universities and research groups, PhD students can continue their work both locally and internationally. There are numerous career options, depending on the field of the research of the students. Besides teaching and researching, PhD students also contribute towards industry.

PROGRAM FACTS
- Program Duration: 3-5 Years (Credit Hours 50)
- Timing: 6:00 am to 9:00 pm (Saturday & Sunday)
- Entry Requirements: 16 Years of Education, MS/M.Phil or Equivalent (in relevant field) with at least 1st Division or 3.00 CGPA (out of 4.00)
- Location: Raiwind Road Campus, Lahore.

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- Higher Education Commission

DOCTOR OF PHILOSOPHY IN PHYSICS (Ph.D)

ELECTIVE COURSES
- Object oriented Programming
- Nano Technology
- Advanced Techniques of Experimental Physics
- Group Theory
- Quantum Field Theory - I
- Quantum Field Theory - II
- Solid State Physics
- Solid State Theory
- Material Science - I
- Advanced Nuclear Theory - I
- Advanced Nuclear Theory - II
- Computational Physics - II
- Magnetic Materials
- Statistical Physics
- Electrodynamics I
- Advanced Quantum Mechanics
- Optical properties of Solids
- Quantum Optics
- Condensed Matter Theory - I
- Quantum Information Theory - I
- Plasma Physics - I
- Plasma Physics - II
- Superconductivity
- Particle Physics
- General Relativity and Cosmology
- Condensed Matter Theory -II
- Quantum Optics - II
- Atomic Physics
- Quantum Information Theory -II
- Accelerator Techniques for Materials
- Quantum Information Theory - III
- Accelerator Techniques for Materials
- Advance Medical Physics
- Material Science
- Computational Physics
- Computational Solid State Physics

RESEARCH GROUPS
- Atomic and Molecular Physics
- Computational Solid State Physics
- Experimental Materials Physics
- Medical Physics and Biophysics
- Particle Physics and Computational Physics

Department of Physics has a growing profile for research in five key areas across Physics, Engineering and Medicine. Hundreds of great minds at the university are associated with research and discovery in these groups. The scope of research is far reaching. Our well-qualified faculty, both nationally and internationally, is associated with these groups, actively pursuing their research activities as well as supporting and supervising graduate and postgraduate students in their areas of interest, which is evident from the growing number of quality publications. The department also extends its collaboration to other institutes, building on the strength of both. Students of M.Phil. and Ph.D. can get associated with any of these areas depending on their interest and background.

Note: Degree is designed as per HEC’s approved format. Detail of the elective courses is available with the department, those courses can be changed as per department’s requirement. More courses can be offered in semester as per departmental requirement.
the materials that are available and, as a result, advancement problems that we are facing today are due to the limitations of investigation of materials. Many of the critical scientific Material science deals with the property-structure relationship COMPUTATIONAL SOLID STATE PHYSICS interaction. are able to use different techniques to solve various problems Current research areas are established a Computational Solid State Physics laboratory which will be equipped with high speed computers or cluster where different researchers will able to use different techniques in the form of Exchange correlation potentials to analyze various Quantum mechanical body problems using different software like WIEN2K, CASTEP, VASP, etc. OBJECTIVES Our objectives are to establish a Computational Solid State Physics laboratory which will be equipped with high speed computers or cluster where different researchers will be able to use different techniques in the form of Exchange correlation potentials to analyze various Quantum mechanical body problems using different software like WIEN2K, CASTEP, VASP, etc. EXPERIMENTAL MATERIALS PHYSICS GROUP (EMP) Materials have always played an imperative role in our daily life, spanning from Bronze Age to this advanced era of technological gadgets. This research group focuses on synthesis, processing, refining of nano/micro materials and achieving optimal properties for desired applications. The potential applications of these materials include but not limited to energy storage/conversion devices, supercapacitor, optoelectronic devices, sensors, photocatalysis, magnetic materials and drug delivery etc. OBJECTIVES Our objectives are to develop a state of the art materials synthesis lab, where graduate and undergraduate/postgraduate researchers and students can synthesize nanomaterials by using different techniques i.e. Hydrothermal synthesis, Microwave-Assisted synthesis, Chemical Vapor Deposition Method, Laser Ablation, Pyrolysis and Co-Precipitation method. CURRENT RESEARCH AREAS • Structural Materials Processing (thermal, chemical, physical, and electrical properties) • Development of Functional Materials (synthesis, characterizations, optical and energy storage) • Laser-matter Interaction • Thin-Film Deposition • Energy conversion and storage (solar cells, supercapacitors and hydrogen production) MEDICAL PHYSICS AND BIOPHYSICS GROUP (MPBG) Biophysicists mostly focus on studying kinematic and energy distribution at cellular level and developing mathematical models for the deeper understanding of dynamics and structure of cells and tissues while medical physicists develop and use medical tools and techniques to investigate and treat various diseases and also design protocols for medical instruments, radiation therapy and radiation detection techniques. OBJECTIVES Our objectives are to develop a computer lab equipped with softwares like SimSET (PET/SPECT) GEANT 4, Simfluid (SPECT) and MATLAB. Students are also encouraged to study the structural, electronic, optical, elastic, thermodynamic and transport properties of materials. Computational Solid State Physics GROUP (CSSP) Material science deals with the property-structure relationship and investigation of materials. Many of the critical scientific problems that we are facing today are due to the limitations of the materials that are available and, as a result, advancement in this field is likely to have a significant impact on the future technology. Experimental results of complex systems can be verified by theoretical techniques because it is very difficult to analyze such systems i.e. many body problem. To have an explanation of such complex problems, Density Functional Theory (DFT) based Computational Solid State Physics is used. Using these techniques we can predict/extract useful information about materials for advanced technological applications/devices. OBJECTIVES Control of light speed in optical media Study of optical properties of materials Effect of rotation of an optical medium on polarization state of light Study of light matter interaction to investigate optical, mechanical and electrical properties of atoms, molecules and solids Investigation of photodetachment and photoabsorption process in various external environment using semiclassical approaches such as theoretical imaging method, closed orbit theory and quantum mechanical approach. Theory of electron-atom scattering near external fields and walls. OBJECTIVES To study the structural, electronic, optical, elastic, thermodynamic and transport properties of materials. CURRENT RESEARCH AREAS • To study the structural, electronic, optical, elastic, thermodynamic and transport properties of materials Particles Physics or high-energy physics is the fundamental branch of Physics, which concerns with the study of atomic and subatomic particles, culminated into Standard Model (SM) of particle physics. Almost all the predictions of SM have been established by experiments; the most recent is the discovery of Higgs boson at CERN. Computational physics aims at handling complex physical problems of particle physics, astrophysics, condensed matter physics, biomedical physics etc. using computational/numerical techniques, especially, problems involving many degrees of freedom. OBJECTIVES This research group aims at providing state of the art research training to undergraduate, graduate and postgraduate students in area of particle and computational physics. The students will learn key research skills, theoretical and experimental techniques in the fields so that they can work in challenging environment of innovation and competence CURRENT RESEARCH AREAS • Hadronic Physics (study of proton-proton, pion-proton scattering processes at high energy experiments such as TOTEM, ALICE, study of scattering and diffractive cross sections, form factors of hadrons) • Chormonium Physics and Light Hadron Spectroscopy (study of chormonium decays into mesons and baryons, light hadron spectroscopy, BESIII Collaboration) • Higgs Physics (study of p-p, Pb-Pb, Pb-p collisions, tth production and decay channels at CMS and ATLAS Collaboration) • Physics of Super symmetry and B-Meson (Study of different aspects of super symmetry, ATLAS, CMS collaboration) • Topology and General Relativity (Topology and its applications, Quantum spinners, Dynamical study of black holes) ATOMIC AND MOLECULAR PHYSICS GROUP (AMP) Atomic and molecular physics (AMP) deals with the study of atomic and molecular systems and their dynamics in different environments using classical, semiclassical and quantum mechanical approaches. Molecular physics specifically focuses on structure of molecules through light-matter and molecules-electrons interactions to investigate the properties of chemical bonding of matter consisting of few atoms in the gaseous phase using quantum and quantum-statistical tools. OBJECTIVES Our objectives are to establish a theoretical atomic and molecular research laboratory where different researchers are able to use different techniques to solve various problems related to Photodetachment microscopy and Laser matter interaction. CURRENT RESEARCH AREAS • Computer Engineering and Computational Modeling
MISSION STATEMENT
The mission of the department is to identify environmental problems and their causes. Our mission is to create a generation committed to promote sustainable development by changing patterns of economic and social behaviors. The degree programs will equip graduates with an ability to understand relations between various bio physical and socio economics of environment.

INTRODUCTION
Department is offering undergraduate and graduate programs i.e BS, M.Sc and M.Phil . The environmental sciences program encompasses multiple scientific disciplines including Physics, chemistry, earth geography, ecology and biology. More specifically, programs are offered with physics concentration to tackle environmental problems with the help of physics techniques. The degree and courses offered in the department are designed according to HEC approved scheme of studies. The BS (HONS.), M.Sc and M.Phil programs are launched with highly qualified faculty members. It fulfills all the curriculum requirements recommended by HEC. Our teaching methods comply with international standards and meet all mandatory requirements of HEC.

DEGREES OFFERED
- BS Environmental Sciences (4 Years)
- M.Sc Environmental Sciences (2 Years)
- M.Phil Environmental Sciences (2 Years)

INTRODUCTION
The program after completion is equivalent to MSc since the degree is awarded on successful completion of 16 years of education after Higher Secondary School Education. The Degree program fulfils all the curriculum requirements for BS Degree recommended by Higher Education Commission consisting of compulsory, core and allied courses. The basic training of research work is also imparted.

CAREER PROSPECTS
- Industrial
- Agricultural
- Educational Research Development
- Health Organizations

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr.-Hrs</th>
<th>SEMESTER 2</th>
<th>Cr.-Hrs</th>
<th>SEMESTER 3</th>
<th>Cr.-Hrs</th>
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</table>
INTRODUCTION

For the students who have completed fourteen years of education, the department offers undergraduate and graduate programs in Environmental Sciences with Physics concentration. This degree focuses on preparing the students for their professional life with huge emphasis on teacher training, web learning. The students, coming from diverse backgrounds, are prepared for problem solving, conceptual learning and are taught new techniques and methodologies in research over the course of two years.

CAREER PROSPECTS

Industrial, Agricultural, Educational Research & Development and Health Organizations

ELECTIVES

- Environmental applications of nanomaterials
- Solid and hazardous waste management
- Environmental biotechnology
- Remote sensing and GIS
- Alternative energy sources
- Cleaner production technologies

Note: List of electives is available with the department.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
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<th>Cr. Hr.</th>
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RECOGNIZED BY

Higher Education Commission

PROGRAM FACTS

- Program Duration: 2 Years (Credit Hours 66)
- Timing: 8:30 am to 5:00 pm (Monday to Friday)
- Entry Requirements: 14 Years of Education/B.Sc (Physics, Math A&B/Physics, Chemistry, Math/Physics, Computer, Math/Physics, Economics, Math/Physics, Economics, Computer/ Physics, Math, Statistics) Minimum 45% marks
- Location: Raiwind Road Campus, Lahore.

MASTERS OF PHILOSOPHY IN ENVIRONMENTAL SCIENCES (M.Phil)

INTRODUCTION

The program of study is equivalent to M.Phil since the degree is awarded on successful completion of 16 years of education after the award of BS degree of 4 years duration or MSc degree of 2 years duration. The Degree program fulfills all the curriculum requirements for MPhil Degree programs as recommended by Higher Education Commission, consisting of compulsory, core and allied courses. The students are required to complete 24 credit hours of courses in the first 2 semesters and conduct research & remaining 12 credit hours complete in the next 2 semesters. Before starting research, the students have to pass Comprehensive Exam as required by HEC. All students are required to pass UOL Admission test will be held by the University.

CAREER PROSPECTS

Industrial, Agricultural, Educational Research & Development and Health Organizations

ELECTIVES

- Environmental applications of nanomaterials
- Solid and hazardous waste management
- Environmental biotechnology
- Remote sensing and GIS
- Alternative energy sources
- Cleaner production technologies

Note: List of electives is available with the department.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
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</table>

RECOGNIZED BY

Higher Education Commission
INTRODUCTION
Department of Chemistry offers a postgraduate program for the students with several advanced fields of studies like organic chemistry, Inorganic chemistry, physical chemistry, Biochemistry, and many more. This degree is to create the research oriented abilities in the diverse background students through experimental work in the laboratories which are equipped with internationally standard equipments. During the span of his degree, the student will be able to prepare different projects by using different research techniques and methodologies which will be helpful for his future research and professional life.

CAREER PROSPECTS
The graduates of this program are equipped to hands on work in different fields of their career. They are prepared to continue their education in world-class institutions without any difficulty or start professional life in industry. After completion of their degrees, there are many opportunities are available, for graduate students, in government as well as private organizations like forensic department, education sector, pharmaceutical industries and beverage industries, Textile, Paint, Pharmaceuticals, Dyes, Fertilizers, Cement Industry, Nuclear science, Surgery, Dentistry, Nanotechnology, Genomics, Petroleum & Petrochemicals, Metallurgy, Environmental Sciences, Alternate energy resources, Waste management, Irrigation & Agriculture, Research and Development.

ROAD MAP

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<th>SEMESTER 1</th>
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<th>SEMESTER 3</th>
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<td>Elective V</td>
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BACHELOR OF SCIENCE IN CHEMISTRY (PURE CHEMISTRY)

INTRODUCTION
BS chemistry offers you the understandings of the basic level to graduate level work in the various field of chemistry. The students will learn about all basic and advanced ideas of the subject and will be equipped to do research in the latest fields as Physiology, Genetics, and Molecular Biology. This degree can lead to specialization in various other fields interconnected with Physics such as Physical Chemistry, Bio-chemistry etc. Over the periods of four years, students will be able to use different techniques to solve problems and perform different experimental work which will be beneficial for his future prospectus.

CAREER PROSPECTS

ROAD MAP

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PROGRAM FACTS
- **Program Duration**: 4 Years (Credit Hours 133-139)
- **Timing**: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 12 Years of Education/Intermediate, F. Sc. / ICS/DAE/A-Level or Equivalent (Physics & Chemistry Combination), Minimum 45% marks
- **Location**: Raiwind Road Campus, Lahore.

RECOGNIZED BY
- Higher Education Commission

GENERAL COURSES
- Mechanics
- Thermodynamics
- Electricity and Magnetism
- Modern Physics
- Mathematics-I
- Mathematics-II
- Introduction to Biology-I
- Biology-II, Biology-III
- introduction to Environmental Science
- Introduction to Spectroscopy
- General Chemistry-I
- General Chemistry-II

ELECTIVES
- Biochemistry – Batteries & Fuel Cells
- Materials Chemistry
- Green Chemistry
- Electronic and Mass Spectrometry
- Stereochemistry
- Nano-chemistry
- Statistics for Chemists
- Biomass Conversion
- Renewable energy
- Polymer Chemistry
- Polymer Nano-composites
- Advanced Organic Reaction Mechanism
- Natural Product Chemistry
- Introduction to Polymer Chemistry
- Organometallic chemistry
- Chemistry and Catalysis
- Instrumental Methods
- Inorganic Spectroscopy
- Corrosion Chemistry

SEMESTER 5 | Cr. Hr. | SEMESTER 6 | Cr. Hr. | SEMESTER 7 | Cr. Hr. | SEMESTER 8 | Cr. Hr. |
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Masters of Philosophy in Chemistry (M.Phil)

Introduction
This degree is designed as per HEC norms to endow students with a deep thoughtful knowledge about the several advanced areas of research. The teaching culture developed at graduate level is highly research-oriented with focus on research methodologies, computational skills and problem solving techniques and experimental work. In the well equipped laboratories designed according to international standards, students are encouraged to participate in conferences and present their research work.

Career Prospects
The graduates of this program are equipped to handle work in different fields of their career. They are prepared to continue their education in world-class institutions without any difficulty or start professional life in industry. After completion of their degrees, there are many opportunities available, for graduate students, in government as well as private organizations like forensic department, education sector, pharmaceutical industries and beverage industries, Textile, Paint, Pharmaceuticals, Dyes, Fertilizers, Cement Industry, Nuclear science, Surgery, Dentistry, Nanotechnology, Genomics, Petroleum & Petrochemicals, Metallurgy, Environmental Sciences, Alternate energy resources, Waste management, Irrigation & Agriculture, Research and Development.

Road Map

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Program Facts
- Program Duration: 2 Years (Credit Hours 30)
- Timing: 8:00 am to 10:00 pm (Saturday & Sunday)
- Entry Requirements: 16 Years of Education/2 years M.Sc. Chemistry, 4 years BS Chemistry or Equivalent (in relevant field) with at least second Division in annual system and 2.5 CGPA (out of 4.00), UOL Entry Test and Interview is Mandatory
- Location: Raiwind Road Campus, Lahore.

Recognized By:
Higher Education Commission

Courses List

General Courses
- Chemical Education
- Research Methodologies
- Computational Chemistry
- Statistical Data Handling and Mathematics
- Assessment in Higher Education
- Forensic Chemistry

Inorganic/Analytical Chemistry (CHEM-711-25)
- Advanced Spectroscopic Techniques
- Advanced Chromatographic Techniques
- Bio-analytical Chemistry
- Solid State Chemistry
- Chemistry of Organometrics
- Metal-based drugs
- Nano-chemistry
- Green Chemistry Techniques
- Thermodynamic
- Assessment in Higher Education
- Nuclear medicine
- Food, pharmaceutical and Forensic analysis
- Advanced Electro-analytical Techniques
- Inorganic Material Chemistry
- Characterization of Natural Antioxidants and Essential Oils

Organic Chemistry (CHEM-726-40)
- Natural Products Chemistry
- Synthetic Applications of Nucleoside Reactions
- Advanced Spectroscopy
- Advanced Heterocyclic Chemistry
- Organic Polymer Chemistry
- Pharmaceutical Chemistry
- Supra-molecular Chemistry
- Phytochemical Techniques
- Modern Trends in Asymmetric Synthesis
- Advanced Stereochemistry
- Pericyclic Chemistry
- Organic Compounds containing S, P & Si
- Dyes and Pigments
- Physical Organic Chemistry

Note: Any other course according to the availability of facilities, expertise in the institution may be offered.

Physical Chemistry (CHEM-741-55)
- Polymers and Advanced Composite Materials
- Advanced Quantum Chemistry
- Advanced Photochemistry and Radiation Chemistry
- Advanced Electrochemistry
- Surface Chemistry
- Advanced Statistical Thermodynamics
- Biophysical Chemistry
- Chemistry of Atmosphere
- Advanced Solid State Chemistry and Characterization Techniques
- Advanced Reactions Dynamics
- Nano-materials
- Magnetic Spin Dynamics
- Applied Nuclear Chemistry

Biochemistry (CHEM-756-770)
- Enzymes Kinetics
- Drug-Protein and Drug DNA Interaction
- Cell Signaling
- Bioassays
- Biometrics
- Biosensors
- Radio-immuno Assay
- PCR and ELISA Techniques
- NutraceuticalsTissue Culture Techniques
- Cell Biology
- Bio-transformations
- Industrial Microbiology
- Clinical Biochemistry

Organic Chemistry (CHEM-762-40)
- Environmental Impact of Chemical Industries
- Nano-materials and their applications
- Chemistry of Dyes and Pigments
- Pharmaceutical Chemistry
- Advanced Polymer Chemistry
- Agrochemicals
- Physical Structure of Porous Materials
- Industrial Process Chemistry
- Advances in Petrochemical Industries
- Coal Gasification and Liquefaction
- Alternative Fuels
- Nuclear Fuel Processing and waste management
- Alternative Energy Sources
MISSION STATEMENT
The Department of Mathematics is established to train the students to become competent professionals and researchers by earning M.Phil/Ph.D. degree in Mathematics through the eminent faculty, state of the art facilities and infrastructure of international standards. We are committed to provide outstanding education to our research scholars in accordance with principles of the University mission. The research activities are planned in modern areas of mathematics to find solutions of current mathematical problems.

INTRODUCTION
The Department of Mathematics is one of the primary departments of the University of Lahore. Its initial setup was laid down and class work started when this university opened her gates for her students to learn and grow. The Department realizes its responsibility to ensure long term vitality of mathematical sciences; that it should foster the development of mathematical scientists as future scholars, teachers, researchers and organizational leaders. The BS (HONS.), M.Phil. and Ph.D. program is launched afresh with highly qualified faculty members. It fulfills all the curriculum requirements for BS (HONS.), M.Phil. and Ph.D. degree recommended by HEC. Our teaching methods comply with international standards and meet all mandatory requirements of HEC.

DEGREES OFFERED
- BS Mathematics (4 Years)
- M.Phil Mathematics (2 Years)
- Ph.D. Mathematics (3 Years)
INTRODUCTION

The BS (hons.) program in Mathematics is a four-year program that gives academically successful undergraduates the opportunity to pursue M.Phil. Degree in Mathematics and Statistics.

CAREER PROSPECTS

Mathematics BS (hons.) student may choose a career as a teacher or industry. Mathematical graduates are in high demand across the world and can obtain extremely well paid work in many areas, including investment banking and finance; the civil service; the pharmaceutical industry; and medicine statistics. Mathematics graduates are highly employable due to the advanced problem-solving, analytical skills and higher level numeracy skills developed by studying this subject. There is a strong demand for financial, business, IT and education sectors.

PROGRAM FACTS

- Program Duration
  4 Years (Credit Hours 142)
- Timing
  8:30 am to 5:00 pm (Monday to Friday)
- Entry Requirements
- Location
  Raiwind Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission

ROAD MAP

<table>
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<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
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<th>Cr. Hr.</th>
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Any Two Course from

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<th>Cr. Hr.</th>
<th>SEMESTER 7</th>
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<td>Rings and Vector Spaces</td>
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<td>Methods of Mathematical Physics</td>
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<td>Complex Analysis-I</td>
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<td>Complex Analysis-II</td>
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<td>Numerical Analysis-I</td>
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<td>Functional Analysis-I</td>
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</table>

ANY TWO ELECTIVE LIST-1

- Mathematical Statistics-I
- Fortran Programming
- Group Theory-II
- Ring Theory
- Number Theory-I
- Quantum Mechanics-II
- Analytical Dynamics
- Electromagnetic Theory-I
- Operations Research-II
- Theory of Approximation & Splines-I
- Functional Analysis-II
- Fluid Mechanics-I

ANY TWO ELECTIVE LIST-2

- Mathematical Statistics-II
- Computer Applications
- Group Theory-III
- Theory of Modules
- Number Theory-II
- Quantum Mechanics-II
- Special Theory of Relativity
- Electromagnetic Theory-II
- Operations Research-II
- Theory of Approximation and Splines-II
- Functional Analysis-II
- Fluid Mechanics-II
INTRODUCTION
The purpose is to offer students who hold degree M.Sc or BS (hons.) Mathematics to broaden their knowledge in several fields of Mathematics.

CAREER PROSPECTS
The program is designed to prepare graduated for teaching at the college level or Universities. The use of Mathematics is in modern industry, so Mathematics is found in almost every sector of the job market.

CORE COURSES LIST
- Group Theory
- Functional Analysis
- Riemannian Geometry
- Mathematical Techniques
- ODEs and Computational Linear Algebra
- Partial Differential Equations
- Integral Equations
- Advanced Mathematical Physics
- Advanced Numerical Analysis
- Mathematical Modeling I

PROGRAM FACTS
- Program Duration
  2 Years (Credit Hours 30 )
- Timing
  Morning 08:00 AM - 05:00 PM
  Weekend (Saturday & Sunday)
- Entry Requirements
  16 years of education, 2 years Msc , 4 years BS or Equivalent (in relevant field) with at least second division min 55% marks in annual system and 2.5 CGPA (out of 4.00)
- Location
  Raiwind Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

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</table>

ELECTIVE COURSES
- Fluid Dynamics
- Relativistic Astrophysics
- Classical Field Theory
- Quantum Field Theory
- Electrodynamics-I
- Electrodynamics-II
- General Relativity-I
- General Relativity-II
- Cosmology
- Electrodynamics
- Plasma Dynamics
- Advanced Course in Plasma Physics
- Magnetohydrodynamics-I
- Magnetohydrodynamics-II
- Optimization-I
- Optimization-II
- Optimal Control Problem for PDEs
- Integral Transform

COMPUTATIONAL MATHEMATICS
- Graph Theory
- Design Theory
- Theory of Splines Functions I
- Theory of Splines Functions II
- Theory of Splines Functions III
- Subdivision Schemes
- Approximation Theory
- Numerical Solution of PDEs
- Mathematical Modeling II
- Minimal Surfaces
- Computer Graphics
- Multigrid Methods for PDEs Optimization

PURE MATHEMATICS
- Lattice Theory
- Topological Groups
- Banach Algebras-I
- Banach Algebras-II
- Rings and Modules
- Operator Theory
- Lie Algebras & Lie Groups
- Field Extensions & Galois Theory
- Linear Groups & Group Representations
- General Topology
- Homotopy Theory
- Homological Theory
- Representation Theory
- BCK Algebra
- BCL Algebra
- Advanced Theory of Rings and Modules
- Spectral Theory in Hilbert spaces-I
- Spectral Theory in Hilbert spaces-II
- Harmonic Analysis
- Advanced Measure Theory
- Advanced Number Theory
- Combinatorics
INTRODUCTION
The program is designed to develop advanced understanding of specific fields of Mathematics and a thorough understanding of one major field of interest. We offer a broad variety of research in different areas of Mathematics.

CAREER PROSPECTS
The aim of the doctoral program in Mathematics is to prepare graduates for productive careers in research, education and industry in general.

CORE COURSES LIST
- Group Theory
- Functional Analysis
- Riemannian Geometry
- Mathematical Techniques
- ODEs and Computational Linear Algebra
- Partial Differential Equations
- Integral Equations
- Advanced Mathematical Physics
- Advanced Numerical Analysis
- Mathematical Modeling-I

PROGRAM FACTS
- Program Duration
  3-5 Years (Credit Hours 48)
- Timing
  Morning 08:00 AM - 05:00 PM
  Weekend (Saturday & Sunday)
- Entry Requirements
  18 years of education, MS/MPhil or Equivalent (in relevant field) with at least second Division min 75% marks in annual system and 3.00 CGPA (out of 4.00) GAT examination conducted by NTS 50% Marks are required in GAT Subject (Mathematics).
- Location
  Raiwind Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

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<td>SEMESTER 6 &amp; 7</td>
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<td>Core Course</td>
<td>3</td>
<td>Elective Course</td>
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<td>Ph.D. Dissertation</td>
<td>6</td>
<td>Ph.D. Dissertation</td>
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ELECTIVE COURSES
- Fluid Dynamics
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- Quantum Field Theory
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COMPUTATIONAL MATHEMATICS
- Graph Theory
- Design Theory
- Theory of Spline Functions I
- Theory of Spline Functions II
- Theory of Spline Functions III
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- Approximation Theory
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PURE MATHEMATICS
- Lattice Theory
- Topological Groups
- Banach Algebras-I
- Banach Algebras-II
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- Representation Theory
- BCK Algebra
- BCL Algebra
- Advanced Theory of Rings and Modules
- Spectral Theory in Hilbert spaces-I
- Spectral Theory in Hilbert spaces-II
- Harmonic Analysis
- Advanced Measure Theory
- Advanced Number Theory
- Combinatorics
MISSION STATEMENT
The mission of the department is to develop manpower and the frontiers of knowledge with emphasis on economically important areas of teaching and research with particular reference to mitigating educated unemployment.

INTRODUCTION
The Institute of Molecular Biology and Biotechnology was established in the year 2004. It offers under graduate and graduate degree programs in the subject of Biochemistry, Molecular Biology, Physiology, Biotechnology, Microbiology and Environmental Science. It is the first Institute of its kind in the private sector. The curricula for the degree program are designed to prepare manpower needed for the economic development of the country.

The Institute employs highly qualified faculty for the delivery of curricula. The semiotic method is combined with interactive teaching to enhance the learning process. The major focus of the university is to impart technologies which could be used gainfully by graduates for employment or for further education. The research programs of the department are based on recent developments at the frontiers of knowledge. Some of the areas of research include: cell signaling in normal and in cancer cells, alternate remedies for treatment of cancer (for example, natural products, micro RNAs and Oncolytic viruses among others) recombinant DNA technologies, metabolic disorders cancer markers, genetic disorders, agri-technology, gene manipulation in plants, hydroponics stress induced by various heavy metals in plants of economic importance, purification of proteins of economic importance and many related problems in areas of molecular endocrinology, clinical biochemistry and medical microbiology.

Special MPhil programs in the subject of Biochemistry, Microbiology, Physiology and Ultra Sound Technology, especially designed for MBBS Doctors are also offered by the Institute. These programs are approved by Pakistan Medical and Dental Council (PMDC) and are conducted by senior PhD faculty of the Institute and Centre for Research in Molecular Medicine (CRiMM). The department encourages the students through exhaustive studies to imbibe new knowledge in their fields of research. Centre for research in Molecular Medicine and Institute of Molecular Biology and Biotechnology are equipped with up-to-date equipment to undertake research for which the students opt in their third and fourth semesters.

DEGREES OFFERED
- BS Biochemistry & Biotechnology
- BS Biotechnology
- BS Microbiology & Biotechnology
- BS Molecular Biology & Biotechnology
- M.Sc Biochemistry & Biotechnology
- M.Sc Biotechnology
- M.Sc Microbiology & Biotechnology
- M.Sc Molecular Biology & Biotechnology
- M.Phil Biochemistry
- M.Phil Biotechnology
- M.Phil Microbiology
- M.Phil Molecular Biology
- M.Phil Physiology
- M.Phil Forensic Sciences
- Ph.D Biochemistry
- Ph.D Biotechnology
- Ph.D Microbiology
- Ph.D Molecular Biology
- Ph.D Physiology
## INTRODUCTION

The program after completion is equivalent to MSc since the degree is awarded on successful completion of 16 years of education after Higher Secondary School Education. The Degree program fulfills all the curriculum requirements for BS Degree recommended by Higher Education Commission consisting of compulsory, core and allied courses. The basic training of research work is also imparted.

## CAREER PROSPECTS

Industrial, Agricultural, Educational Research Development and Health Organizations.

## ROAD MAP

### PROGRAM FACTS

- **Program Duration**: 4 Years (Credit Hours 130)
- **Timing**: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 12 years of education (Higher Secondary School Certificate/Intermediate) with at least second Division
- **Location**: Defence Road Campus, Lahore.

### RECOGNIZED BY

- Higher Education Commission

### SEMESTER 1

<table>
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<tr>
<th>Course Code</th>
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<td>Biochemistry I: Introduction to Biochemistry</td>
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<tr>
<td>1202</td>
<td>Molecular Biology I</td>
<td>3</td>
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<tr>
<td>1203</td>
<td>Cell Biology I</td>
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<td>1204</td>
<td>General Physiology</td>
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<td>Communication Skills</td>
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<td>Molecular Biology II</td>
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<td>1210</td>
<td>Cell Biology II</td>
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<td>Biochemistry of Vitamins and Minerals</td>
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<td>1216</td>
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<td>1217</td>
<td>Toxicology</td>
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## ROAD MAP

### PROGRAM FACTS

- **Program Duration**: 4 Years (Credit Hours 130)
- **Timing**: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 12 years of education (Higher Secondary School Certificate/Intermediate) with at least second Division
- **Location**: Defence Road Campus, Lahore.

### RECOGNIZED BY

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INTRODUCTION
The program after completion is equivalent to MSc since the degree is awarded on successful completion of 16 years of education after Higher Secondary School Education. The Degree program fulfills all the curriculum requirements for BS Degree recommended by Higher Education Commission consisting of compulsory, core and allied courses. The basic training of research work is also imparted.

CAREER PROSPECTS
Industrial, Agricultural, Educational Research & Development and Health Organizations.

ROAD MAP

RECOGNIZED BY
• Higher Education Commission

RECOGNIZED BY
• Higher Education Commission

PROGRAM FACTS
• Program Duration
4 Years (Credit Hours 132)
• Timing
Morning 08:00 AM - 05:00 PM (Monday – Friday)
• Entry Requirements
12 years of education (Higher Secondary School Certificate/Intermedate) with at least second Division
• Location
Defence Road Campus, Lahore.

PROGRAM FACTS
• Program Duration
4 Years (Credit Hours 132)
• Timing
Morning 08:00 AM - 05:00 PM (Monday – Friday)
• Entry Requirements
12 years of education (Higher Secondary School Certificate/Intermediate) with at least second Division
• Location
Defence Road Campus, Lahore.

SEMESTER 1  Cr. Hr. SEMESTER 2  Cr. Hr. SEMESTER 3  Cr. Hr. SEMESTER 4  Cr. Hr.
Biochemistry I: Introduction to Biochemistry 4 Biochemistry I: Metabolism I 4 Biochemistry II: Metabolism II 3 Ecosystem & Environment 3
Introductory Genetics 3 Molecular Biology I 4 Introduction to Biotechnology 3 General Microbiology 3
Introduction to Computers 3 Cell Biology I 3 Cell Biology II 4 Molecular Biology II 4
Foundation of English 3 Biostatistics 3 Biological diversity 3 Animal Biotechnology 3
Mathematics 3 English Technical Writing and comprehension 3 Communication Skills 3 Plant Biotechnology 3
Islamic Studies 2

SEMESTER 5  Cr. Hr. SEMESTER 6  Cr. Hr. SEMESTER 7  Cr. Hr. SEMESTER 8  Cr. Hr.
Microbiology I: Introduction to Biochemistry 4 Biochemistry II: Metabolism I 4 General Microbiology 3 General Bacteriology 3
Introductory Genetics 3 Molecular Biology I 4 Introduction to Biotechnology 3 Microbial Biochemistry 4
Introduction to computers 3 Cell Biology I 3 Cell Biology II 4 Molecular Biology II 4
Foundation of English 3 Biostatistics 3 Biological diversity 3 Medical Microbiology 3
Mathematics 3 English Technical Writing and comprehension 3 Communication Skills 3 Microbial Physiology 3
Islamic Studies 2 Pakistan Studies 2

SEMESTER 1  Cr. Hr. SEMESTER 2  Cr. Hr. SEMESTER 3  Cr. Hr. SEMESTER 4  Cr. Hr.
Microbial Biotechnology 3 Genetic Resource & Conservation 3 Genomics, Transcriptomics & Proteomics 3 Cell and Tissue Culture 3
Microbial Genetics 4 Food Biotechnology 3 Environmental Biotechnology 3 Health Biotechnology 4
Principles of Biochemical Engineering 3 Pharmaceutical Biotechnology 3 Techniques in Molecular Biology 3 "Review Report/Research 3
Immunology 4 Biostatistics 3 Agriculture Biotechnology 3
Research Methodology 2 *Review Report/Research 3

SEMESTER 5  Cr. Hr. SEMESTER 6  Cr. Hr. SEMESTER 7  Cr. Hr. SEMESTER 8  Cr. Hr.
General Microbiology 3 Microbial Biotechnology & Vaccinology 3 Genomics, Transcriptomics & Proteomics 3 Cell & Tissue Culture 3
Microbial Genetics 4 Food Microbiology 3 Environmental Microbiology 3 Biotechnologies and System Biology 3
General Virology 3 Industrial Microbiology 3 Techniques in Microbiology 3 "Review Report/Research 3
Immunology 4 Introduction to Cell Signaling 3 Bio-safety & Bioethics 2
Recombinant DNA Technology 4 Biostatistics 3 Stem Cell and Gene Therapy 3
Research Methodology 2 *Review Report/Research 3

The University of Lahore 180 Sciences 181
INTRODUCTION
The program after completion is equivalent to MSc since the degree is awarded on successful completion of 16 years of education after Higher Secondary School Education. The Degree program fulfills all the curriculum requirements for BS Degree recommended by Higher Education Commission consisting of compulsory, core and allied courses. The basic training of research work is also imparted.

CAREER PROSPECTS
Industrial, Agricultural, Educational Research & Development and Health Organizations

PROGRAM FACTS
• Program Duration 2 Years (Credit Hours 60)
• Timing Morning 08:00 AM - 05:00 PM (Monday – Friday)
• Entry Requirements 14 years of education (B.Sc or Equivalent) with at least 2nd division
• Location Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

ROAD MAP

<table>
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SEMINAR 4

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<td>Molecular Genetics &amp; Genetic Disorders</td>
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RECOGNIZED BY
Higher Education Commission

SEMINAR 4

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CAREER PROSPECTS
Industrial, Agricultural, Educational Research & Development and Health Organizations

PROGRAM FACTS
- Program Duration: 2 Years (Credit Hours 60)
- Timing: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: 14 years of education (B.Sc or Equivalent) with at least 2nd division
- Location: Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

ROAD MAP

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<th>Cr. Hr.</th>
<th>Semester 4</th>
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<td>Agricultural Biotechnology</td>
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<td>Genetics, Transcription &amp; Protein</td>
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<td>Bioinformatics</td>
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<tr>
<td>Introduction to Molecular Biology &amp; Biotechnology</td>
<td>4</td>
<td>Immunology</td>
<td>4</td>
<td>Health Biotechnology</td>
<td>2</td>
<td>Research thesis/Review</td>
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<tr>
<td>Genomic Resources &amp; Conservation</td>
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<td>Recombinant DNA Technology</td>
<td>4</td>
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<td>Environmental Biotechnology</td>
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<td>Biostatistics</td>
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</table>

MASTER OF SCIENCE IN BIOENGINEERING (M.Sc)

INTRODUCTION
The program after completion is equivalent to MSc since the degree is awarded on successful completion of 16 years of education after Higher Secondary School Education. The Degree program fulfills all the curriculum requirements for BS Degree recommended by Higher Education Commission consisting of compulsory, core and allied courses. The basic training of research work is also imparted.

CAREER PROSPECTS
Industrial, Agricultural, Educational Research & Development and Health Organizations

PROGRAM FACTS
- Program Duration: 2 Years (Credit Hours 62)
- Timing: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: 14 years of education (B.Sc or Equivalent) with at least 2nd division
- Location: Defence Road Campus, Lahore.

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Higher Education Commission

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<td>General Microbiology</td>
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</table>
INTRODUCTION
The program of study is equivalent to M.Phil since the degree is awarded on successful completion of 16 years of education after the award of BS degree of 4 years duration or MSc degree of 2 years duration. The Degree program fulfills all the curriculum requirements for MPhil Degree programs as recommended by Higher Education Commission, consisting of compulsory, core and allied courses. The students are required to complete 24 credit hours of courses in the first 2 semesters and conduct research & remaining 12 credit hours complete in the next 2 semesters. Before starting research, the students have to pass Comprehensive Exam as required by HEC. All students are required to pass GAT examination conducted by National Testing Service (NTS) institute. Admission test will be held by the institute.

CAREER PROSPECTS
• Industrial
• Agricultural
• Educational Research & Development
• Health Organizations

ROAD MAP

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<td>Recent Trends in Immunology</td>
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<td>Techniques in Biochemistry</td>
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<tr>
<td>Elective I (e.g. Advanced Heterocyclic Compounds)</td>
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<td>Elective II (e.g. Advanced Toxicology)</td>
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PROGRAM FACTS
• Program Duration: 2 Years (Credit Hours 36)
• Timing: After Noon 02:00 PM - 05:00 PM (Monday – Friday)
• Entry Requirements: 16 years of education BS/MSc/MBBS/BDS/B-Pharm with at least 2nd division.
• Location: Defence Road Campus, Lahore.

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Higher Education Commission

MASTERS OF PHILOSOPHY IN BIOCHEMISTRY (M.Phil)
INTRODUCTION

The program of study is equivalent to M.Phil since the degree is awarded on successful completion of 16 years of education after the award of BS degree of 4 years duration or MSc degree of 2 years duration. The Degree program fulfills all the curriculum requirements for MPhil Degree programs as recommended by Higher Education Commission, consisting of compulsory, core and allied courses. The students are required to complete 24 credit hours of courses in the first 2 semesters and conduct research & remaining 12 credit hours complete in the next 2 semesters. Before starting research, the students have to pass Comprehensive Exam as required by HEC. All students are required to pass GAT examination conducted by National Testing Service (NTS) institute. Admission test will be held by the institute.

CAREER PROSPECTS

- Industrial
- Agricultural
- Educational Research & Development
- Health Organizations

ROAD MAP

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<td>Elective I: (e.g. Molecular Genetics &amp; Genomic)</td>
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<td>Elective III: (e.g. Cell Signaling &amp; Signal Transduction)</td>
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<tr>
<td>Advanced Recombinant DNA Technology</td>
<td>3</td>
<td>Techniques in Molecular Biology</td>
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<td>Biostatistics</td>
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<tr>
<td>Elective I: (e.g. Molecular Genetics &amp; Genomic)</td>
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<td>Elective II: (e.g. Genomics, Transomics &amp; Proteomics)</td>
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<td>Elective I: (e.g. Molecular Basis of Plant Development)</td>
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<td>Elective III: (e.g. Transgenic Organisms)</td>
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<tr>
<td>Advanced DNA Technology</td>
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<td>Elective II: (e.g. Molecular Basis of Plant Development)</td>
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<td>Elective I: (e.g. Cell &amp; Tissue Culture)</td>
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PROGRAM FACTS

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- Entry Requirements: 16 years of education BS/MSc/MBBS/ BDS/ B-Pharm with at least 2nd division.
- Location: Defence Road Campus, Lahore.

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Higher Education Commission

INTRODUCTION

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CAREER PROSPECTS

- Industrial
- Agricultural
- Educational Research & Development
- Health Organizations

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PROGRAM FACTS

- Program Duration: 2 Years (Credit Hours 36)
- Timing: After Noon 02:00 PM - 05:00 PM (Monday – Friday)
- Entry Requirements: 16 years of education BS/MSc/MBBS/ BDS/ B-Pharm with at least 2nd division.
- Location: Defence Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission

MASTERS OF PHILOSOPHY IN MOLECULAR BIOLOGY (M.Phil)
INTRODUCTION
The program of study is equivalent to M.Phil since the degree is awarded on successful completion of 16 years of education after the award of BS degree of 4 years duration or MSc degree of 2 years duration. The Degree program fulfills all the curriculum requirements for M Phil Degree programs as recommended by Higher Education Commission, consisting of compulsory, core and allied courses. The students are required to complete 24 credit hours of courses in the first 2 semesters and conduct research & remaining 12 credit hours complete in the next 2 semesters. Before starting research, the students have to pass Comprehensive Exam as required by HEC. All students are required to pass GAT examination conducted by National Testing Service (NTS). Admission test will be held by the institute.

CAREER PROSPECTS
• Industrial
• Agricultural
• Educational Research & Development
• Health Organizations

ROAD MAP

PROGRAM FACTS
• Program Duration 2 Years (Credit Hours 36)
• Timing After Noon 02:00 PM - 05:00 PM (Monday – Friday)
• Entry Requirements 16 years of education BS/MSc-MBB/BDS/B-Pharm with at least 2nd division.
• Location Defence Road Campus, Lahore.

RECOGNIZED BY Higher Education Commission

MASTERS OF PHILOSOPHY IN MICROBIOLOGY (M.Phil)

MASTERS OF PHILOSOPHY IN FORENSIC SCIENCE (M.Phil)

INTRODUCTION
The program of study is equivalent to M Phil/MS. Students who have completed 16 years of education at BS or MSc level are eligible for admission to MPhil degree program. The Degree program fulfills all the curricular requirements as set out by the Higher Education Commission, consisting of compulsory. The students are required to complete 24 credit hours of courses in the first 2 semesters and conduct research in the remaining 12 credit hours spread over two semesters. All students are required to pass GAT examination conducted by the National Testing Service (NTS). Admission test is held by the Institute.

CAREER PROSPECTS
The MPhil in forensic sciences will train graduates to think strategically and critically about crime and forensic science, expertise them with transferable skills suitable for a wide range of careers. It is a new multidisciplinary program with modules provided by Institute of molecular biology and Biotechnology including crime science, forensic drug chemistry, computer science, biosciences, statistics, anthropology and laws and psychology behind decision making.

Outcomes:
By the end of the program, students will be prepared for a variety of different career paths including research, crime investigation, forensic science provision, policy making and public sector careers such as the civil service

ROAD MAP

PROGRAM FACTS
• Program Duration 2 Years (Credit Hours 36)
• Timing After Noon 02:00 PM - 05:00 PM (Monday – Friday)
• Entry Requirements 16 years of education BS/MSc-MBB/BDS/B-Pharm with at least 2nd division.
• Location Rawal Road Campus, Lahore.

RECOGNIZED BY Higher Education Commission

SEMESTER 1
SEMESTER 2
SEMESTER 3
SEMESTER 4

Cr.
Hr.
Cr.
Hr.
Cr.
Hr.
Cr.
Hr.

Advanced Microbiology 3
Microbial Biochemistry and Physiology 3

Microbial Genetics and Diseases 3
Techniques in Microbiology 2

Elective I. (e.g Medical Microbiology) 3
Elective II. (e.g Food Microbiology) 3

Biostatistics 2
Bioinformatics 2

Elective III. (e.g Advanced Virology) 3
Research Thesis 6

Research Thesis 6

SEMESTER 1
SEMESTER 2
SEMESTER 2

Cr.
Hr.
Cr.
Hr.
Cr.
Hr.

Criminology and Introduction to Forensics 3
Basics of Biological Evidence 3
Bloodstream Pattern Analysis 2

Quality Assurance Standards in Forensic Laboratory 3
Hair Examination for DNA Analysis 2
Forensic Photography 2

Witness and Testimony in Courts 2
Forensic Science and Death Investigation 3
Advances in Forensic Anthropology 3

Forensic Communication Skills and Report Writing 2
Forensic Drug Chemistry 3
Firearms and Tool Marks Analysis 3

Forensic Ethics and Project Preparation techniques 2
Forensic Analytical Toxicology 3
Population Genetics and Statistics 2

Analytical Techniques in Forensic Chemistry 2
Forensic Questioned Document Analysis 3

Outcomes:
By the end of the program, students will be prepared for a variety of different career paths including research, crime investigation, forensic science provision, policy making and public sector careers such as the civil service

SEMESTER 3
SEMESTER 4

Cr.
Hr.
Cr.
Hr.
Research Thesis 6
Research Thesis 6

Research Thesis 6
Research Thesis 6
INTRODUCTION
Ph.D program has been organized in accordance with the guidelines provided by the Higher education Commission (HEC). Those who have completed 18 years of education are eligible for admission to the program. The program in the subject of Biochemistry, Physiology and Microbiology are approved by the Pakistan Medical and Dental Council (PMDC).

CAREER PROSPECTS
• Industrial
• Agricultural
• Educational Research & Development
• Health Organizations

COURSES LIST
• Advanced Physiology
• Advances in Endocrinology
• Cell and Molecular Physiology
• Physiology of Reproduction
• Cell Signaling & Signal Transduction
• Recent Trends in Neuroscience
• Physiology of Sports and Exercise
• Nutritional Biochemistry
• Translational Research
• Cancer Biology
• Application of Stem cells Technology
• Cell & Tissue Culture
• Forensic Sciences
• Research Reading I
• Research Reading II
• Research Thesis

Note: The Panel of PhD Supervisors will propose four taught courses from the courses list. «Taught Courses»

PROGRAM FACTS
• Program Duration
3-5 Years (Credit Hours 48)
• Timing
After Noon 02:00 PM - 05:00 PM (Monday – Friday)
• Entry Requirements
18 years of education (M.Phil or Equivalent in relevant field) with at least 1st division in annual system and 300 CGPA (out of 4.00) in semester system.
• Location
Raiwind Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

The University of Lahore
**INTRODUCTION**

Ph.D program has been organized in accordance with the guidelines provided by the Higher education Commission (HEC). Those who have completed 18 years of education are eligible for admission to the program. The program in the subject of Biochemistry, Physiology and Microbiology are approved by the Pakistan Medical and Dental Council (PMDC).

**CAREER PROSPECTS**

Industrial, Agricultural, Educational Research & Development and Health Organizations

**COURSES LIST**

- Advanced Microbiology
- Microbial Genetics and Diseases
- Medical Microbiology
- Microbial Biochemistry and Physiology
- Techniques in Microbiology
- Food Microbiology
- Advanced Virology
- Molecular Immunology
- Microbial Biotechnology & Vacciology
- Cell and Tissue Culture
- Genomics, Transcriptomics & Proteomics
- Cell Signaling and Signal Transduction
- Research Reading I
- Research Reading II
- Research Thesis

**ROAD MAP**

**PROGRAM FACTS**

- **Program Duration** 3-5 Years (Credit Hours 48)
- **Timing** After Noon 02:00 PM - 05:00 PM (Monday – Friday)
- **Entry Requirements** 18 years of education (M.Phil or Equivalent in relevant field) with at least 1st division in annual system and 300 CGPA (out of 4.00) in semester system.
- **Location** Defence Road Campus, Lahore.

**RECOGNIZED BY**

Higher Education Commission

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**DOCTOR OF PHILOSOPHY**

**MICROBIOLOGY (Ph.D)**

---

**INTRODUCTION**

Ph.D program has been organized in accordance with the guidelines provided by the Higher education Commission (HEC). Those who have completed 18 years of education are eligible for admission to the program. The program in the subject of Biochemistry, Physiology and Microbiology are approved by the Pakistan Medical and Dental Council (PMDC).

**CAREER PROSPECTS**

Industrial, Agricultural, Educational Research & Development and Health Organizations

**COURSES LIST**

- Principles of Biotechnology
- Advanced DNA Technology
- Cell & Tissue Culture (EC)
- Health Biotechnology
- Molecular Basis of Plant Development (EC)
- Transgenic Organisms (EC)
- Applications of Biotechnology
- The Molecular Basis of Cancer
- Advanced Techniques in Biotechnology
- Advances in Plant Biotechnology
- GM Technology and Environmental Management
- Biotechnology of Renewable Resources
- Research Reading I
- Research Reading II
- Research Thesis

**ROAD MAP**

**PROGRAM FACTS**

- **Program Duration** 3-5 Years (Credit Hours 48)
- **Timing** After Noon 02:00 PM - 05:00 PM (Monday – Friday)
- **Entry Requirements** 18 years of education (M.Phil or Equivalent in relevant field) with at least 1st division in annual system and 300 CGPA (out of 4.00) in semester system.
- **Location** Defence Road Campus, Lahore.
INTRODUCTION
PhD program has been organized in accordance with the guidelines provided by the Higher education Commission (HEC). Those who have completed 18 years of education are eligible for admission to the program. The program in the subject of Biochemistry, Physiology and Microbiology are approved by the Pakistan Medical and Dental Council (PMDC).

CAREER PROSPECTS
Industrial, Agricultural, Educational Research & Development and Health Organizations

COURSES LIST
• Advanced Molecular Biology
• Advanced Recombinant DNA Technology
• Molecular Genetics & Genetic Disorders
• Molecular Immunology
• Genomics, Transcriptomics & Proteomics
• Advanced Epigenetics
• Developmental Biology
• Molecular Basis of Cancer
• Cell and Molecular Physiology
• Cell Signalling and Signal Transduction
• Techniques in Molecular Biology
• Research Reading I
• Research Reading II
• Research Thesis

Note: The Panel of PhD Supervisors will propose four taught courses from the courses list. + Taught Courses

ROAD MAP

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<td>Course IV*</td>
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Note: The University of Lahore
MISSION STATEMENT

• Foster professional and intellectual development of scholars and faculty members at all levels. Place major emphasis on quality of the postgraduate programme leading to PhD.
• Undertake basic research in areas of national importance in the sectors of biomedical sciences and health.
• Actively interact and collaborate in research and higher training with other relevant institutions within and outside the country.
• Promote research interaction with public agencies and industry through outreach and scientific leadership.
• Organize symposia, seminars and special lectures in relevant disciplines at national and international levels.

OBJECTIVES

• To conduct quality research in molecular medicine and related disciplines with strong relevance to human health in the local context.
• To provide research training of postgraduate students in biomedical sciences, leading to MPhil and PhD degrees.
• To firm up research linkages and interactive cooperation with national and international institutions conducting similar research.
• To attract scientists and physicians for short term training in molecular medicine techniques and invite foreign and local experts for lectures and in research advisory capacity.
• To publish scientific articles based on research conducted at the Centre in peer reviewed international journals.
• To generate high quality manpower to meet the demand for qualified faculty and scientists, in institutions both educational and research, and in industry.
• To provide an open, stimulating and nurturing environment for training and career development in biomedical sciences.

INTRODUCTION

During the last three decades the discipline of molecular and cellular biology has expanded phenomenally in scope and in depth. New knowledge in the field, mainly acquired through a multidisciplinary approach and experimental research, has made it possible not only to unravel living processes in health and disease from molecular to organismal level but also to introduce novel and more effective therapeutic and diagnostic tools in medical practice.

In line with the policy of the University of Lahore to develop high quality expertise and manpower in emerging areas of biomedical sciences, a Centre for Research in Molecular Medicine was initiated in April 2009. The Centre represents a major investment and a bold initiative by the University in the field of life sciences and human health. A covered area of approximately 9,000 sq feet was allocated to the Centre at the University’s new campus adjacent to the University College of Medicine, to develop purpose-built teaching and research laboratories with state-of-the-art facilities. The Centre draws resources from other academic units of the University as well, such as the Institute of Molecular Biology and Biotechnology, Department of Pharmacy, the University College of Medicine and the Department of Information Technology. The Centre also has close collaboration in relevant areas with other reputable institutions within and outside the country.

POSTGRADUATE PROGRAMMES

The Centre for Research in Molecular Medicine attempts to integrate molecular, cellular and systems approaches and focuses on carrying out goal-oriented research and delivering postgraduate programmes of the highest possible quality. The Centre offers postgraduate programmes for medical and science candidates, leading to MPhil and PhD degrees.

CURRENT RESEARCH AREAS

• Genetics and molecular biology of breast cancer
• Genetics and biochemistry of metabolic diseases with special emphasis on obesity and diabetes
• Molecular and biochemical markers in cancer and metabolic diseases
• Recombinant DNA techniques
• Cell signaling mechanisms in Physiological functions
• Production of monoclonal and polyclonal antibodies used in medical diagnostics and applied medical research
• Cell and tissue culture technology
• Stem cell technology
• Genetics and physiology of idiopathic infertility
• The development and testing of therapeutic agents derived from natural protocol.
• Pharmaco-Physiology of drugs presently used in cancer.

COLLABORATIVE INSTITUTIONS

INTERNATIONAL

University of Pittsburgh School of Medicine
CRRP, Department of Physiology and Cell Biology
Pittsburgh, PA, USA

University of Muenster
Centre of Reproductive Medicine and Andrology (CeRA)
Muenster, Germany

ACADEMICS AND RESEARCH

NATIONAL

The Children’s Hospital
Department of Paediatric Endocrinology
Lahore

National Institute of Biototechnology
and Genetic Engineering
Faisalabad

Institute of Nuclear Medicine and Oncology
Lahore

CONFERENCES

Recent Trends in Endocrinology was held on 14-15th May, 2010 at Auditorium New Campus. The University of Lahore-Pakistan

WORKSHOPS

1. “Citation & Referencing in research –Using EndNote Software X4” Was held on 14th January, 2011 at Auditorium New Campus. The University of Lahore-Pakistan (In collaboration with Institute of Research promotion)

2. “Managing Plagiarism in academic Research” Was held on 04th March, 2011 at Auditorium New Campus. The University of Lahore-Pakistan (In collaboration with Institute of Research promotion)
The Centre offers MPhil/MS and PhD programmes, in the following disciplines:

- Molecular Biology and Biochemistry: Research specializations: Breast cancer and tumour research; molecular biomarkers of disease; proteomics; cell signaling; recombinant DNA technology; tissue culture; immunobiology.
- Physiology: Research specializations: Molecular and clinical endocrinology; metabolism; biochemistry and molecular biology of metabolic diseases; andrology; genetics of idiopathic infertility; comparative reproductive biology.
- Biochemistry: Research specializations: Biochemistry of growth and development; biochemical spectrum of metabolic syndromes and clinical biochemistry and diagnostics; biochemical markers of metabolic diseases, molecular basis of cardiovascular disease; drug research using animal models.
- Microbiology: Research specialization in bacteriology; virology; microbial biotechnology (in collaboration with the Institute of Molecular Biology of the University of Lahore).
- Radiological Sciences: Specialization in Diagnostic Radiography, Ultrasoundography, Nuclear Medicine and Radiation Therapy

**PROGRAM FACTS**

Candidates holding one of the following degrees with a minimum 2nd division or 2.5 CGPA may apply:

- MBBS/DVM/B.Pharm or Pharm D degree;
- An M.Sc. or M.Phil* or MS* degree in one of the biological sciences disciplines;
- A 4-year Bachelor’s degree in one of the biological sciences disciplines.

(*MPhil/MS degree holders joining the PhD programme will be allowed exemption in some courses. Detailed regulations for MPhil/PhD are placed at annexure III."

**Evaluation of Applicants**

Applicants will be evaluated in two stages: Stage I: Short listing of applicants after administration of admissions test on the basis of academic record, work experience, and the results of the Admission Test. Stage II: Interviews of short listed candidates with the faculty of CRiMM.

**Course Work**

A major part of the course work is scheduled during the first 9 months, while the following years are mainly for research, thesis writing and taking advanced level courses. In addition to lectures, tutorials and laboratory exercises, students are trained in protocol writing, paper presentation, data collection and finally conducting a research study in which the faculty members provide all possible support and guidance as advisors.

**RECOGNIZED BY:**

Higher Education Commission
Publications: Ninety five (95) plant extracts
Toxicology of Patients, heavy metals and Research Area: Enzyme Technology, Ph.D (Biochemistry) Professor M. Syed Shahid Ali

Publications: Forty One (54) & Diagnostic kits.
Ph.D (Biochemistry)

Eight (128) Research Area: Nano-biotechnology Ph.D (Biotechnology) Professor

Three (123) Publications: One Hundred and Twenty Research Area: Physiology / Endocrinology Ph.D (Physiology) Professor A.M Cheema

Publications: Hundred and four (104) Research Area: Cancer biology/Physiology Ph.D (Physiology) Associate Director/Professor M. Arslan

PROFESSOR M.H. Qazi Professor/Director Ph.D (Physiology) Research Area: Cancer biology/Physiology Publications Ninety Ninety (91)

ASSOCIATE PROFESSOR Aamir Qazi Associate Professor PhD (Biochemistry) Research Area: Biochemistry & Molecular Biology Publications: Twenty Nine (29)

ASSISTANT PROFESSOR Sarfraz Ahmad Assistant Professor Ph.D (Pharmaceutical Chemistry, Austria) Research Area: Anti-parasitic and anticancer drug synthesis. Natural product extraction of pharmaceutical interest Publications: Four (4)

Farheen Ansari Assistant Professor Ph.D (Microbiology) Research Area: Biological Activities on natural products synthetic compounds Publications: Seven (7)

Rana Amjad Assistant Professor Ph.D (Molecular Biology) Research Area: Human molecular genetics Publications: Seven (7)

Muhammad Sajjad Ali Assistant Professor Ph.D (Plant Biotechnology) Research Area: Genetic modification of plants for biotic and abiotic stress, Biosafety assessment of GM/Novel genes for primary and secondary consumers; ERAs of recombinant DNAs, Publications: Nine (9)

Roquyra Gul Assistant Professor Ph.D (Biological Sciences) Research Area: Molecular Biology Publications: Sevem (7)

Muhammad Asif Habeeb Assistant Professor DAV, Ph.D (Biotechnology) Research Area: Structural and Cell Biology, Cancer genomics and therapeutics, Infectious diseases, Immunology, Stem cell and genome sequencing Publications: Eight (8)

Nadia Wajid Assistant Professor Ph.D (Molecular Biology) Research Area: Stem Cells Publications: Eight (8)

Fatima Ali Assistant Professor Ph.D (Molecular Biology) Research Area: Stem Cells Publications: Eight (8)

Aroza Moazzam Assistant Professor MBBS, Ph.D (Reproductive Endocrinology) Research Area: Reproductive Endocrinology/Physiology Publications: Two (2)

Dr. Mazhar Abbas Assistant Professor, Ph.D Research Area: In vitro toxicity, like Hercolytic assay, brine shrimp lethality assay, Biological assay, Antimicrobial, Antioxidant, DNA damage (genotoxicity). Ames test for mutagenicity (TT A 98, TA100) Salmonella strain

Dr. Muhammad Danish Mehmood Assistant Professor, Ph.D Research Area: Immunophrophylaxis/ Diagnosis Publications: Three (3)

Saeeda Kalsoom Assistant Professor PhD (Molecular Biology) Research Area: Genetic Diseases, Cancer genetics Publications: Three (3)

Sana Jawaid Awan Assistant Professor PhD (Molecular Biology) Research Area: Molecular biology, Cell biology Publications: Three (3)

Noreen Sarwar Assistant Professor PhD (Molecular Biology) Research Area: Vaccinology Publications: One (1)

Syed Zeeshan Haider Assistant Professor PhD (Microbiology) Research Area: Applied Microbiology, Nano-biotechnology Publications: Four (4)

Humera Kausar Assistant Professor PhD (Molecular Biology) Research Area: Microbiology Publications: Twelve (12)

Rab Nawaz Assistant Professor PhD (Environmental Engineering & Management) Research Area: Sustainability Issues in Environment and Development Publications: Fourteen (14)

Asia Parveen Assistant Professor MPhil (Biochemistry) Research Area: Clinical Biochemistry, Nutritional Biochemistry Publications: Four (4)

Abid Sarwar Assistant Professor M.Phil (Microbiology) Research Area: Microbial fermentation, Microbial genetics, Food microbiology, Publications: Six (6)

Dr. Maria Fareed Siddiqui Assistant Professor Pharm.D., M. Phil (Molecular Biology) Research Area: Pharmacogenomics, Clinical Biochemistry, Chemotherapy, Toxicology Publications: Seven (7)

Saba Shamim Assistant Professor M.Sc (Pharmacology) Research Area: Environmental, Clinical & food Publications: Five (5)

Qurat-ul-Ain Ahmad Assistant Professor MPhil (Biotechnology) Research Area: Plant Molecular Biology Publications: Thirty (30)

Abid Sarwar Assistant Professor M.Phil (Microbiology) Research Area: Microbial fermentation, Microbial genetics, Food microbiology, Publications: Six (6)

Dr. Afia Muhammad Akram Assistant Professor, Ph.D Research Area: Leukemia Genetics, Chronic Myeloid Leukemia drug resistance mechanisni, Acute Myeloid Leukemia Publications: Six (6)

Dr. Sana Khurshid Assistant Professor Ph.D (Biological Sciences) Research Area: Diagnosis of Infectious disease, Protein engineering of enzymes Publications: Four (4)

Dr. Arfan Ali Assistant Professor Ph.D (Molecular Biology) Research Area: Plant Molecular Biology Publications: Thirty (30)

Dr. Tanzeel Huma Assistant Professor, Ph.D Research Area: Endocirna physiology

Dr. Afia Muhammad Akram Assistant Professor, Ph.D Research Area: Leukemia Genetics, Chronic Myeloid Leukemia drug resistance mechanisms, Acute Myeloid Leukemia Publications: Six (6)

Dr. Sana Khurshid Assistant Professor Ph.D (Biological Sciences) Research Area: Diagnosis of Infectious disease, Protein engineering of enzymes Publications: Four (4)

Dr. Arfan Ali Assistant Professor Ph.D (Molecular Biology) Research Area: Plant Molecular Biology Publications: Thirty (30)
ALLIED HEALTH SCIENCES

- Radiology Research Section
- Radiological Sciences & Medical Imaging Technology
- Physical Therapy
- Sports Sciences
- Medical Lab Technology
- Diet & Nutritional Sciences
- Public Health
- Health Professional Technologies
- Optometry & Vision Sciences
- Lahore School of Nursing
RADIOLOGY RESEARCH SECTION

MISSION STATEMENT

• Enable students to develop the cognitive, effective and psychomotor skills needed by an entry level radiologist as prescribed in the professional curriculum.

• Provide a liberal arts and sciences component which will broaden the student’s knowledge and understanding into areas beyond the Radiology Curriculum.

• Provide an opportunity for students to achieve a high degree of information literacy, including the ability to seek and use information resources for problem-solving, critical thinking and professional values, such as those outlined in the American Society of Radiologists.

• Practice set standards for Medical Imaging and Radiology.

• Prepare students to pass the national certification examination and qualify for regional licensure.

• Demonstrate a high degree of student success within the curriculum, as evidenced by low attrition & high graduation rates.

INTRODUCTION

There are four major divisions in medical imaging (Radiological Sciences) Diagnostic Radiography, Ultrasound, Nuclear Medicine and Radiation Therapy. Medical Imaging relies heavily on computer controlled equipments with the image productions and processing emphasizing new techniques i.e. digital image processing, picture archiving & communication system (PACS) etc. In addition, the medical diagnostic ultrasound is believed to be a diagnostic tool which is replacing the stethoscope of a physician. Today, a physician cannot cope with rapid advancements in the computerized technologies unless he chooses the option of upgrading his knowledge including clinical as well as diagnostic advances. Medical Imaging (Radiological Sciences) especially Medical Diagnostic Ultrasound, CT and MRI curriculum s should be aligned with new technology and national or regional requirements. Our goal, at Radiology Research Section is to train our residents and clinical fellows to face all aspects and challenges of our constantly evolving specialty.

DEGREES OFFERED

• Diploma in Medical Radiology & Diagnostic (DMRD)
• MD Radiology
• MS Diagnostic Ultrasound
INTRODUCTION

This program of Diploma in Medical Radiology and Diagnostics is especially designed for those students who want to accelerate their careers in the field of Diagnostic Radiology.

CAREER PROSPECTS

This professional program is for the Physicians community to provide them the latest techniques in the field of Medical Diagnostic Ultrasound worldwide. After completing this program, they will have all the basic knowledge required for a Radiologist and can start their career by competing for jobs or can go on for higher degrees such as MD Radiology. The successful student of DMRD are encouraged to enroll in MD course. They shall be granted exemption from MD part I examination and two years of relaxation provided to complete mandatory clinical rotation.

ROAD MAP

PROGRAM FACTS

- **Program Duration**: 2 Years (Credit Hours 36)
- **Timing**: 11:00 AM - 03:00 PM (Monday – Friday)
- **Entry Requirements**: For MBBS (registered PMDC) with 1 year house job in PMDC recognized institution
- **Location**: Defence Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission
Pakistan Medical & Dental Council

SEMESTER 1

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<td>Musculoskeletal Ultrasound</td>
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<td>Research Methodology &amp; Statistics</td>
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<td>Neuroradiology &amp; ENT Radiology</td>
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<td>Interventional Ultrasound</td>
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<td>Ultrasound in Fetal Medicine</td>
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Nuclear Medicine & Radiology in emergency medicine | 1

ANNUAL 1

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MD RADIOLOGY (MDR)

INTRODUCTION

The fellowship provides thorough training in areas of Radiology. A main goal of training is a thorough understanding of the principles of diagnostic modalities.

CAREER PROSPECTS

This professional program is for the Physicians community to provide them the latest techniques in the field of Medical Diagnostic Ultrasound worldwide. After completing this program, they will have all the basic knowledge required for a Radiologist and can start their career by competing for jobs or can go on for higher degrees such as MD Radiology. After successful completion of Degree the candidate acquired sufficient knowledge of clinical practice in different disciplines relevant to clinical radiology, comprehensive knowledge of radiological physics, basics of X-Ray image, quality control, radiation protection and regulations, basic principles of US, CT, MRI, and be familiar with general and cross sectional radiological anatomy of conventional as well as advance multiplanar modalities like US, CT and MRI.

ROAD MAP

PROGRAM FACTS

- **Program Duration**: 4 Years (Credit Hours 40)
- **Timing**: 11:00 AM - 03:00 PM (Monday – Friday)
- **Entry Requirements**: For MBBS (registered PMDC) with 1 year house job in Radiology PMDC recognized institution
- **Location**: Defence Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission
Pakistan Medical and Dental Council

ANNUAL 1

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<td>Pharmacology</td>
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<tr>
<td>Physiology</td>
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</table>
INTRODUCTION
This program is introduced for the first time in Pakistan, keeping in view the need of a Radiology Dept. of healthcare institutes in Pakistan. This course will provide and enable students to cope with the rapid advancement in the field of Medical Diagnostic Ultrasound.

CAREER PROSPECTS
This program is introduced for the first time in Pakistan, keeping in view the need of a Radiology Dept. of healthcare institutes in Pakistan. This course will provide and enable students to cope with the rapid advancement in the field of Medical Diagnostic Ultrasound.

PROGRAM FACTS
- Program Duration
  2 Years (Credit Hours 39)
- Timing
  11:00 AM - 03:00 PM (Monday - Friday)
  Week Days (Monday - Friday)
- Entry Requirements
  For MBBS (registered PMDC) with 1 year house job in PMDC recognized institution
- Location
  Defence Road Campus, Lahore.

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Higher Education Commission
Pakistan Medical & Dental Council

ROAD MAP

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DEGREES OFFERED

- Medical Imaging Doctor (MID)
- M.Phil Medical Imaging Technology
- Diploma In Medical Ultrasound Technology
- B.Sc Medical Ultrasound Technology
- M.Sc Medical Ultrasound Technology
- M.Phil Medical Diagnostic Ultrasound (Fetal Medicine Ultrasound)
- M.Phil Medical Diagnostic Ultrasound (General Ultrasound)
- M.Phil Musculoskeletal Ultrasound
- M.Phil Vascular Ultrasound
- M.Phil Obstetrical & Gynecological Ultrasound
- Ph.D Diagnostic Ultrasound
- Ph.D Ultrasound Technology

MISSION STATEMENT

a. Enable students to develop the cognitive, effective and psychomotor skills needed by an entry level radiographer/sonographer/sonologist, as prescribed in the professional curriculum.
b. Provide a liberal arts and sciences component which will broaden the student’s knowledge and understanding into areas beyond the Radiology Curriculum.
c. Provide an opportunity for students to achieve a high degree of information literacy, including the ability to seek and use information resources for problem-solving, critical thinking and professional values, such as those outlined in the American Society of Radiologists.
d. Practice set standards for Medical Imaging and Radiology.
e. Prepare students to pass the national certification examination and qualify for regional licensure.
f. Demonstrate a high degree of student success within the curriculum, as evidenced by low attrition & high graduation rates.

INTRODUCTION

There are four major divisions in medical imaging (Radiological Sciences) Diagnostic Radiography, Ultrasound, Nuclear Medicine and Radiation Therapy. Now a day’s Medical Imaging relies heavily on computer controlled equipments with the image productions and processing emphasizing new techniques i.e. digital image processing, picture archive &communication system (PACS) etc. Today, a physician cannot cope with rapid advancements in the computerized technologies unless he chooses the option of upgrading his/her knowledge including clinical as well as diagnostic advances. Medical Imaging (Radiological Sciences) especially Medical Diagnostic Ultrasound, CT and MRI curriculum s should be aligned with new technology and national or regional requirements. Our goal at Radiology Research Section is to train our residents and clinical fellows to face all aspects and challenges of our constantly evolving specialty.
INTRODUCTION
This program is equal to professional & clinical Master degree like Pharm-D & DVM etc. It was introduced for the first time in Pakistan in spring 2013, keeping in view the need of a healthcare institute in Radiology Department. The curriculum encompasses all the basic modalities of Radiology as well as the rapid advancement in the field of Medical Imaging Technology e.g. Radiography, CT, MRI, Ultrasound etc.

CAREER PROSPECTS
This professional program is for the students interested to pursue their careers in the field of Radiological Technology including Ultrasound and it serves to provide them the knowledge of latest techniques in this field. After completing this program, they can go on to do higher degrees like MS in medical imaging technology or can compete for the jobs in the Radiology department as a "Doctor of Medical Imaging" as per job description approved by health authorities later on. As Doctor of Medical Imaging Students can also have the opportunity to specialize in different diagnostic modalities.

The students are also eligible to appear in Board exam in Medical Imaging conducted by the international organizations.

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ROAD MAP

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PROGRAM FACTS
- Program Duration
  5 Years (Credit Hours 157)
- Timing
  Morning, 8:30 AM-5:00 PM (Monday to Friday)
- Entry Requirements
  Minimum (50%) 12 years of education/A-Levels/Intermediate (Pre-Medical Equivalent)
- Location
  Defence Road Campus, Lahore.

MEDICAL IMAGING DOCTOR (MID)

INTERDISCIPLINARY PROGRAMS
- 1285 (or equivalent) 12 years of education/Intermediate (Pre-Medical Equivalent)
- 1432 (or equivalent) 12 years of education/Intermediate (Pre-Medical Equivalent)

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214 The University of Lahore
MASTER OF PHILOSOPHY IN MEDICAL IMAGING TECHNOLOGY (M. Phil)

INTRODUCTION
This M. Phil programme targets the candidates with a background of MID, MBBS, DMRD, FCPS in relevant field. Research is also an important part of our profession and completion of the degree requires working on a project, writing a thesis and its successful defense.

CAREER PROSPECTS
The degree adds a lot to the professional skills of the students and broadens the horizon of opportunities for better jobs and careers. After the completion of M.Phil students can do Ph.d in Medical Imaging Technology which will help them to get the job in the country and abroad. This is the first time M.Phil MIT is offered by any university in the country.

ROAD MAP

**SEMESTER 1**
- Biostatistics & Research Methodology: 3 Cr.
- Cardiovascular Radiology: 1 Cr.
- Mammography & Breast: 1 Cr.
- Musculoskeletal Radiology: 1 Cr.
- Radiology & Emergency Medicine: 1 Cr.
- Respiratory system & Instrumentation: 1 Cr.
- Total: 6 Cr.

**SEMESTER 2**
- Angiography: 3 Cr.
- Gastrointestinal System Radiology: 1 Cr.
- Gastrointestinal Radiology: 1 Cr.
- Interventional Radiology: 2 Cr.
- Neuroradiology & ENT: 2 Cr.
- Nuclear Medicine: 1 Cr.
- Total: 6 Cr.

**SEMESTER 3**
- Research: 6 Cr.

**SEMESTER 4**
- Research: 6 Cr.

**PROGRAM FACTS**
- **Program Duration**: 2 Years (Credit Hours 30)
- **Timing**: Morning, 08:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 17/18 years of Education, M.B.B.S, MID, DMRD, with min 75% marks in annual system and 3.00 CGPA(out of 4.00)
- **Location**: Defence Road Campus, Lahore.

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The University of Lahore
INTRODUCTION
The DIPLOMA in medical ultrasound technology program (DMUT) presents a new concept in the field of diagnostic medical imaging education. Traditionally, students were offered programs enabling them to specialize in a single diagnostic medical ultrasound modality. This program is housed within a degree program that is ONE YEAR in length.

CAREER PROSPECTS
Students who complete the one-year diploma program will meet national board eligibility requirements in diagnostic medical ultrasound technology as well as possess research skills that will distinguish them in their fields.

Most full-time diagnostic medical imaging technologists work about 40 hours a week. They may, however, have evening, weekend, or on-call hours. Opportunities for part-time and shift work also are available.

Physical stamina is important, because diagnostic medical imaging technologists are on their feet for long periods and need to assist incapacitated patients. Diagnostic medical imaging technologists work with stationary diagnostic imaging devices, and their duties may include performing some services at the patient’s bedside. Some technologists travel to patients’ locations, using large vans and trucks equipped with sophisticated diagnostic equipment.

Although some diagnostic medical imaging professionals use radiation as part of their occupation, radiation hazards are minimized by the use of shielding and the application of radiation safety practices. All individuals working with radiation are monitored continuously for radiation exposure.

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ROAD MAP

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BACHELOR OF SCIENCE IN MEDICAL ULTRASOUND TECHNOLOGY (B.Sc)

INTRODUCTION
The B.Sc in medical ultrasound technology program (B.Sc-MUT) presents a new concept in the field of diagnostic medical imaging education. Traditionally, students were offered programs enabling them to specialize in a single diagnostic medical ultrasound modality. This program is housed within a degree program that is 2 YEARS in length.

CAREER PROSPECTS
Most full-time diagnostic medical imaging technologists work about 40 hours a week. They may, however, have evening, weekend or on-call hours. Opportunities for part-time and shift work also are available. Physical stamina is important, because diagnostic medical imaging technologists are on their feet for long periods and need to assist incapacitated patients. Diagnostic medical imaging technologists work with stationary diagnostic imaging devices, and their duties may include performing some services at the patient’s bedside. Some technologists travel to patients’ locations, using large vans and trucks equipped with sophisticated diagnostic equipment.

Although some diagnostic medical imaging professionals use radiation as part of their occupation, radiation hazards are minimized by the use of shielding and the application of radiation safety practices. All individuals working with radiation are monitored continuously for radiation exposure.

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ROAD MAP
INTRODUCTION
The M.Sc in medical imaging technology program (M,Sc-MIT) presents a new concept in the field of diagnostic medical imaging education. Traditionally, students were offered programs enabling them to specialize in a single diagnostic medical imaging modality. Students entering our professional MASTERS curriculum are educated in multiple diagnostic medical imaging modalities. Currently, magnetic resonance imaging, nuclear medicine technology and sonography are taught in the professional curriculum.

CAREER PROSPECTS
Students who complete the MS program will meet national board eligibility requirements in two diagnostic medical imaging modalities as well as possess research skills that will distinguish them in their fields.

ROAD MAP

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PROGRAM FACTS

- **Program Duration**: 2 Years (Credit Hours 72)
- **Timing**: Morning, 08:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 14 years of Education, B.Sc Medical Imaging technology, B.Sc Nursing, B.Sc Radiography, B.Sc Lab Technology, DVM with min 45% marks
- **Location**: Defence Road Campus, Lahore.

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MASTER OF SCIENCE IN MEDICAL ULTRASOUND TECHNOLOGY (M.Sc)

INTRODUCTION
The concept of this M.Phil in FETAL MEDICINE ULTRASOUND is a program in educational process which is accepted in academia and proven to be highly effective toward the demand of skilled graduate. The curriculum maintains basic and advance core courses which are necessary to employ in the future plans. Thus, the attention in different modalities of ultrasound will concern clinical practice with minimum alteration on the other core courses regarding other tracks when deemed necessary. This strategy aims to give a comprehensive view in all Medical Diagnostic Ultrasound division and a focused course study plan on the specific selected tracks with integrated courses of computer sciences.

CAREER PROSPECTS
To enable the student to relate the physics and instrumentation (Knobology) of medical diagnostic ultrasound. After discussing the basic definitions like sound waves, period, wave equation etc, image interpretation, Knobology, transducers, Doppler, display modes, scan converters, memory, image recording, artifacts, bioeffects and safety shall be discussed in detail.

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RECOGNIZED BY
Higher Education Commission

MASTER OF PHILOSOPHY IN MEDICAL DIAGNOSTIC ULTRASOUND (FETAL MEDICINE ULTRASOUND)

PROGRAM FACTS

- **Program Duration**: 2 Years (Credit Hours 36)
- **Timing**: Morning, 08:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 16 years of Education, MD (5 year), M.Sc Medical Imaging technology, M.Sc Medical Ultrasound Technology, BS Radiography, with min 60% marks
- **Location**: Defence Road Campus, Lahore.

The University of Lahore
INTRODUCTION
The concept of this M.Phil in General Ultrasound is a program in educational process which is accepted in academia and proven to be highly effective toward the demand of skilled graduate.

The curriculum maintains basic and advance core courses which are necessary to employ in the future plans. Thus, the attention in different modalities of ultrasound will concern clinical practice with minimum alteration on the other core courses regarding other tracks when deemed necessary. This strategy aims to give a comprehensive view in all Medical Diagnostic Ultrasound division and a focused course study plan on the specific selected tracks with integrated courses of computer sciences.

CAREER PROSPECTS
To enable the student to relate the physics and instrumentation (Knobology) of medical diagnostic ultrasound. After discussing the basic definitions like sound waves, period, wave equation etc, image interpretation, Knobology, transducers, Doppler, display modes, scan converters, memory, image recording, artifacts, bioeffects and safety shall be discussed in detail.

MASTER OF PHILOSOPHY IN MEDICAL DIAGNOSTIC ULTRASOUND (GENERAL ULTRASOUND)

PROGRAM FACTS
• Program Duration 2 Years (Credit Hours 34)
• Timing Morning, 08:00 AM - 05:00 PM (Monday – Friday)

RECOGNIZED BY
Higher Education Commission

ROAD MAP

SEMESTER 1 Cr. Hr. SEMESTER 2 Cr. Hr. SEMESTER 3 Cr. Hr. SEMESTER 4 Cr. Hr.
Ultrasound Physics & Instrumentation 3 Applied Doppler 2 Research 5 Research 6
Abdominal Ultrasound 2 Vascular Ultrasound 3 Research M. and Statistics 1
Small Parts Ultrasound 2 Musculoskeletal Ultrasound 2
General Ultrasound 2 Featal Medicine Ultrasound 1
Obstetrical Ultrasound 3 Advances in Ultrasound 2
3D & 4D Ultrasound 2

SEMESTER 1 Cr. Hr. SEMESTER 2 Cr. Hr. SEMESTER 3 Cr. Hr. SEMESTER 4 Cr. Hr.
Ultrasound Physics & Instrumentation 3 Upper Limb Ultrasound 2 Research 5 Research 6
Abdominal Ultrasound 1 Lower Limb Ultrasound 2 Research M. and Statistics 1
Small Parts Ultrasound 1 Soft tissue Ultrasound 2
Anatomy of Musculoskeletal system 2 Miscellaneous indications 2
Basics of Musculoskeletal Ultrasound 3 Intervention in Musculoskeletal/Ultrasound 2
Dissertation Ethics Consenting 2

MASTER OF PHILOSOPHY IN MUSCULOSKELETAL ULTRASOUND

INTRODUCTION
The concept of this M.Phil in MUSCULOSKELETAL ULTRASOUND is a program in educational process which is accepted in academia and proven to be highly effective toward the demand of skilled graduate.

The curriculum maintains basic and advance core courses which are necessary to employ in the future plans. Thus, the attention in different modalities of ultrasound will concern clinical practice with minimum alteration on the other core courses regarding other tracks when deemed necessary. This strategy aims to give a comprehensive view in all Medical Diagnostic Ultrasound division and a focused course study plan on the specific selected tracks with integrated courses of computer sciences.

CAREER PROSPECTS
To enable the student to relate the physics and instrumentation (Knobology) of medical diagnostic ultrasound. After discussing the basic definitions like sound waves, period, wave equation etc, image interpretation, Knobology, transducers, Doppler, display modes, scan converters, memory, image recording, artifacts, bioeffects and safety shall be discussed in detail.

RECOGNIZED BY
Higher Education Commission

ROAD MAP

SEMESTER 1 Cr. Hr. SEMESTER 2 Cr. Hr. SEMESTER 3 Cr. Hr. SEMESTER 4 Cr. Hr.
Ultrasound Physics & Instrumentation 3 Applied Doppler 2 Research 5 Research 6
Abdominal Ultrasound 2 Vascular Ultrasound 3 Research M. and Statistics 1
Small Parts Ultrasound 2 Musculoskeletal Ultrasound 2
General Ultrasound 2 Featal Medicine Ultrasound 1
Obstetrical Ultrasound 3 Advances in Ultrasound 2
3D & 4D Ultrasound 2

SEMESTER 1 Cr. Hr. SEMESTER 2 Cr. Hr. SEMESTER 3 Cr. Hr. SEMESTER 4 Cr. Hr.
Ultrasound Physics & Instrumentation 3 Upper Limb Ultrasound 2 Research 5 Research 6
Abdominal Ultrasound 1 Lower Limb Ultrasound 2 Research M. and Statistics 1
Small Parts Ultrasound 1 Soft tissue Ultrasound 2
Anatomy of Musculoskeletal system 2 Miscellaneous indications 2
Basics of Musculoskeletal Ultrasound 3 Intervention in Musculoskeletal/Ultrasound 2
Dissertation Ethics Consenting 2

PROGRAM FACTS
• Program Duration 2 Years (Credit Hours 34)
• Timing Morning, 08:00 AM - 05:00 PM (Monday – Friday)

RECOGNIZED BY
Higher Education Commission
INTRODUCTION

The concept of this M.Phil in Obstetrical & Gynecological Ultrasound is a program in educational process which is accepted in academia and proven to be highly effective toward the demand of skilled graduate.

The curriculum maintains basic and advance core courses which are necessary to employ in the future plans. Thus, the attention in different modalities of ultrasound will concern clinical practice with minimum alteration on the other core courses regarding other tracks when deemed necessary. This strategy aims to give a comprehensive view in all Medical Diagnostic Ultrasound division and a focused course study plan on the specific selected tracks with integrated courses of computer sciences.

CAREER PROSPECTS

To enable the student to relate the physics and instrumentation (Knobology) of medical diagnostic ultrasound. After discussing the basic definitions like sound waves, period, wave equation etc, image interpretation, Knobology, transducers, Doppler, display modes, scan convertors, memory, image recording, artifacts, bioeffects and safety shall be discussed in detail.

ROAD MAP

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PROGRAM FACTS

- Program Duration
  2 Years (Credit Hours 34)
- Timing
  Morning, 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  16 years of Education, MD (5 year), M.Sc Medical Imaging Technology, M.Sc Medical Ultrasound Technology, BS Radiography, with min 60% marks
- Location
  Defence Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission

MASTER OF PHILOSOPHY IN
VASCULAR ULTRASOUND

INTRODUCTION

The concept of this M.Phil in Vascular Ultrasound is a program in educational process which is accepted in academia and proven to be highly effective toward the demand of skilled graduate.

The curriculum maintains basic and advance core courses which are necessary to employ in the future plans. Thus, the attention in different modalities of ultrasound will concern clinical practice with minimum alteration on the other core courses regarding other tracks when deemed necessary. This strategy aims to give a comprehensive view in all Medical Diagnostic Ultrasound division and a focused course study plan on the specific selected tracks with integrated courses of computer sciences.

CAREER PROSPECTS

To enable the student to relate the physics and instrumentation (Knobology) of medical diagnostic ultrasound. After discussing the basic definitions like sound waves, period, wave equation etc, image interpretation, Knobology, transducers, Doppler, display modes, scan convertors, memory, image recording, artifacts, bioeffects and safety shall be discussed in detail.

ROAD MAP

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PROGRAM FACTS

- Program Duration
  2 Years (Credit Hours 36)
- Timing
  Morning, 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  16 years of Education, MD (5 year), M.Sc Medical Imaging Technology, M.Sc Medical Ultrasound Technology, BS Radiography, with min 60% marks
- Location
  Defence Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission

The University of Lahore
INTRODUCTION
The concept of this Ph.D in DIAGNOSTIC ULTRASOUND is a program in educational process which is accepted in academia and proven to be highly effective toward the demand of skilled graduate.

The curriculum maintains basic and advance core courses which are necessary to employ in the future plans. Thus, the attention in different modalities of ultrasound will concern clinical practice with minimum alteration on the other core courses regarding other tracks when deemed necessary.

This strategy aims to give a comprehensive view in all Medical Diagnostic Ultrasound division and a focused course study plan on the specific selected tracks with integrated courses of computer sciences.

CAREER PROSPECTS

To enable the student to relate the physics and instrumentation (Knobology) of medical diagnostic ultrasound. After discussing the basic definitions like sound waves, period, wave equation etc, image interpretation, Knobology, transducers, Doppler, display modes, scan converters, memory, image recording, artifacts, bioeffects and safety shall be discussed in detail.

Program Facts

- **Program Duration**: 3 Years (Credit Hours 42)
- **Timing**: Morning, 11:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 18 years of Education, M.Phil Medical Imaging technology, MS Medical Ultrasound Technology, MS Radiography, with min 60% marks
- **Location**: Defence Road Campus, Lahore.

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Higher Education Commission

ROAD MAP

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MISSION STATEMENT
Our Vision is to establish a state-of-the-art teaching, clinical & research Division of Physical Therapy & Rehabilitation at THE UNIVERSITY OF LAHORE for basic & advanced activities/training along with quality undergraduate and postgraduate physiotherapy education in line with current national & international higher standards.

INTRODUCTION
University Institute of Physical Therapy (UIPT) is a newly established department under the umbrella of Faculty of Allied Health Sciences (FAHS). The date of birth of this department is 1st September, 2012. The launching milestone achieved by this department was the accommodation of so many migration students from other known universities. So it started its journey from four semesters and five classes with senior most batch of 4th semester.

Now, the total number of students of this department is 1000. The total permanent faculty of this department consists of 40 people along with 2 international and 3 national visiting faculty members so far. Just after start of three months, two new postgraduate programs consisting of M.Phil (Physical Therapy-Musculoskeletal) and PhD in Physical Therapy also launched by this department 1st ever in Pakistan under the supervision of international supervisors. Future programs include MS and M.Phil programs in other specialties of Physical Therapy Insh-Allah. Recently inaugurated “University Physical Therapy & Rehabilitation Clinic (UPTRC)” (Clinical project 1 out of 5) is the state-of-the-art clinic for affording and non-affording patients and also a very good place for clinical learning of UIPT students. During last one and half year, UIPT organized more than eight (8) national and international workshops/seminars in which participants came through out Pakistan. Another milestone achieved by UIPT is the MoU signed among UOL, KEMU and TUF for mutual sharing of learning resources.

DEGREES OFFERED
- Doctor of Physical Therapy (DPT)
- M. Phil Physical Therapy (Musculo-Skeletal)
- M. Phil Physical Therapy (Biomechanics)
- M. Phil Physical Therapy (Kinesiology)
- MS Physical Therapy (Neurology)
- MS Physical Therapy (Musculo-Skeletal)
- Ph.D Physical Therapy
INTRODUCTION
This degree is designed especially for those students who want to excel their career in the field of Physical Therapy. They will be called “Physiotherapist” and will add “Doctor” as Prefix in their names and “Physiotherapist” as Suffix in their names. This degree will provide professional skill to them and they will be in a position to get better jobs as a “Physiotherapist” in health settings. Physiotherapists can treat a wide range of disorders, they are highly in demand today making career physiotherapy very attractive. Currently there is a lot of demand for physiotherapists in Pakistan as well as in USA, Canada, UK, Australia and in South Asia etc. It is estimated that one physiotherapist is required per 10,000 people. But the total number of physiotherapy professionals in Pakistan is only in hundreds.

PROGRAM FACTS
• Program Duration
  5 Years (Credit Hours 172)
• Timing
  Morning, 08:00 AM - 05:00 PM (Monday – Friday)
• Entry Requirements
  Minimum 50% 12 Year of Education/HSSC/A-Level/Intermediate (Pre- Medical) or Equivalent
• Location
  Defence Road Campus, Lahore.

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DOCTOR OF PHYSICAL THERAPY (DPT)
MASTER OF PHILOSPHY IN PHYSICAL THERAPY- MUSCULO-SKELETAL (M.Phil)

INTRODUCTION
This degree is designed especially for those DPT graduates only who want to excel their career in the field of Physiotherapy education and teaching. This Degree will provide professional skills of teaching and research and M.Phil (MSK-PT) graduates will be in a position to get better jobs in rapidly growing and developing physical therapy institutions.

CAREER PROSPECTS
This degree provides foundation for PhD. This degree will provide them with professional skills and equip them to compete in the job market. M. Phil graduates usually pursue academic career and go on for Ph.D in their area of interest.

There are opportunities in teaching and research. This is the era of specialization and research. The institutions are now interested in hiring subject specialists and the M. Phil graduates are the best option for them.

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Higher Education Commission

PROGRAM FACTS
• Program Duration 2 Years (Credit Hours 36)
• Timing Saturday and Sunday 09:00 AM - 06:00 PM
• Entry Requirements 5 Years DPT or BS Honors degree (or minimum 16 years of education) recognized by HEC GAT/NTS-General Test -Minimum passing marks 50%
• Location Defence Road Campus, Lahore.

ROAD MAP

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<td>Clinical Decision Making</td>
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<td>Documentation &amp; Teaching Methodology In Physical Therapy</td>
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<tr>
<td>Professional Practice/Laws, Ethics &amp; Administration</td>
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<td>Applied Biomechanics &amp; Ergonomics</td>
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<td>Differential Diagnosis</td>
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MASTER OF PHILOSPHY IN PHYSICAL THERAPY- BIOMECHANICS (M.Phil)

INTRODUCTION
This degree course is structured for the DPT graduates who have vision of excelling in assessment of movement and its patterns of different living organisms. The students will study the application of forces and their effects on living organisms specifically in humans. It is important for comprehending the structural and functional aspects of biological systems that are humans, animals, plants etc. by means of methods of mechanics.

CAREER PROSPECTS
Biomechanics is closely related to engineering because it often uses traditional engineering sciences to analyze biological systems. Subfields of biomechanics may include
- Kinesiology
- Human locomotion & gait analysis
- Musculoskeletal & orthopedic biomechanics
- Cardiovascular biomechanics
- Ergonomics
- Sports biomechanics
- Rehabilitation
- Orthotics & prosthetics

RECOGNIZED BY
Higher Education Commission

PROGRAM FACTS
• Program Duration 2 Years (Credit Hours 36)
• Timing Saturday and Sunday 09:00 AM - 06:00 PM
• Entry Requirements 5 Years DPT or BS Honors degree (or minimum 16 years of education) recognized by HEC GAT/NTS-General Test -Minimum passing marks 50%
• Location Defence Road Campus, Lahore.

ROAD MAP

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<td>Biomechanical Measurement and Technology</td>
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<td>Clinical Decision Making</td>
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INTRODUCTION

The primary objective of the master’s degree program in kinesiology is to help students to acquire a breadth of knowledge grounded in theory, to gain expertise in one or more areas of specialization, and to develop competence in methods of inquiry.

CAREER PROSPECTS

This degree provides foundation for PhD. This degree will provide them with professional skills and equip them to compete in the job market. M. Phil graduates usually pursue academic career and go on for Ph.D in their area of interest. There are opportunities in teaching and research. This is the era of specialization and research. The institutions are now interested in hiring subject specialists and the M. Phil graduates are the best option for them.

PROGRAM FACTS

- Program Duration
  2 Years (Credit Hours 36)
- Timing
  Saturday and Sunday 09:00 AM - 06:00 PM
- Entry Requirements
  5 Years DPT or BS Honors degree (or minimum 16 years of education) recognized by HEC
- GAT/NTS-General Test - Minimum passing marks 50%
- Location
  Defence Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission

ROAD MAP

SEMESTER 1

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<td>Evidence Based Practice</td>
<td>2</td>
<td>Advanced Motor Learning and Control</td>
</tr>
<tr>
<td>Clinical Decision Making</td>
<td>2</td>
<td>Sports and Exercise in Society</td>
</tr>
<tr>
<td>Professional Practice/Laws, Ethics &amp; Administration</td>
<td>2</td>
<td>Advance Physiology of Exercise</td>
</tr>
<tr>
<td>Differential Diagnosis</td>
<td>2</td>
<td>Measurement and Analysis of Human Motion</td>
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<tr>
<td>Biomechanics of Physical Activities</td>
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SEMESTER 2

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<th>Cr. Hr.</th>
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<tbody>
<tr>
<td>Evidence Based Practice</td>
<td>2</td>
<td>Biostatistics and Research Methodology</td>
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<tr>
<td>Clinical Decision Making</td>
<td>2</td>
<td>Applied Clinical Neurosciences</td>
</tr>
<tr>
<td>Professional Practice/Laws, Ethics &amp; Administration</td>
<td>2</td>
<td>Advanced Motor Control &amp; Learning</td>
</tr>
<tr>
<td>Differential Diagnosis</td>
<td>2</td>
<td>Measurement &amp; Analysis of Human Motion</td>
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SEMESTER 3

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<tbody>
<tr>
<td>Advanced Electrocardiography</td>
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<td>Research / Dissertation</td>
</tr>
<tr>
<td>Evaluation of Literature and Current Trends in Kinesiology</td>
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<td>Research / Dissertation</td>
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SEMESTER 4

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</thead>
<tbody>
<tr>
<td>Advanced Practice &amp; Concepts in Pediatric Neurological Physical Therapy</td>
<td>3</td>
<td>Research / Dissertation</td>
</tr>
<tr>
<td>Advanced Practice &amp; Concepts in Adult Neurological Physical Therapy</td>
<td>3</td>
<td>Clinical Residency</td>
</tr>
<tr>
<td>Patient care Skills</td>
<td>2</td>
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</tr>
</tbody>
</table>
MASTER OF SCIENCE IN PHYSICAL THERAPY - MUSCULO-SKELETAL (MS)

INTRODUCTION
This degree is designed for those graduates who want to excel in their career in the field of physiotherapy in order to provide physiotherapy services to the patients having musculoskeletal disorders. This degree will provide students with professional skills that will enable them to function well as a member of multidisciplinary rehabilitation teams in disabled communities and also enable them to design education-based and research-oriented physiotherapy practice.

CAREER PROSPECTS
After completion of this degree students will be able to apply their knowledge and skills to practice with confidence. There will be a wide range of job opportunities for students, in different academic and clinical setups. Students will be able to enlighten their future by getting enrolled in national and international PhD programs. The research expertise of students will get improved to the level that they will be able to conduct individual and supervised research. This postgraduate degree will enable students to pursue their clinical and hospital-based career in various musculoskeletal rehabilitation centers.

PROGRAM FACTS
- **Program Duration**: 2 Years (Credit Hours 36)
- **Timing**: Saturday and Sunday 09:00 AM - 06:00 PM
- **Entry Requirements**: 5 Years DPT or BS Honors degree (or minimum 16 years of education) recognized by HEC
- **GAT/NTS-General Test**: Minimum passing marks 50%
- **Location**: Defence Road Campus, Lahore.

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DOCTOR OF PHILOSOPHY IN PHYSICAL THERAPY (Ph.D-PT)

INTRODUCTION
This degree is designed especially for M.Phil Physical Therapy graduates only who want to excel in their career in the field of Physiotherapy as a specialized educationist.

The goal of this doctoral program is to prepare critical thinkers and independent researchers so as to further expand the knowledge base of the physical therapy profession. Through a modern scientific approach, students will enhance their capacities to critically review scientific literature, formulate questions, devise hypotheses, and test those hypotheses using valid and reliable research designs. THERE IS ACUTE SHORTAGE OF PH.D PHYSICAL THERAPY GRADUATES THROUGHOUT PAKISTAN. SO GRADUATES OF THIS PROGRAM WILL BE IN GREAT DEMAND THROUGHOUT COUNTRY AS WELL AS ABROAD.

ROAD MAP

**SEMESTER 1**
- **Evidence Based Practice** 2 Cr.
- **Clinical Decision Making** 2 Cr.
- **Professional Practice: Law, Ethics and Administration** 2 Cr.
- **Differential Diagnosis** 2 Cr.

**SEMESTER 2**
- **Biostatistics and Research Methodology** 2 Cr.
- **Applied Biomechanics and Ergonomics I (Upper Quadrant)** 2 Cr.
- **Musculoskeletal Disorders and Assessment I (Upper Quadrant)** 2 Cr.
- **Advanced Musculoskeletal Physical Therapy Practice I (Upper Quadrant)** 3 Cr.

**SEMESTER 3**
- **Research / Dissertation** 6 Cr.
- **Advanced Biostatistics & Research Methodology** 5 Cr.
- **Genetics and Molecular Biology of Muscle Adaptation** 3 Cr.
- **Sports Traumatology and Rehabilitation** 3 Cr.

**SEMESTER 4**
- **Research / Dissertation** 6 Cr.
- **Diagnostic Imaging in Rehabilitation** 3 Cr.
- **Public Health and Physical Therapy** 3 Cr.
- **Sciotic Theory and Clinical Application in Orthopedic-Physical Therapy** 3 Cr.

**SEMESTER 5**
- **Research / Dissertation** 9 Cr.

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Higher Education Commission
MISSION STATEMENT

The mission of the Sport Sciences program at The University of Lahore is to promote quality knowledge, research and expertise associated to human movement, physical education and sports to improve the quality of life and human performance.

CAREER PROSPECTS

The vision of sports sciences & physical education department is to have a positive impact through various programs that promote sports leadership, wellness, teamwork and ethics, and provide students and faculty opportunities to design and enhance the intellectual assets and moral values required to lead meaningful lives while impacting society in respectful ways.

The programs in the Department of Sports Sciences and Physical Education are designed to prepare students for lifelong growth in the physical, intellectual, cultural, emotional and social dimensions. These goals and objectives are met through the qualified faculty’s presentation of research-based information, utilizing the latest technology. In near future, department is determined to launch new programs e.g. M.Phil Sports Psychology and PhD Sports Psychology. Moreover it is planned to put share in existing terrain of knowledge by publishing at least four research papers annually in impact factor journals, this number will increase to ten research papers in five years.

DEGREES OFFERED

- BS Sports Sciences and Physical Education
- M.Sc. Sports Sciences & Physical Education
- M. Phil Sports Sciences
- MS Sports and Exercise Psychology
INTRODUCTION
This program consists of 133 credit hours with 50 core courses. After completion of Four Year BS Sports Sciences and Physical Education students will be able to:

Integrate a broad and coherent theoretical and technical knowledge of health and physical education and the exercise and sport science disciplines with advanced specialist knowledge related to physical education and sport science

Critically review and apply information with autonomy, responsibility and judgment in order to both anticipate and creatively solve problems related to professional practice, including developing appropriate activities for participation in physical education and sport in contemporary settings.

CAREER PROSPECTS
Employment for graduates would include such positions as professional coaches, sport directors, sport and exercise scientists and coordinators and sport development officers in professional and government contexts and in urban and regional localities. The program would provide the students sufficient skills to undertake health and wellness programs based upon the ability to assess needs and going beyond the pitch and field to contribute to the body of literature through research project.

ROAD MAP

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<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
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<th>SEMESTER 3</th>
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<td>Athletics-II</td>
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<td>Athletics-III</td>
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<td>Basics of Human Anatomy</td>
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<td>Biochemistry (General 2)</td>
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<td>Basic of Human Physiology</td>
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<td>English-II</td>
<td>3</td>
<td>Gymnastics-II</td>
<td>3</td>
<td>English IV</td>
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<td>Games-I</td>
<td>2</td>
<td>Games-II</td>
<td>2</td>
<td>Introduction to Computer</td>
<td>3</td>
<td>Games IV</td>
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<td>Sports Biomechanics</td>
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<td>Introduction to Modern Technology</td>
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<td>Pakistan Studies</td>
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<td>Islamic Studies</td>
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<td>Sociology</td>
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<tr>
<td>Mathematics-II</td>
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</table>

PROGRAM FACTS
- **Program Duration**
  4 Years (Credit Hours 133)
- **Timing**
  12:00 PM - 08:00 PM (Monday to Friday)
- **Entry Requirements**
  12 Years of Education, FA, FSc, Minimum 50% Marks
- **Location**
  Defence Road Campus, Lahore.

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BACHELOR OF SCIENCE IN
SPORTS SCIENCES AND PHYSICAL EDUCATION (BSSPE)

ENVIRONMENTAL SCIENCE
Planning and development of Sports Facilities
Physical Education For Special Population
Scientific Sports Coaching
Adapted Physical Education

INTRODUCTION TO STATISTICS
Practical (Teaching Practice)
Role of Media in Sports
Curriculum Development in Physical Education

PHYSICAL EDUCATION METHODOLOGY IN PHYSICAL EDUCATION
Research Methodology in physical Education
Research Thesis/Research Project

SCIENCE OF SPORTS TRAINING
Specialization in one group of track and Field
Scientific Sports Coaching
Sports Medicine

SPORTS NUTRITION
Sports Psychology
Specialization in one Game

TEST, MEASUREMENT AND EVALUATION IN PHYS ED AND SPORTS
Trauma and Rehabilitation

Allied Health Sciences
INTRODUCTION

This program consists of 64 credit hours with 20 cores courses. Main objectives of offering this program are

a. To train the students to understand the functional anatomy and biomechanics of the human body.

b. To introduce to the students the physiological basis for exercise and physical activity in direct application to physical fitness and athletic conditioning.

c. To facilitate the students to assess health status, conduct fitness testing, and prescribe and administer exercise programs.

d. To familiarize the students to perform health and wellness programming based upon the ability to assess needs, and to design, implement, and evaluate a project.

CAREER PROSPECTS

The Graduate having a degree of Sports Sciences and Physical Education will be able to play a significant role and positive contribute to generate human resources and to serve various sector of society in general, related to such program in particular, render to educational institutions and sports organizations.

CAREER PROSPECTS

Degree will have equipped you with a good knowledge of the sports and exercise industry and enabled you to look at the science behind fitness, as well as giving you an insight into related areas such as nutrition, psychology, management and finance – plenty to make you an attractive prospect to potential employers.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
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<tr>
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<td>Human Anatomy</td>
<td>3</td>
<td>Exercise Physiology</td>
<td>3</td>
<td>Leadership in sports</td>
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<td>Computer Application in Sports</td>
<td>3</td>
<td>Methodology of Scientific Coaching</td>
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<td>Gymnastics</td>
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<td>Measurement and Evaluation in sports</td>
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<td>Planning Sports Facilities</td>
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<td>Physical Education for special population</td>
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<td>Practical Education</td>
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<td>Practical Athletics</td>
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<td>Practical Games</td>
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<td>Practical Games (volley ball, tennis, cricket)</td>
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<td>Practical Games (volley ball, tennis)</td>
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<td>Roles and Techniques of Games</td>
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<td>Practical Swimming</td>
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<td>Sport Psychology</td>
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<td>Role of media in sports</td>
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<td>Sports Nutrition</td>
<td>3</td>
<td>Research Methods in Physical Education</td>
<td>3</td>
<td>Sports Bio Mechanics</td>
<td>3</td>
<td>Trauma and Rehabilitation</td>
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<tr>
<td>Talent Identification in sports</td>
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<td>Science of Track and Field</td>
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PROGRAM FACTS

- Program Duration
  2 Years (Credit Hours 64)
- Timing
  12:00 PM - 08:00 PM (Monday to Friday)
- Entry Requirements
  14 Years of Education, BA, BSc, Minimum 50% Marks
- Location
  Defence Road Campus, Lahore.

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MASTER OF PHILOSOPHY IN SPORTS SCIENCES (M.Phil)

INTRODUCTION

In the era of educational revolution description of the MPhil programs in Sport Sciences and Physical Education is to prepare graduates having a deep knowledge of the subjects as well as ability to analyze sports performance in a given situation and draw out conclusion. The main objective of the program is to produce broad base graduates able to face the challenges of the modern world to enhance the performance of the athletes. The main objectives of the M Phil course are to provide opportunity for professional training to sports science students who have research aptitude in the field of Physical Education and Sports Sciences. It is also a pre-doctoral Program, which will enable students to develop research aptitude and experience.

CAREER PROSPECTS

The Graduate having a degree of Sports Sciences and Physical Education will be able to play a significant role and positive contribute to generate human resources and to serve various sector of society in general, related to such program in particular, render to educational institutions and sports organizations.

CAREER PROSPECTS

Degree will have equipped you with a good knowledge of the sports and exercise industry and enabled you to look at the science behind fitness, as well as giving you an insight into related areas such as nutrition, psychology, management and finance – plenty to make you an attractive prospect to potential employers.

ROAD MAP

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<th>SEMESTER 1</th>
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<td>Core Course III</td>
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<td>Core Course I</td>
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<td>Core Course IV</td>
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<td>Core Course II</td>
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<td>Core Course IV</td>
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<td>Elective Course II</td>
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<td>Elective Course IV</td>
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PROGRAM FACTS

- Program Duration
  2 Years (Credit Hours 30)
- Timing
  09:00 AM - 05:00 PM (Saturday and Sunday)
- Entry Requirements
  16 Years of Education in relevant field, Minimum 50% Marks or 2.50/4.00 CGPA
- Location
  Defence Road Campus, Lahore.

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COURSES LIST

CORE COURSES

- Research in Physical Education
- Advance Measurement in Physical Education and sports
- Sports and Exercise Psychology
- Talent Identification in Sports

ELECTIVE COURSES

- Group dynamics
- Sports medicine
- Sports management and Olympic movement
- Concept of health, fitness and wellness
- Nutrition and athletic performance
- Scientific sports coaching
- Sports sociology
- Planning and development sports facilities
- Science of sports training
- Sports biomechanics
INTRODUCTION
This proposed program will be interdisciplinary in nature and the fields will be included Sports and exercise psychology, research methods and statistics, and related areas such as psychology and human development. The main focus of the M.S. degree is the completion of a research thesis, which is developed in consultation with a faculty mentor. The program is well suited to individuals who seek to enter doctoral programs in sports psychology, counseling, social/developmental psychology, education, or social work. Overall it will be a blend of medical sciences and social sciences as well. This particular program will strengthen the process of integration with the goal of fostering to enhance learning in each subject area. The nature of the program will introduce the students the psychological basis for exercise and physical activity in direct application to athletic performance, motivation, and recovery and will further familiarize the students to perform health and wellness programming based upon the ability to assess needs, and to design, implement, and evaluate a project.

CAREER PROSPECTS
This unique program, consisting of a team of 10 members of a diverse, highly specialized and qualified background, which enriches the Pakistani society through highly qualified graduates. The programme philosophy seeks to critically engage you with a broad spectrum of Sport Psychology perspectives, drawing on a range of research and applied methodologies. Founded on an academically rigorous knowledge base, studies focus on the impact that research and psychological theory has on applied practice.

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
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</thead>
<tbody>
<tr>
<td>Research Methodology</td>
<td>3</td>
<td>Statistics in Sports Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Applied Sports and Exercise psychology I</td>
<td>3</td>
<td>Applied Sports and Exercise psychology II</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Assessment in Sports</td>
<td>3</td>
<td>Psychological social work and counseling</td>
<td>3</td>
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<tr>
<td>Stress, Health and Wellbeing</td>
<td>3</td>
<td>Performance psychology</td>
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<tbody>
<tr>
<td>Research Work / Thesis</td>
<td>3</td>
<td>Research Work / Thesis</td>
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</table>
MISSION STATEMENT
The university institute of diet and nutritional sciences will be the premier academic institute in Nutrition recognized for the way it integrates research, teaching service and practice in diverse environment to develop effective solution to public health nutritional problems.

To improve human health through enhanced nutrition by providing excellent education research and community engagement.

INTRODUCTION
Numerous nutritional deficiency disorders ranging from protein malnutrition to specific micro-nutrients in certain areas of the country especially in Pakistan. These deficiencies have resulted in growth retardation, mental disorders and various types of physical disabilities. Beside micronutrient deficiencies, the incidences of cardiovascular diseases, diabetes, cancer, obesity, hypertension and kidney and liver problems are increasing day by day due to unsafe and poor quality diets. This alarming situation demands to cure diseases with food. Realizing the importance of human nutrition in daily life and emergencies like earthquake, drought, famine and man-made disasters, the University Institute of Diet and Nutritional Sciences started 5-years degree program leading to Doctor of Diet and Nutritional Sciences.

The main aim of the department is to produce manpower in the field of food science and human nutrition which will provide services in health departments, teaching and research, International Organizations, Private Sector, and Non-Governmental Organizations, Community Development Program etc. By consistent emphasis on experiential learning through laboratory studies, research-based learning, debate and presentations, designed to enhance the student’s critical thinking, communication and collaboration, tackling of ill defined problems, development of individual learning objectives and self-evaluation of performance.

DEGREES OFFERED
- Doctor of Dietetics & Nutritional Sciences
- M.Phil in Human Nutrition and Dietetics
- M.Phil in Food Science and Technology
- Ph.D Human Nutrition and Dietetics
**INTRODUCTION**

This 5-year degree program is precisely designed to keep in view the importance of nutrition and dietetics in sustaining the healthy lifestyle. This course will provide and enable students to cope with the advancement in the field of Diet & Nutritional Sciences.

**CAREER PROSPECTS**

This professional program is for the student’s community to provide them the latest techniques in the field of Diet & Nutritional Sciences worldwide. After completing this program, they can work in public and private sectors.

- **Foreign Countries**
  - Public health departments in Middle East, Europe, etc.
  - Independent Private Practice as registered dietitians

- **Private Sector**
  - Independent Private Practice
  - Multinational Food Industry
  - Multi-national Companies
  - Pharmaceuticals Industry
  - Consultant for Private Companies
  - Consultant in Private Hospitals
  - Airlines and Railways
  - Health Care Centers

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**PROGRAM FACTS**

- **Program Duration**
  5 Years (Credit Hours 165)

- **Timing**
  Morning 08:30 AM - 05:00 PM (Monday – Friday)

- **Entry Requirements**
  12 years of education (Higher Secondary School Certificate / A-Level / Intermediate F. Sc Pre medical or Equivalent) with at least second Division with 50% marks

- **Location**
  Defence Road Campus, Lahore.

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Higher Education Commission

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**ROAD MAP**

**SEMESTER 1**  
Cr. Hr. | **SEMESTER 2**  
Cr. Hr. | **SEMESTER 3**  
Cr. Hr. | **SEMESTER 4**  
Cr. Hr.
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Fundamentals of human Nutrition | 4 | Advanced nutrition; Carbohydrates, lipids and proteins | 3 | Nutrition and life cycle | 3 | Dietetics (i) | 5
Principles of food sciences | 3 | Advanced human nutrition; Vitamins and minerals | 3 | Disease prevention through Nutrition | 3 | Public health nutrition (i) | 3
Basic anatomy | 4 | Medical Biochemistry | 3 | Metabolic ecoscienceology | 3 | Behavioral and social Sciences | 3
Cell biology and physiology (i) | 3 | Cell biology and Physiology (ii) | 3 | Food and drug laws | 2 | Meal planning and management | 2
English comprehension (i) | 2 | English comprehension (ii) | 2 | Fundamentals of microbiology | 3 | Herbs, food and Phytochemicals | 3
Pakistan studies | 2 | Islamic studies/ethics | 2 | Epidemiology and public health | 3 | Drug-nutrient interaction | 3

**SEMESTER 5**  
Cr. Hr.  | **SEMESTER 6**  
Cr. Hr.  | **SEMESTER 7**  
Cr. Hr.  | **SEMESTER 8**  
Cr. Hr.
--- | --- | --- | ---
Dietetics (i) | 3 | Advanced clinical nutrition | 3 | Nutrition education | 3 | Research methodology | 4
Public health nutrition (i) | 3 | Food processing and Preservation | 3 | Nutrition assessment and Menu planning | 4 | Principles of food service | 3
Statistics for scientists | 3 | Nutritional counselling and diet therapy | 3 | Nutraceuticals and Functional Foods | 3 | Global nutritional issues | 3
Communication skills | 2 | Nutrition intervention Planning | 3 | Recent advances in human Nutrition | 3 | Controversies in the field of Nutrition | 3
Proteomics and nutrigenomics | 3 | Sports nutrition | 3 | Computer education and Nutritional data base | 4 | Community nutrition | 3
Food toxicology and addititives | 3 | Sociocultural aspects of Food | 3

**SEMESTER 9**  
Cr. Hr.  | **SEMESTER 10**  
Cr. Hr.
--- | ---
Seminar | 3 | Practical dietary models & counselling | 3
Nutritional report writing | 3 | Nutrition care in emergency cases | 3
Institutional management | 3 | Hospital based nutritional practice | 4
Practise nutritional practices in clinical care | 3 | Log book | 6
Practivedietary models & counselling | 3
Nutrition care in emergency cases | 3
INTRODUCTION
This 2-years program will provide the advanced knowledge of nutrition and prevention of disease with food in consort with strong clinical, analytical and research skills in the field of Diet & Nutritional Sciences.

CAREER PROSPECTS
This professional program is for the student’s community to provide them the latest techniques in the field of Diet & Nutritional Sciences worldwide. After completing this program, they can work in public and private sectors.

ROAD MAP

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<thead>
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<th>SEMESTER 1</th>
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<tbody>
<tr>
<td>Nutrition and Metabolism</td>
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<td>Human Nutrition Disorders &amp; Disease Prevention</td>
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<tr>
<td>Recent Advances in Dietetics</td>
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<td>Maternal &amp; Pediatric Nutrition</td>
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<td>Biochemistry &amp; Physiology of Human Nutrition</td>
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<td>Nutraceuticals/Functional Foods</td>
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<td>Research Methods in Human Nutrition</td>
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<td>Laboratory Techniques in Nutrition</td>
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<tr>
<td>Research M &amp; Statistics.</td>
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<td>Micro-Nutrient and Contemporary Issues in Dietetics</td>
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<td>Seminar-I</td>
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PROGRAM FACTS
- **Program Duration**: 2 Years (Credit Hours 36)
- **Timing**: Morning 08:30 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 16 years of Education or equivalent degree with at least 2.5 CGPA (out of 4.00) in semester system 1st div / 66% in annual system with graduation in followings
  - M.Sc in Food and Nutrition (2 years)
  - Doctor of Dietetics and Nutritional Sciences (5 years)
  - BS (Home) Food Science and Technology (4 years)
  - BS (Home) Agriculture-Food Technology (4 years)
  - BS Food Science and Nutrition (4 years)
- **Location**: Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

MASTER OF PHILOSOPHY IN HUMAN NUTRITION AND DIETETICS (M.Phil)

INTRODUCTION
This course will provide and enable students to cope with the rapid advancement in the field of product development and food processing industry.

CAREER PROSPECTS
This professional program is for the student’s community to provide them the latest techniques in the field of Diet & Nutritional Sciences worldwide. After completing this program, they can move further for Master & M.Phil in Diet & Nutritional Sciences or can work independents.

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
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<td>Food Enzymology</td>
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<td>Dairy Processing-I</td>
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<td>Physical Properties of Foods</td>
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<td>Advanced Beverage Technology</td>
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<td>Food Quality Assurance Management</td>
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<td>Technology of Processed Meat</td>
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PROGRAM FACTS
- **Program Duration**: 2 Years (Credit Hours 38)
- **Timing**: Afternoon 11:00 AM - 03:00 PM (Monday – Friday)
- **Entry Requirements**: 16 years of Education or equivalent degree with at least 2.5 CGPA (out of 4.00) in semester system 1st div / 66% in annual system with graduation in followings
  - M.Sc in Food and Nutrition (2 years)
  - Doctor of Dietetics and Nutritional Sciences (5 years)
  - BS (Home) Food Science and Technology (4 years)
  - BS (Home) Agriculture-Food Technology (4 years)
  - BS Food Science and Nutrition (4 years)
- **Location**: Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

MASTER OF PHILOSOPHY IN FOOD SCIENCE AND TECHNOLOGY (M.Phil)
INTRODUCTION
This Degree Is Designed For The Food And Nutrition Sciences Graduates Who Want To Excel Their Career In The Field Of Human Nutrition And Dietetics. The PhD Program Will Require Both Course And Research Work Leading To Submission And Defense Of Thesis And If Successful The Award Of PhD Degree. Modules (Core And Electives) Will Be Based On Advanced Levels In The Selected Topics That Will Provide An In-Depth Student-Faculty Interaction.

CAREER PROSPECTS
The Graduate Of Human Nutrition And Dietetics Can Work In National And International Organization Related To The Nutritional Sciences, Research And Teaching Institutes, Public Health Departments, International Organizations [Unicef, Undp, Who, Fao, World Bank], Non-Governmental Organizations, Community Development Program.

PROGRAM FACTS
- Program Duration
  3-5 Years (Credit Hours 48)
- Timing
  Morning 11:00 AM - 03:00 PM (Monday - Friday)
- Entry Requirements
  Minimum 18 years of Education or equivalent degree with at least 3.0 CGPA (out of 4.00) in semester system 1st div / 75% in annual system with graduation in followings
  • MS/ M.Phil in Food & Nutrition
  • MS in Human Nutrition and Dietetics
  • MS/ M.Phil in Food Science and Technology
- Location
  Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

DOCTOR OF PHILOSOPHY IN
HUMAN NUTRITION AND DIETETICS (Ph.D)

ROAD MAP

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<tr>
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<th>SEMESTER 2 Cr. Hr.</th>
<th>SEMESTER 3 Cr. Hr.</th>
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Allied Health Sciences
MISSION STATEMENT
Our Vision is to establish a state-of-the-art academic, clinical & research division of Medical Laboratory Sciences at The University of Lahore for basic & advanced activities/ training along with quality undergraduate and postgraduate Laboratory Technology education in line with current national and international standards, along with basic and advanced framing.

INTRODUCTION
The department has been established with the vision to promote development and appropriate use of techniques for promotion of health care. Our department has the honor to introduce Doctor of Medical Laboratory Science (DMLS) Program for the first time in the history of the country. Our DMLS program is well known and appreciated for its excellent educational standards nation wide. UIMLT offers different graduate and postgraduate programs where students are trained to critically examine all data and results and to be alert for potential technical errors. They are also encouraged to participate in the on-going basic research programs in the department and publish their research findings in reputable scientific journals. To begin transition to the “real world” they undergo rotations in the UIMLT basic skill laboratories and first pathological laboratories at the affiliated hospitals of the University of Lahore. There they learn handling and dealing of the specimen, bio-safety management and develop understanding of principles, basic skills and professionalism.

DEGREES OFFERED
- Doctor of Medical Laboratory Sciences
- M.Phil Virology and Molecular Pathology
- M.Phil Immunology and Molecular Pathology
- Ph.D Virology and Molecular Pathology
- Ph.D Immunology and Molecular Pathology
INTRODUCTION
This program is introduced for the first time in Pakistan, keeping in view the need of a healthcare institute in Pathology department. This course will provide and enable students to cope with the rapid advancements in the field of Laboratory Technology.

CAREER PROSPECTS
This professional program is for the student's community to provide them the latest techniques in the field of Medical Laboratory Technology worldwide. After completing this program, the students are able to look independently or continue their post graduation in various discipline of biomedical sciences.

ROAD MAP

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<th>SEMESTER 1</th>
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<td>Blood Banking II</td>
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<td>Basic Biochemistry –II</td>
<td>3</td>
<td>Histopathology &amp; Cytopathology-I</td>
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<td>SEMESTER 6</td>
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<td>Pakistan Studies</td>
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<td>Chemical Pathology I</td>
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<td>Chemical Pathology II</td>
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<td>Elective Subject II</td>
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<td>Clinical Pathology –I</td>
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<td>Clinical Pathology-II</td>
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<td>Clinical Laboratory Rotations</td>
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<td>Research Report</td>
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<td>Laboratory Biosafety &amp; Management-I</td>
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<td>Laboratory Biosafety &amp; Management-II</td>
<td>3</td>
<td>Elective Subject-I</td>
<td>6</td>
<td>Clinical Laboratory Rotations</td>
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PROGRAM FACTS
- Program Duration
  5 Years (Credit Hours 172)
- Timing
  Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  Minimum (50%) 12 years of education/HSSC/A-Level/ Intermediate (Pre-Medical) or Equivalent
- Location
  Defence Road Campus, Lahore.

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Higher Education Commission

DOCTOR OF MEDICAL LABORATORY SCIENCES (DMLS)
MASTER OF PHILOSOPHY IN IMMUNOLOGY & MOLECULAR PATHOLOGY (M.Phil)

INTRODUCTION
Understanding the immunological interactions and molecular aspects of different immunological disorders is one of the utmost challenges faced by the scientific world in the recent times. These courses provide and enable students to cope with the speedy progression in the field of Immunology and Molecular Pathology and helps them to address the immunological interfaces of immunological disorders and pathological human diseases through focused research projects.

CAREER PROSPECTS
This program aims to generate human resource of molecular pathologists in the field of Immunology who can contribute to the society by serving in prestigious academic and research institutes around the globe.

PROGRAM FACTS
- Program Duration: 2 Years (Credit Hours 36)
- Timing: Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements:
  - 16 years of Education or equivalent degree (in relevant field) with at least 2.5 CGPA (out of 4.00) in semester system 2nd div / 50% in annual system with graduation in followings
  - M.Sc in Medical Lab Technology (2 years)
  - Doctor of Medical Laboratory Sciences (5 years)
  - BS (Hons) Four Year Medical Lab Technology (4 years)
  - BS (Hons) Bio Medical Science (4 years)
- Location: Defence Road Campus, Lahore.

RECOGNIZED BY:
Higher Education Commission

ROAD MAP

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<th>SEMESTER 1</th>
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<td>General Immunology</td>
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<td>Vaccinology</td>
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<td>Molecular Pathology/ Molecular Biology</td>
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<td>Biosafety/Bioethics</td>
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<td>Diagnostic Techniques/ Instrumentation</td>
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<td>Biostatistics</td>
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MASTER OF PHILOSOPHY IN VIROLOGY & MOLECULAR PATHOLOGY (M.Phil)

INTRODUCTION
This program is introduced for the first time in Pakistan, keeping in view of the emerging viral diseases and their deadly outbreaks during the last couple of decades. Understanding molecular aspects of these viral infections is one of the greatest challenges faced by the scientific world. These courses provide and enable students to cope with the rapid advancement in the fields of Virology and Molecular Pathology and helps them to address the interactions of viral and pathological human diseases through focused research projects.

CAREER PROSPECTS
This program aims to generate human resource of molecular pathologists in the field of virology who can contribute to the society by serving in prestigious academic and research institutes around the globe. There is a huge demand of these professional in the vaccine, pharmaceutical, research laboratories, university circles and health care industry within Pakistan and abroad where they can pursue their careers.

PROGRAM FACTS
- Program Duration: 2 Years (Credit Hours 36)
- Timing: Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements:
  - 16 years of Education or equivalent degree (in relevant field) with at least 2.5 CGPA (out of 4.00) in semester system 2nd div / 50% in annual system with graduation in followings
  - M.Sc in Medical Lab Technology (2 years)
  - Doctor of Medical Laboratory Sciences (5 years)
  - BS (Hons) Four Year Medical Lab Technology (4 years)
  - BS (Hons) Bio Medical Science (4 years)
- Location: Defence Road Campus, Lahore.

RECOGNIZED BY:
Higher Education Commission

ROAD MAP

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<td>Diagnostic Techniques/ Instrumentation</td>
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<th>SEMESTER 3</th>
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</thead>
</table>
INTRODUCTION
Comprehending the immunological interactions between host and disease is utmost complex and is one of the extreme challenges faced by the scientific/research world during the recent times. This course will provide and enable students to cope with the speedy progression in the field of Immunology and Molecular Pathology and helps them to address the immunological interfaces of immunological disorders and pathological human diseases through focused research projects.

CAREER PROSPECTS
Our aim is to generate human resource of molecular pathologists in the field of immunology who can contribute to the society by serving in prestigious academic and research institutes around the globe. Since there is a huge demand of immunologists and molecular pathologists, these professionals can pursue their future career in the vaccine, pharmaceutical, research laboratories, university circles and health care industry within as well as outside Pakistan.

ELECTIVE COURSES
- Immunotoxicology
- Medical Genetics/Gene Therapy
- Stem Cell Studies
- Immunogenetics
- Cell Biology
- Clinical Immunology
- Biostatistics
- Pharmacology/Antimicrobial Agents

ROAD MAP

SEMMESTER 1 | Cr. Hr. | SEMESTER 2 | Cr. Hr. | SEMESTER 3 | Cr. Hr. | SEMESTER 4 | Cr. Hr.
--- | --- | --- | --- | --- | --- | --- | ---
General Immunology | 3 | Immune disorders | 3 | Research Work / Thesis | 9 | Research Work / Thesis | 9
Molecular Pathology/ Molecular Biology | 3 | Virology | 3 | | | |
Diagnostic Techniques/ Instrumentation | 3 | Elective Subject | 3 | | | |

PROGRAM FACTS
- Program Duration: 3-5 Years (Credit Hours 42)
- Timing: Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: 18 years of education in relevant field or equivalent with at least 1st Division min 60% marks in annual system and 3.00 CGPA (out of 4.00)
- Location: Defence Road Campus, Lahore.
- Recognized By: Higher Education Commission

DOCTOR OF PHILOSOPHY IN IMMUNOLOGY & MOLECULAR PATHOLOGY (Ph.D)

INTRODUCTION
This program is introduced for the first time in Pakistan, keeping in view of the emerging viral diseases and their deadly outbreaks during the last couple of decades. Understanding molecular aspects of these viral infections is the greatest challenges faced by the scientists/researchers these days. This course will provide and enable students to cope with the rapid advancement in the fields of Virology and Molecular Pathology and helps them to address the interactions of viral and pathological human diseases through focused research projects.

CAREER PROSPECTS
This program aims to generate human resource of molecular pathologists in the field of virology who can contribute to the society by serving in prestigious academic and research institutes around the globe. There is a huge demand of these professional in the vaccine, pharmaceutical, research laboratories, university circles and health care industry within as well as outside Pakistan where they can pursue their careers.

ELECTIVE COURSES
- Immunotoxicology
- Cell Biology
- Medical Genetics / Gene Therapy
- Clinical Immunology
- Stem Cell Studies
- Biostatistics
- Immunogenetics
- Pharmacology/Antimicrobial Agents

ROAD MAP

SEMMESTER 1 | Cr. Hr. | SEMESTER 2 | Cr. Hr. | SEMESTER 3 | Cr. Hr. | SEMESTER 4 | Cr. Hr.
--- | --- | --- | --- | --- | --- | --- | ---
Molecular Pathology/ Molecular Biology | 3 | Molecular mechanism of disease (Molecular Virology) | 3 | | | |
Diagnostic Techniques/ Instrumentation | 3 | Elective Subject | 3 | | | |

PROGRAM FACTS
- Program Duration: 3-5 Years (Credit Hours 42)
- Timing: Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: 18 years of education in relevant field or equivalent with at least 1st Division min 60% marks in annual system and 3.00 CGPA (out of 4.00)
- Location: Defence Road Campus, Lahore.
- Recognized By: Higher Education Commission

DOCTOR OF PHILOSOPHY IN VIROLOGY & MOLECULAR PATHOLOGY (Ph.D)

SEMMESTER 1 | Cr. Hr. | SEMESTER 2 | Cr. Hr. | SEMESTER 3 | Cr. Hr. | SEMESTER 4 | Cr. Hr.
--- | --- | --- | --- | --- | --- | --- | ---
Molecular Pathology/ Molecular Biology | 3 | Molecular mechanism of disease (Molecular Virology) | 3 | | | |
Diagnostic Techniques/ Instrumentation | 3 | Elective Subject | 3 | | | |

PROGRAM FACTS
- Program Duration: 3-5 Years (Credit Hours 42)
- Timing: Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: 18 years of education in relevant field or equivalent with at least 1st Division min 60% marks in annual system and 3.00 CGPA (out of 4.00)
- Location: Defence Road Campus, Lahore.
- Recognized By: Higher Education Commission

ELECTIVE COURSES
MISSION STATEMENT

University vision is to become a center of excellence for teaching and research in Public Health. We aim to accomplish a benchmark level through:

- Specialized training and educational opportunities designed to address the evolving needs of the public health system.
- Achieving brilliance by integrating both academics and research with extraordinary practice opportunities.
- Promoting creative and innovative interdisciplinary research.
- Promoting collaboration and partnership to address emerging Public Health problems.
- Improving the capacity of current public health professionals and infrastructure to respond to public health challenges.

INTRODUCTION

The Public Health activities include a wide range of efforts to identify, prevent and combat threats to the health of the community/population.

Essential Public Health services include:

1. Monitoring the health status of the community.
2. Investigating the epidemics, community based health problems health hazards of flooding and earth quake.
3. To provide awareness and education to the people regarding health issues.
4. Mobilize partnership between public health physicians and public health administrators to solve community problems.
5. To support policy makers & planners for the achievement of public health interventions.
6. To enforce laws, rules & regulations for the public health safety and protection.
7. To make a link between community health workers and the public health physicians.
8. Ensure to hire the skilled and competent public health workforce for educating the educators.
9. To evaluate effectiveness, accessibility and quality of health services.
10. Conduct of research and apply innovative solutions

DEGREES OFFERED

- Master of Public Health (MPH)
- Ph.D. Public Health

UNIVERSITY INSTITUTE OF PUBLIC HEALTH

The University of Lahore

Allied Health Sciences
INTRODUCTION
The University Institute of Public Health is a pioneer institute of the University of Lahore among private sector universities for the award of Master of Public Health (MPH) since 1999. It is a two years postgraduate professional degree program comprising of 4 semesters. During the first three semesters, the course work of 50 credit hours and in the fourth semester 10 credit hours of research and thesis dissertation has to be completed. Public Health is a joint venture of public health physicians and organized by the society, to protect, promote and restore the health of the public through collective social actions. Public Health paradigm changes with the changing need, technologies, values and the objectives for the reduction in the magnitude of disease problem/disease load/disease burden, preventive and early deaths and to relieve the community from discomfort, disability and sufferings. The teaching faculty is highly qualified, trained and specialized.

CAREER PROSPECTS
Students learn through a wide variety of courses, exercise, assignments and skills that help them in the problem solving situations faced by the community/society. After qualifying the MPH degree, they are eligible for promotion in public and private institutions.

ROAD MAP

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<td>Applied Epidemiology &amp; Biostatistics</td>
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<td>Environmental Health</td>
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<td>Research Work / Thesis</td>
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<td>Introduction to epidemiology/ Principles and Methods</td>
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<td>Communicable and Non- Communicable Disease Control</td>
<td>3</td>
<td>Occupational Health</td>
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<td>Basic Biostatistics</td>
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<td>Health Management &amp; Administration</td>
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<td>Research Module-2</td>
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DOCTOR OF PHILOSOPHY
PUBLIC HEALTH (Ph.D)

INTRODUCTION
The Ph.D. program is comprising of a course work of two semesters (18 Credit Hours) and research work of four semesters (30 Credit Hours). The research and thesis dissertation has to be completed 3rd through 6th semester which shall be supervised by the supervisory committee from related fields of expertise as per rules and regulations approved by UOL, PMDC & HEC.

CAREER PROSPECTS
The predominant aim is to provide opportunity to the scholars to acquire essential knowledge, skills through creative and innovative research, for the dissemination of knowledge to the public health providers, policy makers and planners.
MISSION STATEMENT

• To produce competent allied health professionals to meet local, regional and national needs and to develop reflective practitioners, capable of effective, critical evaluation and analysis with effective interpersonal and clinical skills.

• To develop reflective practitioners, capable of effective, critical evaluation and analysis with effective interpersonal and clinical skills.

INTRODUCTION

DHPT is newly (Sep 2014) established department under the umbrella of Faculty of Allied Health Sciences (FAHS). The foundation milestone of this department is launching four disciplines (BSSLPI, BS Audiology, and BSOT & PGNIO) in UOL. BS Audiology deals with hearing, balance related disorders and rehabilitation. BSSLPI (BS speech & Language Pathology) deals with communication disorders. BSOT (BS Occupational Therapy) prevent disability. Post Graduate Diploma in Non-Invasive Orthopedics for clinician Physicians, Physical therapists and Medical Imaging Doctors. All these disciplines will increase professionals towards different treatments in hospitals, rehabilitation centers and health care institutes and introduce new advancement of skills with expertise in the field of Rehabilitations.

DEGREES OFFERED

• BS AUDIOLOGY
• BS SPEECH LANGUAGE PATHOLOGY
• BS OCCUPATIONAL THERAPY
INTRODUCTION

BS Audiology program offered at University of Lahore provides a detailed study of the hearing and balance: their structure, function and pathology. The relationship between laboratory research and clinical aspects forms a key element. Lectures, demonstrations and tutorials will be complemented by practical experience in the clinic and laboratory.

CAREER PROSPECTS

After successful completion of 4 years degree offered at University of Lahore, the SLP graduates will be certified to do their independent private clinical practices.

In addition to private clinical practice, speech language pathologists also have employment options at:

- Government Hospitals
- Private Hospitals
- Universities
- Rehabilitation Centers for hearing impaired
- School & Colleges
- Government Agencies
- Special education school & colleges for children

PROGRAM FACTS

- **Program Duration**: 4 Years (Credit Hours 140)
- **Timing**: Morning 08:30 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: Minimum (50%) 12 years of education/HSSC/ A-Level/ Intermediate (Pre-Medical) or Equivalent
- **Location**: Defence Road Campus, Lahore.

RECOGNIZED BY

Higher Education Commission

ROAD MAP

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INTRODUCTION
Speech and Language Pathology is the study of human communication disorders. The Speech Language Pathology (SLP) assess, diagnose and treat children and adults with a wide range of communication disorders including speech language and voice disorders and swallowing difficulties, both development and acquired.

In addition to the traditional roles, speech language pathologist is trained in the assessment and treatment of individuals across the lifespan who may present with autism, speech language disorders, dyslexia, vocal pathology, stuttering, hearing impairment, brain injury, stroke, degenerative nervous system disease, and swallowing difficulties.

Clearly, the scope of practice of this profession has evolved and is not one of simply treating speech and language disorders.

CAREER PROSPECTS
After successful completion of 4 years degree offered at University of Lahore, the SLP graduates will be certified to do their independent private clinical practices.

In addition to private clinical practice, speech language pathologists also have employment options at:

RECOGNIZED BY
• Government Hospitals
• Private Hospitals
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• Rehabilitation Centres for hearing impaired
• School & Colleges
• Government Agencies
• Special education school & colleges for children

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PROGRAM FACTS
• Program Duration
4 Years (Credit Hours 139)
• Timing
Morning 08:30 AM - 05:00 PM (Monday – Friday)
• Entry Requirements
Minimum (50%) 12 years of education/HSSC/ A-Level/ Intermediate (Pre-Medical) Equivalent
• Location
Defence Road Campus, Lahore.

BACHELOR OF SCIENCE IN
SPEECH LANGUAGE PATHOLOGY

The University of Lahore

270
Allied Health Sciences
271
INTRODUCTION

Occupational Therapy enables people to do the ‘day-to-day activities that are important to them’ despite impairments, activity limitations or participation restrictions or despite risks for those problems. Occupations are another name for these day-to-day activities. You will acquire the skills to facilitate independent living in people with a variety of disabilities and disorders.

Occupational therapy is directed to those who possess or who are at risk for physical disabilities, cognitive disabilities, psychosocial dysfunctions, mental illness, development disorders, maladaptive behaviors, other disorders or conditions.

CAREER PROSPECTS

The scope of occupational therapy ranges from infancy to old age, and occupational therapists can work in fields such as:

- Government & Private Hospitals
- Independent Practice
- Special Schools & Colleges
- Sports Complexes Gyms
- Mental Hospitals
- Charity Departments

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PROGRAM FACTS

- **Program Duration**
  4 Years (Credit Hours 140)
- **Timing**
  Morning 08:30 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**
  Minimum (50%) 12 years of education HSSC/ A-Level/ Intermediate (Pre-Medical) or Equivalent
- **Location**
  Defence Road Campus, Lahore.

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MISSION STATEMENT
The mission of the Department of Optometry & Vision Sciences is to prepare, educate and train optometric physicians to practice at the highest level of proficiency, integrity, and professionalism; and to provide a multidisciplinary environment that encourages scholarly activity, service, and lifelong learning.

INTRODUCTION
DOVS is newly established department under the umbrella of Faculty of Allied Health Sciences (FAHS). The foundation milestone of this department is launching three Courses (OD, PP-OD, T-OD) in UOL. Optometry is an independent primary health care profession that encompasses the prevention and remediation of disorders of the eye and visual-system. Doctors of Optometry perform comprehensive examinations of both the internal and external structures of the eye and subjective and objective tests to evaluate patient vision, analyze test findings, and diagnose and manage visual efficiency and eye health. Optometrists also work with other health professionals in co-managing the care of patients.

All optometrists provide general eye and vision care—some through general practice and others through more specialized practice such as contact lenses, geriatrics, low vision services (for visually impaired patients), occupational vision (to protect and preserve workers’ vision and minimize eye strain), pediatrics, sports vision, and vision therapy.

DEGREES OFFERED
- DOCTOR OF OPTOMETRY
- POST PROFESSIONAL DIPLOMA IN DOCTOR OF OPTOMETRY
- TRANSITIONAL DIPLOMA IN DOCTOR OF OPTOMETRY
INTRODUCTION

This degree is designed especially for those students who want to excel their career in the field of Optometry. They will be called “Optometrist” and will add “Doctor” as Prefix in their names and “Optometry” as Suffix in their names. This Degree will provide professional skill to them and they will be in a position to get better jobs as an “Optometrist” in health settings, provide general eye and vision care—some through general practice and others through more specialized practice such as contact lenses, geriatrics, low vision services (for visually impaired patients), occupational vision (to protect and preserve workers’ vision and minimize eye strain), pediatrics, sports vision, and vision therapy. Currently there is a lot of demand for Optometrists in Pakistan as well as in USA, Canada, UK, Australia and in South Asia etc. It is estimated that one Optometrist is required per 10,000 people. But the total number of physiotherapy professionals in Pakistan is only in hundreds.

CAREER PROSPECTS

Doctors of Optometry are independent primary health care providers and represent the front line of vision health. The eye health and good vision of the public are the prime responsibilities of Pakistan’s Doctors of Optometry, who:  
- Specialize in the examination, diagnosis, treatment, management and prevention of disease and disorders of the visual system, the eye and associated structures  
- Diagnose ocular manifestations of systemic conditions such as diabetes and high blood pressure and complications of the aging process such as cataracts and macular degeneration  
- Prescribe medication to treat certain eye diseases  
- Prescribe and fit eye glasses and contact lenses as well as safety eyewear and subnormal vision devises  
- Provide vision therapy and low-vision rehabilitation  
- Work in conjunction with other health care providers to provide integrated, quality care for patients  
- Educate patients about vision health and lifestyle choices for protecting and enhancing good vision and health  
- Conduct research and promote advancements in the visual sciences.  
- Optometry is a regulated profession. ODs practice in a range of settings: most work in Govt. /Private practice, others work in offices, hospitals, community health centers, corporate optometry, research, teaching and administration.

PROGRAM FACTS

- Program Duration 5 Years (Credit Hours 172)  
- Timing Morning 08:00 AM - 05:00 PM (Monday – Friday)  
- Entry Requirements 12 years of education (Higher Secondary School Certificate/A Level/Intermediate/F. Sc Pre medical or Equivalent) with at least second Division with 50% marks  
- Location Defence Road Campus, Lahore.

RECOGNIZED BY Higher Education Commission

ROAD MAP

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| SEMESTER 9 | Cr. | HR. | SEMESTER 10 | Cr. | HR. |
| Clinical Rotations I (Fringration, screening and Pediatric care) | 6   |     | Clinical Rotation IV (Vitre-retina Clinic & Glaucoma Clinic) | 6   |     |
| Clinical Rotations II (Contact Lens, dispensing, low vision) | 6   |     | Research methodology and applied statistics and Research Project | 6   |     |
| Clinical Rotations III (Diagnostic & Paeds & Ophthalmology clinic) | 6   |     | | | |
INTRODUCTION
This degree is designed especially for those Optometry graduates who are the Grandfathers of the Optometry Profession in Pakistan. Graduates who are already working in different Govt./ Private Hospitals they were pioneers of Optometry field, One they taught and groomed optometry profession in Pakistan. Department of Optometry & Vision Sciences offering Post Professional Doctor of Optometry with B.Sc. Vision Sciences (15 Years) will study 4 semesters.

CAREER PROSPECTS
Post Professional Doctors of Optometry are independent primary health care providers and represent the front line of vision health. The eye health and good vision of the public are the prime responsibilities of Pakistan’s Doctors of Optometry, who:
- Specialize in the examination, diagnosis, treatment, management and prevention of disease and disorders of the visual system, the eye and associated structures
- Diagnose ocular manifestations of systemic conditions such as diabetes and high blood pressure and complications of the aging process such as cataracts and macular degeneration
- Prescribe medication to treat certain eye diseases
- Provide vision therapy and low-vision rehabilitation
- Work in conjunction with other health care providers to provide integrated, quality care for patients
- Educate patients about vision health and lifestyle choices for protecting and enhancing good vision and health

ROAD MAP

PROGRAM FACTS
- **Program Duration**: 2 Years (Credit Hours 72)
- **Timing**: Morning 11:00 AM - 06:00 PM (Monday – Friday)
- **Entry Requirements**: 15 years of education, B.Sc. Vision Sciences in relevant field
- **Location**: Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

INTRODUCTION
This degree is designed especially for those Optometry graduates who had completed their B.Sc. (Hons) Vision Sciences from a recognized institute. Department of Optometry & Vision Sciences offering Transitional Doctor of Optometry they will study 2 semesters.

CAREER PROSPECTS
Post Professional Doctors of Optometry are independent primary health care providers and represent the front line of vision health. The eye health and good vision of the public are the prime responsibilities of Pakistan’s Doctors of Optometry, who:
- Specialize in the examination, diagnosis, treatment, management and prevention of disease and disorders of the visual system, the eye and associated structures
- Diagnose ocular manifestations of systemic conditions such as diabetes and high blood pressure and complications of the aging process such as cataracts and macular degeneration
- Prescribe medication to treat certain eye diseases
- Provide vision therapy and low-vision rehabilitation
- Work in conjunction with other health care providers to provide integrated, quality care for patients
- Educate patients about vision health and lifestyle choices for protecting and enhancing good vision and health

ROAD MAP

PROGRAM FACTS
- **Program Duration**: 1 Years (Credit Hours 36)
- **Timing**: Morning 11:00 AM - 06:00 PM (Monday – Friday)
- **Entry Requirements**: 16 years of education, B.Sc. Vision Sciences, B.Sc. (Hons) Optometry/ B.Sc. (Hons) Optometry & Orthoptics in relevant field
- **Location**: Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission

as safety eyewear and subnormal vision devises
- Provide vision therapy and low-vision rehabilitation
- Work in conjunction with other health care providers to provide integrated, quality care for patients

SEMESTER 1
- **Human Anatomy & Histology**: 4 Hr.
- **Biochemistry and Genetics**: 3 Hr.
- **Communication Skills**: 3 Hr.
- **Neuro-Ophthalmology**: 2 Hr.
- **General and Ocular Pharmacology**: 2 Hr.
- **Refractive Surgeries and Eye Banking**: 2 Hr.

SEMESTER 2
- **Community Based Optical Rehabilitation**: 3 Hr.
- **General Pathology**: 3 Hr.
- **Introduction to Computer**: 3 Hr.
- **Mathematics for Optometry**: 3 Hr.
- **Bisalistics for Optometry**: 2 Hr.
- **Refraction**: 3 Hr.

SEMESTER 3
- **Clinical Reasoning and Medical Ethics**: 2 Hr.
- **Primary Eye Care**: 2 Hr.
- **Behavioral Sciences**: 2 Hr.
- **Optometric Procedures**: 4 Hr.
- **Pediatric Optometry & Strabismus**: 4 Hr.
- **Clinical Medicine of Eye**: 2 Hr.

SEMESTER 4
- **Advance Low Vision**: 4 Hr.
- **Clinical Ophthalmology**: 2 Hr.
- **Advance Contact Lens**: 3 Hr.
- **Final Research Project**: 6 Hr.
- **Pediatric Optometry & Strabismus**: 4 Hr.
- **Clinical Medicine of Eye**: 2 Hr.
LAHORE SCHOOL OF NURSING (LSN)

MISSION STATEMENT
To produce health-oriented nurses rather than disease-oriented nurses by utilizing need based, learning based and community based curriculum. Inculcate milieu that is conducive to critical thinking, problem solving, and is a step ladder to research culture.

INTRODUCTION
By the grace of Allah, beginning of BS Nursing Programme in University of Lahore is a great achievement for Nursing Profession. We hope that beginning step will be milestone of new Era of Nursing profession in Punjab. It is Two-Years (Post RN) and Four-Years BSN degree programme to prepare competent nurses who will develop innovative practical solution to complex health problems from the scientific perspective.

DEGREES OFFERED
- BS Nursing (4-Years)
- B.Sc Nursing -Post RN (2-Years)
BACHELOR OF SCIENCE IN NURSING (BSN)

INTRODUCTION
This programme consists of 137 credit hours with 44 core courses and one elective course. After completion of Four Year BS Nursing students will be able to:

a. Utilizing the nursing process to provide safe, competent, and holistic nursing care to patients/clients in variety of settings.
b. Utilizing effective critical thinking and problem solving in their professional practiced.
c. Utilizing scholarly skills and the use of scientific methods in critiquing and applying existing nursing theories and research findings in selected practice settings.
d. Utilizing effective oral and written communication in interpersonal and professional interactions with peers, clients, families, and other professional.
e. Developing leadership skills to promote development of the profession.

ROAD MAP

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<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
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<td>Mental Health Nursing</td>
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<td>Critical Care Nursing</td>
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<td>Introduction to Biostatistics</td>
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<td>Introduction to Nursing Theories</td>
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<td>Nursing Seminar / Role Transition</td>
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<td>Behavioral Psychology</td>
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PROGRAM FACTS

- Program Duration
  4 Years (Credit Hours 137)
- Timing
  Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  Minimum (50%) 12 years of education/HSSC/ A-Level/ Intermediate (Pre-Medical)/ Equivalent
- Location
  Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission
Pakistan Nursing Council

CAREER PROSPECTS
Graduate (BSN) nurses can work in a variety of practice settings such as hospitals, long-term care facilities, community and public health agencies, ambulatory care centers, Public Health Service, military services, Administration Medical centers and in any setting where health care services are needed. It includes operation room, critical care and emergency departments as well.

*CLINICAL PRACTICUM (COURSES)

- Accident and Emergency
- Community Health Nursing
- Critical Nursing
- Dental Health Nursing
- Education
- Management
- Mental Health Nursing
- Operation Theatre Nursing
- Paediatric Nursing
INTRODUCTION
This programme consists of 65 credit hours with 18 core courses and one elective course. After completion of Two Year BS Nursing students will be able to:

a. Utilizing the nursing process to provide safe, competent, and holistic nursing care to patients/clients in variety of settings.
b. Utilizing effective critical thinking and problem solving in their professional practiced.
c. Utilizing scholarly skills and the use of scientific methods in critiquing and applying existing nursing theories and research findings in selected practice settings.
d. Utilizing effective oral and written communication in interpersonal and professional interactions with peers, clients, families, and other professional.
e. Developing leadership skills to promote development of the profession.

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
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<td>Advance Concepts of Nursing- I</td>
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CAREER PROSPECTS
Graduate (BSN) nurses can work in a variety of practice settings such as hospitals, long-term care facilities, community and public health agencies, ambulatory care centers, Public Health Service, military services, Administration Medical centers and in any setting where health care services are needed. It includes operation room, critical care and emergency departments as well.

PROGRAM FACTS
- Program Duration
  2 Years (Credit Hours 65)
- Timing
  Morning 08:30 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  Matric (Scientific)
  Three Years General Nursing Diploma
  One Year Midwifery / One Year Specialization
  Valid PNC Registration Card, 3 Years Clinical Experience
- Location
  Defence Road Campus, Lahore.

RECOGNIZED BY
- Higher Education Commission
- Pakistan Nursing Council

BACHELOR OF SCIENCE IN NURSING (POST RN)
ARTS & ARCHITECTURE

- School of Architecture
- School of Creative Arts
MISSION STATEMENT
The School of Architecture at University of Lahore aims to evolve into a center of excellence in architectural education focusing on the human, socio-cultural, environmental, scientific and technological, aesthetic and philosophical values.

INTRODUCTION
The Architecture Program at University of Lahore prepares students to engage critically in the complex discourse of architectural practice and theory. Through research, analysis and exploration, students discover that design is found at the dynamic intersection of our social and physical environments. Faculty members with diverse perspectives guide students in their investigations of contemporary issues that supersede trends. Encouraged by interdisciplinary study, they craft varied ideas for the environment, finding passion and delight in the consideration of architecture.

The academic program of the School follows the framework of curriculum developed by the Higher Education Commission and Pakistan Council of Architects & Planners Pakistan. The curriculum is designed to balances the creative and technical aspects of architectural education. The core components of the curriculum are Architectural Design, History and Theory, Building Sciences, and Professional Development. The school consists of the state of the art workshops, lecture rooms, Computer laboratory, Studios, Library and other allied facilities.

LEARNING OUTCOMES
The objectives of the Bachelor of Architecture program are translated into a number of learning outcomes. These outcomes are directly related to the profession of architecture, the way in which it is practiced, and the knowledge components necessary for such a practice. The following list of outcomes represents the minimum learning outputs expected and therefore they are not exclusive:

• An ability to conceptualize and coordinate designs, addressing social, cultural, environmental and technological aspects of architecture.
• An ability to apply and integrate computer technology in design processes and products.
• An ability to utilize cutting edge building technology in design.
• An ability to apply visual and verbal communication skills at various stages of architectural design and project delivery processes.
• An ability to critically analyze building designs and conduct post occupancy evaluation studies.
• An ability to employ architectural research methods including data collection and analysis to assess and propose improvements in existing built environments.
• An ability to work collaboratively with teams of architects and various interdisciplinary design teams involved in the building industry.
• An ability to recognize diversity of needs, values, behavioral norms, social patterns as they relate to the creation of the built environment.
• Specific exercises and individual and group projects may help in achieving additional learning outcome.

DEGREE OFFERED
• Bachelor of Architecture (B.Arch) 5 Years
INTRODUCTION
The B.Arch. program balances the intensity of a professional education with opportunities to use the resources of a world-class university. The faculty of the department of architecture has developed a highly structured and intensive curriculum, one that emphasizes design, as well as theory, history, technology, representation, and structures. Basic conceptual skills are emphasized early on, along with introducing the fundamental skills of architecture. Students learn to communicate ideas through models and drawings, working fluidly and seamlessly between all modes of both analog and digital representation. All students spend their first three years following a core curriculum designed to lay a strong foundation for architectural education and beyond. During the final four semesters, students are encouraged to work across disciplines focusing on an intellectually rigorous and speculative course of study.

CAREER PROSPECTS
Career opportunities for professionally trained and qualified architects are immense. They can seek employment in both public and private sectors. They are frequently employed in consultancy and private architectural firms, teaching institutions, real estate development firms etc. The architects can set up their own business. International practice. With some years of experience in an organization, they are frequently employed in consultancy and private architectural firms, teaching institutions, real estate development firms etc. They can seek employment in both public and private sectors. They are frequently employed in consultancy and private architectural firms, teaching institutions, real estate development firms etc. They are frequently employed in consultancy and private architectural firms, teaching institutions, real estate development firms etc. They are frequently employed in consultancy and private architectural firms, teaching institutions, real estate development firms etc. They are frequently employed in consultancy and private architectural firms, teaching institutions, real estate development firms etc. They are frequently employed in consultancy and private architectural firms, teaching institutions, real estate development firms etc.
MISSION STATEMENT

Our mission is “To pursue excellence.” To develop professionals who can face challenges with ease and ethically manage the media activities in a dynamic and competitive environment in which technology is a key determinant of organizational success. We are committed to developing in students a dedication to lifelong learning, communication skills, analytical and critical thinking skills, appreciation of diversity, and professional excellence.

Our vision is “To ensure that the faculty and students of the School of Creative Arts study how media technologies elaborate stories, entertain as well as educate the various masses of the world so they can be responsible and creative in their expression.” We nurture a universal desire for free expression.

INTRODUCTION

Where the Dedication and Fire you have for Media, Creativity, and Learning has no Boundaries!

We’re proud to have one of the largest and most innovative Mass Communication and Film and Television programs in Pakistan. This is the time when the old models are collapsing and new electronic paths are being blazed. But for SOCA, it is the quality of the information being communicated - not the technology - that matters most. SOCA comprises a wide variety of disciplines, starting from the basic perspectives of Mass Media and Communication and then moving onto explore each area of the discipline through broad exposure. It has media labs equipped with professional cameras, sets, lights & sound system, where students are given in hand training and practice. We have one of the best high quality sound recording studio, highly sophisticated cameras specifically RED camera, audio and video facilities, which are always available for the ongoing projects of the students.

The facilities are designed around the principle that students need maximum exposure to the equipment to develop the competency required in media production fields.

Our vibrant and active faculty of scholars and professionals are passionate advocates to all who wish to learn. Their successes and expertise will help pave the way for you to find your own path with the best training and preparation for productive and responsible careers in the booming fields of mass communication and film & television.

We aim to develop versatile and creative media visionaries and leaders, equipped to respond to new situations within an ever changing and vigorous industry.

We hope that you will strongly consider joining us as you pursue your Mass Communication and Film and Television degree.

DEGREES OFFERED

• BS Media and Mass Communication
• BS Film and Television
• M.Sc Mass Communication
• M.Phil Media & Mass Communication Studies
  1. Research Track
  2. Production/Professional Track

SCHOOL OF CREATIVE ARTS (SOCA)
**BACHELORS OF SCIENCE IN MEDIA AND MASS COMMUNICATION**

**INTRODUCTION**
The Bachelor of Science (Hons) in Media and Communication Studies is characterized by its progressive structure, which allows for increasing specialization through the programme. The course has been designed as a rigorous yet interactive approach towards both theory and practical subjects. Specific studio courses, which are open ended in their approach, are designed to give the student a chance to interact with the faculty according to general agendas to discuss and develop new ideas. The core courses provide the student with the capability to harness the concepts and technologies according to their needs. A wide array of elective and summer courses have also been designed to further facilitate the students towards a better understanding of their curriculum and the field of media and communication. In general terms, the Bachelor of Science (Hons) in Media and Communication aims to provide the following opportunities for students.

**CAREER PROSPECTS**
The students of this course will acquire the training and skills required for excelling in the fields of print, television, radio and online journalism, corporate communications, media theory, media regulation and public policy, and media and public relations.

**ROAD MAP**

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<tr>
<th>SEMESTER 1</th>
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<td>Introduction to Sociology</td>
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**SEMINAR 5**

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</table>
INTRODUCTION
The degree offers the state of the art and unrivalled combination of academic, theoretical and professional training in the field of Film and Television in Pakistan. BAFT promotes intellectual analysis of film, television, video and digital media arts, developing knowledge, understanding, and key skills for film and television industries in Pakistan. The program provides a variable and progressive structure in which students are able to gain knowledge and understanding of film and television studies. It helps developing a mature understanding of the history, scope and sociocultural impact of Film, Cinema and Television in Pakistan and globally. BAFT offers extensive experience in the production of Film and Television content required for new trends in media and communication industries in Pakistan. The degree enables Development of knowledge, understanding and key skills required to produce or research new trends in Film and Television in Pakistan.

CAREER PROSPECTS
The students of this course will acquire the training and skills required for exceeding in the fields of infotainment, entertainment, cinema and television in Pakistan. They would be able to understand the application of theories of media, communication, Film, television and other forms of audio & visual media in their practical life.

ROAD MAP

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<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr.</th>
<th>SEMESTER 2</th>
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RECOGNIZED BY
Higher Education Commission

PROGRAM FACTS
- **Program Duration**: 4-Years (Credit Hours 132)
- **Timing**: Morning 09:00 AM - 05:00 PM (Monday – Friday)
- **Entry Requirements**: 12 Years Education (HSSC) Intermediate A Levels (minimum 45% Marks)
- **Location**: Defence Road Campus, Lahore.

SEMESTER 5 | Cr. | SEMESTER 6 | Cr. | SEMESTER 7 | Cr. | SEMESTER 8 | Cr. |
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<td>Digital Compositing and Color grading</td>
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<td>Screen Writing</td>
<td>3</td>
<td>Fiction Film</td>
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</tbody>
</table>
INTRODUCTION
The department aims to inculcate among the students an understanding regarding different media set-ups and how to work in different media outlets in a professional manner.

CAREER PROSPECTS
After graduating at the Department of Mass communication, the mass communicators would be able to compete in the market in a socially responsible manner to contribute to the public welfare and socio-cultural and national development. The graduates, trained at the department of Mass Communication, would have insights that would make them critical thinkers and problem-solvers in various areas of this profession.

AREA OF SPECIALIZATION

PUBLIC RELATIONS & ADVERTISING
- Copywriting Theory & Practice
- Theories, principles and practices of Public Relation/Advertising
- Media Management in Advertising and
- Public Relation

COMMUNICATION RESEARCH AND THEORY
- Communication Theories (Advance)
- Audience Analysis

PRINT AND ELECTRONIC MEDIA
- Radio Broadcasting and production
- TV Production
- Documentary Making

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
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<th>Cr. Hr.</th>
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<td>News Techniques: Reporting Theory &amp; Practice</td>
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<td>News Treatment and Page Designing</td>
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<td>Development Communication</td>
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<td>Opinion Writing (Features, Editorial Writing and Production)</td>
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The University of Lahore
INTRODUCTION
The MS program in Media, Culture, and Communication offers a rigorous examination of topics at the intersections of media and culture. Our research and curriculum emphasize the study of political communication, information management and new technologies, media history, and research methodologies. The overall objective of the program is to give deeper and critical insights into developments in the field and make students qualified for independent and advanced work inside and outside of media organizations.

CAREER PROSPECTS
The program trains agile researchers able to think critically and deeply about rapidly changing industries, technologies, and cultures. You will work with leading faculty from a wide variety of media studies disciplines. Program builds careers as astute analyzers of media, navigating new and complex domains.

ELECTIVES
- M.Phil Seminar
- Media and Public Opinion
- Media Management
- Media, Politics and Policy
- Political Communication

ROAD MAP

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<td>Approaches to Mass Communication Studies</td>
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<td>International &amp; Cross Cultural Communication</td>
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<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
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</thead>
</table>

INTRODUCTION
The program offers you the opportunity to study media production and performance, media analysis, media business and entrepreneurship and emergent media in the context of rapidly converging industries. The course outline is concerned with the historical, theoretical, and cultural contexts within which audio, video, film, new media, and popular culture are produced and experienced.

CAREER PROSPECTS
The degree enables the student to develop individual talent and the ability for the student to work in collaboration with others within a diverse and vibrant community. Thus providing a high production standard possible, thereby allowing students the ability to create portfolios. That enables them to understand the media how it influences people.

ELECTIVES
- Documentary
- Marketing for entertainment/Communication and Art Industry

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
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<tr>
<td>Media Production Management</td>
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<td>Visual Communication for Digital Media</td>
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The University of Lahore
• College of Law
• Post Graduate Institute of Law
MISSION STATEMENT
To cultivate a new generation of lawyers who will help the stagnant legal society to evolve, to match the high international standards and revolutionize the legal profession with their acquired knowledge and skills. They will not only build a bright future for themselves but will also help the country as well by providing up to date guidance to the government and the ordinary people. Suitable for industry executives, bank executives, engineers, health service professionals, public departments and educationists who seek to complement their existing degrees with a PG Diploma, B.Com or M.Com. These degrees will ensure career advancement and provide an understanding of the changing business environment.

INTRODUCTION
Law is a field, which is in a state of constant evolution, given the frequent changes in the mindsets and ideas throughout the world. Given its fluid nature, it becomes a highly competitive arena.

Lawyers are expected to be highly adaptive to new situations and their problem-solving skills ought to be exemplary. These skills obviously do not come to them naturally; rather they have to be acquired through the legal knowledge gained through education.

DEGREE OFFERED
- Bachelor of Law (5 Years)

College of Law, through its Bachelors program, aims to give this knowledge to young minds, if they seek to pursue a career in the legal profession. Pakistan’s legal society is large only the most hard-working and able minded prevail over the others and for them, there are no limits to what they can achieve through this profession. The extensive courses offered by the College of Law focus on not only giving the young scholars the necessary tools to begin a legal career but are also designed to add to their knowledge so that their vision increases vis-à-vis other aspects of life, given the fact that law is inextricably intertwined with all other fields of activity.

The College proposes to achieve this goal in the highest standard with the help of senior practitioners of Law who will not only teach the students but also offer their personal expertise to help them to understand law and its practice much more effectively.
INTRODUCTION
Our LLB degree is in accordance with the guidelines and requirements of the HEC and Pakistan Bar Council. This will be an academic as well as professional degree in law and legal studies. The courses recommended by the Pakistan Bar Council as basic courses for joining the legal profession are part of the curriculum.

CAREER PROSPECTS
To become a part of the esteemed legal profession as a lawyer or the part of the judiciary and change the face of the field in Pakistan. Graduates may also choose to expand their horizons to legal professions outside the country.

PROGRAM FACTS
- Program Duration: 5 Years (Credit Hours 163)
- Timing: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: FA /FSC or GCE A-Levels or Equivalent, Min 2nd Div & Interview
- Location: Defence Road Campus, Lahore.

RECOGNIZED BY
Higher Education Commission | Pakistan Bar Council

ROAD MAP

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<td>Islamic Studies/Ethics</td>
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<td>Introduction To European Union Laws</td>
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<td>Constitutional Law-I (Comparative)</td>
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<td>Law of Contract-I</td>
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<td>Law of Torts</td>
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<td>Islamic Jurisprudence-II</td>
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<td>Consumer Protection Laws</td>
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<td>Minor Acts</td>
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ELECTIVE COURSES
- Consumer Protection Laws
- Islamic Commercial Laws
- Labor Laws
- Civil Service Laws In Pakistan

INTERNERSHIP
After completion of 8th semester during vacations

Note:
In Semester-9th and 10th students will be required to take two of the elective courses in the list of Elective Courses.
MISSION STATEMENT
To cultivate a new generation of lawyers who will help the stagnant legal society to evolve, to match the high international standards and revolutionize the legal profession with their acquired knowledge and skills. They will not only build a bright future for themselves but will also help the country as well by providing up to date guidance to the government and the ordinary people. Suitable for industry executives, bank executives, engineers, health service professionals, public departments and educator who seek to complement their existing degrees with a PG Diploma, B.Com or M.Com. These degrees will ensure career advancement and provide an understanding of the changing business environment.

INTRODUCTION
At PIL, we are dedicated to absolute top-tier education. And we are equally devoted to using our extensive intellectual capital to help resolve real-world problems and to create a more just society. One of our distinct features is to foster an environment where our students and faculty partner with people beyond the school: identifying challenges, forging alliances, solving problems, and sparking change. Our highly distinguished faculty prepares our students for careers in a world of swift change, intricacy, and opportunity. At PIL, we meet this formidable challenge by offering a curriculum that offers a solid legal and ethical foundation, enriched by courses in emerging fields and practical experience. We train our students to think and reflect critically, carefully, and thoughtfully and we do better than any other institution. The education and training you will receive as a PIL Law student is unrivalled, and private and public employers alike will be eager to have you as part of their teams. Come visit us and let us show you why our students and faculty are so content and satisfied to be here.

DEGREE OFFERED
• Master of Laws - LL.M (2 Years)

INTRODUCTION
LL.M program is designed to develop sound theoretical knowledge of the subject and its application. This program helps the students to grasp tools and skills for advanced studies leading to Ph.D. Furthermore, it aims to disseminate comprehensive knowledge focused at advance legal issues.

CAREER PROSPECTS
To become a part of the esteemed legal profession as a lawyer or the part of the judiciary and change the face of the field in Pakistan. Graduates may also choose to expand their horizons to legal professions outside the country.

ELECTIVE COURSES
• Constitutional Law of Pakistan
• Criminology
• Intellectual Property Laws
• International Economic Law
• International Trade Law
• Islamic Laws
• Labour Laws
• Law and Politics
• Law of Evidence
• Law of International Institutions
• Law of Taxation
• Research Methodology
• Thesis/Dissertation

ROAD MAP
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<td>13 Two Courses in lieu of thesis</td>
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PROGRAM FACTS
• Program Duration
  5-Years (Credit Hours 163)
• Timing
  Morning 08:00 AM - 05:00 PM (Monday – Friday)
• Entry Requirements
  FA / FSC or GCE A-Levels or Equivalent, Min 2nd Div & Interview
• Location
  Defence Road Campus, Lahore.

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Higher Education Commission | Pakistan Bar Council
SOCIAL SCIENCES

- Islamic Studies
- Economics
- School of Integrated Social Sciences
- Education
MISSION STATEMENT
Produce such learned scholars for society who have grip on the tradition and may have a mature understanding of the contemporary issues with a clear and perfect skill in the modern thoughts and academic approaches.

INTRODUCTION
Modern times have brought many new challenges for humanity and especially for Muslim world. These challenges are both at home and at international level. But it is unfortunate that traditional institutions have failed in genuine contribution for the solution of prevalent problems and proper response to the contemporary challenges. Furthermore, the traditional religious institutions have created a divide in the society. The new generation educated through modern educational institutes and universities and those who are trained in traditional religious madrassas are poles apart in their understanding of Islamic teachings and their approach towards contemporary issues too. A comprehensive course which may have merits of both of these systems can bridge the gap. The University of Lahore has established the Department of Islamic Studies with the same vision and objectives that we may produce such learned scholars for society who have grip on the tradition and may have a mature understanding of the contemporary issues with a clear and perfect skill in the modern thoughts and academic approaches. These scholars will be able to present Islam in accordance with its real spirit before society.
INTRODUCTION
Islam is a religion of peace, moderation and progression, but the Western media paints a negative image of our faith and is presenting it as synonymous with terrorism. Muslim seminaries—where learners are exposed to the classical Islam cut off from the contemporary world—have not risen to the challenge. It is against this backdrop of rigidity of the religious class that this university proposes to acquaint students with Islam teachings in a moderate environment so that they may portray the belief appropriately.

CAREER PROSPECTS
MPhil in Islamic Studies is an intensive programme that gives us a thorough understanding of Islamic teachings and thoughts. It encourages learners to be inquisitive by engaging in Islamic research projects. The department aims at realizing the long cherished dream of striking a balance between the pristine values of Islam as outlined in the Holy Qur’an and the Sunnah, and the practical challenges of modern times. We try to cultivate a spirit of dispassionate research bringing about chiselled minds firm in belief but endowed with tolerance without, of course, being apologetic. The highly qualified academicians have been engaged to focus on achieving excellence in education-cum-research. The faculty will contribute to the intellectual, cultural and social development of the institution domains.

CAREER PROSPECTS
PhD in Islamic Studies is an intensive programme that gives us a thorough understanding of Islamic teachings and thoughts. It encourages learners to be inquisitive by engaging in Islamic research projects. The department aims at realizing the long cherished dream of striking a balance between the pristine values of Islam as outlined in the Holy Qur’an and the Sunnah, and the practical challenges of modern times. We try to cultivate a spirit of dispassionate research bringing about chiselled minds firm in belief but endowed with tolerance without, of course, being apologetic. The highly qualified academicians have been engaged to focus on achieving excellence in education-cum-research. The faculty will contribute to the intellectual, cultural and social development of the institution.

ROAD MAP

<table>
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<th>SEMESTER 1</th>
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</thead>
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<tr>
<td>Quranic Sciences</td>
<td>3</td>
<td>Hadith Science</td>
<td>3</td>
<td>Functional English</td>
<td>2</td>
<td>Dissertation/Choose Two Courses</td>
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<tr>
<td>Islamic Jurisprudence &amp; History</td>
<td>3</td>
<td>Study of Sira and Tābi‘īn</td>
<td>3</td>
<td>Arabic Language and Literature</td>
<td>3</td>
<td>Comparative Study of Religion</td>
<td>6</td>
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<tr>
<td>Research Methodology</td>
<td>3</td>
<td>Islam &amp; Modern Thoughts</td>
<td>3</td>
<td>Creationism (Course as substitute of thesis)</td>
<td>6</td>
<td>Human Rights in Islam and West (Course as substitute of thesis)</td>
<td>6</td>
</tr>
</tbody>
</table>

INTRODUCTION
Islam is a religion of peace, moderation and progression, but the Western media paints a negative image of our faith and is presenting it as synonymous with terrorism. Muslim seminaries—where learners are exposed to the classical Islam cut off from the contemporary world—have not risen to the challenge. It is against this backdrop of rigidity of the religious class that this university proposes to acquaint students with Islam teachings in a moderate environment so that they may portray the belief appropriately.

CAREER PROSPECTS
MPhil in Islamic Studies is an intensive programme that gives us a thorough understanding of Islamic teachings and thoughts. It encourages learners to be inquisitive by engaging in Islamic research projects. The department aims at realizing the long cherished dream of striking a balance between the pristine values of Islam as outlined in the Holy Qur’an and the Sunnah, and the practical challenges of modern times. We try to cultivate a spirit of dispassionate research bringing about chiselled minds firm in belief but endowed with tolerance without, of course, being apologetic. The highly qualified academicians have been engaged to focus on achieving excellence in education-cum-research. The faculty will contribute to the intellectual, cultural and social development of the institution.

CAREER PROSPECTS
PhD in Islamic Studies is an intensive programme that gives us a thorough understanding of Islamic teachings and thoughts. It encourages learners to be inquisitive by engaging in Islamic research projects. The department aims at realizing the long cherished dream of striking a balance between the pristine values of Islam as outlined in the Holy Qur’an and the Sunnah, and the practical challenges of modern times. We try to cultivate a spirit of dispassionate research bringing about chiselled minds firm in belief but endowed with tolerance without, of course, being apologetic. The highly qualified academicians have been engaged to focus on achieving excellence in education-cum-research. The faculty will contribute to the intellectual, cultural and social development of the institution.

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
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<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
</tr>
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<tbody>
<tr>
<td>Research Principles &amp; Methodology</td>
<td>3</td>
<td>Health Sciences</td>
<td>3</td>
<td>Research Work</td>
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<td>Research Work</td>
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<tr>
<td>Quranic Sciences</td>
<td>3</td>
<td>History of Muslim Thought</td>
<td>3</td>
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</tbody>
</table>

PROGRAM FACTS
- Program Duration
  2-Years (Credit Hours 30)
- Timing
  Morning 8:00 AM to 5:00 PM
  Monday to Wednesday
  Weekend 9:00 AM to 6:00 PM
- Entry Requirements
  Master degree in Islamic Studies/BS Islamic Studies/BS (Arabic) 4 years with Shariah Subjects/Al-Shahadat-ul-Aalamiyya from HEC recognized institution with 2.5 CGPA or at least 60% marks under semester system or 2nd Division (50% marks) under annual system.
- Location
  Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

PROGRAM FACTS
- Program Duration
  3-Years (Credit Hours 42)
- Timing
  Morning 8:00 AM to 5:00 PM
  Monday to Wednesday
  Weekend 9:00 AM to 6:00 PM
- Entry Requirements
  MPhil/MS Islamic Studies/other equivalent with MPhil degree (18 years of education) in relevant discipline from HEC recognized University with 3.0 (4.0) CGPA or at least 60% marks under semester system or 1st Division (60% marks) under annual system.
- Location
  Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission
MISSION STATEMENT
“The department offers high quality education with a focus on research excellence, develop ethics norms, meet challenges of diversified culture and foster demand driven education for all. Provide purposeful education and training to enhance analytical ability of students to elucidate contemporary economic problems, impart independent and creative thinking to enable students for lifetime learning. The students are prepared to make valuable contributions at national, as well as, international level in the economics sphere. Our graduates are envisaged to lead the nation in their areas of specialization, moral values, as well as, professional ethics.”

INTRODUCTION
There is an intense awakening that sound economic policies for any country require the services of highly trained economists, having analytical ability and problem solving skills. Also, it is a well-recognized fact that application of new ideas and economic theory leads to create new knowledge; one of the main objectives and contribution of universities for which these institutions are meant for. The Department of Economics ensures development of the skills needed for variety of services in the education sector, international institutions and public sector. We have introduced graduate and post graduate programs which meet market demands and also enhance intellectual ability of our students. The department aims at to foster advanced education and training in Economics. For this purpose, M.Sc in Economics, M. Phil. in Applied Economics and Ph.D. Economics programs has been introduced. We assure a purposeful academic and social life at “The University of Lahore” and students feel proud of investing their precious time and energy for bright career.

We have opened a window of opportunity to fulfill your dreams to have quality education. Our doors open to attract good students on merit, to impart quality education. All major state of the art facilities are available for you. Now, students may benefit from it and get ready to embrace the challenge needed to achieve their goals. We care our students and ensure quality education.

DEGREES OFFERED
- BS Economics
- BS Business Economics and Finance
- M.Sc Economics
- M.Sc Business Economics and Finance
- M.Phil in Applied Economics / MS in Economics
- Ph.D Economics

DEPARTMENT OF ECONOMICS
The department aims at to foster advanced education and training in Economics. For this purpose, M.Sc in Economics, M. Phil. in Applied Economics and Ph.D. Economics programs has been introduced. We assure a purposeful academic and social life at “The University of Lahore” and students feel proud of investing their precious time and energy for bright career.

We have opened a window of opportunity to fulfill your dreams to have quality education. Our doors open to attract good students on merit, to impart quality education. All major state of the art facilities are available for you. Now, students may benefit from it and get ready to embrace the challenge needed to achieve their goals. We care our students and ensure quality education.
ROAD MAP

OPTIONAL COURSES
- Comparative Economic Systems
- Rural Development
- Industrial Economics
- Health Economics
- Urban Economics
- Regional Economics
- Financial markets
- Agricultural Economics
- Entrepreneurial Economics
- Independent Study
- Thesis

Note: (Students have to take six courses from the list of courses given below.)

OPTIONAL COURSES
- Management Information System
- Accounts
- Real Estate
- Stock Market
- Project Appraisal and Investment Analysis
- Transport Economics
- National Economics
- Poverty and Income Distribution
- Labor Economics
- Political Economy

PROGRAM FACTS
- Program Duration
  4-Years (Credit Hours 130)
- Timing
  Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  12 Years of Education, Intermediate with at least 2nd Division
  Dep’t. entry test.
- Location
  Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

ROAD MAP

SEASON 1 Cr. Hr.
Principles of Microeconomics 3
English 3
Pak Studies 2
Mathematics I 3
Introduction to computer 3
Optional (Non-Econ) 3

SEASON 2 Cr. Hr.
Principles of Macro Economics 3
English II 3
Islamic Studies 2
Mathematics II 3
Optional (Non-Econ) 3

SEASON 3 Cr. Hr.
Intermediate Micro Economics 3
Statistics I 3
English III 3
Development Economics: Theory 3
Optional (Non-Econ) 3

SEASON 4 Cr. Hr.
Intermediate Macro Economics 3
Statistics II 3
Principles of Management 3
World Economics: History 3
Optional (Non-Econ) 3

SEASON 5 Cr. Hr.
Micro Econ. Analysis 3
Dynamic Micro. Economics analysis 3
Issues in Pak Economy 3
Elective (Economics) 3
Optional (Non-Econ) 3

SEASON 6 Cr. Hr.
Econ. Growth Models 3
Economics I 3
Islamic Economics 3
Elective I (Economics) 3
Elective I (Economics) 3

SEASON 7 Cr. Hr.
International Trade Theory 3
Research Methods 3
Economics II 3
Public Sector Economics 3
Elective II (Economics) 3

SEASON 8 Cr. Hr.
Monetary economics 3
Managerial Economics 3
International Finance 3
Optional Economics -
Thesis(Optional Econ. Two optional courses Optional Economics)
Elective IV (Economics) 3

BACHELOR OF SCIENCE IN
ECONOMICS

PROGRAM FACTS
- Program Duration
  4-Years (Credit Hours 131)
- Timing
  Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  12 Years of Education, Intermediate with at least 2nd Division
  Dep’t. entry test.
- Location
  Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

ROAD MAP

SEASON 1 Cr. Hr.
Introduction to Economic Theory 3
Basic Mathematics 3
Financial Accounting: 1 3
Statistics for Business & Economics 3
Introduction to computer 3
Optional (Non-Econ) 3

SEASON 2 Cr. Hr.
Principles of Micro-Economics 3
Financial Accounting: II 3
Development Economics: Theory 3
Optional (Non-Econ) 3

SEASON 3 Cr. Hr.
Principles of Macro-Economics 3
Business English: II 3
Math. for Econ. & Business Economics 3
Business English I 3
Pak Studies 2

SEASON 4 Cr. Hr.
Business/Finance) 3
International Banking 3
Public Policies 3
Banking and Finance 3
Optional (Non-Econ) 3

SEASON 5 Cr. Hr.
Intermediate Microeconomics 3
Applied Principles of Economics & Management 3
Art of Public Speaking 3
English 3
Econometrics: I 3

SEASON 6 Cr. Hr.
Applied Principles of Economics & Management 3
Advance Corporate Finance 3
International Trade & Finance 3
Financial Management 3
Monetary Economics 3

SEASON 7 Cr. Hr.
Advanced Corporate Finance 3
International Trade & Finance 3
Islamic Banking and Finance 3
Managerial Economics 3
Public Finance 3

SEASON 8 Cr. Hr.
Cost benefit Analysis (Projects) 3
Issues in Financial Market and Pak Economy 3
Islamic Banking and Finance 3
Thesis/Optional Econ. Two optional courses Optional Economics 3
Islamic studies 3

BACHELOR OF SCIENCE IN
BUSINESS ECONOMICS: BANKING AND FINANCE

PROGRAM FACTS
- Program Duration
  4-Years (Credit Hours 131)
- Timing
  Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements
  12 Years of Education, Intermediate with at least 2nd Division
  Dep’t. entry test.
- Location
  Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission
INTRODUCTION
M.Sc. Economics program is designed to develop sound theoretical knowledge of the subject. It is a two years program, i.e. four semesters. This program helps the students to equip themselves with tools and skills for advanced studies leading to M.Phil. and/or Ph.D. Degree. Furthermore, it aims at disseminating comprehensive knowledge focused to ensure quantitative skills and develop analytical ability. It also helps to develop lifelong learning ability among students.

CAREER PROSPECTS
The completion of the program leads to open doors for students to enter various fields like banks, economic consulting firms, and non-governmental organizations. Students often secure full-time employment with organizations where they had internships or part-time employment.

ROAD MAP

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<tr>
<td>Micro-economic Theory-I</td>
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<td>Applied Economics-I</td>
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<td>Macro-economic Theory-I</td>
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<td>Research Methodology and Computer Application</td>
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<td>Mathematical Economics-I</td>
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<td>Islamic Economics</td>
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<tr>
<td>Applied Statistics for Economists</td>
<td>3</td>
<td>Two Optional Courses (3 Credit Hrs. each)</td>
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<tr>
<td>Micro-economic Theory-II</td>
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<td>Public Sector Economics</td>
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<td>Macro-economic Theory-II</td>
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<td>Development Economics</td>
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<td>Mathematical Economics-II</td>
<td>3</td>
<td>Issues in Pakistan Economy</td>
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<tr>
<td>Applied Econometrics-I</td>
<td>3</td>
<td>Applied Statistics for Business Economics</td>
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<td>Islamic Economics</td>
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<td>Business Research Methods</td>
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<td>Micro-economics-I</td>
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<td>Management Information System</td>
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<td>Macroeconomic-Theory</td>
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<td>Business Communication</td>
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<td>Financial Management</td>
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<td>Micro-economic Theory</td>
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<td>General Equilibrium</td>
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<td>Macroeconomics</td>
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<td>Welfare Economics</td>
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<td>Monetary Theory and Policy</td>
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<td>Micro-economic Theory II</td>
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<td>Applied Microeconomics</td>
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<td>Macroeconomics</td>
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<tr>
<td>Macroeconomics</td>
<td>3</td>
<td>Public Sector Economics</td>
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</tr>
<tr>
<td>Islamic Economics</td>
<td>3</td>
<td>M.Sc. Thesis</td>
<td>3</td>
</tr>
</tbody>
</table>

OPTIONAL COURSES
- Managerial Economics
- Human Resource Development and Policy
- Economic Development Policy
- WTO and International Finance
- Economic Growth Models
- History of Economic Thought
- Environmental Economics
- Cost Benefit Analysis
- Institutional Economics
- General Equilibrium and Welfare Economics
- Monetary Theory and Policy
- Applied Microeconomics
- Dynamic Macroeconomics
- Public Sector Economics
- M.Sc. Thesis

OPTIONAL COURSES
- Investment/ Project Management
- Human Resource Development and Management
- Applied Econometrics: Modelling & Forecasting
- Optional -I
- Optional -II

PROGRAM FACTS
- Program Duration: 2 Years (Credit Hours 65)
- Timing: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: B.A/B.Sc./B.Com with Economics as an Elective subject from HEC recognized institution with at least 2nd Division under annual system.
- Location: Raiwind Road Campus, Lahore

RECOGNIZED BY: Higher Education Commission

INTRODUCTION
In the present time role of financial institutions and industry is vital for socio-economic development of any country. Keeping in view its ever increasing demand, department of economics felt its responsibility to introduce this program to address the issues and solve the problems of financial markets, institutions and business enterprises in the country. This program integrates two similar contemporary fields i.e. business economics and finance to provide those human resource, which is fully equipped with sound theoretical and practical understanding of business economics and financial skills. The prime interest is to target the markets of industries and trade, banking and finance, capital markets, development and planning agencies and public and private enterprises.

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
<th>Cr-Hr</th>
<th>SEMESTER 2</th>
<th>Cr-Hr</th>
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</thead>
<tbody>
<tr>
<td>Principals of Microeconomics</td>
<td>3</td>
<td>Islamic Banking &amp; Finance</td>
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<tr>
<td>Mathematics for Business &amp; Economics</td>
<td>3</td>
<td>Principals of Microeconomics</td>
<td>3</td>
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<tr>
<td>Principals of Financial Accounting</td>
<td>3</td>
<td>Statistics for Business Economics</td>
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<tr>
<td>Financial Management</td>
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<td>Management Information System</td>
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<td>Business Communication</td>
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<td>Business Research Methods</td>
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<td>Management Information System</td>
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<td>Monetary Theory and Policy</td>
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<td>Macroeconomics</td>
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<tr>
<td>Applied Microeconomics</td>
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<td>Public Sector Economics</td>
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<tr>
<td>Management Information System</td>
<td>3</td>
<td>M.Sc. Thesis</td>
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</tbody>
</table>

OPTIONAL COURSES
- Investment/ Project Management
- Human Resource Development and Management
- Applied Econometrics- Modelling & Forecasting
- Optional -I
- Optional -II

PROGRAM FACTS
- Program Duration: 2 Years (Credit Hours 65)
- Timing: Morning 08:00 AM - 05:00 PM (Monday – Friday)
- Entry Requirements: B.A/B.Sc./B.Com with Economics as an Elective subject from HEC recognized institution with at least 2nd Division under annual system.
- Location: Raiwind Road Campus, Lahore

RECOGNIZED BY: Higher Education Commission

OPTIONAL COURSES
- International Finance
- Corporate Finance
- Macroeconomics
- Public Finance
- Computer Application in Business
- Cost and Benefit Analysis of Projects
- Insurance Risk Management
- Independent Study
- International Banking
- Research Report

Note: All courses are 3 credits.
INTRODUCTION

M.Phil in Applied Economics program offers to provide a solid background in economic theory, quantitative methods and applications appropriate to the needs of economists involved in policy formulation, planning and forecasting and welfare projects. This program emphasizes on applied economics and caters to the growing market demand for economic analysts. Major focus is on developing analytical and creative ability in students who can embark upon advanced research and offer quality training in Economics.

MS. IN ECONOMICS

M. S. in Economics may be awarded on completion of M. Phil course work; plus two extra courses. The student has to complete minimum 30 cr./hr. to be eligible for this degree. The M. Phil students who earn GAP less than 2.75 (in course work) can also apply for M. S. degree, s.t. he/she fulfills all other conditions/requirements.

CAREER PROSPECTS

The M. Phil. in Applied Economics is an ideal program for students who wish to pursue Ph.D studies. If your ambitions are to look for an academic career in economics, then this degree is also the best choice for you. Not only does it teach you to carry out independent scientific research, but it also provides an excellent stepping stone to embark upon further advanced studies in Economics. Completion of the degree equip you with the tools and capable to conduct independent research. Besides, it opens up door for jobs in the public and private sectors, teaching and research institutions, banking sector, various ministries at the federal and provincial level; particularly in the ministries/departments of planning and development, finance and commerce, etc. Furthermore, it strengthens own careers in different economic sectors and professional places of Management, Accountancy, Consultancy, Insurance, and Corporate Sector etc.

ROAD MAP

OPTIONAL COURSES LIST

- Advanced Microeconomics and Application
- Topics in Monetary Economics and Application
- Advanced Macroeconomics and Application
- Institutional Economics
- Advanced Applied Econometrics
- Topics in Environmental Economics and Application
- Major Economic Issues in Pakistan Economy
- Topics in Development Economics & Policy
- Topics in International Economics and Finance
- Project Analysis and Investment decision Making
- WTO, Globalization, International Trade and Integration
- Topics in Applied Econometric Techniques
- Applied Welfare Economics

Note: For further details, contact the department
Thesis 12 cr./hr.(06 Credit hrs. each semester)
Independent Study (Research Paper and Empirical Investigation)
DOCTOR OF PHILOSOPHY IN ECONOMICS (Ph.D)

INTRODUCTION
Ph.D. program in Economics provides graduate students an opportunity to enhance advanced knowledge in Economics and learn tools and skills to apply knowledge and equip students with application of econometrics tools for welfare of the society. Furthermore, this program will also enable students to conduct quality research in their specialized fields of interest in economics. The major areas offered for specializations are: Development Economics, International Economics, Applied Econometrics, Environmental Economics, Monetary Economics, Applied Macroeconomics/ Microeconomics, Public Sector Economics and Human Resource Development.

CAREER PROSPECTS
The Ph.D program is designed to prepare students for academic and research oriented jobs, as per market demand. Once you have completed this degree, you will have many career paths to choose from. However, your choice will be based on what your interests are and your area of specialization. Career prospects are many including Researcher, Educationist, Econometrician, advisors, policy analyst, Market research analyst, central banks expert, and careers in public sector and international organizations/financial institutions.

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Higher Education Commission

PROGRAM FACTS
• Program Duration 3-Years (Credit Hours 49)
• Timing Saturday & Sunday 9:00 AM to 6:00 PM
• Entry Requirements M.Phil. Equivalent Degree in Economics 3.0/4.0 CGPA or 60% marks in the last required degree GAT-Subject with 60% marks.
Dept. Test *Must have done M. Phil Thesis
• Location Raiwind Road Campus, Lahore

ROAD MAP

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<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
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<tbody>
<tr>
<td>Advanced Topics in Microeconomics</td>
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<td>Advanced Econometrics</td>
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<tr>
<td>Advanced Topics in Macroeconomics</td>
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<td>Seminar in Applied Econometrics</td>
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</tr>
<tr>
<td>One Optional Course</td>
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<td>Contemporary Economic Issues in Pakistan</td>
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<tr>
<td>Thesis / Dissertation</td>
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<th>SEMESTER 3</th>
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<tr>
<th>SEMESTER 5</th>
<th>Cr. Hr.</th>
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CORE COURSES
• Advanced Topics in Microeconomics
• Advanced Topics in Macroeconomics
• Advanced Econometrics
• Seminar in Applied Econometrics
• Contemporary Economic Issues in Pakistan
• Ph.D. Dissertation (06 Credit Hrs. in each semester, after course work)

Note: Ph.D. Dissertation (06 Credit Hrs. in each semester, after course work)

OPTIONAL COURSES
• Topics in Institutional Economics
• Advanced Topics in Public Sector Economics
• Advanced Topics in Environmental Economics
• Advanced Topics in Labor Economics and Human Resource Development
• Advanced Topics in Monetary Economics
• Seminar in Development Economics
• Issues in Development Economics
• Issues in Population Dynamics
• Advanced Topics in International Economics
MISSION STATEMENT
The undergraduate degree in Social Science aims to develop amongst students a sophisticated and comprehensive understanding of contemporary social science disciplines through three specializations: Politics and International Relations; International Development Studies and; Governance and Public Policy.

INTRODUCTION
• To provide thorough understanding about broader defense, political, social, economic, security, foreign policy, governance and sustainable development issues.
• To enhance the ability of students to conceptualize problems and apply analytical tools to solve them.
• Enhance understanding about the convergence and conflict of interest that shapes international relations and structuring of global politics, challenges to sustainability of development in the 21st century and issues in governance and public policy.
• To provide tools to sharpen critical thinking and development of skills for discourse analysis.
• Counsel on personal and career development goals.
• To provide a supportive and professional learning environment.

CAREER PROSPECTS
This degree is designed to enable our graduates to join the Civil Superior Services (CSS) of Pakistan, Federal and Provincial Government, NGOs and INGOs, The UN, local and foreign media outlets and thinktanks.

BACHELOR OF SCIENCE IN SOCIAL SCIENCE (POLITICS AND INTERNATIONAL RELATIONS)

DEGREES OFFERED
• BACHELOR OF SCIENCE IN SOCIAL SCIENCE

PROGRAM FACTS
• Program Duration
  4-Years (Credit Hours 130)
• Timing
  Morning 8:00 AM to 5:00 PM (Monday to Friday)
• Entry Requirements
  12 Years of education, Intermediate or equivalent at least 45%
• Location
  Defence Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

ROAD MAP

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<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
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<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
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<td>Islamic Studies/Ethics</td>
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PROGRAM FACTS
• Program Duration
  4-Years (Credit Hours 130)
• Timing
  Morning 8:00 AM to 5:00 PM (Monday to Friday)
• Entry Requirements
  12 Years of education, Intermediate or equivalent at least 45%
• Location
  Defence Road Campus, Lahore
## BACHELOR OF SCIENCE IN SOCIAL SCIENCE (INTERNATIONAL DEVELOPMENT STUDIES)

### ROAD MAP

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<td>Advanced Research Methodology</td>
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<td>Developmental Politics of Third World</td>
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<td>History of International Economic Expansion</td>
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<td>International Organizations and the Politics of Aid Institutions</td>
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<td>Survey of Economics and Development in Pakistan</td>
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## BACHELOR OF SCIENCE IN SOCIAL SCIENCE (GOVERNANCE AND PUBLIC POLICY)

### ROAD MAP

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<tr>
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<td>Elective III: Science, Technology and Public Policy</td>
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<td>Leadership and Policy-making</td>
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<td>Determinants of Pakistan’s Foreign Policy</td>
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DEPARTMENT OF EDUCATION

MISSION STATEMENT
"The department offers quality education with a focus on research excellence, develops truthful ethical norms, respects diversified culture create and disseminate knowledge for all. Equal importance is given to enhance analytical ability of students to elucidate contemporary educational problems, impart independent and creative thinking to enable students for lifetime learning. The students are prepared to make valuable contributions at national, as well as, international level in the educational sphere. Our graduates are envisaged to lead the nation in areas of specialization, moral value and professional ethics."

INTRODUCTION
Generally it is believed that no nation can develop without a good education system and “No system is better than its teachers. “We also believe that teachers are agents for change to provide academic leadership which can contribute to the process of education in our cultural context.

DEGREES OFFERED
• BS Education Business
• Master of Arts in Education (Special Education)
• Master of Arts in Education (Early Childhood Education)
• Master of Arts in Education (Leadership Management)
• Master of Arts in Education (Pure Education)
• MPhil Education
• PhD Education

in the way that is ultimately needed for development of our country. Here we provide an inspiring environment to improve practices of teaching and examination. We are also committed to provide academic leadership which can contribute to the policies and practices in education according to our social, psychological and ideological needs. Our qualified and skilled faculty is able to use their knowledge and experience to contribute to prepare teachers who can serve to bring reforms in classroom teaching, curriculum development and examination practices.

BACHELOR OF SCIENCE IN EDUCATION (WITH BUSINESS)

INTRODUCTION
The course will focus on the introduction of basic concepts in education and the ideological, Philosophical and Psychological foundations of education. The course will also include guidance and counseling as an essential component of education. Emphasis will be given on analyzing various sociological, political, economic and ideological forces that influence the process of education in our cultural context.

ROAD MAP

PROGRAM FACTS
• Program Duration 4-Years (Credit Hours 130)
• Timing Morning 8:00 AM to 5:00 PM (Monday to Friday)
• Entry Requirements 12 Years of education, Intermediate or equivalent at least 45%
• Location Rawalpindi Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

DEGREES OFFERED
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• Master of Arts in Education (Special Education)
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RECOGNIZED BY
Higher Education Commission

SEMESTER 1 Cr. Hr. SEMESTER 2 Cr. Hr. SEMESTER 3 Cr. Hr. SEMESTER 4 Cr. Hr.
English I 3 English II 3 English III 3 English IV 3
Introduction to Education 3 Mathematics 3 Educational Technology & ICT 3 Teaching of General Science (Professional I) 4
Institutional Methods 3 General Science 3 Philosophy of Education 3 Teaching of English Language (Professional II) 4
Computer Application 4 Education in Pakistan 4 Teaching of History & Geography (Professional I) 4 Curriculum Development 3
Pakistan Studies 2 Islamic Studies 2 Educational Psychology 3 Comparative Education 3
Fundamentals of Language and Linguistics 3 Language skills 3 Computer Assisted Language Learning 3

SEMESTER 5 Cr. Hr. SEMESTER 6 Cr. Hr. SEMESTER 7 Cr. Hr. SEMESTER 8 Cr. Hr.
Second Language Acquisition 3 Educational Assessment and Evaluation 3 Teaching Practice II 3 Area II: Term Paper 3
Teaching Practice I 6 Sociology of Education 3 Area II: Seminar on Trends & Issues in Education OR Area III: Qualitative Research Methods in Education 3
Research Methods in Education 3
Educational Planning and Management 3 Area II: Analysis and Interpretation of Data 3
Thesis 6

Note: Second phase of teaching practice will start in 7th semester. This phase covers 09 credits in total. In this phase students will teach in schools. After teaching practice students will join the department and attend reflective sessions. Students will reflect upon their observations and experiences during teaching practice.
INTRODUCTION

The course will focus on the introduction of basic concepts in education and the ideological, Philosophical and Psychological foundations of education. The course will also include guidance and counseling as an essential component of education. Emphasis will be given on analyzing various sociological, political, economic and ideological forces that influence the process of education in our cultural context.

MASTER OF ARTS IN EDUCATION (EDUCATIONAL MANAGEMENT & PLANNING)

INTRODUCTION

A master’s degree in educational management and planning is designed for professionals seeking expertise in this critical and highly specialized field. Our program focuses on educational management and planning through a theoretical orientation which places educational management and planning within broader social, historical, political, and cultural contexts. Coursework provides a context for students to critically examine educational management and planning. Themes of bilingual and multicultural education and care, critical thinking, and reflective teaching are infused throughout the educational management and planning course work. Educational management and planning is an exciting and dynamic field in which standards for teachers are being raised and career opportunities are constantly developing.

CAREER PROSPECTS

Students learn about the education of elementary and higher study development and psychology. Practical experience is another significant part of the program. For those people who like to be around children, a career in educational management and planning can be a labor of love.

ROAD MAP

The University of Lahore

RECOGNIZED BY

Higher Education Commission

PROGRAM FACTS

- Program Duration
  4-Years (Credit Hours 130)
- Timing
  Morning 8:00 AM to 5:00 PM (Monday to Friday)
- Entry Requirements
  12 Years of education, Intermediate or equivalent at least 45%
- Location
  Raiwind Road Campus, Lahore

SEMINAR 1

- English 3
- Pakistan Studies 2
- Introduction to Education Management 3
- Governance 3
- Socio Economics Problems of Pakistan 3
- English II 3
- Statistics 3
- Information Management of Education 3
- Management Control 3
- Educational Sociology 3

SEMINAR 2

- Health and physical Education 3
- Education Law 3
- Quality Control in Education 3
- Educational Psychology 3
- Educational Operations Management 3
- Educational Planning-I 3
- Educational Planning-II 3
- Educational Policy analysis 3

SEMINAR 3

- Power Politics in Education 3
- Economic Reasoning of Education 3
- LT Education 3
- Delegation of power/ processes/producers 3
- Research Methods in Education 3
- Organizational processes regulation 3
- Curriculum Development and implementation 3
- Challenges for education in developing Countries 3
- Assessment in Education 3
- Education and innovation 3
- Project/Thesis 6

SEMINAR 4

- Curriculum Planning and Evaluation-I 3
- Curriculum Planning and Evaluation-II 3
- Educational Policy analysis 3
- Project/Thesis 6
- Educational Evaluation-I 3
- Educational Evaluation-II 3

The University of Lahore

RECOGNIZED BY

Higher Education Commission

PROGRAM FACTS

- Program Duration
  2-Years (Credit Hours 66)
- Timing
  Morning (Monday to Friday) 8:00 AM to 5:00 PM
- Entry Requirements
  BA/BSc/BEd: Home Economics/BFA, Bachelor’s degree (14 years of education) from HEC recognized University with 2.00 CGPA or at least 50% marks under semester system or 2nd Division (45%) marks under annual system.
- Location
  Raiwind Road Campus, Lahore

SEMINAR 1

- Basic Concepts of Educational Planning-I 3
- Basic Concepts of Educational Planning-II 3
- Education -I 3
- Education -II 3
- Monitoring and Evaluation-I 3
- Monitoring and Evaluation-II 3

SEMINAR 2

- Plan Implementation and Management-I 3
- Plan Implementation and Management-II 3
- Project Implementation, Monitoring and Evaluation-I 3
- Project Implementation, Monitoring and Evaluation-II 3

SEMINAR 3

- Economics and Financing of Education-I 3
- Economics and Financing of Education-II 3
- Planning for Population Education-I 3
- Planning for Population Education-II 3

SEMINAR 4

- Project Implementation, Monitoring and Evaluation-I 3
- Project Implementation, Monitoring and Evaluation-II 3
- Research Thesis 12
- Educational Research and Statistics-I 3
- Educational Research and Statistics-II 3

The University of Lahore
INTRODUCTION
The University of Lahore’s Master of Special Education offers you, as an educator, the opportunity to build your skills and experience in the challenging and rewarding field of special education. Providing you with the qualifications to teach children with special needs, the Master of Special Education combines current research with practical coursework to ensure you are equipped with the best possible teaching techniques to enter your career as a special needs educator.

You will be able to specialize your studies in one of these key areas including education for the blind and vision impaired, deaf and hard of hearing, early childhood, emotional and behavioral problems, sensory disabilities or a general specialization where you can take a broader look at all of these areas.

CAREER PROSPECTS
Graduates may find opportunities in the following areas: Head or Leading Special Teacher positions; Assistant or Deputy Principal Positions; School Principal positions; Special Educational Administrators; Special Education Academic Managers; Training Head positions; and Special Education Curriculum leaders, among others.

PROGRAM FACTS
• Program Duration
  2-Years (Credit Hours 66)
• Timing
  Morning 8:00 AM to 5:00 PM (Monday to Friday)
• Entry Requirements
  BA/BSc/BSc Home Economics/BFA, Bachelor’s degree (14 years of education) from HEC recognized University with 2.00 CGPA or at least 50% marks under semester system or 2nd Division (45% marks) under annual system.
• Location
  Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

ROAD MAP
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<td>Teaching of Science in Special Education</td>
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<td>Teaching of Art &amp; Craft in Special Education</td>
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<td>Special Education Teaching Methods &amp; Specialized Services</td>
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<td>Special Education Assessment &amp; Interpretation</td>
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TEACHING PRACTICE-1

INTRODUCTION
A master’s degree in early childhood education (ECE) is designed for professionals seeking expertise in this critical and highly specialized field. Our program focuses on early children education through a theoretical orientation which places early childhood education within broader social, political, and cultural contexts. Coursework provides a context for students to critically examine early education and child care. Themes of bilingual and multicultural education and care, critical thinking, and reflective teaching are infused throughout the Early Childhood coursework. Early Childhood Education is an exciting and dynamic field in which standards for teachers are being raised and career opportunities are constantly developing.

CAREER PROSPECTS
Students learn about the education of children and study early childhood development, nutrition, first aid, children’s literature and child psychology. Practical experience is an integral part of the program. For those people who love children, a career in Early Childhood Education can be a labor of love.

PROGRAM FACTS
• Program Duration
  2-Years (Credit Hours 66)
• Timing
  Morning (Monday to Friday)
  8:00 AM to 5:00 PM
• Entry Requirements
  BA/BSc/BSc Home Economics/BFA, Bachelor’s degree (14 years of education) from HEC recognized University with 2.00 CGPA or at least 50% marks under semester system or 2nd Division (45% marks) under annual system.
• Location
  Raiwind Road Campus, Lahore

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<td>Trends and Issues in Early Childhood Education</td>
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<td>Teaching of Art and Craft in Early Childhood Education</td>
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<td>Integration of Technology in ECE Curriculum</td>
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<tr>
<td>Child Growth and Holistic Development</td>
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<td>ECE Classroom, Material and Activities</td>
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<td>Social Skills in Early Childhood Education</td>
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<td>Foundations of Early Childhood Education</td>
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<td>Play, Learning and Development</td>
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<td>Teaching Mathematics in Early Childhood Education</td>
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<td>Teaching of Social Studies &amp; Islamiat in Early Years</td>
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<tr>
<td>Designing Learning Environment</td>
<td>3</td>
<td>Assessment, Observation, and Evaluation in Early Childhood Education</td>
<td>3</td>
<td>Teaching of Urdu in Early Childhood Education</td>
<td>3</td>
<td>Teaching Practice-11</td>
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</tr>
<tr>
<td>Child’s Literature in Early Years</td>
<td>3</td>
<td>Computers in Children’s Learning</td>
<td>3</td>
<td>Teaching of Science/ Environmental studies in ECE</td>
<td>3</td>
<td>Master’s Thesis in Early Childhood Education</td>
<td>6</td>
</tr>
</tbody>
</table>

TEACHING PRACTICE-1
Students who complete a Master’s in Education will gain:

**CAREER PROSPECTS**

- Provides a broad perspective.
- The Master’s program has many streams of preparation. It considers flexibility as you pursue your educational goals.
- You achieve your specific career objectives. You will have to meet your needs and learning interests, and to help children in all educational settings. Our program is designed to transform society by motivating, challenging, and assisting.

**INTRODUCTION**

Our Masters of Education Program will prepare you to work closely with specialists in their field. Access to outstanding research facilities. The practical, organizational and presentational skills necessary for the successful reporting of educational research.

**ENTRY REQUIREMENTS**

BA/BSc/BFA, Bachelor’s degree (14 years of education) from HEC recognized University with 2.00 CGPA or at least 50% marks under semester system or 2nd Division (45% marks) under annual system.

**LOCATION**

Raiwind Road Campus, Lahore

**PROGRAM FACTS**

- **Program Duration**
  - 2 Years (Credit Hours 66)
- **Timing**
  - Morning 8:00 AM to 5:00 PM (Monday to Friday)
- **Entry Requirements**
  - BA/BSc/BFA, Bachelor’s degree (14 years of education) from HEC recognized University with 2.00 CGPA or at least 50% marks under semester system or 2nd Division (45% marks) under annual system.

**RECOGNIZED BY**

Higher Education Commission

**ROAD MAP**

**SEMMER 1**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy of Education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Introduction to Educational Psychology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sociology of education</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Educational Management &amp; Supervision</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Curriculum Development &amp; Implementation</td>
<td>3</td>
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<tr>
<td>Research Methods in education</td>
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**SEMMER 2**

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Educational Technology</td>
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<tr>
<td>Educational in Pakistan</td>
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<td></td>
</tr>
<tr>
<td>Educational Measurements &amp; Evaluation</td>
<td>3</td>
<td></td>
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<tr>
<td>Computer Application in Education</td>
<td>3</td>
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<tr>
<td>One course from the (Urdu, English, Social Studies, Physical Science)</td>
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<td>Thesis</td>
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**SEMMER 3**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hr.</th>
<th>Cr.</th>
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<tbody>
<tr>
<td>Comparative Education</td>
<td>3</td>
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</tr>
<tr>
<td>Contemporary Trends &amp; Issues in Education</td>
<td>3</td>
<td></td>
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<tr>
<td>Area of specialization I</td>
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<tr>
<td>Course as substitute of Thesis: Research Writing in Educational Research</td>
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<td>Dissertation/ Two Courses</td>
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**SEMMER 4**

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Guidance &amp; Counseling in Education</td>
<td>3</td>
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</tr>
<tr>
<td>Teaching Practice/ Internship in educational Institutions</td>
<td>3</td>
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<tr>
<td>Course as substitute of Thesis: Statistical Application in Education</td>
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</tbody>
</table>

**CURRICULUM STUDIES**

- Foundations of Curriculum
- Curriculum Development
- Curriculum Transaction
- Curriculum Evaluation

**PLANNING, MANAGEMENT & FINANCING OF EDUCATION**

- Educational Planning
- Educational Management
- Educational Finance
- Issues in Planning, Management, and Financing of Education

**ELEMENTARY EDUCATION**

- Perspectives in Elementary Education
- Early Childhood Care and Education
- Curriculum and Evaluation in Elementary Education
- Elementary Teacher Education

**GUIDANCE AND COUNSELING DISTANCE**

- Introduction to Guidance and Counseling
- School Guidance Programme
- Career Development and Guidance
- Assessment and Appraisal in Guidance and Counseling

**INCLUSIVE EDUCATION**

- Inclusion of children with Diverse Needs
- Inclusive Strategies and Education for children with Diverse Needs
- School Education of the Disadvantaged Groups Girls’ Education

**EDUCATION TECHNOLOGY AND ICT**

- Educational Technology ICT in Education
- Computer Technology
- Courseware Development
- Elementary Education
- Elementary Teacher Education

**TEACHER EDUCATION**

- Teachers and Teaching
- Preparation of Teachers
- Professional Development of In-service Teachers
- Any one of the following papers
- Pedagogy of Science Education
- Mathematics Education

**DISTANCE EDUCATION AND OPEN LEARNING**

- Foundations of Distance Education
- Learner Support Services (LSSs)
- Planning and Management of DE & OL
- E-Learning
The Master of Leadership and Management in Education program at the University of Lahore is a cutting edge, practically oriented, highly relevant master’s degree program for education of leaders and managers. This program is designed to develop your education leadership skills and equip you to work effectively in the 21st century international environment. The program integrates practical knowledge, conceptual frameworks and state-of-the-art research.

**CAREER PROSPECTS**

Career Prospects & Objectives:
The Master of Leadership and Management in Education program is focused on exposing students to innovative research and practice in the leadership, management and administration of educational institutions. Taught by experienced teachers and active researchers in the field, this program explicitly integrates theory and practice to enable graduates to apply the latest research to refine and improve practice in their own contexts. Graduates may find opportunities in the following areas: Head or Leading Teacher positions; Assistant or Deputy Principal Positions; School Principal positions; Educational Administrators; Academic Managers; Training Head positions; and Curriculum leaders, among others.

**ROAD MAP**

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Development and Instruction</td>
<td>3</td>
<td>Measurement and Evaluation in Education</td>
<td>3</td>
<td>Supervision and Mentoring of Teachers</td>
<td>3</td>
<td>Teaching Profession</td>
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<tr>
<td>Foundations of Leadership and Management</td>
<td>3</td>
<td>Contemporary Issues in Educational Management</td>
<td>3</td>
<td>Human Resources and Personal Administration</td>
<td>3</td>
<td>Development of Research Proposal</td>
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<tr>
<td>Educational Leadership and ICT</td>
<td>3</td>
<td>School and Community Partnerships</td>
<td>3</td>
<td>Psychology and Guidance in Education</td>
<td>3</td>
<td>Methods/Instruments Content and Methods of Teaching Mathematics</td>
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<tr>
<td>Leading and Managing Educational Change</td>
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<td>School Development</td>
<td>3</td>
<td>Effective Communication in Education</td>
<td>3</td>
<td>Methods/Instruments Content and Methods of Teaching Science</td>
<td>3</td>
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<tr>
<td>Educational Planning and Policy analysis</td>
<td>3</td>
<td>Entrepreneurship in Education</td>
<td>3</td>
<td>Project Management in Education</td>
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<td>Master's Thesis in Leadership and Management</td>
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<td>Research in School Leadership</td>
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<td>Comparative Educational Administration Systems</td>
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**RECOGNIZED BY**
Higher Education Commission

**INTRODUCTION**

**EDUCATION**

**MASTER OF ARTS IN**

**LEADERSHIP & MANAGEMENT**

**PROGRAM FACTS**

- **Program Duration**
  2-Years (Credit Hours 66)
- **Timing**
  Morning 8:00 AM to 5:00 PM (Monday - Friday)
- **Entry Requirements**
  BA/BSc/BEd Home Economics/BFA Bachelor’s degree (14 years of education from HEC recognized University with 2.00 CGPA or at least 50% marks under semester system or 2nd Division (45% marks) under annual system.
- **Location**
  Raiwind Road Campus, Lahore

**RECOGNIZED BY**
Higher Education Commission

**ROAD MAP**

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<thead>
<tr>
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<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
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<tbody>
<tr>
<td>Educational Research</td>
<td>3</td>
<td>Educational Measurement and Evaluation</td>
<td>3</td>
<td>Statistics in Education</td>
<td>3</td>
<td>Dissertation/Choose Two Courses</td>
<td>6</td>
</tr>
<tr>
<td>Curriculum Models and Theory</td>
<td>3</td>
<td>Comparative Teacher Education</td>
<td>3</td>
<td>Computers and Information Technology in Education</td>
<td>3</td>
<td>Course as substitute of these Professional Ethics for Teachers</td>
<td></td>
</tr>
<tr>
<td>Educational Leadership and Management</td>
<td>3</td>
<td>Cognition, Learning and Assessment</td>
<td>3</td>
<td>Course as substitute of these Course as substitute of these Human Resource Management</td>
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</table>

**RECOGNIZED BY**
Higher Education Commission

**INTRODUCTION**

**EDUCATION**

**MASTER OF PHILOSOPHY IN**

**LEADERSHIP & MANAGEMENT**

**PROGRAM FACTS**

- **Program Duration**
  2-Years (Credit Hours 30)
- **Timing**
  Morning 8:00 AM to 5:00 PM (Monday to Wednesday)
  Weekend 9:00 AM to 6:00 PM (Saturday - Sunday)
- **Entry Requirements**
  B.Ed. (4 year), B.Ed. (Hons) in Education / M.Ed. / M.A. in Educational Leadership and Management and Education, Master’s degree (16 years of education) from HEC recognized University with 2.5 CGPA or at least 60% marks under semester system or 2nd Division (50% marks) under annual system.

**CAREER PROSPECTS**
The M. Phil. in Education program is focused on exposing students to innovative research and practice in the leadership, management and administration of educational institutions. Taught by experienced teachers and active researchers in the field, this program explicitly integrates theory and practice to enable graduates to apply the latest research to refine and improve practice in their own contexts. Graduates may find opportunities in the following areas: Head or Leading Teacher positions; Assistant or Deputy Principal Positions; School Principal; Educational Administrators; Academic Managers; and Curriculum leaders, among others.

**ROAD MAP**

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
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<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
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<tbody>
<tr>
<td>Educational Research</td>
<td>3</td>
<td>Educational Measurement and Evaluation</td>
<td>3</td>
<td>Statistics in Education</td>
<td>3</td>
<td>Dissertation/Choose Two Courses</td>
<td>6</td>
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<tr>
<td>Curriculum Models and Theory</td>
<td>3</td>
<td>Comparative Teacher Education</td>
<td>3</td>
<td>Computers and Information Technology in Education</td>
<td>3</td>
<td>Course as substitute of these Professional Ethics for Teachers</td>
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</tr>
<tr>
<td>Educational Leadership and Management</td>
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<td>Cognition, Learning and Assessment</td>
<td>3</td>
<td>Course as substitute of these Human Resource Management</td>
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</tbody>
</table>
DOCTOR OF PHILOSOPHY IN EDUCATION (Ph.D)

INTRODUCTION
PhD in Education program is for individuals who aspire to positions of professional educational leadership or to a career in educational research. The program focuses on extending knowledge and research expertise of students through scientific inquiry. To accomplish these objectives, the program offers challenging curricula, a variety of teaching-learning methodologies and a supportive academic environment. Here we provide an inspiring environment to improve practices of teaching and examination. We are also committed to provide academic leadership which can contribute to the policies and practices in education according to our social, psychological and ideological needs. Our qualified and skilled faculty is able to use their knowledge and experience to contribute in preparing teachers who can serve to bring reforms in classroom teaching, curriculum development and examination practices.

INTRODUCTION
PhD in Education program is for individuals who aspire to positions of professional educational leadership or to a career in educational research. The program focuses on extending knowledge and research expertise of students through scientific inquiry. To accomplish these objectives, the program offers challenging curricula, a variety of teaching-learning methodologies and a supportive academic environment. Here we provide an inspiring environment to improve practices of teaching and examination. We are also committed to provide academic leadership which can contribute to the policies and practices in education according to our social, psychological and ideological needs. Our qualified and skilled faculty is able to use their knowledge and experience to contribute in preparing teachers who can serve to bring reforms in classroom teaching, curriculum development and examination practices.

PROGRAM FACTS
• Program Duration
  3-5 Years (Credit Hours 42)
• Timing
  Weekend 09:00 AM to 06:00 PM (Saturday - Sunday)
• Entry Requirements
  M.Phil in Education (with any are of specialization) or Master degree in Education (18 years of education) in relevant discipline from HEC recognized University with 3.0 (4.0) CGPA or least 60% marks under semester system or 1st Division (60% marks) under annual system.
• Location
  Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

ROAD MAP

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<tr>
<td>Philosophical Paradigms of Education</td>
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<td>Quality Assurance in Education</td>
<td>3</td>
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<tr>
<td>Qualitative Research in Education</td>
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<td>Modern Trends and Issues in Education</td>
<td>3</td>
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<tr>
<td>Policy and Planning in Education</td>
<td>3</td>
<td>Topical Seminar in Research Design</td>
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<th>SEMESTER 6&amp;7</th>
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<tbody>
<tr>
<td>Research Work</td>
<td>6</td>
<td>Research Work</td>
<td>6</td>
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</tbody>
</table>
• English Language & Literature
MISSION STATEMENT
The mission of the Department is to ensure that, while pursuing his/her programme of study, each learner develops linguistically, academically, and cognitively within a socially and culturally supportive environment.

INTRODUCTION
The Department constitutes a professional, yet congenial, environment for the teaching and promotion of both (applied) linguistics and literature in English. A variety of degrees ranging from BS to MA to MPhil are offered involving both these disciplines; the BS is a multidisciplinary degree in the study of English language and literature, (applied) linguistics, and communication.

The Department has appropriately qualified faculty thoroughly committed to teaching and research in a vigorous atmosphere, and its programmes of study are characterized by a balanced combination of rigour and flexibility. We try to sustain a dynamic learning environment that encourages creative thinking abilities as well as linguistic and interpersonal skills.

DEGREES OFFERED
• BS English Language and Communication
• MA English Literature
• MA English Language Teaching & Linguistics
• M.Phil in English Literature
• M.Phil in Applied Linguistics

The classes are typically highly interactive, involving a good deal of student participation. We try to maintain the highest standards of academic excellence, and of professional and ethical conduct.

Extracurricular activities are part of our broader scheme, and are organized to provide the students opportunities for social interaction, entertainment, and the development of their non-academic talent.
BS (ELC) is an integrated degree programme including both English Language and Literature courses. The diversity of the programme is further enhanced by the addition of a wide range of courses from other disciplines, e.g., Social Sciences, Business and Commerce. Social Sciences are the backbone of development in social and economic terms. Extending over eight semesters or four years, the aim of this programme is to provide students with strong foundational but in-depth knowledge of English Language and Literature on the one hand, and to develop their communicative skills on the other. The coursework comprises 129 credit hours.

The last two semesters provide the students an opportunity to major in English Language or English Literature by devoting their studies entirely to either of these disciplines, and write a thesis (3 credits) on a corresponding topic.

This programme will open up many career avenues for the students. These may lead on to key positions in the print and electronic media, the civil services, multinational organizations, and education (especially English language teaching), to name just a few of the possibilities. To state the obvious, a first degree is necessary for anyone wanting to pursue higher studies at the Master’s level and beyond.

<table>
<thead>
<tr>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
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<tr>
<td>Introduction to English Literature III: Fiction 3</td>
<td>3</td>
<td>Introduction to English Literature IV: Prose</td>
<td>3</td>
<td>Literary Criticism I</td>
<td>3</td>
<td>Literary Criticism II</td>
<td>3</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>3</td>
<td>Morphology and Syntax</td>
<td>3</td>
<td>Classical Poetry</td>
<td>3</td>
<td>Classics in Drama</td>
<td>3</td>
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<tr>
<td>Introduction to Computer</td>
<td>3</td>
<td>Academic Reading and Writing</td>
<td>3</td>
<td>Psycholinguistics</td>
<td>3</td>
<td>Literary Movements</td>
<td>3</td>
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<tr>
<td>Phonetics and English Phonology</td>
<td>3</td>
<td>Anthropology</td>
<td>3</td>
<td>Sociolinguistics</td>
<td>3</td>
<td>Pakistan Literature in English</td>
<td>3</td>
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<tr>
<td>Environmental Sciences</td>
<td>3</td>
<td>Human Rights and Citizenship</td>
<td>3</td>
<td>Introduction to Research Methodology</td>
<td>3</td>
<td>Discourse Analysis</td>
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<td>Entrepreneurship</td>
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<th>SEMESTER 8</th>
<th>Cr. Hr.</th>
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<td>20th Century Literature (Poetry and Drama)</td>
<td>3</td>
<td>Teaching of Literature</td>
<td>3</td>
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<tr>
<td>American Literature</td>
<td>3</td>
<td>Literary Stylistics</td>
<td>3</td>
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<tr>
<td>South Asian Literature</td>
<td>3</td>
<td>Literary Discourse and Journalistic Writing</td>
<td>3</td>
</tr>
<tr>
<td>Translation Theory and Literary Studies</td>
<td>3</td>
<td>Science Fiction and Fantasy</td>
<td>3</td>
</tr>
<tr>
<td>American Drama</td>
<td>3</td>
<td>Research Project</td>
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<tr>
<td>Second Language Acquisition</td>
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<td>Syllabus Designing and Testing</td>
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<tr>
<td>Pragmatics</td>
<td>3</td>
<td>Stylistics</td>
<td>3</td>
</tr>
<tr>
<td>Translation Studies</td>
<td>3</td>
<td>Language Culture and Identity</td>
<td>3</td>
</tr>
<tr>
<td>World English</td>
<td>3</td>
<td>English for Specific Purposes</td>
<td>3</td>
</tr>
<tr>
<td>Research Methods in Linguistics</td>
<td>3</td>
<td>Thesis/ Research Project</td>
<td>3</td>
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</tbody>
</table>
MASTER OF ARTS IN ENGLISH LITERATURE

INTRODUCTION
This degree consists of 19 taught courses (63 credit hours), and aims at fostering an appreciation of the richness and variety of literary texts from both British and American literature. Students are given rigorous training in interpretive thinking and precise expression, enabling them to invent and organize ideas, draw conclusions and articulate them in eloquent and convincing ways. The coursework is extended over four semesters, the last one including a thesis (taking up another 6 credits).

CAREER PROSPECTS
MA in English Literature is the basic requirement for an appropriate teaching position at school and college levels. This programme also helps students relate their multiple experiences of literature to real life situations, and thus become more sensitive human beings. Further, it makes students eligible for admission to an MPhil degree in English Literature.

PROGRAM FACTS
- Program Duration: 2-Years (Credit Hours 69)
- Timing: Morning 08:00 to 5:00 (Monday-Friday)
- Entry Requirements: Fourteen(14) years of BA/BCom, or any other equivalent degree with the minimum CGPA of 2.5 or a 2nd Division under the annual system.
- Location: Raiwind Road Campus, Lahore

RECOGNIZED BY: Higher Education Commission

ROAD MAP

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<thead>
<tr>
<th>SEMESTER 1</th>
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<tbody>
<tr>
<td>Classical Poetry</td>
<td>3</td>
<td>Elizabethan Drama</td>
<td>3</td>
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<tr>
<td>Greek Drama</td>
<td>3</td>
<td>Victorian Novel</td>
<td>3</td>
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<tr>
<td>Novel</td>
<td>3</td>
<td>History of English Literature (Victorian and Modern)</td>
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<tr>
<td>Prose</td>
<td>4</td>
<td>Literary Criticism</td>
<td>4</td>
</tr>
<tr>
<td>History of English Literature (Middle Ages)</td>
<td>4</td>
<td>Contemporary Fiction</td>
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<tbody>
<tr>
<td>Romantic Poetry</td>
<td>3</td>
<td>Literature and Politics</td>
<td>3</td>
</tr>
<tr>
<td>Creative Non Fiction</td>
<td>3</td>
<td>American Drama</td>
<td>3</td>
</tr>
<tr>
<td>Modern Drama</td>
<td>3</td>
<td>American Novel</td>
<td>3</td>
</tr>
<tr>
<td>Research Methods</td>
<td>4</td>
<td>Postcolonial Literature</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Contemporary Literature</td>
<td>3</td>
<td>Thesis/Research Project</td>
<td>6</td>
</tr>
</tbody>
</table>

MASTER OF ARTS IN ENGLISH LANGUAGE TEACHING & LINGUISTICS

INTRODUCTION
This is a dual Master’s Degree programme consisting of 69 credit hours distributed among 20 courses and a 4-credit thesis/research project. The two areas covered are linguistics and its applications to English language teaching. Besides, considerable attention is diverted, directly or indirectly, to improving the English language skills of the students themselves. The students are provided training in critical thinking and precise expression, enabling them to compose organized texts and to articulate their ideas in clear and persuasive ways.

CAREER PROSPECTS
This programme will prepare the students for an English teaching career at both school and college levels. Further, it makes them eligible for admission to an M.Phil degree in the same or a compatible area of study.

PROGRAM FACTS
- Program Duration: 2-Years (Credit Hours 69)
- Timing: Morning 08:00 AM to 5:00 PM (Monday-Friday)
- Entry Requirements: 14 years of BA/BCom, or any other equivalent degree with the minimum CGPA of 2.5 or a 2nd Division under the annual system.
- Location: Raiwind Road Campus, Lahore

RECOGNIZED BY: Higher Education Commission

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercultural Communication</td>
<td>3</td>
<td>Approaches to Foreign Language Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Linguistics</td>
<td>4</td>
<td>Assessment of Language Skills</td>
<td>5</td>
</tr>
<tr>
<td>Phonetics and English Phonology</td>
<td>3</td>
<td>Morphology and English Syntax</td>
<td>4</td>
</tr>
<tr>
<td>Psycho- and Sociolinguistics</td>
<td>3</td>
<td>Pragmatics and Semantics</td>
<td>3</td>
</tr>
<tr>
<td>Descriptive Syntax</td>
<td>4</td>
<td>Teaching English for Specific Purposes</td>
<td>3</td>
</tr>
<tr>
<td>Computer and Language Teaching</td>
<td>3</td>
<td>Critical Thinking</td>
<td>4</td>
</tr>
<tr>
<td>Curriculum Designing and Material Development</td>
<td>3</td>
<td>Error Analysis</td>
<td>3</td>
</tr>
<tr>
<td>Language and Media</td>
<td>3</td>
<td>Semantics</td>
<td>4</td>
</tr>
<tr>
<td>Research Methods</td>
<td>3</td>
<td>Student Teaching and Observation</td>
<td>2</td>
</tr>
<tr>
<td>Stylistics</td>
<td>4</td>
<td>Translation Studies</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Contemporary Literature</td>
<td>3</td>
<td>Thesis/Research Project</td>
<td>4</td>
</tr>
</tbody>
</table>
INTRODUCTION
Consisting of four semesters or about two years, the aim of this programme is to develop a critical approach towards a wide-range of issues and techniques figuring in English literature from the Elizabethan to the modern and contemporary periods. The program will help reinforce the students’ previous knowledge of English Literature and will strive to sharpen its appreciation through exposure to diverse literary texts and theories. Divided into core and elective courses, this scheme of study covers (as already implied) certain theoretical areas (such as research methodology, literary theory) as well as various texts belonging to the periods mentioned above. The coursework, comprising 24 credit hours, takes up three semesters, but work on a supervised thesis (adding another 6 credits) starts in the third semester. The fourth semester is thus devoted entirely to thesis writing.

CAREER PROSPECTS
An M.Phil in English Literature is the basic requirement for an academic or teaching career in the literature departments of all university-level institutions. This degree should also be very helpful in getting a teaching position at colleges or other institutions further below in the educational hierarchy. Further, it is meant to enable the more ambitious candidates to go on to higher studies at the doctoral level.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparative Literature</td>
<td>3</td>
<td>American Literature</td>
<td>3</td>
<td>American Literature II (Drama and Poetry)</td>
<td>3</td>
<td>Thesis I</td>
<td>3</td>
</tr>
<tr>
<td>Elizabethan and Restoration Literature</td>
<td>3</td>
<td>Literary Theory</td>
<td>3</td>
<td>Postdoctoral Studies</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Methodology</td>
<td>3</td>
<td>Modern and Contemporary Literature</td>
<td>3</td>
<td>Thesis II</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROGRAM FACTS
- Program Duration: 2-Years (Credit Hours 30)
- Timing: Weekday 09:00 AM to 06:00 PM (Monday - Sunday)
- Entry Requirements: 16 years of education culminating in an MA or a 4-year BS degree in a relevant field, with a minimum CGPA of 2.5 or a second division under the annual system.
- Location: Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

MASTER OF PHILOSOPHY IN APPLIED LINGUISTICS (M.Phil)

INTRODUCTION
Consisting of four semesters or about two years, the aim of this programme is to reinforce the students’ background in linguistics and to investigate a wide range of issues related to the various applied aspects of the discipline in question. Divided into core and elective courses, the scheme of study encompasses certain fundamental areas (such as research methodology, syntax, pragmatics) as well as several applied ones (e.g., Translation Studies, Critical Discourse Analysis). The coursework, comprising 24 credit hours, is spread over three semesters, but work on a supervised thesis (adding another 6 credits) starts in the third semester. The fourth semester is thus devoted entirely to thesis writing.

CAREER PROSPECTS
M.Phil in Applied Linguistics is the basic requirement for an academic career in the relevant departments of all university-level institutions. Naturally, the degree is also very helpful in seeking a teaching position at colleges or other lower-level educational institutions. Further, it enables the successful and more ambitious candidates to go on to higher studies at the doctoral level.

ROAD MAP

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>Cr. Hr.</th>
<th>SEMESTER 2</th>
<th>Cr. Hr.</th>
<th>SEMESTER 3</th>
<th>Cr. Hr.</th>
<th>SEMESTER 4</th>
<th>Cr. Hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issues in Syntax</td>
<td>3</td>
<td>Applied Linguistics</td>
<td>3</td>
<td>Critical Discourse Analysis</td>
<td>3</td>
<td>Thesis II</td>
<td>3</td>
</tr>
<tr>
<td>Research Methodology in Linguistics</td>
<td>3</td>
<td>Pragmatics</td>
<td>3</td>
<td>Crosscultural Communication</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translation Studies</td>
<td>3</td>
<td>Theories of Language Description</td>
<td>3</td>
<td>Thesis I</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROGRAM FACTS
- Program Duration: 2-Years (Credit Hours 30)
- Timing: Weekday 09:00 AM to 06:00 PM (Monday - Sunday)
- Entry Requirements: 16 years of education culminating in an MA or a 4-year BS degree in a relevant field, with a minimum CGPA of 2.5 or a second division under the annual system.
- Location: Raiwind Road Campus, Lahore

RECOGNIZED BY
Higher Education Commission

The University of Lahore
RULES & POLICIES

- Admission Rules and Policies
- External and Internal Student/Credit Hour Transfer Policies
- Examination Rules and Policies
- Library Rules and Policies
- Student Conduct and Discipline Rules
- Accommodation Rules and Policies
ADMISSION POLICIES

The University of Lahore admits students whose educational background is sound and who can achieve success in higher education. Applications received for admission in various programmes are reviewed by the concerned departments. The applicants are required to appear in admission test and interview. The final merit is determined on the basis of past academic performance, score obtained in the admission test and performance in the interview.

The test pattern is of the same standard as of scholastic aptitude test (SAT) for undergraduate studies and graduate record examination (GRE) for graduate studies.

Students who have complete all the formalities and deposit their fees and other dues on the prescribed date are eligible for registration. Each student, admitted on merit, is expected to take full load of courses prescribed for the semester.

ADMISSION

- Application for admission shall be entertained only on a prescribed form, which is part of the prospectus. Applications received through "e-mail" shall be entertained only if they are followed by a pay order in the name of The University of Lahore and should reach UOL up to last date announced for the admission.

- Admission shall be granted on the basis of eligibility criteria mentioned for each programme and after passing the admission test & interview arranged by the admission committee of the department.

- Applicants, who have appeared in inter / degree level or pre-requisite level examination prescribed for admission in a programme and are awaiting results will be allowed to apply for admission, but they will be given admission only after they have submitted the attested copies of their certificates / degrees within three weeks of commencement of the semester. They will also be required to submit an undertaking that they understand the rules/policy of the admissions and that if they fail to submit the required documents within the prescribed time, they will not be given admission.

- For eligibility criteria reference may be made to each relevant programme / degree.

- Each successful applicant will be issued “Admission Letter” by the concerned department.

THE SEMESTER SYSTEM

The academic programmes are spread over two semesters during each year. Total undergraduate programme is spread over eight semesters (four years). Graduate programs are taught for 2-4 years, keeping in view the type of degree. Each semester comprises of 18 – 20 weeks, which includes one week of examinations. A short summer semester of 6 weeks is usually offered to cover special courses.

The classes for different programs are conducted on the pattern of semester system. This system is based on instructional autonomy resting with the department and aims at progressive development of student's information level, skills and competence.

ACADEMIC CALENDAR

The academic calendar consists of two regular semesters i.e. winter and fall. Each semester runs over 18 to 20 weeks, out of which 16 weeks are reserved for regular classes, one week for final examinations and one week for course review. A short semester called summer semester of 8 weeks is arranged for the students to overcome their deficiencies.

REGISTRATION & ENROLMENT POLICY

- After completing admission formalities and having paid the semester dues the applicants will be registered as bonafide students of UOL.

- At the time of registration the applicants will be required to produce their original certificates, which will be returned to the student after making entries in his/her file that the originals having been verified.

- The applicants will be allocated the University Registration Number and will be issued the University Registration Card by the Registrar Office. This will allow the students to get enrolled in different courses offered by the concerned departments.

- In each semester students should enroll in the courses as per “degree / program road map” issued by the concerned department and shall not enroll in advance courses unless they have passed the prerequisite course.

- Students in undergraduate programs shall not enroll in less than 3 courses and more than 4 courses in a regular semester.

- Student in graduate programs shall not enroll in less than 2 courses and more than 4 courses in a regular semester.

- In summer semester students can enroll up to two courses.

ATTENDANCE POLICY

The following attendance criteria will be applied:

- The minimum requirement for a student to complete the semester is 75% attendance in each course. The department will determine the exceptions to this rule if any.

- Students with poor attendance record will be issued a written warning at any time during a semester. The department reserves the right to inform the student’s parents or guardian through a letter of the possible consequences including withdrawal from the course or admission cancellation.

- In case a student joins a course after it has started, he/she will be responsible to make up the deficiencies for any quizzes, assignments and attendance requirements.

FEE POLICY

University reserves the right to change the fee structure at any time.

FEE CONCESSION AND FINANCIAL AID

- Students who want to avail the facility of financial assistance or fee concession shall obtain the prescribed form from Office of Student Affairs and after completion submit the same along with their application. The application will be reviewed by the competent authority.

- Fee concession / financial aid is subject to maintaining a semester GPA of 3.00 in each semester. Failure to do so may lead to complete withdrawal or reduction of fee concession as decided by the competent authority.

- Tuition fee etc. shall not be refunded, but will be adjusted in the next semester in accordance with the conditions prescribed for this purpose.

- Students may be allowed to pay their fee in installments with the permission of departmental head and competent authority. The fee shall be paid on the dates as notified from time to time.

- A fine of Rs 200/- per day will be charged in case of late deposit of fee.

- A Student will be automatically de-registered if he/she fails to clear the dues within four weeks after the notified date.
EXTERNAL AND INTERNAL STUDENT TRANSFER POLICIES

REQUIREMENTS OF ADMISSION FOR TRANSFERRED STUDENT
The applicant can get admission in the same program that he was studying in the previous institution if available with the university.

Student must complete the program within maximum applicable program duration starting from the admission date in previous institution (e.g. seven years for four years undergraduate program).

The applicant must provide following documents in addition to the regular admission requirements:

- The department concerned shall admit students who wish to transfer their credits earned from an HEC recognized institution (university or college) to UOL on the recommendation of the departmental equivalence committee.
- He/she shall be required to fill the migration form available with registrar office.
- Transfer of credit will be communicated to the registrar office for issue of notification on case to case basis by each department.
- The equivalence committee of the department is authorized to review and approve the equivalence of courses completed at another recognized degree awarding institutions.
- The course completed at another accredited institution will be shown as exempted along with credit hours of each course. Their grades will not be shown on UOL transcript.
- Exemption shall only be granted by the equivalence committee of the concerned department.
- Copy of transcript (original to be verified by admission officer) from the degree awarding institution (not from affiliated colleges etc.)

- No Objection Certificate (NOC) from the degree awarding institution (not from affiliated colleges, institutions etc.) and further applicant must not have been expelled from the previous institution based upon academics or disciplinary ground.
- Proof that the degree awarding institute is recognized by the HEC.
- If the applicant seeking admission in a program that is accredited by a council, the applicant must provide proof that his admission in previous institution is recognized by the relevant council.
- Character Certificate (in current date)

COURSE EXEMPTION CRITERIA
After fulfilling admission requirements the applicant may be granted course exemptions as per following criteria:

- Course contents and credit hours conforming to the relevant course for the program i.e. a course can be exempted if course contents are similar and the studied credit hours are equal or higher than that of the course being exempted.
- Course can only be exempted if its sub parts are also passed e.g. a course with mandatory lab can be exempted if the candidate has passed both theory and lab at previous institution.
- Courses exempted shall have a minimum percentage or grades as per university rule which is currently “C” for undergraduate and “B” grade for post graduate programs. The department may set a higher grade as required.
- One course can be exempted against one or more courses studied at previous institution depending upon the course contents distribution, but not otherwise.
- Copies of transcript (original to be verified by admission officer) from the degree awarding institution (not from affiliated colleges etc.).
- The selected applicant will submit documents required for the assessment of course exemption as described in section 1.2.
- The committee will review documents and approve courses for exemptions and will forward the decision to the registrar for notification before the commencement of classes.
- If the Committee is not satisfied with the academic attainment of a course(s) completed at another institution, the committee may offer a challenge test in the course(s).
- Maximum number of course exemption is as per department recommendation/university rules.

COURSE EXEMPTION FEE
Course exemption/transfer fee will be charged as per the university rules at the time of transfer/exemption, which is currently tuition fee of the course per exempted course.

PROCEDURE FOR COURSE EXEMPTION
- The Head of the Department will constitute an admission committee for the admission of transferred students headed by the HOD.
- The selected applicant will submit documents required for the assessment of course exemption as described in section 1.2.
- The committee will review documents and approve courses for exemptions and will forward the decision to the registrar for notification before the commencement of classes.
- If the Committee is not satisfied with the academic attainment of a course(s) completed at another institution, the committee may offer a challenge test in the course(s).
- The Registrar will verify the documents and other legal issues and policies and will notify the exemptions forwarded by the department.
- The Registrar will issue the Registration Number. Student’s batch will be the batch in which student’s gets admission.
- Courses studied in an undergraduate program shall not be exempted in a graduate program.
- Specialization and final project or thesis shall not be exempted.
- If the Committee is not satisfied with the academic attainment of a course(s) completed at another institution, the university may offer a challenge test in the course(s).

INTRA UNIVERSITY CAMPUS AND PROGRAM TRANSFERS
Any student with fee status pending/clear can apply for degree transfer. If student fulfill admission/merit criteria and seats are available in the transferee/recipient department, the Head of department (HOD) of receiving department will approve the application and will forward it to student affairs department. Such transfers can be performed as per following policy. This policy applies to programs offered under semester systems. It does not apply on programs offered by Medical and Dental departments.

- If any discrepancy is found, the Registrar will ask to review the decision and provide rationale for this.
- The applicant may be granted admission and exemptions provisionally after the approval of the HOD. Exemptions will be confirmed after the notification issued by the Registrar.
- In case of MBBS/BDS, Pro-Rector (Academics)/Chairman BOG will be the final authority to approve transfer of new admission with Zero Credit Hours.
- The Registrar will verify the documents and other legal issues and policies and will notify the exemptions forwarded by the department.
- The Registrar will issue the Registration Number. Student’s batch will be the batch in which student’s gets admission.
DEGREE TRANSFER SCENARIOS
Following can be the Degree transfer scenarios that have been dealt with hereunder:

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>TRANSFER DEPARTMENT</th>
<th>TRANSFER DEPARTMENT</th>
<th>TRANSFER DEGREE</th>
<th>TRANSFER DEGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter Department Transfer</td>
<td>A</td>
<td>A</td>
<td>Program A</td>
<td>Program B</td>
</tr>
<tr>
<td>Other Department Transfer</td>
<td>A</td>
<td>B</td>
<td>Program A</td>
<td>Program B</td>
</tr>
<tr>
<td>From Other Campus – Same Program</td>
<td>N/A</td>
<td>N/A</td>
<td>Program A</td>
<td>Program B</td>
</tr>
<tr>
<td>From Other Campus – Other Program</td>
<td>N/A</td>
<td>N/A</td>
<td>Program A</td>
<td>Program B</td>
</tr>
<tr>
<td>From Other University-Same Program</td>
<td>N/A</td>
<td>N/A</td>
<td>Program A</td>
<td>Program B</td>
</tr>
<tr>
<td>From Other University-Other Program</td>
<td>N/A</td>
<td>N/A</td>
<td>Program A</td>
<td>Program B</td>
</tr>
</tbody>
</table>

REQUIREMENTS OF INTRA UNIVERSITY TRANSFERS
CATEGORY – NEW ADMISSIONS
Transfer of a new admission from one campus to other campus including degree transfer can be with following status:

- The student must apply for transfer to another department within 3 weeks of class start at the accepting campus or program. Student will be liable for payment of differential in registration fee and tuition fee, if any, due to this change however any excess payment paid in transferor campus will not be refunded or adjusted against transferee campus dues.
- No intra university transfers will be allowed after 3 weeks of commencement of classes and student will have to complete the semester.
- The student must be able to complete his program within maximum applicable program duration starting from the admission date in his previous program (e.g. seven years for four years undergraduate program).
- The student must provide No Object Certificate (NOC) from the HOD of existing program and must get written acceptance from the HOD of accepting program of campus where the student wants to be transferred.

COURSE ACCEPTANCE CRITERIA
- Course contents and credit hours conformity to the relevant course for the program i.e. a course can be exempted if course contents are similar and the studied credit hours are equal or higher than that of the course being exempted.
- One course can be accepted against one or more courses studied at previous campus or program depending upon the course contents distribution, but not otherwise.
- Courses studied in an undergraduate program shall not be accepted in a graduate program.
- All the passed courses may be accepted in case of campus transfer in the same program regardless of the grade.

MANAGING REGISTRATION NUMBER
- The registrar office will issue a unique Student registration number to a student who submits registration fee for first time regardless of the campus or program.
- The registrar office will issue program/campus specific applicant number while registration number will be issued as per batch in which student was enrolled/admitted.
- If a student changes program/campus, the registrar office will issue a new program/campus specific registration number with traceability of old number available with new registration number.
- If student has paid fee before requesting the transfer then the fee will be transferred from UOL degree (studying) to UOL degree (transferred).
- Students who have taken admission on self-finance basis can apply for degree transfer and on transfer from one degree to other where there is difference of fee for respective degree, UOL will refund self-finance fee deposited. Tuition fee will be charged according to new selected degree program.

MANAGING FINANCES
- Every student will have a separate account that will have all the details of financial transactions relating to such student.
- The student will be charged applicable transfer fee, however admissions approved with 100% fee waiver will be processed and student account updated at zero.
- The student must pay the tuition fee at the campus where he/she will be transferred or in case student has paid fee at the transferor campus, relevant fee will be credited to the transferee campus by finance section.
- Fees will have to be paid by due date, any delay therein will be levied with late payment charges.
- If a student wants to change degree program in 1st semester then fee applicable and in effect at that time will be charged as degree transfer fee. He/she will forward application to HOD and approval from both departmental heads is required. Previous registration number will be cancelled and registrar office will issue new registration number.
number on same applicant number. In case of difference in fee package, difference will be adjusted.

- If a student wants to transfer to another department and apply within 3 weeks of start of classes he will submit application to HOD. Application should be approved by both departmental Heads. Registration fee & tuition fee will exist and difference fee shall be charged/adjusted by accounts department.
- If student apply after 3 weeks of class start, registration fee will be transferred to new registration number and tuition fee will be forfeited. In this case refund will not be allowed.
- If student apply for degree transfer after completing one semester then applicable transfer fee in effect at that time will be charged. Difference of fee will be charged/adjusted to student account.
- Student should seek new admission if opting new degree after 5 semesters and No relevance/exemption of course studied in new program.

CAMPUS TRANSFER - SAME DEGREE MANAGING EXAMS & RESULTS

- In case student changes the campus only, all the courses studied in previous campus will be acceptable with result notified by the controller. In case the curriculum is different for the same program, the HOD of accepting department will review the courses and accept the courses matching the curriculum.
- In case of change of program, the HOD of accepting department will notify the transfer and will issue new program/campus specific registration number under the Student ID.
- The student will be charged for applicable transfer fee.
- A student is registered in some degree program by mistake then HOD will verify and confirm the mistake and registrar will issue new registration number.

NEW ADMISSION TRANSFER - 1ST SEMESTER

- Recipient HOD after approval will forward case to student affairs department who will forward it to the Registrar office.
- If Fee status is pending on provisional registration number issued, then registration number will be marked cancelled on student registration form and new registration number will be issued on the same applicant number after selection.
- Applicable on all degrees under regulatory bodies like Engineering, MBBS/BDS, 2)

NEW ADMISSION CANCELLED-FAIL TO MEET ELIGIBILITY CRITERIA

- Student should provide complete documents/ equivalence before MID Term exams to secure admission. In case admission is cancelled student will have to pay re registration fee.
- A student can not apply for fee transfer to next session in case of ineligibility. However applying for refund in case of ineligibility will be after declaration of result within the time limit prescribed by HEC and the University.
- This policy is not applicable on MBBS/BDS students.

PROCEDURE

- The student must apply for transfer before starting the classes at the accepting department/Campus.
- The student should consult and get written permission of transfer to that department of accepting campus from the HOD.
- The HOD will send approved requests to the Registrar who will notify the transfer and will issue a new program/campus specific registration number under the Student ID.
- The student will be charged for applicable transfer fee.
- A student is registered in some degree program by mistake then HOD will verify and confirm the mistake and registrar will issue new registration number.

EXAMINATION RULES AND POLICIES

- In addition to mid-term test(s) and final examination, the department can require students to take quizzes, projects, assignments, case studies, term papers and presentations in accordance with course requirements.
- Final examination will cover entire course content.
- Student's results will be formulated by the teacher on the basis of attendance, quizzes, project, assignments, case studies, term papers and presentation, mid term test and final examination and after fulfilling any other evaluation criteria required by the Department.
- The Department, on completion of final examination shall send under a covering letter signed by the Head of Department or by an official nominated by him, student’s consolidated results in each subject/course on a Markis Sheet to CE Office within three weeks of the final examination.
- If a student who wishes to have their Semester result reviewed are to be dealt with by the HOD according to the policy of the University.
- Any student scoring a semester GPA less than 1.0 in a semester will repeat those courses in which he/she earned less than "C" grade of that semester.
- On completion of program, student (s) will be required to appear in a comprehensive examination where it is required. It shall encompass all the subjects the student has studied and passed in that program.
- Computation & review of result should be completed by the Department within three weeks of the final examination. CE will compile and declare the overall semester result in Semester Grade Points Average (GPA) and Cumulative Grade Points Average (CGPA) on the Following basis:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Numerical Value of Grade</th>
<th>Points earned in Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>(Exceptionally Outstanding)</td>
</tr>
<tr>
<td>B+</td>
<td>3.75</td>
<td>(Outstanding)</td>
</tr>
<tr>
<td>B</td>
<td>3.50</td>
<td>(Excellent)</td>
</tr>
<tr>
<td>B-</td>
<td>3.00</td>
<td>(Very good/High pass)</td>
</tr>
<tr>
<td>C+</td>
<td>2.50</td>
<td>(Good/Pass)</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>(Neutral)</td>
</tr>
<tr>
<td>D+</td>
<td>1.50</td>
<td>(Pass)</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
<td>(Incomplete)</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>(Fail)</td>
</tr>
</tbody>
</table>

GPA = Sum (Points earned in Course)/Sum of Credit Hours
Points earned in Course = Numerical Value of Grade earned x Course Credit Hour

"F"- Incomplete: A temporary course grade "I" is granted by an instructor when necessary absence, or other reasons prevent completion of course requirements by the end of the semester and the instructor believes that the student's performance in the course generally has been satisfactory. An "I" is not given as a substitute for failing or obtaining lowest grade. Incomplete grades will automatically convert to a ""F" if not removed within one semester from the date of declaration of the result.

"W"- Official Withdrawal: A grade of "W" is given in a course when a student officially withdraws from the course or from the university at least one day prior to the final examination.

"Probation" If a student earns a CGPA of less scoring of 2.00 under graduate, 2.50 graduate and 3.00 M.Phil leading to Ph.D, he will be placed on probation.

"Good Standing" If a student earns a CGPA scoring of 2.00 under graduate, 2.50 graduate and 3.00 M.Phil leading to Ph.D he shall be placed on "good standing".
WARNING
Whenever the CGPA of a student is less than as that prescribed above the Head of the Department will issue warning to him/ her and place him/her on probation.

AWARD OF DEGREE
• A minimum CGPA of 2.00 without any ‘F’ grade for the total semester of a degree program shall be required for the award of degree. Each student shall also be required to (1) complete laid down duration, pass number of courses as well as prescribed by respective department (2) clear all dues and that (3) has no disciplinary action is pending against him/ her.
• If a student on completion of his program fails to achieve a CGPA less than 2.00 will only be provided with a transcript of incomplete program showing the grades he has obtained and the CGPA only. He will not be eligible to receive the degree of that Program.

TIME LIMIT FOR COURSE DROP
• A student can drop a course only within first two weeks of the commencement of semester with carry forward of fee already deposited. After this period no carry forward on the fee paid for the subjects will be allowed except for circumstances enunciated in sub Para (b) below.
• Dropping of a course within two weeks of commencement of semester is allowed in exceptional circumstances, like clash in the time table or for reason of sickness beyond one’s control and duly certified by a registered medical practitioner.

COURSE DROP OR SEMESTER FREEZE
Due to unforeseen circumstances and personal situations beyond student’s control, he/she may be allowed to drop course(s) or freeze the semester as per following conditions:
• If the course(s) are dropped or semester freeze is applied within two weeks of the commencement of the semester then no dues will be charged and if the fee has been paid, the same shall be adjusted in the next semester.
• If the student is not enrolled and applies for semester freeze within two weeks of commencement of semester then no fee will be charged.
• In case the student is not enrolled in that semester and applies for semester freeze after two weeks till the end of that semester then semester freeze fee of Rs. 5000/-
• In case the student does not apply for semester freeze within that semester then he/she shall deposit semester freeze fee of Rs. 10,000/- per semester.
• After enrollment a student is ineligible to apply for drop of a course (s) or freeze the semester after two weeks of commencement of the semester and shall pay full fee and dues of that semester.
• In case a student rejoins the program after de-registration he/she shall pay the re-registration fee as laid down and semester freeze fee mentioned above for the number of semesters he/she has missed.

MISCELLANEOUS
• Not with standing anything to the contrary contained in these rules, no student shall be admitted to an examination after the expiry of seven academic years.
• Provided that a student who obtained by a student in each is admitted directly to a higher class in the university, the period already spent by him in studying the relevant discipline shall be excluded from the aforesaid period.
• All answers books of the Students will be destroyed after 120 days (one hundred and twenty days) after declaration of the Results.
LIBRARY RULES AND POLICIES

LIBRARY TIMINGS

Rainwind Road Campus
Central Library
Monday to Friday
08:00 AM - 04:45 PM
Timing for Circulation Section & Archive Section will be
01:00PM to 02:30PM on Friday.

Pharmacy and Law Library
Monday to Friday
08:00 AM - 08:00 PM

Defence Road Campus
L.B.S and Medical Library
Monday to Friday
09:00 AM - 05:00 PM
Saturday and Sunday
08:00 AM - 09:00 PM

Library and UOL disclaims any liability for loss or damage
from any member who is found misusing the library
material or facilities.

The Librarian is authorized to withdraw library facilities
to be student of the university.

A security deposited under any of the foregoing regulation
shall lapse to the university if it will remain unclaimed for
a period of one year from the date on a borrower ceases
his/her borrowing privilege.

If any library user disturbs the study environment for other
library users, he/she will be debarred from entering the library premises
for the same day.

Books are carefully examined on return and the borrower
will reshelf them.

If a member misplaces a book library material and cannot
find it after a thorough search, he/she must report to the
Librarian immediately to avoid overdue fine.

If a member fails to return the library book/s or any
material on due date, shall have to pay a fine of Rs.10/-
per day per book.

The Librarian shall decide the price of rare special books.

In the case of book loss or defacement by a user, he/she
will be charged two times double the current price of the
book or replacement there of.

The following categories will be allowed borrowing the library
material as per rules.

LENDING RULES FOR STUDENTS

i. Students are entitled to borrow up to Two Books for a
period of 14 days. Period may be renewed for further 14
days if another user has not reserved the desired book.

ii. Overdue books will not be reissued until the fine is not
paid.

iii. Reference Material and CDs, may only be issued for one
day as per special necessity.

iv. Annual Reports, Projects, Thesis, Pamphlets, Periodicals
and Newspapers cannot be checked-out, and can only
be consulted within the library.

v. Books already checked-out by some other user can be
reserved. If the books are not collected within 2 days, the
reservation will be cancelled.

vi. Presentation of Library Membership University Card is
must for any checkout at the Circulation Sec-8 Archive
Section.

vii. If a member misplaces a book library material and cannot
find it after a thorough search, he/she must report to the
Librarian immediately to avoid overdue fine.

viii. Misutilization of library material is a matter of disciplinary
action. Books accidentally damaged should be reported
so that suitable assessment can be made & damages paid.

GENERAL RULES

i. Only registered library users can use the library.

ii. Complete silence should be observed in the library.

iii. Drinks and eatables are not allowed in the library.

iv. Smoking is strictly prohibited.

v. Discussions / meetings are not allowed in the library.

vi. Please use library locker for your personal belongings
(such as personal books, briefcases, handbags, etc.)

vii. Library and UCL disclaims any liability for loss or damage
of any member’s personal belongings.

viii. Any book or object should be shown for inspection, on
the desire of library staff at any time.

The University of Lahore

iii. Please do not write, underline or mark any library book

iv. Books are carefully examined on return and the borrower

v. Library books should be left on the reading tables, library

vi. If any library user disturbs the study environment for other

vii. Books are liable to be recalled before the date, if required

viii. All library rules are displayed on library notice board, library

ix. Mobile phone usage is not allowed in the library.

x. Do not change configuration of computer or any other

xi. A security-deposited under any of the foregoing regulation

xii. Library books should be left on the reading tables, library

xiii. Complete silence should be observed in the library.

xiv. Drinks and eatables are not allowed in the library.

xv. Smoking is strictly prohibited.

xvi. Discussions / meetings are not allowed in the library.

xvii. Please use library locker for your personal belongings

xviii. Library and UCL disclaims any liability for loss or damage

xix. Any book or object should be shown for inspection, on

Librarian, violation of this rule shall require replacement of damaged volume or payment of its price specified under the rule.

iv. If one volume of a set Series is damaged and it is not available separately, the whole set shall have to be replaced or paid by the member as specified in the rules.

v. The amount received from a member as cost of lost or damaged books or materials or for not returning the books after due date may be spent on the welfare or development of library.

DISABLING FINE

• Rs.500/- on 1st violation. Rs.1000/- on 2nd violation. Case could be reported to disciplinary Committee on 3rd violation.

• All kind of fine will be paid on account office receipts. Library account will be blocked in case of non-payment of fine.

• Library Clearance

The result of students, having library membership will not be declared unless they provide a Clearance Certificate issued from the library. The Librarian will notify to the Controller of Examination the list of defaulters.

• Clearance from the library for leaving students will be requisite and shall be granted after checking the record of the library regarding the following:
   i. Whether any book is outstanding with the student.
   ii. Any fine is payable by the student.
   iii. Any legal action pending against student.

• Other Library Members will have to clear their “Library Accounts” to have Library Clearance by returning all the borrowed book/s or library material.

• Library clearance shall be given only by the Librarian.
STUDENTS CONDUCT AND DISCIPLINE RULES

Students are expected to demonstrate ethical and moral values upheld by the University. For this purpose, student(s) will be required to observe disciplinary rules framed by the Board of Governors of the University. A copy of these rules can be obtained from the Office of the Registrar. While filling in application form, the students are required to sign an affidavit that they will maintain discipline as required under the discipline rules. The affidavit is a part of the application form. In case of breach of discipline on any account specified in the discipline rules, the matter will be reported to the “Discipline Committee”, for the final decision in accordance with the norms of justice and keeping in view the evidence available thereof.

GENERAL DISCIPLINE RULES FOR STUDENTS

1. The students are required to refrain from:

   • Indulging in acts or behavior that threatens other students, faculty or staff members, including disruption of teaching and research training in the university; cheating in the examination/ tests and disruption of normal operation of the other essentials using functions of the University;
   • Participating in any unauthorized assembly and function;
   • Keeping fire arms or other weapons, even if licensed;
   • Involving in fighting or using of abusive language;
   • Sabotaging the normal operation of the University;
   • All students must carry with them university identity cards. Cards are required for entering the University premises, for boarding a University vehicle. A Student may be penalized for not carrying or displaying his/her I.D. card.
   • Outsiders, friends of the students are not allowed to visit or be entertained within the University premises. Students are not allowed to organize or participate in any unauthorized political, religious or sectarian activity/group. This will lead to instant expulsion from the University.
   • Students are expected to demonstrate ethical and moral values upheld by the University. For this purpose student(s) shall be faithful and honest in his/her dealing with all people. Shall protect the property of the University.
   • shalt keep himself/herself clean in body and mind standing for clean speech and clean habits.
   • shalt devote himself/herself faithfully to his studies.

2. Violation of these rules will lead to strict disciplinary action including rustication or expulsion from the rolls of the University, in addition to any other action under law that may accrue against the defaulters.

3. All the students are required to wear modest and tidy dress. Violation of this rule will lead to a fine. Student may also be asked to leave the University Campus until his/her dress is found to be reasonable.

a. Male Students should wear shirts with trousers, Shalwar Qameez or Kurta, suits and dress shoes with socks.

b. Female Students must also be decently dressed. Following dress code is to be strictly followed by them:
   • Clothing must be modest and within the norms of modesty
   • Tight fitted clothes should be avoided. Loose and unrevealing clothes are to be worn. Boldly designed dresses are not allowed
   • Flashing clothes, jewelry, pazaets etc are not allowed.

4. Smoking is not allowed on the University campus or inside the University vehicles except in the reserved area.

5. Use of the mobile phone is strictly prohibited in the University libraries, class rooms and laboratories. Deviation will be fined Rs. 5000/-.

6. Drinks and eatables can be taken only inside the cafeteria and not in the University lawns. Eating or drinking at all other places is prohibited.

7. Male and female students should sit at the places reserved for them in the cafeteria and other part of the University.

8. Smoking in the University is prohibited and may be handed over to the civil authorities if found trespassing.

STUDENT DISCIPLINE RULES (REVISED FEBRUARY 2009)

The Discipline Rules have been formulated under the University Ordinance No LXI of 2002. The purpose of these rules is to streamline the discipline among the students of the University. These rules are a revision of 2006 of University of Lahore Discipline Rules and the amendments made herewith, with effect from February 18, 2009, approved by the Rector and Chairman BoG. These Rules will come into force with immediate effect.

EVERY STUDENT

a. Shall be faithful in his/her religious duties and respect the convictions of others in matters of religion and customs.

b. Shall be faithful and honest in his/her dealing with all people.

c. Shall be loyal to his/her country and refrain from doing anything which might damage his/her honor and prestige.

d. Shall respect the elders and be polite to all.

e. Shall respect the teachers and others in authority in the University.

f. Shall keep himself/herself clean in body and mind standing for clean speech and clean habits.

g. Shall help his/her fellow being especially those in distress.

h. Shall devote himself/herself faithfully to his studies.

i. Shall protect the property of the University.

1.0 DEFINITION

In these Rules, unless the context otherwise requires, the following expressions shall have the meaning hereby respectively assigned to them. “University Discipline Committee” the Committee constituted by Board of Governor for the purpose of maintaining discipline in University and among the students. “Department Discipline Committee” the Committee constituted by Board of Governor for the purpose of maintaining discipline in Department and among the students.

“Appellate Authority” means the University Discipline Committee, Rector UOL and Chairman Board of Governors and other teachers/ officers of the University to whom the powers may have been delegated.

a. “Rector” means the Rector of the University.

b. “Chairman” means the Chairman of the Board of Governors of the University.

c. “Chairman of the Committee” means the Chairman of University Discipline Committee appointed by the Board of Governors.

d. “HoD/Director/Dean” means the head of the Department Discipline Committee appointed by the Rector and/or Chairman BoG.

e. “Member” means the members of the Discipline Committee approved by the Rector and/or Chairman BoG.

f. “Students” means the students of the University.
2.0 INTRODUCTION
The University believes that student conduct is an important personality trait and as such expects its students to act in an ethical and moral way. Student behavior is a major issue for everybody who works in a campus environment. Anti-social or criminal behavior usually damages people emotionally as well as physically, be it the students, staff or teachers. It results in a great deal of unintended worry and distress for the victims and their families. The University has zero tolerance for such acts or the consequences resulting from behavioral misconduct.

2.1 STUDENT DISCIPLINE
The University has a disciplinary system, the purpose of which is to protect the University community and to deter those who interfere with its work and activities. Students agree to abide by the University rules at the time they register themselves as University students. Parents, staff and students all expect the University to maintain a safe, orderly and peaceful environment. The University takes this very seriously.

2.2 UNIVERSITY DISCIPLINE COMMITTEE
The University Discipline Committee shall be formed by the Rector UOL, and shall be headed by the Chairman University Discipline Committee. The University Discipline Committee shall consist of members not below the rank/designation of HoD/Dean. This committee shall supervise and guide the department Discipline Committees as and when required.

2.3 DEPARTMENT DISCIPLINE COMMITTEE
To expedite discipline cases, the Rector has authorized the departments to constitute Department Disciplinary Committees for the purpose of efficient processing of the disciplinary cases. The HoD and Director of Department or Dean of the Faculty shall constitute a Departmental Disciplinary Committee to handle discipline cases and give decision according to the UOL Discipline Policy.

3.0 PROCEDURE
For the purposes of this policy, the following guideline may be followed:

i. The HoD/Dean shall designate their staff / faculty members to communicate the rules/policy of student conduct to the students, and also assure or take steps to watch the general conduct of the students during their presence at the department / University. It is strongly recommended that a faculty member or staff may be designated to keep watch on the students from time to time.

ii. The HoD/Dean shall put up a general notice which shall communicate to the students that all complaints must be brought to the notice of the HoD/ Director/ Dean.

iii. The students must submit a written complaint in the department. The department shall also ask the accused to submit a written reply in response to the complaint. Applications of witnesses shall also be collected and maintained for record.

iv. The departmental committee shall schedule a meeting and ask both parties to the disciplinary hearing, and shall record their attendance as well as minutes of the meeting.

v. The department shall make effort to review the applications and statements of the witnesses, and give their decision on the day of the hearing. A copy of the decision shall be sent to the Chairman UOL Discipline Committee, Rector and to the Registrar’s Office.

vi. A student who is under investigation by the department discipline committee shall be suspended from attending classes, till the time a decision has been taken by the committee.

vii. A student who is punished by the discipline committee shall not be allowed to attend the university. In case of nesculation, the student ceases to be a student of the University or campuses of University.

viii. A student who is suspended from the university remains: a student but is not allowed to pursue a course of study in the university during the period of suspension.

4.0 GENERAL GUIDELINE ON MISCONDUCT
An act of misconduct by a student is an offence and falls under the preview of the discipline rules/policy. Guideline on this misconduct is displayed for information.

4.1 If a student commits an act of general misconduct within the university

a. Attacks, harasses or threatens to attack or harass any person;

b. Intimidates or attempts to intimidate any person; willfully, recklessly or negligently engages in conduct which causes or is to cause bodily injury to any person;

c. Engages in conduct which involves unauthorized or unjustified use of force or interference.

d. Which causes or is likely to cause injury or damage to; or denies or obstructs or is likely to deny or obstruct the rightful use of any property of the university or of any person.

e. Disobeys any reasonable order or direction given to the student by a faculty member, officer or employee of the university in relation to the use of any property of the university.

f. Smokes in the University premises or class rooms, laboratories, libraries and Examination Hall.

g. Consumes alcohol/liquor or other intoxication drugs within the University Campus, classrooms, laboratories, and library or during instructional tours.

h. Uses mobile phone with camera in the premises of the University in the classrooms, University library, laboratories, examination hall and studio.

i. Collects any money or receive donation or pecuniary assistance from or on behalf of the University except with the permission of the Rector.

j. Stages, incites or participates in or abet a walk out or strike or other form of agitation against the University or its teachers and officers.

k. Behaves in a non-ethical and unsocial manner in the University premises.

l. Indulges in fighting and uses fire arms, daggers and knives.

m. Call relatives/friends for fighting in the premises of the University.

n. Involves in activities that are against the University discipline like playing music in campus, drive the car noisily, or play the alarm signal consistently.

o. Behaves improperly on educational trips or other co-curricular activities within the University or in ground/stadium organized by the University.

p. Frames any political association with any political party.

q. Organizes or takes part in any function within the University campus or a hall of residence or organize any club or society of students which is detrimental to the objectives of the university.

4.2 The faculty or officer may take action, if a student commits general misconduct and the officer or employee concerned has reasonable cause to believe that such order or direction is necessary to ensure the safety of any person;

a. To prevent damage to or destruction of the property;

b. For the performance of the officer’s or employees duties in relation to the custody, maintenance or use of the property;

c. Refuses or fails to provide identification when requested to do so by an officer or faculty or employee of the university acting in the course of official duties, provided that when making such a request the officer or employee concerned produces identification to the student;

d. Interferes with the orderly conduct of a teaching group or ceremony of the university or a meeting of the board of directors, committees, subcommittee or anybody constituted by or under the university’s charter, policies, regulations or appointed by anybody so constituted;

e. In an examination, is in possession of material contrary to the instructions for the examination;

f. Copies or attempts to copy computer software without the permission of the university and or in breach of the Copyright Act of the Government of Pakistan;
4.3.1 Major Case of Misconduct

a. Misbehavior with a teacher/officer of the University.

b. Fighting incidents.

c. Use of alcohol in the premises of the University.

d. Teasing the girl students.

e. Strike/protest etc.

f. Theft/damage to University property.

g. Promotion of political party/agenda/ unions. h) Any other incident/misconduct which the committee feels falls in the preview of major offence.

4.3.2 Minor Case of Misconduct

a. Exchange of arguments among students.

b. Making noise in the University.

c. Playing music in cars.

d. Late coming in class, playing cricket on University roads.

e. Smoking in the University.

f. Any other incident/misconduct which the committee feels falls in the preview of minor offence.

5.0 PUNISHMENTS ON BREACH OF DISCIPLINE RULES

5.1 In the major cases, the Discipline Committee shall be authorized to rusticate or expel a student at fault. But before the punishment is announced the student at fault shall be given a chance to defend himself/herself in writing and a chance of personal hearing by the Committee.

5.2 In Minor cases, the Head of department is expected to suspend the student from his/her classes for not more than seven consecutive days or fine him up to a minimum of Rs. 3000/- or more keeping in view the gravity of the offence.

5.3 The concerned teacher may fine a student up to a maximum of Rs. 1000/- or he may expel the student from the class.

6.0 RIGHT TO APPEAL

6.1 The student shall have the right of appeal to Board of Governors against the punishment awarded by the Discipline Committee, if he/she puts up the appeal within fifteen days of date of decision. The appeal may, however, be disposed of by the Rector subject to the approval of the Board of Governors.

6.2 The Board of Governors after due consideration may take such decision as may be considered appropriate according to the merit of case.

7.0 STUDENT DISCIPLINE ON THE CAMPUS

7.1 The University of Lahore primarily aims to promote, project and maintain a peaceful academic environment that is conducive to equitable transmission of knowledge and learning, pursuit of truth, intellectual growth and development of its students as scholars and citizens.

7.2 In order to achieve these aims and goals the University strives to guide the educational community by establishing Students Disciplinary Rules and Regulations and Student Code of Conduct for promotion of individual and social responsibility.

7.3 Accordingly the University of Lahore has set up Unfair Means Committee, Students Discipline Committee along with their Appellate Committees. These Committees while dealing with cases of violation of rules and regulation follow recognized judicial and legal principles and procedures.

7.4 Reasonable opportunity is available to accused student to defend himself, call witness and present material evidence in his support before being penalized or exonerated. Right of appeal is also available to penalized students for waiver or reduction of penalty.

8.0 PROCTOR SYSTEM

8.1 Proctor System has also been established whereby faculty members are appointed as proctors from each department. They remain vigilant and alert for taking, on spot cognizance of violation of Rules and Regulation and Code of Conduct.

8.2 They take immediate administrative action against violators by imposing fines, other penalties and by reporting major offenses to the Discipline Committee.

8.3 The Proctor System is headed by a Chief Proctor.

1. Appointment of Chief Proctor The Chief Proctor will be appointed from amongst the Deans or Head of Department and will be at least the status of a professor.

2. At least two proctors will be appointed from each department with the status not less than Assistant Professor.

3. Standing Proctor Committee The Chief Proctor will constitute a committee comprising of not less than proctors representing different departments for holding hearing of minor violations of discipline and student conduct rules. He may require the concerned student to appear before the committee on date and time and place intimated to the student. No adjournment of the meeting shall ordinarily be allowed to the student.

4. The Chief Proctor may suspend the accused student for fifteen days from attending classes and utilizing other facilities provided to him by the University.

5. At the same time a letter by courier services shall be sent by Chief Proctor to the student at the address given by him in the admission form with a copy to his parents. The letter shall contain the detailed allegation and asking the student to appear before the Standing Proctor Committee and to defend his case on a specified date, time and place.

• The student should be given reasonable opportunity to defend his case. However, the student will not be allowed to represent his case by a lawyer or any other person at the proceeding of the Standing Committee. The committee may if considers necessary require the complainant against the student and witnesses of the case to be present in the meeting at the time holding the enquiry.

• The Chief Proctor shall give responsibility to record minutes of the proceeding of the meeting to any member of the committee, who shall record the statement of the concerned student and witness if any, about incidence in writing and get the signature of students and witness on their statements.

• The Standing Proctor Committee after due consideration of the whole matter should recommend suitable punishment that shall be notified by the Registrar after approval of the Rector with copies to the student and his parents, Dean, HOD’s, etc.

9.0 RIGHT TO APPEAL

9.1 The student has the right to appeal in writing to the Appellant Committee against the decision of the Standing Committee. The Appellant Committee after due consideration may decide to concur or enhance or reduce the punishment.

10.0 COGNIZABLE INFRACTION OF STUDENT CODE OF CONDUCT

10.1 The following are serious infractions of the Student Code of Conduct and are subject to disciplinary sanction by the University of Lahore.

1. Misuse of Alcoholic Beverages, Drug and other Controlled Substances, Smoking.

2. Assault, Injury and Threat

3. Indecent Exposure, Violation of prescribed dress code, wearing tight, Jeans

4. Sexual Misconduct, Sexual Assault, Sexual Harassment

5. Hazing
6. Disruption of Rights
7. Public Disorder, Group Violence and Mass Disturbance
8. Contempt
9. Endangerment
10. Fire and Safety Regulations
11. Possession and Misuse of Weapons
12. Theft or Damage of Property or Services
13. Bribery and Extortion
14. Gambling
15. Misuse of Computers

16. Ragging, Zero Tolerance shall be shown towards
    a. Gambling
    b. Bribery and Extortion
    c. Theft or Damage of Property or Services
    d. Possession and Misuse of Weapons
    e. Fire and Safety Regulations
    f. Endangerment
    g. Contempt
    h. Public Disorder, Group Violence and Mass Disturbance
    i. Disruption of Rights

11.0 PUNISHMENT FOR INFRINGEMENTS

11.1 The Chief proctor, Standing Proctor Committee and Proctor can impose following punishment on student committing violation given above.

- Suspend student violator for fifteen days from attending classes, and utilizing university facilities, memberships and scholarship etc.
- Impose a fine of up to Rs. 10,000/-
- Hear cases of minor offences spotted by them and report major cases to the Discipline Committee.
- The Proctor individually may impose a fine of Rs. 1,000/- on student violating Student Code of Conduct.
- There will be a Chief Proctor along with Proctors at each campus.

Note: There will be a Chief Proctor along with Proctors at each campus.

11.2 The Chief Proctor, Standing Proctor Committee and Proctors besides performing the above functions, duties and responsibilities shall also be required to undertake the following.

- Take regular rounds of campus for maintaining peaceful atmosphere.
- May wear prescribed dress-gown and proctor badge.
- Give power point presentation in classes on student Discipline Rules and Regulations, students Code of Conduct including penalties for violations.
- They will not be required to appear before the Discipline Committee as witnesses etc.

Note: There will be a Chief Proctor along with Proctors at each campus.

ACCOMMODATION RULES AND POLICIES

UNIVERSITY GIRL’S HOSTEL

OBJECTIVES:

- Ensuring that hostels are operated and managed by the University on professional grounds.
- Only eligible occupants will be allotted rooms and remarkable discipline will be maintained.
- Fee and billing is executed on auto basis and there should be zero outstanding hostel dues.
- All processing of hostel be system based.
- Proper reporting mechanism is in place and management is informed of progress/results of all hostels on daily basis.

RULES AND REGULATIONS

1. Only enrolled students studying at UOL and faculty members will be eligible to apply for hostel rooms.
2. Upon admission in the university and on willingness to take a hostel room, student will fill out the requisite application form for room reservation.
3. De-allocation application should be submitted on month prior notice.
4. Room rent will be charged to the occupant regardless to the date e-g if the student is interested in getting admission in the last date of month; she has to pay the dues for the entire month.
5. All the occupants of hostel rooms will be bound to follow the code of conduct and hostel rules and regulations in place from time to time. Any material breach thereof will render the boarder of disciplinary action.
6. All senior students, foreigners and faculty members will avail the bi-seater facility and juniors will be adjusted in four-seater , six-seater and eight-seater facility.
7. Warden series is exceptional case and these students will be entertained on first come first serve basis.
8. Mess is mandatory in all situations for all students.
9. Prior to allocation of room, it will be ensured that student has paid due tuition fee to the university and evidence of such payment is sourced and attached to application form.
10. Hostel management will take a decision of application in terms of acceptance or refusal within the same day of the receipt of application and whatever will be the decision, applicant will be informed accordingly.
11. On acceptance of application, room allocation will be made to the applicant/student and relevant dues such as registration fee and room rent will be charged on auto basis by the system and same will be required to be deposited by due date notified on relevant document.
12. No allocation of room will be processed unless all the desired information is provided by the applicant in full including family, guardian and visitor’s information, their CNIC numbers, contact details and numbers and emergency contact.
13. Billing of room charges will be made monthly in advance and all boarders will be billed by 10th of the relevant month. Dues are to be deposited by due date mentioned on bill. Failure to pay within the due date will be charged late payment @ Rs. 50 per day or as applied by the management from time to time and placed on hostel manage notice board. Non payment by due date will change the status of the boarder ineligible to enter the hostel premises and hostel management will have the right to place such status of the board on notice board.
14. Non payment of dues by 25th of the month will render the boarder ineligible to enter the hostel premises and status of the boarding will change to suspend. Further the guardian of the student notified at the time of admission will be informed of nonpayment of the dues by the boarder. Change of status from suspension to normal will be made on payment of default sub charge in addition to the fine that will be applied and levied by the management as deemed appropriate and student will not be allowed to take their classes.
15. All hostel occupant will be liable to pay damages caused by them to the property of University hostel.
16. On breach of any hostel accommodation and after affording an opportunity of heard, name of boarder may be struck off, fine will be charged, hostel room will be de-allocated and guardian will be notified in writing.
17. On subsequent reallocation of hostel room, a reactivation fee will have to be charged
18. Any change in the capacity of hostel and addition in lodging facility will have to be created in the system prior to allocation of bed. No allocation will be possible in the system unless such bed number/room exists and in case of non-existence its information first be created in the setup.
19. Hostels fee bill to be collected by the student.
20. Student admit card to be issued on allocation and such card will be the property of UOL which the student will have to deposit back on vacation of premises.
21. Student availing air conditioning facility will be charged with such applicable rate of electricity with the unit consumed as notified by the finance office on monthly basis. AC facility will be active for five months that is (may to sep) every year and rent for bi-seater will be 2000 each student, for tri-seater it will be 1500 each student and other different capacity all student will pay 1000 per month, and bill will be charged on prevailing rates divided by number of students.
22. Student’s outstanding dues will be monitored by accounts office and fee recovery section. Hostel management will help them when required
23. Accounts will prepare the legal notices for the fee and recovery and warning letters will be issued to the occupants, if they fail to pay the dues hostel management reserve the rights to de-allocate the student from the hostel.
24. Student will be responsible to take care of their valuables/belongings in case of theft management will not be responsible.
25. On breach of rules and regulations fine will be charged to the students, only first aid will be provided as and when required.
26. Student parents and visitors will not be allowed to meet the student after visiting hours.
27. A student, once de-allocated from the hostels, cannot re-allocate within the time period of next 6 months.

STUDENTS’ ENTRY AND EXIT PASSES

• To ensure safety and security of the students, OSA has designed an entry and exit pass which has three copies; a copy which remains in the warden’s office, a copy which the students leaves at the security office and a copy which she hands into security office upon return to the University at he stated time.

• The pass contains a student’s name, registration number, hostel name, the student’s contact number and CNIC number.

• Out pass slips are issued to students who may find it difficult to report at the standard time (7:00pm). The out pass can only be issued with the consent of the parents. If the student fails to return by the time indicated on the out pass slip, she and the family are immediately contacted to locate the student. The student is also charged a fine of Rs 4000.
Lahore
Defence Road Main Campus
1 - Km Defence Road, Near Bhuptian Chowk,
Off Raiwind Road, Lahore
Raiwind Road Campus
1 - KM Raiwind Road,
Near Thokar Niaz Baig, Lahore

Islamabad
Sihala Campus
6.5-KM Japan Road Sihala, Zone-5, Islamabad
Tel: (051) 44 86 422-28 | info@isb.uol.edu.pk
Jinnah Avenue Campus
24-west, Jinnah Avenue, Blue Area, Islamabad
Tel: (051) 282 96 97-98

Sargodha
Sargodha Campus
10-KM Lahore Road, Sargodha
Tel: (0483) 88 10 12-16 | info@sgd.uol.edu.pk

Gujrat
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Tel: +92 (0531) 111 865 865 | info@grt.uol.edu.pk

Pakpatan
Pakpatan Campus
9-KM Sahiwal Road, Near Charwat, Pakpatan
Tel: 0307 493 00 00, 0300 8640 116 | info@pkpt.uol.edu.pk

Web: www.uol.edu.pk | Tel: (042) 111-865-865 | Email: info@uol.edu.pk