

Programs in Sciences and Humanities

Dean's Message

In line with the mission of the University: The quality of human beings shall remain the center of our focus. It shall be our constant endeavor to produce, not only excellent scientists and good technicians, but also well balanced human beings with strong sense of values,

the School of Sciences and Humanities aims to promote intellectual curiosity, critical thinking, and profound sense of cultural norms and values among our students to serve humanity.

Sciences and Humanities courses form the backbone of all disciplines. The learning of creative ideas finds its way into literature, history, philosophy and related fields and adds value of the interdisciplinary education. Our courses aim to engage the students in the meaningful learning of fundamental core humanities, social and natural sciences, applied and computational linguistics studies, as well as collaborative interdisciplinary approaches to keep themselves at par with the fast paced modern world.

Our faculty is a group of professional researchers and educators who strive hard to broaden students' horizon of knowledge and imagination and encourage among them creativity and innovation. We are mindful of the combination of technical knowledge of the respective subjects and the ethical values that need to be inculcated in the students.

We offer three graduate programs at Lahore campus namely; MS in Mathematics, PhD in Mathematics



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PhD (Eng.), University of Azad Jammu & Kashmir (2013)

MS (App. Ling.), UMT, Lahore (2008)

MA (Eng.), Kinnaird College, Lahore (1999)

MA (Eng.), University of Punjab (1991)

and MS in Applied Linguistics. These programs are highly research oriented and contribute extensively in the wide-range of research activities that include seminars, workshops, webinars and conferences. Our state-of-the art English Language Communication Labs not only provide a communicative framework to the students to develop their language skills but also serve as a platform for empirical research.

With the pressing need of digitalization, come challenges of diverse nature to equip the human resource with the specific skills and orientation. The requirements of every segment are unique and specific to its needs. The curriculum of Sciences and Humanities offered to different disciplines is so designed as to cater to their specific objectives and needs professionally.

We are committed in providing our students with the skill set based on sound communication and understanding tools to become the active participants and excel in today's competitive world.

Master of Science (Applied Linguistics)

There is an ever-growing demand of trained English teachers. Colleges, universities, and language schools, all need qualified English teachers. English has now become more than a mere language. It is a bridge across borders and cultures, and a source of unity in a rapidly evolving world. This program shall enable students to learn how linguistic analysis can be used in practice in the vast arena of Language with specializations in Computer Assisted Language Learning (CALL), Computational Linguistics (CL), English Language Teaching (ELT), and English for Specific Purposes (ESP). This program inculcates specialized skills to effectively perform teaching of English language. This program integrates Language and computing skills.

Program Objectives

- To produce qualified teaching resource.
- To integrate ICT (Information and Communication Technologies) in Teaching of English Language.
- To develop collaborative e-learning resources for teaching.
- To encourage teachers to be critically engaged in advanced research in English language teaching and learning.

Eligibility

- Master degree in ELT, TESL, English Literature or a related discipline AND
- At least 55% marks OR CGPA of at least 2.0 (on a scale of 4.0)

Selection Criteria

- Past Academic Record (Bachelor) 50%
- Score obtained in NU Admission Test/NTS-GAT (General) 50%

Award of Degree

For the award of MS degree, a student must have:

- Passed courses totalling at least 30 credit hours, including all those courses which have been specified as Core courses
- Obtained a CGPA of at least 2.50.

Tentative Study Plan of MS (Applied Linguistics)

Semester – I		
SS 5001	Comp. Assisted Lang. Learning	3
SS 5002	Fund. of Language & Linguistics	3
SS 5003	Computational Linguistics	3
Total		9

Semester – II		
SS 5005	Research Methodology	3
SS xxxx	Specialist Module – I	3
SS xxxx	Elective – I	3
Total		9

Semester – III		
SS 5091	Thesis-I	3
SS xxxx	Specialist Module – II	3
Total		6

Semester – IV		
SS 5092	Thesis-II	3
SS xxxx	Elective – III	3
Total		6

Note

Registration in “Thesis – I” is allowed provided the student has

- a) Earned at least 18 credits
- b) Passed the “Research Methodology” course; AND
- c) CGPA is equal to or more than 2.5.



Master of Science (Mathematics)

Mission Statement

MS (Mathematics) program at NUCES is committed to provide an excellent major for students, whose career goals are teaching, immediate entry into allied arenas or pursuit of a higher research degree in mathematics. This program will enable students to develop quantitative and abstract reasoning by using mathematics as an analytical tool. In fulfilling this mission, the department has created an environment for quality instruction to all students in Mathematics courses and nurturing a pleasant and constructive faculty-student interface.

Program Objectives

- To integrate relevant knowledge and pose new questions across a range of pure and applied mathematics.
- To provide a background of mathematics for research and development.
- To learn novel mathematical concepts, methods and tools for application in the applied fields.
- To construct, analyse and interpret mathematical models for real-life problems, drawing from a wide range of areas of mathematics.
- To bridge the gap for mathematicians between financial academic institutions.

Eligibility

- Degree in relevant subject, earned from a recognized university after 16 years of education with at least 55% marks (under annual system) OR
- CGPA of at least 2.0 (on a scale of 4.0) in the most recent degree program.

Selection Criteria

- Past Academic Record (4 year Bachelor/2 year Master) 50%
- Score obtained in NU Admission Test/NTS-GAT (General) 50%

Typical course load in a semester is four courses. However, NUCES staff cannot register for more than two courses in a semester.

Tentative Study Plan of MS(Mathematics)

Semester – I		
MT	Core Course – I	3
MT	Core Course – II	3
MT	Elective – I	3
MT	Elective – II	3
Total		12
Semester – II		
MT	Core Course – III	3
MT	Core Course – IV	3
MT	Elective – III	3
MT	Elective – IV	3
Total		12
Semester – III		
SS 5011	Research Methodology 1	1
MT	MS Thesis – I	3
Total		4
Semester – IV		
MT	MS Thesis – II	3
Total		3

A student has the option to pursue MS either by undertaking a 6 credit hour MS Thesis, or by taking a 3 credit-hour Research Survey plus one taught course.

Registration in “MS Thesis – I” is allowed provided the student has

- Earned at least 15 credits
- Passed the “Research Methodology” course; AND
- CGPA is equal to or more than 2.5.

Core Courses (Must pass any Four of the following courses)

MT 5002 Advanced Integral Equations
MT 5003 Advanced Mathematical Statistics
MT 5005 Advanced Algebra
MT 5006 Advanced Functional Analysis
MT 5007 Advanced Number Theory
MT 5013 Adv. Num. Solutions of ODEs
MT 5027 Advance topics in Real & Complex Analysis
MT 5099 Advanced Riemannian Geometry
MT 6010 Numerical Solutions of PDEs

Award of Degree

For the award of MS degree, a student must have:

- Passed courses totalling at least 31 credit hours, including four core courses.
- Obtained a CGPA of at least 2.50.

