

MIRPUR UNIVERSITY OF SCIENCE AND TECHNOLOGY (MUST), MIRPUR AJK





# VISION

To be a superior teaching and research Institution, having transformative impact on society and acting as a knowledge corridor between Azad Jammu & Kashmir, Pakistan and rest of the World.

# MISSION

MUST is committed to all-encompassing growth of its students, besides enabling them to tap the world of knowledge and assume leadership role in the future through a process of continual innovation in education, research, creativity, technological advancement and entrepreneurship.









#### MESSAGE FROM THE CHANCELLOR

The Mirpur University of Science and Technology (MUST) is imparting state of the art education in Azad Jammu and Kashmir. Though, in MUST, the bulk of the students are from Azad Kashmir, it is a matter of great satisfaction that many from different parts of Pakistan are also part of its faculty and student community. Over the years, MUST have laid down foundations for developing competencies in cutting edge scientific and disciplines. But, in addition to focusing on its core specializations, it is also developing fast into a centre for quality education in social sciences and humanities. MUST is rapidly investing in research and innovation and its products are being appreciated and recognized in the academic community. This is possible because of its emphasis on faculty development programmes and creation of an enabling environment for productive learning that would prepare students for professions in the ever-changing markets. MUST is also emerging as a pioneer in new technologies such as Artificial Intelligence, Internet of Things, Robotics and Cloud Computing.

This gives it a head-start to meet the challenges of the future. For all these achievements, I would congratulate the Vice-chancellor as well as members of his efficient team for their meticulous planning and diligence. In the wake of the COVID-19 outbreak, the biggest challenge for the academia has been to shift from traditional campus-based teaching to the digital mode of education. I commend the University leadership for their tremendous efforts in meeting this challenge with success. I also felicitate MUST for being ranked first in HEC's list of top Universities of Azad Jammu & Kashmir for online readiness. This is an impressive achievement despite resource constraints. I feel immense pleasure in acknowledging that MUST has expanded its digital infrastructure in a short span of time. Its next outreach initiative would up-grade the existing online teaching platforms for students living in remote areas. I appreciate the readiness of the faculty, administration and staff to enable students to achieve academic excellence in diverse fields. I wish you all more success!

Sardar Mohammad Masood Khan President of Azad Jammu and Kashmir/ Chancellor MUST





#### MESSAGE FROM THE VICE CHANCELLOR

I am proud to be the Vice Chancellor of Mirpur University of Science & Technology (MUST), Mirpur. This is a time of unprecedented change over in the higher education worldwide. As well as expanding itself with a view to proving higher education opportunities to masses at doorsteps, quality of education remains MUST's a priority goal. In this regard, we have recently established Faculty of Health & Medical Sciences in addition to startup of other nine new departments in various Faculties. We have also extensively revised our curricula with a view to incorporating latest development and trends in the respective fields of study. MUST makes sure that an ideal environment conducive to learning exists at all campuses. International collaboration with top ranking universities is what we actively pursue in order to provide international exposure to our students and faculty and promote joint research. We take pride in our highly qualified faculty who made their appearance at international forums by publishing quality research. Our students remain our top most priority. MUST is willing to go any far to protect their future and are working hard to maintain quality education and provide facilities to our students in the face of the Covid 19 pandemic. I am happy to share that as a fruit of a joint effort we have among the top universities of the country, and first in the State, in HEC's ranking of

universities for their online readiness. I take this opportunity to congratulate all faculty and staff without whose effort this would not have been possible.

MUST stand ready to harness its digital resources if this pandemic situation exists. We have put all the arrangements in place in this regard. I am thankful to the Chancellor of MUST, Sardar Masood Khan for his continuous support in our effort to uplift the standards of education at MUST. I am positive we would achieve further heights under his dynamic leadership and vision. I am also grateful to Higher Education Commission (HEC) for their providing guidelines and support in building university's wide-ranging rollout of Microsoft Teams for online teaching. This, for sure, allowed us to outreach students in remote areas and continue teaching unhindered. I believe that communities play a key role in building higher education institutions. I would take this opportunity to urge upon the members of the community and philanthropists to come forward and strengthen our hands, in whatever capacity they can, in implementing our initiatives relating to different foundations, endowments, social campaigns, and, more importantly, university infrastructure development. Our Vision 2025 envisages widening of academic activities and infrastructure development. I am pleased to share that the PC-I for Pallandri has already been approved by DDWP (HEC), while the PC-I for Bhimber Campus has also been submitted. As the Vice-Chancellor of MUST, I am determined to create an environment that provides favorable environment to each and every student and staff to meet their professional needs and aspirations. I assure you that your experience at MUST will be an asset for the rest of your life.

I welcome you all to Mirpur University of Science and Technology and look forward to seeing you soon on the campus.

(Prof. Dr. Maqsood Ahmed)
Vice Chancellor



#### **About The State of Azad Jammu & Kashmir**

Azad Jammu and Kashmir is the political entity Within the Pakistani-controlled part of the former Princely state of Jammu and Kashmir. It borders Indian administered Jammu and Kashmir to the east (separated from it by the Line of Control), Khyber Pakhtun khwa province to the west, Gilgit-Baltistan to the north, and the Punjab province to the south. With its capital at Muzaffarabad, Azad Jammu and Kashmir covers an area of 13,297 square kilometers (5134 square miles) and has an estimated population of about four million. Azad Jammu and Kashmir (AJK) is a self-governing state under Pakistani control, but under Pakistan's constitution the state is not actually part of Pakistan. Azad Kashmir has its own elected president, prime minister, legislature, high court, and official flag. The state is administratively divided into three divisions which, in turn, are divided into ten districts namely, Mirpur, Kotli, Bhimber, Muzaffarabad, Hattian, Neelum, Poonch, Sudhnuti, Haveli, and Bagh. These ten districts are further subdivided into 29 subdivisions. The people's participation in the political and socio economic development is ensured through the elected



Banjonsa Lake Rawlakot

institutions of the Azad Jammu & Kashmir Legislative Assembly comprising of 41 directly and 8 indirectly elected members and the Azad Jammu & Kashmir Council with six elected members. Azad Kashmir's financial matters, i.e., budget and tax affairs, are dealt with by the Azad Jammu and Kashmir Council rather than by Pakistan's Central Board of Revenue.

The Azad Jammu and Kashmir Council is a supreme body consisting of 11 members, six from the government of Azad



Jammu and Kashmir and five from the government of Pakistan. Its chairman/chief executive is the president of Pakistan. Other members of the council are the President and the Prime minister of Azad Kashmir and a few other AJK ministers.

The literacy rate in Azad Kashmir is more than 64%, which is significantly higher than the national average of Pakistan. At

Neelum Valley

present the gross enrolment rate at primary level is 95% for boys and 88% for girls (between the ages of 5-9). Urdu is the official language of Azad Jammu and Kashmir. However, due to the area's diverse cultural blend, many languages are spoken by different populations, including Pahari, Potwari.





The northern part of Azad Jammu and Kashmir encompasses the lower part of the Himalayas, including Hari Parbat peak in the Neelum Valley is the highest peak in the state. Fertile, green, mountainous valleys are characteristic of Azad Kashmir's geography, making it one of the most beautiful regions on the subcontinent. The region receives rainfall in both winter and summer. Muzaffarabad and Patton are among the wettest areas of the state. Throughout most of the region, the average rainfall exceeds 1400 mm, with the highest average rainfall occurring near Muzaffarabad (around 1800 mm). During the summer season, monsoon floods of the Jhelum and Neelum rivers are common, due to high rainfall and melting snow.

Azad Jammu & Kashmir is very rich in natural beauty. Its snow-covered peaks, dense forests, winding rivers, turbulent foaming streams, wheat-scented valleys, velvet green plateaus and climate varying from arctic to tropical, all join together to make it an excellent tourist attraction. Splendid vallies of Neelum, Jhelum, Leepa, Sudhan Gali, Banjosa, Rawalakot, Paniola, Datot, Tolipir and many more have magical attraction for visitors. Azad

Jammu & Kashmir is a fascinating land of diverse people, languages & cultures.

Agriculture is a major part of Azad Kashmir's economy. Lowlying areas that have high populations grow crops like barley, mangoes, millet, corn (maize), and wheat, and also raise cattle. In the elevated areas that are less populated and more spreadout, forestry, corn, and livestock are the main sources of income.

There are mineral and marble resources in Azad Kashmir close to Mirpur and Muzaffarabad. There are also graphite deposits at Mohriwali. There are also reservoirs of low-grade coal, chalk, bauxite, and zircon. Commensurate with its natural beauty, Kashmir is famous for its rich and varied cultural heritage. Handicrafts are famous all over the world.

In addition to agriculture, textiles, arts and crafts, remittances by British Pakistanis have played a major role in the economy of Azad Kashmir.



#### **About the University**

Mirpur University of Science & Technology (MUST) established in 2008 was formerly a constituent college of University of Azad Jammu and Kashmir as University College of Engineering & Technology (UCET Mirpur). MUST is a state-run Public-Sector University and the President of Azad Jammu & Kashmir is the Chancellor of the University. The Vice Chancellor is the executive head and manages the university functions.

The university is situated in the culturally rich city Mirpur that is also the economic hub of the state of Azad Jammu & Kashmir. The university is playing a leading role to impart quality education in the country. Mirpur University of Science & Technology (MUST) is presently located in three campuses, the main one is situated on Allama Iqbal Road opposite to the District Courts.



There are seven departments namely: Electrical Engineering, Computer System Engineering, Electrical Technology, Power, Software, Civil and Mechanical under faculty of Engineering, five Departments under faculty of Sciences namely: Biotechnology,



Chemistry, CS&IT, Mathematics, Physics, Statistics and four departments of faculty of Arts namely: Islamic Studies, Law, Education, and Business Administration are working. Directorate of Student Affairs, Board of Advanced Studies and Research, ORIC, Sports and NTC offices are also in city campus. This City Campus is the main hub of education due to which its buildings are designed in this way that it comprises of the Central Library, auditorium, hostels, mosque, student cafeterias, some outdoor sports facilities, big lecture halls, conference halls, spacious labs, parking zone are some of the facilities available in the city campus.

The second campus is located on Allama Iqbal Road adjacent to Girls Degree College. In this campus there is an administrative block, department of Home Economics and Zoology. The girl's hostel is also located in this campus.

The University has also started sub campuses at Bhimber and Pallandri. Bhimber campus is offering programs in English, Economics and Botany.



Bhimber Campus



Pallandri campus is offering degree programs in Hotel & Tourism, Forestry, Education, International relations, History and Physics.



Palandri Campus

MUST always looks forward to welcoming successful performers being only one institution in territory of Azad

Kashmir for teaching and training Graduates in Engineering, Sciences and in Social Sciences & Humanities. The University as an institution of higher learning is devoted to promote the general advancement of knowledge and understanding and the development of every student to his/her highest potential so that each may make the maximum contribution to the improvement of the standards, mores, and scientific and cultural climate of all people. In this standpoint MUST in collaboration with HEC has offered 92 Need based scholarships worth 10.609 million for students securing good positions in class but financial hardships are the main encumbrance in their studies. This scheme will be continued in the forth coming session and the number of scholarships will be 100 in this time so that needy but talented student could avail maximum opportunity.



In pursuit of excellence in education, and to enhance the skills of their graduates MUST dedicates itself to adopting a curriculum that embodies and promotes academic specialization and professional education while maintaining a continuous process of institutional self-assessment and adaptation to meet the rapidly changing needs of society.

MUST provide its own internet facility along with its own internal Network so that all students can access it from their own departments and for this purpose NTC was established. The University intends holding online Courses in collaboration with other Universities both local and foreign. These courses could be on subjects in which required expertise is not available. Interactive desktop video conferencing for discussions on research topics can also be one of the possible future developments with a view to enhance facilities for higher

education and research in the state of Azad Jammu & Kashmir and the adjoining areas, in the field of Science & Technology. Commendable services rendered by these institutions are praiseworthy. The students having been bestowed upon degrees in their respective disciplines, mentioned above, are ardently serving the nation, and the humanity at large, at home and abroad. The new status heralds a new sign of revolutionary uplift of education.

Evidently, there are certain requirements, rather pressing ones; first and foremost is that of land. Out of total requirement of 5000 Kanals, 4800 Kanals have already been awarded. University shall be shifted to its new location; a picturesque spot Sainse, 15 kilometres away from the city on the main Mirpur-Bhimber road. It may fulfil the requirements of future expansion at least for five decades. The calm and



peaceful environment is conducive to academic and research activities.

The new university with the name of MUST is really a beginning of new era in terms of imparting quality education. Ours is a propitious transformation from smaller to bigger, from lower to higher and from better to the best in the real sense of the term. Our qualified staff is devoted to the very cause of sublime and perfection. The veteran staff, embodiment of professionalism, is involved in class work along with research and other scholarly activities. Living in this age of marvellous scientific and technological achievements, advancements in these fields are intrinsically of paramount importance. Mirpur University of Science & Technology (MUST), Mirpur AJK differs in its character from AJ&K University Muzaffarabad by its high powered body "Senate"; a body with full integrity of formulating

statutes, rules and regulations, purchasing, maintaining and disposing of moveable and immovable property, creation and abolition of posts and maintenance of academic and administrative disciplines. Such a body is non-existent in AJ&K University.

Our new born university, MUST is endeavouring its best to take up the challenges of the day and come up to the national expectations and aspirations. We are equipping our laboratories with modern apparatus so that we may be able to quench the thirst of our students for knowledge. The MUST is determined to produce such graduates as to prove the grist to the mill of the nation. Enhancement of standard is our pivotal goal and we are doing our best to make the MUST worthy by all standards. It will touch the ecstasy of prominence in a short extent of time.



#### **Organizational Setup**

- Chancellor
- Vice Chancellor
- Dean Faculty of Social Sciences & Humanities
- Dean Faculty of Engineering & Technology
- Dean Faculty of Natural & Applied Sciences
- Convener Faculty of Health & Medical Sciences
- Registrar
- Controller of Examinations
- Treasurer
- Director of AS & RB
- Director QEC
- Director ORIC
- Director Planning & Development
- Director NTC
- Director Student's Affairs
- Director Sports
- Provost Hostels

Sardar Mohammad Masood Khan

Prof. Dr. Maqsood Ahmed

Prof. Dr. Magsood Ahmed

Prof. Dr. Anwar Khitab

Prof. Dr. Shaukat Mahmood

Prof. Dr. Maqsood Ahmed

Engr. Muhammad Waris

Dr. Arshad Faroog

Dr. Aamir Saghir

Dr. Javeed Akhtar

Dr. Imtiaz Ahmed

Mr. Asif Javed

Muhammad Iqbal Ch

Imtiaz Ahmad Bhat

Dr. Asghar Ali

Engr. Muhammad Shabir Mirza

Dr. Ilyas Minhas





#### Highlights of convocation 2020









#### MUST activities at a glance







# BHIMBER CAMPUS MUST













Dr. Muhammad Ajaib Associate Professor

#### **Message from Campus Coordinator:**

Welcome to MUST, Bhimber Campus, an institution that rests academic foundation of 12 years, incorporated with modern approach that seeks to shape young men and women into successful world leaders. I have join MUST in 2015 and feel privilege to lead this vibrant institution that offers good opportunities.

#### Introduction

District Bhimber lies in southern in Azad Jammu & Kashmir and bounded Indian-administered Kashmir to the east. It is located at a Latitude: 32.48 to 33.34 and Longitude: 73.55 to 74.45. Before 1995 Bhimber was a sub-division (Tehsil) of District Mirpur, meanwhile 1996 the Tehsil status of Bhimber was updated into a separate District. The District is enriching with literate people. The District reflects scenic beauty in form of Samahni valley (Tehsil) Baghsar Fort and

Watala National Park Tesil Barnala. Climatically District Bhimber falls in dry tropical arid to dry subtropical type area in which temperature raises to more than 45°C in summer. The total area of the District is 1516 square kilometers and is sub-divided into three tehsils viz. Bhimber, Barnala and Samahni.

Mirpur University of Science & Technology (MUST) Bhimber Campus was established in August 2008. The campus is located on Bhimber bypass road adjacent to Girls Degree College. In the campus there are two blocks, i.e. Administration block and Academic block along with photocopy shop and cafeteria. Bhimber campus also provide hostel residence for girls only. The Fatima girls hostel facility has been designed to ensure a secure and pleasant stay of female students in a learning environment. Facilities available in hostel contain furnished rooms, high speed 24 hours internet, dining hall, TV lounge and sports. Campus also contain internet facility for students. Bhimber campus also offers shuttle bus service to students coming from remote areas.

#### **Departments at MUST Bhimber Campus**

Botany

• English

Economics

Statistics

#### **Program**

• Human Resource Management (Program Offered)

# DEPARTMENT OF BOTANY

#### **Our Vision**

Our vision is to provide innovative knowledge and productive research in plant sciences to the students by incorporating latest technological approaches to address the climate issues and food related agricultural needs of the society.

#### **Programs Offered**

BS Botany M.Sc. Botany M.Phil. Botany Ph.D. Botany







#### **Chairperson:**

Dr. Muhammad Ishtiaq

Tel: +92-5828-920235

E-mail: chairman.botany@must.edu.pk

#### Message from Chairperson:

I welcome you to the Department of Botany which is one of the pioneer Departments of MUST. The importance of plants in Biological Sciences is paramount and role of plants in global ecosystems cannot be underlined. Botany is not conventional field of study rather it has all levels of applied studies and research in molecular level as: genomics, proteomics, green house to global climate change and carbon foot prints. Department is well equipped with furnished classrooms, research laboratories, herbarium and green house. I have full confidence in my faculty that they will train the students in such manner that the graduates will meet and be able to solve all the challenges of society and country in line with market demands.

I am glad to share that Department has highly qualified faculty consisting of five teachers with Ph.D. and all other having M.Phil. who are well known for research productivity in the University and country. Currently, Department of Botany is offering quality-based and applied research in all fields of Plant Sciences. Four degree programs: B.S., M.Sc., M.Phil. and Ph.D. are offered by the Department with highly conducive learning and research environment for the graduates of Botany at level excellent professional standards. I hope that your decision to join the Department of Botany in MUST will lead you to the height of excellent and profound level in your academics with bright future, Inshallah.





**Faculty members of Botany Department** 



#### **Faculty Members**

Dr. Muhammad Ishtiaq

**Designation:** Associate Professor (Tenure)

Qualification: Ph.D.

**Area of interest:** Plant Systematics

E-mail: chairman.botany@must.edu.pk

Dr. Nafeesa Zahid

**Designation:** Assistant Professor

Qualification: Ph.D. (PMAS, Rawalpindi)

Area of interest: Plant Ecology

E-mail: nafeesa.botany@must.edu.pk

Dr. Neelam Rashid

**Designation:** Lecturer

**Qualification:** Ph.D. (QAU, Islamabad)

**Area of interest:** Plant Systematics and Biodiversity

E-mail: neelam.botany@must.edu.pk

Dr. Muhammad Ajaib

**Designation:** Associate Professor

Qualification: Ph.D.

**Area of interest:** Plant Taxonomy

E-mail: majaib.botany@must.edu.pk

Dr. Tanveer Hussain

**Designation:** Assistant Professor

Qualification: Ph.D. (MUST, Mirpur/USA)

Area of interest: Plant Pathology and Microbiology

E-mail: tanveer.botany@must.edu.pk

Ms. Waheeda Mushtaq

**Designation:** Lecturer

**Qualification:** M.Phil. (MUST, Mirpur) **Area of interest:** Ethnopharmacy

E-mail: waheeda.jawad@must.edu.pk



# **Faculty Members**

Mr. Noman Rafique

**Designation:** Lecturer

**Qualification:** M.Phil. (GCU, Faisalabad)

**Area of interest:** Plant Physiology **E-mail:** noman.botany@must.edu.pk

Ms. Rehana Anwar

**Designation:** Jr. Lecturer

**Qualification:** M.Phil. (MUST, Mirpur)

Area of interest: Genetics

**E-mail:** rehana.botany@must.edu.pk

Ms. Mehwish Maqbool

**Designation:** Jr. Lecturer

**Qualification:** M.Phil. (MUST, Mirpur)

Area of interest: Ethnobotany

**E-mail:** mehwish.botany@must.edu.pk



#### **BS Botany**

B.S. program is a four-year degree program. The goal of B.S program is to produce competent professionals in the field of Botany who can face the challenges of the changing world. In the program contents of B.S various foundation courses have been reviewed, modified and updated such as; Biodiversity and conservation, Plant Anatomy, Plant Systematics, Genetics, Biochemistry and Biostatistics etc. and the major courses as Physiology, Genetics, Ecology, Ethnobotany and Cell Biology etc. are incorporated. The students are also taught computer, Islamic studies, Arabic, Pakistan Studies, Zoology and Chemistry as core and foundation courses. These courses are as per policy of HEC. Thesis is compulsory for the students who secure CGPA 3.00 or more.

#### **Program Mission:**

Botany as a subject is multidisciplinary in nature, involving study of plants and their genetics, morphological and physiological attributes, their surrounding environment, and their role in conservation of environment. This subject has significant role in human resources development, food security, environmental conservation, sustainable development and ultimately in alleviation of poverty from society.



**Lab Activity on Ethnobotany** 



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

The BS program will enable the students to be acquainted with the latest knowledge of the plant sciences. In the program the contents of various foundation courses have been reviewed, modified and updated such as; Diversity of Plants, Plant Systematics, Cell Biology, Genetics and Evolution, Plant Physiology and Ecology, and the major courses as Mycology and Plant Pathology, Plant Systematics, Genetics-I, Plant Biochemistry-I, Plant Physiology-II etc. are incorporated. The technical and typing errors have been removed. The four elective courses are left for specific requirement of the students of University.

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

To impart knowledge about the major disciplines of Botany.
 It will enable the students to understand the principles of

- organizations and inter-relationships in the biological systems with particular reference to plant diversity.
- 2. To teach different methods of exploration, investigation, organization of data and its utilization in Lab.
- 3. To train students for advanced studies and specialization on recently emerging technological and multidisciplinary fields such as Biodiversity and conservation, Environmental Science, Biotechnology, etc. After completing of their degree, students will be able to apply their knowledge in their respective fields effectively.
- 4. To equip students with knowledge and skills for better planning and management of plant resources, environment, health, medicine, agriculture and population in the country.
- 5. To develop the scientific culture and demonstrate professional skills in teaching/ research and managerial



positions in wide range of professions in national and international organizations.

#### **Admission Criterion:**

The criterion to apply for the admission in B.S Botany is that applicant must have passed F. Sc. with Biology, Physics and Chemistry with at least second division (45% Marks). An aptitude test is conducted and final merit is computed including the academia marks as per University Rules.

#### **Selection Criterion:**

Final eligibility (merit) for admission in the Department of Botany is aggregate of both and formulated by central admission committee of MUST.

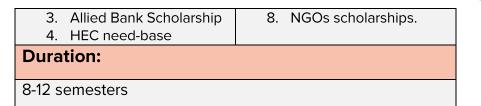
#### **Degree Requirements:**

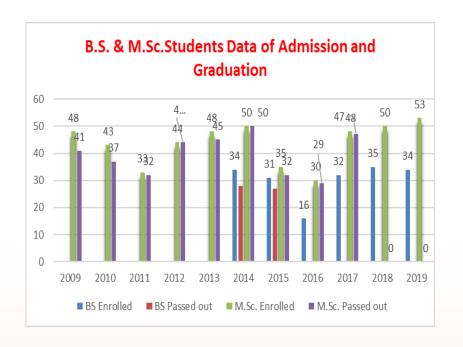
F.Sc. Pre Medical/ A level.

#### **Scholarships Offered:**

- 1. Merit Based Scholarship
- 2. HBL Foundation Scholarship

- 5. Ehsas Scholarships
- 6. MUST scholarship
- 7. Baitul Mall Scholarship







# Scheme of Study (BS Botany)

Duration   8-12 semesters						
Courses 124 credits			124 credits			
Internship S/ U basis			S/ U basis			
Comprehensive Oral Examination S/ U basis			S/ U basis			
Research Thesis/Spe	ecialpaper		6 credits			
Total Credits 130 credits						
	Course Code	Course Title		Lect. Hrs	Lab. Hrs	Credit. Hrs
	BOT-1101	Diversity of Plants	iversity of Plants		1	4
	ZOO-1123	Principles of Animal Life-I		3	0	3
1 <sup>st</sup> Semester	MAT-1115	Mathematics-I		3	0	3
. Jeinestei	CHE-1104	Inorganic Chemistry		3	0	3
	ENG-1107	English-I (Functional English)		3	0	3
	PS-1117	Pakistan Studies		2	0	2
	Subtotal			17	1	18
	BOT-1201	Plant Systematics, Anatomy & Development		3	1	4
	ZOO-1223	Principles of Animal Life –II		3	0	3
2 <sup>nd</sup> Semester	CHE-1204	Organic Chemistry		3	0	3
	ENG-1207	English-II (Communication Skills)		3	0	3
	ARA-1201	Arabic		3	0	3
	ISL-1212	Islamic Studies		2	0	2
	Subtotal		17	1	18	



	BOT-2301	Cell Biology, Genetics & Evolution	3	1	4
3 <sup>rd</sup> Semester	ZOO-2323	Animal Diversity-I	3	1	4
	CHE-2304	Physical Chemistry	3	0	3
	ENG-2307	English-III (Technical Report Writing & Presentation Skills)	3	0	3
	COM-2305	Introduction to Computer	3	0	3
	Subtotal		15	2	17
	BOT-2401	Plant Physiology and Ecology	3	1	4
	BOT-2402	Biodiversity and Conservation	3	1	4
4 <sup>th</sup> Semester	ZOO-2423	Animal Diversity –II	3	0	3
	CHE-2404	Analytical Chemistry	3	0	3
	STA-2420	Biostatistics	3	0	3
	Subtotal		15	2	17
	BOT-3501	Bacteriology & Virology	2	1	3
	BOT-3502	Mycology & Plant Pathology	2	1	3
5 <sup>th</sup> Semester	BOT-3503	Phycology & Bryology	2	1	3
<b>5 5 6 1 1 1 1 1 1 1 1 1 1</b>	BOT-3504	Diversity of Vascular Plants	2	1	3
	BOT-3505	Plant Systematics	2	1	3
	Subtotal		10	5	15
	BOT-3601	Plant Anatomy	2	1	3
6 <sup>th</sup> Semester	BOT-3602	Genetics-I	2	1	3
	BOT-3603	Plant Biochemistry-l	2	1	3
	BOT-3604	Plant Ecology-I	2	1	3
	BOT-3605	Plant Physiology-I	2	1	3
	Subtotal		10	5	15
	BOT-3605	9,	2	1 1 5	



	BOT-4701	Molecular Biology	2	1	3
7 <sup>th</sup> Semester	BOT-4702	Plant Biochemistry- II	2	1	3
	BOT-4703	Plant Ecology-II	2	1	3
	ВОТ-	Research Thesis/ Elective-I	-	-	3
	ВОТ-	Elective-II	2	1	3
	Subtotal		8	4	15
	BOT-4801	Plant Physiology –II	2	1	3
Oth Compostor	BOT-4802	Genetics-II	2	1	3
8 <sup>th</sup> Semester	BOT-4803	Environmental Biology	2	1	3
	ВОТ-	Research Thesis/ Elective-III	-	_	3
	BOT	Elective-IV	2	1	3
	Subtotal		8	4	15
		Total			130



# **Approved list of Elective Courses**

Course Code	Course Title	Lec. Hrs	Lab. Hrs	Credit Hrs
BOT-4704	Ethnobotany	2	1	3
BOT-4705	Phytoremediation	2	1	3
BOT-4706	Plant Stress Physiology	2	1	3
BOT-4707	Conservation and Management of Plant Resources	2	1	3
BOT-4708	Plant Nutrition	2	1	3
BOT-4709	Phytosociology	2	1	3
BOT-4710	Economic Botany	2	1	3
BOT-4711	Flora of Azad Jammu and Kashmir	2	1	3
BOT-4712	Research Thesis	2	1	3
BOT-4804	Research Techniques	2	1	3
BOT-4805	Plant Metabolism	2	1	3
BOT-4806	Plant Biotechnology	2	1	3
BOT-4807	Applied Mycology	2	1	3
BOT-4808	Plant Microbe Interaction	2	1	3
BOT-4809	Molecular Genetics	2	1	3
BOT-4810	Phytochemistry	2	1	3
BOT -4811	Palynology	2	1	3
BOT-4812	Applied Microbiology	2	1	3



#### M.Sc. in Botany:

M.Sc. botany is a two-year degree program. The course is in line with unified curriculum prescribed by the Higher Education Commission (HEC). The program consists of two main parts: Compulsory courses and Elective Courses with different fields of specialization. These courses are broad enough to encompass nearly all the major fields in Botany. These include Mycology, Biotechnology, Biodiversity Fungal Conservation, Plant Biotechnology, Environment Biology, Biochemistry, Medicinal Plant Biotechnology, Plant Pathology, Bioinformatics, Proteomics, Genomics, Ethnobotany, Advance Environmental Biotechnology, Ecology and Plant Systematics. It is worth mentioning that courses offered along with applied research in different fields of specialization are paramount for productivity of society and nation. The areas of specialization include Mushroom and Fugal Technology, Plant Pathology, Aquatic Ecology, Ecology, Phytosociology, Tissue Culture, Medicinal Plants, Microbiology, Environmental Biotechnology, Plant Stress Physiology, Applied Ethnobotany, Edaphalogy, Plant Systematics, Plant Metabolism, Advanced Plant Physiology, Plant Biotechnology, Bioinformatics, Proteomics, Genomics Plant Biodiversity and Conservation, Virology & Bacteriology and Applied research on local flora.

Thesis is compulsory for the students who secure CGPA 3.00 or more. Though the thesis does not specify any limit, but the work produced will be inordinate to address any problem of environment, society and science in a comprehensive manner.

The program provides a firm ground in major fields of study which opens up a wide range of opportunities for job as well as higher studies in national and international institutions.



The Department contributes in developing a qualified teaching workforce, which are serving the Department of Education of Azad Kashmir and Pakistan in various positions.

Apart from this, the graduates of this department have taken up their jobs in the research organizations of the country including PARC, NARC, WWF, IUCN, HRSP, NIAB, NIBGE and PSCIR. Thus, they are playing an important role in the development of the society and country.

The pharmaceutical industry is another place where the graduates of this program are easily absorbed. In short, the course offers a promising future to its successful graduates who never will leave any stone unturned to work for the promising future of the society and country.

#### **PROGRAM OBJECTIVES**

 To impart knowledge about the major disciplines of Botany. It will enable the students to understand the principles of organizations and inter-relationships in the biological systems with particular reference to plant diversity.

- To teach different methods of exploration, investigation, organization of data and its utilization in practical life.
- To train students for advanced studies and specialization on recently emerging technological and multidisciplinary fields such as Genetic Engineering, Biodiversity and Conservation, Environmental Science, Wildlife and conservation, Biotechnology, etc. After completing the degree/students will be able to apply their knowledge to their respective fields effectively.
- To equip students with knowledge and skills for better planning and management of plant resources, environment, health, medicine, agriculture and population in the country.
- To develop the scientific culture and demonstrate professional skills in teaching/ research/ managerial positions



in wide range of professions in national and international organizations.

#### **Admission Criterion:**

The criterion to apply for the admission in M.Sc. Botany is B. Sc. with Botany, Zoology and Chemistry/ Botany, Zoology and geography in at least second division (45% Marks). An aptitude test is conducted and final merit is computed including the academic marks.

#### **Degree Requirements:**

B.Sc. with Botany, Zoology and Chemistry/ Botany, Zoology and geography in at least second division (45% Marks).

#### **Scholarships Offered:**

- 1. Merit Based Scholarship
- 2. HBL Foundation Scholarship
- 3. Allied Bank Scholarship
- 4. HEC need-base

- 5. Ehsas Scholarships
- 6. MUST scholarship
- 7. Baitul Mall Scholarship
- 8. NGOs scholarships.

#### **Duration:**

4 – 6 Semesters





# Scheme of Study (M.Sc. Botany)

Scheme of Study (M.Sc. Botany)						
1 <sup>st</sup> Semester	Course Code	Course Title	Lect. Hrs	Lab.Hrs	Credit. Hrs	
	BOT-5101	Bacteriology & Virology	2	1	3	
	BOT-5102	Mycology & Plant Pathology	2	1	3	
	BOT-5103	Phycology & Bryology	2	1	3	
	BOT-5104	Diversity of Vascular Plants	2	1	3	
	BOT-5105	Plant Systematics	2	1	3	
	BOT-5106	Biostatistics	2	1	3	
	Subtotal		10	5	18	
	BOT-5201	Plant Anatomy	2	1	3	
	BOT-5202	Cell Biology	2	1	3	
	BOT-5203	Genetics-I	2	1	3	
2 <sup>nd</sup> Semester	BOT-5204	Plant Biochemistry-I	2	1	3	
	BOT-5205	Plant Ecology-I	2	1	3	
	BOT-5206	Plant Physiology-I	2	1	3	
	Subtotal		12	6	18	
3rd Semester	BOT-6301	Molecular Biology	2	1	3	
	BOT-6302	Plant Biochemistry- II	2	1	3	
	BOT-6303	Plant Ecology-II	2	1	3	
	ВОТ-	Research Thesis/ Elective-I	-	-	3	
	BOT-	Elective-II	2	1	3	
	Subtotal		8	4	15	



	BOT-6401	Plant Physiology –II	2	1	3
	BOT-6402	Genetics-II	2	1	3
4 <sup>th</sup> Semester	BOT-6403	Environmental Biology	2	1	Ω
	BOT-	Research Thesis/ Elective-III	2/0	1/3	3
	BOT	Elective-IV	2	1	3
	Total		10/8	5/7	15
	Total				66

# **Approved List of Elective Courses:**

Course Code	Course Title	Lec. Hrs	Lab. Hrs	Credit Hrs
BOT-6304	Recent Trends in Biotechnology	2	1	3
BOT-6305	Plant Pathology	2	1	3
BOT-6306	Fresh Water Ecology	2	1	3
BOT-6307	Phytosociology	2	1	3
BOT-6308	Ethnobotany	2	1	3
BOT-6309	Plant Stress Physiology	2	1	3
BOT-6310	Plant Metabolism	2	1	3
BOT-6311	Medicinal Plants	2	1	3
BOT-6312	Physiological Genetics	2	1	3
BOT-6313	Plant Microbe Interaction	2	1	3
BOT-6314	Economic Botany	2	1	3
BOT-6315	Cell & Molecular Biology of Plants	2	1	3
BOT-6404	Biodiversity and Conservation	2	1	3
BOT-6405	Edaphology	2	1	3



Course Code	Course Title	Lec. Hrs	Lab. Hrs	Credit Hrs
BOT-6406	Biodegradation	2	1	3
BOT-6407	Environmental Pollution	2	1	3
BOT-6408	Research Techniques and Lab Tools	2	1	3
BOT-6409	Wild Plants & Their economic uses	2	1	3
BOT-6410	Palynology	2	1	3
BOT-6411	Bioinformatics	2	1	3
BOT-6412	Molecular Genetics	2	1	3
BOT-6413	Mycorrhizae	2	1	3
BOT-6414	Thesis			6



## M.Phil. in Botany:

The Department of Botany has launched M. Phil. Program since 2012. The research degree of M. Phil. will be of two years' duration, respectively. In the first year, students will study taught courses consisting of two semesters (each of 16 weeks' duration) in partial fulfillment of the degree as per criterion of HEC. Other time is used for thesis research work to be conducted by scholar. The course and research is geared towards providing research training in the various disciplines of Botany and its related disciplines. The major fields of research groups offered comprise of Mycology and Plant Pathology, Fungal Biotechnology, Environmental Biology, Medicinal Plant Biotechnology, Plant Systematics, Physiology, Genetic Engineering, DNA Technology, OMICs Technology and Plant Biodiversity and Conservation, Commercialization of Local flora, Numerical Taxonomy, Proteomics, Tissue Culture, Ethnobotany,

Chemotaxonomy, Ecology, Edaphalogy, Microbiology, Applied Forestry Research, Agronomics, Horticulture, Bioinformatics and Climate Change Adaptation and Mitigations.

#### **Mission Statement:**

The MPhil Education enables participants to think critically and deeply about education as a field of study. Education is a rich field that covers a wide range of contrasting disciplinary, political and philosophical positions. This program encourages participants to be communicative and explanative to the complex and diverse theories and practices in higher education internationally.

Our mission is to adoptive an environment of excellence by attracting and supporting the outstanding students, faculty and staff needed to sustain our vision. We focus on the patterns and processes that enable predictive understanding of plants and their environments at local, regional, and global scales, leading



to strengths in the areas of ecology, Mycology, Biotechnology, Plant systematics, genetics. Environment, Ethnobotany, physiology and pharmaceutics. The Botany Department is unique because of our focus on fundamental research and teaching on plants as well as our study of populations, communities and ecosystems of which they are the key component. Our faculty conducts basic and applied research relevant to the state, nation and global needs to foster the basic food and medicine necessities.

#### **Objectives:**

- To focus on extending knowledge and research expertise of students through scientific inquiry.
- To enable students to have the comprehensive understanding, knowledge and skills required for the critical scrutiny of educational matters and issues and finding novel solutions for them.

- The degree program provides the participants with the understanding of educational process, equip them with methodological skills of conducting different types of research and helps them to become proficient educational leaders for both public and private sector institutes.
- Additionally, the program enables them to become aware of new trends and various techniques in educational process and evaluation.



#### **Admission Criterion:**

The criterion to apply for the admission in M. Phil. Botany is that applicant must have passed M.Sc. Botany at least in second division (CGPA-3.00 or more/ as per HEC policy) with no third division during the whole academic career. An aptitude test and interview is conducted and final merit is formulated on aggregate based on academic record, aptitude test and interview. The students must have to pass NTS with a minimum 50% score (as per HEC requirement) and provide the certificate as per policy of University in stipulated time frame. The students are required to present a thesis based on original research work carried out under the supervision of a qualified teacher from the department. The students are required to undertake study trips/field courses as part of their syllabi. The presentation of research work in national and

international conferences and symposia is compulsory which bears one credit hour weightage, during the academic year.

#### **Selection Criterion:**

An aptitude test and interview is conducted and final merit is formulated on aggregate based on academic record, aptitude test and interview. The students have to pass NTS with minimum 50% scores (as per HEC requirement) and provide the certificate as per policy of university in stipulated time frame.

## **Degree Requirements:**

Applicants must have passed M.Sc. Botany in at least second division (CGPA-3.00 or more/ as per HEC policy) with no third division during the whole academic career.

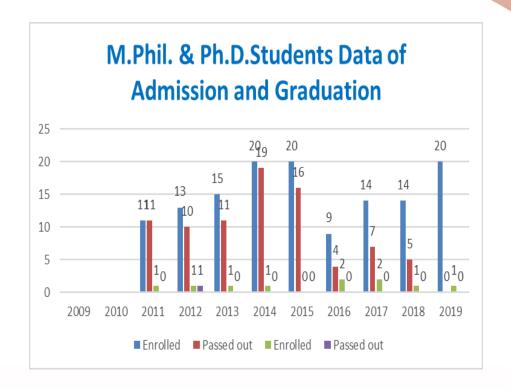


## **Scholarships Offered:**

- 1. Merit Based Scholarship
- 2. HBL Foundation Scholarship
- 3. Allied Bank Scholarship
- 4. HEC need-base
- 5. Ehsas Scholarships
- 6. MUST scholarship
- 7. Baitul Mall Scholarship
- 8. NGOs scholarships.

## **Duration:**

2-4 Years





## Scheme of Study (M.Phil. Botany)

Duration:	2-4 Years
Courses:	24 Credit Hours
Seminar/Conference paper with certificate	01 Credit Hours
Thesis	06 Credit Hours
Total:	31 Credit Hours

No.	Course Title	Lec. Hrs	Lab. Hrs	Credit Hrs
BOT-701	Advances in Plant Physiology	3	0	3
BOT-702	Advances in Biodiversity and Conservation	3	0	3
BOT-703	Plant Tissue and Cell Culture	3	0	3
BOT-704	Ornamental Horticulture	3	0	3
BOT-705	Advances in Stress Physiology	3	0	3
BOT-706	Weed Ecology	3	0	3
BOT-707	Bioenergetics and Molecular Enzymology	3	0	3
BOT-708	Advances in Phytosociology	3	0	3
BOT-710	BOT-710 Advances in Genetics		0	3
BOT-711	Advances in Environmental Biology	3	0	3
BOT-712	Advances in Microbiology	3	0	3
BOT-713	Advances in Lab Experimental Techniques	3	0	3
BOT-714	-714 Recombinant DNA Technology		0	3
BOT-715	5 Plant Soil Water Relations 3 0		0	3
BOT-716	Plant Biotechnology and Genetic Eng.	3	0	3



BOT-717	Biostatistics and Computer Application	3	0	3
BOT-718	Pharmaceutical Microbiology	1	0	1
BOT-719	Applied Ethnobotany	3	0	3
BOT-720	Advances in Flowering Plant Taxonomy	3	0	3
BOT-721 Applied Ethnopharmacology		3	0	3
BOT-722 Climate Change and Adaptation of Plants		3	0	3
BOT-798 Seminar		1	0	1
BOT-799	Thesis M.Phil.	0	6	6



#### Ph.D. in Botany:

The Department of Botany has launched Ph. D. Program since 2012. The research degree of Ph.D. will be of three years' duration, respectively. In the first year, students will take taught courses consisting of two semesters (each of 16 weeks' duration) in partial fulfillment of the degree as per criterion of HEC. Other time is used for thesis research work to be conducted by scholar. The course and research is geared towards providing research training in the various disciplines of Botany and its related disciplines. The major fields of research groups offered comprise of Mycology and Plant Pathology, Fungal Biotechnology, Environmental Biology, Medicinal Plant Biotechnology, Plant Systematics, Physiology, Genetic Engineering, DNA Technology, OMICs Technology and Plant Biodiversity and Conservation, Commercialization of Local flora, Numerical Taxonomy, Proteomics, Tissue Culture, Ethnobotany,

Chemotaxonomy, Ecology, Edaphalogy, Microbiology, Applied Forestry Research, Agronomics and Horticulture and Bioinformatics.

#### **Mission Statement:**

The mission of the program is to inculcate concept-based knowledge in the minds of its graduates by delivering various subjects of Plant Sciences with a problem-solving approach through research, thereby creating new knowledge pertaining to latest issues of Plant Sciences. The goal of the department is to produce top quality graduates in Botany while grooming best-trained, problem-solving minds capable of playing a leading role in the society with refined human qualities and great integrity. It is our mission to acquire Ph.D. scholars with a sound background and skills necessary for careers as university teachers and researchers. We typically engage these scholars in dissertation research and seminars participation with



preparation of their minds to solve issues at national and international level through their applied research skills.

#### **Objectives:**

- To develop critical thinking skills in PhD scholars leading as mile stone in career development.
- To produce highly capable researchers with quality research and education.
- The ability to formulate a specific research plan and carry out original independent research on a hypothesis to be tested in depth concerning novel ideas in the field of Botany.
- To commence essential and applied research plan and carry out original independent research
- The presentation of the research results to the larger community of scholars nationally and internationally.

- To bequeath the department with integration of knowledge in linked fields.
- To transport inventive thinking in students to grow cost effective research accomplishments.
- To develop good interpersonal, communication and learning skills



#### **Admission Criterion:**

The criterion to apply for the admission in Ph.D. Botany is that the applicant must have passed M. Phil. (CGPA-3.0 or more/ as per policy of HEC) with no third division during the whole academic career. An aptitude test and interview is conducted and final merit is formulated on aggregate based on academic record, aptitude test and interview. The students have to pass GRE (international)/GAT Subject Test (NTS) with minimum percentile score 60% (as per HEC requirement) and provide the certificate as per policy of University in stipulated time frame. The students are required to present a thesis based on original research work carried out under the supervision of a qualified teacher (HEC approved supervisor) from the department. The students are required to undertake study trips/field courses as part of their syllabi. The presentation of

research work in national and international conferences and symposia is compulsory which bears one credit hour. The scholar has to present one seminar in the department with one credit hour value. The scholar has to publish one/two research papers in HEC recognized journals as per policy of HEC.

#### **Selection Criterion:**

An aptitude test and interview is conducted and final merit is formulated on aggregate based on academia, aptitude test and interview. The students have to pass GRE (international)/GAT Subject Test (NTS) with minimum percentile score 60% (as per HEC requirement) and provide the certificate as per policy of University in stipulated time frame.



## **Degree Requirements:**

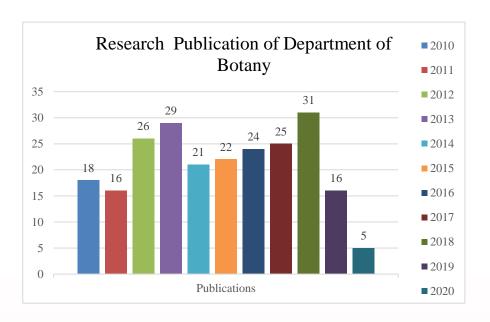
The applicant must have passed M. Phil. (CGPA-3.0 or more/ as per policy of HEC) with no third division during the whole academic career.

## **Scholarships Offered:**

- 1. Merit Based Scholarship
- 2. HBL Foundation Scholarship
- 3. Allied Bank Scholarship
- 4. HEC need-base
- 5. Ehsas Scholarships
- 6. MUST scholarship
- 7. Baitul Mall Scholarship
- 8. NGOs scholarships.

#### **Duration:**

3 - 8 Years





## Scheme of Study (Ph.D. in Botany)

Scheme of Study (1 mb. in Bottany)					
Duration	Ouration 3 - 8 Years				
Courses		18 Credit Hours			
Seminar		02 Credit	Hours		
Thesis		50 Credit	Hours		
Total		70 Credit	Hours		
No.	Course Title		Lec. Hrs	Lab. Hrs	Credit Hrs
BOT-801	Plant Chemotaxonomy		3	0	3
BOT-802	Advances in Edaphalogy		3	0	3
BOT-803	Fungal Ecology and Biotechnology		3	0	3
BOT-804	Advances in Molecular Biology of Plants		3	0	3
BOT-805	Phytogeography		3	0	3
BOT-806	Advances in Phycology		3	0	3
BOT-807	Soil Fertility and Plant Nutrition		3	0	3
BOT-808	Wild plants and their economic uses		3	0	3
BOT-809	Research Techniques		3	0	3
BOT-810	Advances in Proteomics		3	0	3
BOT-811	Bioinformatics		3	0	3



BOT-812	OT-812 Statistical Genomics 3 0		3	
BOT-813	Plant Growth and Development	3	0	3
BOT-814	Biosystematics	3	0	3
BOT-815	Project Planning, Monitoring and Evaluation	3	0	3
BOT-816	Integrated Biological Resource Management	3	0	3
BOT-819	Climate Change and Forest Conservation Studies	3	0	3
BOT-897	Seminar I	1	0	1
BOT-898 Seminar II		1	0	1
BOT-899	Thesis PhD	0	25	25



#### **Research and Study Facilities for Students:**

#### **A-Research Laboratories:**

The department has two research laboratories; one is general laboratory for graduate students to conduct class practicals and basic research. The second laboratory is welldeveloped and primarily assigned for "Thesis research work". These laboratories are well equipped with modern apparatus like: PCR, Gel Doc., various types of microscopes, laminar flow, digital autoclave, growth chambers, spectrophotometers, ultrafreezer, GPS, Fungal colony counter, digital microscopic camera for anatomy and rotary evaporator apparatus, Soxhlet for phytochemistry. The work relevant to Plant Physiology, Plant Ecology, Biotechnology, Ethnobotany, Pharmaceutical analysis, Plant Taxonomy, Anatomy, Mycology and Plant Pathology, Plant Microbe Interaction and environment and Climate change can easily be performed in these self-sufficient labs at any level.

Presently, the Department is providing research facilities in all areas of medicinal plants including phytochemistry, molecular characterization of various compounds & allelopathic screening of plant extracts, phytosociology, ethnobotany, aflatoxin and their integrated management, stress and drought physiology, taxonomic studies in all fields including algal and fungi for perusing B.S., M.Sc. M. Phil. and Ph.D. studies.

## **B-Library:**

There are 1375 books in the Departmental library for students of all programs. There are more than 200 research theses on different fields of Botany available for reference studies and research for students and faculty. There is provision of more than 100 journals printed copies and there is also a facility of online or digital library as per line of HEC facility.



#### **C-Internet and Computer Laboratory:**

The free internet facility is available to all students and faculty for study and research work. There is computer Lab of 50 Computers for study aid and research thesis work purpose.

#### **D-Herbarium:**

There is One Herbarium (named as MUH) in Department of Botany containing more than 3500 plants preserved from all areas of Kashmir and allied areas of Pakistan. The basic morphology and anatomy study facilities are available in the herbarium. There three computers with internet connection are also available for updating and compilation of herbarium research and for the students who will work in the herbarium.

#### **E-Green House:**

One green house is present in the Department to conduct field relevant experiment works in controlled environment for class practicals and theses research work. It contains all basic infrastructure and needs for experimental work.

#### F-Plant Nursery and Field Trial Land Facility:

There is "field trail experiment" land designed for field trials for class or thesis research work. There is also nursery facility available in collaboration with Department of Forest (as MoU is signed for collaboration in research). The students and faculty is availing this opportunity and conducting applied research work.



#### STUDENTS' MESSAGES

I am feeling very proud to be a student of Department of Botany. It is a great honor for us as we have great teachers in this department. The environment here is healthy and conducive for learning and research. Good opportunities are there to obtain the latest knowledge in the field of botany as well as building of my character. I am not only gaining skills but also confidence, dedication, character building and ethics. The attitude and devotion of the faculty members and admin staff towards students is remarkable. I shall graduate in Botany, rise and serve the nation, Inshallah.



Asma Akram
B.S. Botany

2<sup>nd</sup> Semester

I am grateful to be a student of Department of Botany. I am indebted to my parents who supported me emotionally and financially. I am thankful to my honorable teachers for teaching me that my job in life is to learn, to know myself and serve community. In the Department of Botany, I am not only gaining knowledge and skills but also have an opportunity to inculcate my confidence and ethics. The behavior and attitude of faculty and admin staff is conducive and remarkable. I am proud to be student of Botany.



Ali Haidar M.Sc. Botany 2<sup>nd</sup> Semester



It is a great pleasure to be a student of M.Phil. in the Department of Botany MUST. I am highly impressed with the sound and up to date knowledge delivered to the students. Teachers are highly skilled and very cooperative. I have learnt latest techniques used in recombinant DNA technology and Proteomics. Excellent academic environment and interaction with faculty has given me tremendous confidence. Exposure to seminars and conferences has broadened my horizons. I have sweet memories, a very faithful friendship and academic achievements.



Mahnoor Muzamil
M.Phil. Botany

2nd Semester

It is an honor and indeed privilege for me to be the Ph.D. scholar of MUST. I feel proud that I did my masters and M.Phil from this department and now I have again chosen this department to pursue my higher studies due to faculty of the department which is fully equipped with the latest research skills and impressive theoretical knowledge. Excellent self-grooming environment, dynamic faculty and amazing research opportunities welcome the new comers and alumni as well to pursue their dreams.



Faiza Shaffi Ph.D. Botany 2<sup>nd</sup> Semester







## **Chairperson:**

Dr. Khadim Hussain

Telephone Office: +92-5828-960015

Email: chairman\_economics@must.edu.pk

#### **Message from Chairperson**

Pakistan is an evolving economy and at this unique phase of transition new issues and problems are also emerging. It is crucial to develop aptitudes to explain and resolve these issues. The academia has an essential obligation to develop competencies to overcome these challenges. The Department of Economics is engaged in producing the professionals to recognize, examine and solve the problems in their respective area of operations. We are concentrating on developing human resource that has the capacity to think about issues uniquely, to study problems analytically and to craft innovative and operational solutions. The aim of education should not simply be attainment of a degree in quest of a job, but rather the acquirement of knowledge, skills and creative thought-processes that actually creates values for whole sphere of your life. I believe, your stay in the Department of Economics will provide you a golden opportunity to develop your intellectual, moral and social capacity.





From Left to Right:

Row 1: Mr. Faisal Azeem Abbassi, Dr. Muhammad Saim Hashmi, Dr. Khadim Hussain, Mrs. Nasim Akhter, and Mr. Tanveer Bashir Row 2: Ms. Aneeda Ayub, Ms. Mariam Yassar and Ms. Rani Saima Noureen



#### **Department of Economics:**

The Department of Economics was established in 2009 during the inception of the Mirpur University of Science and Technology (MUST) under the Faculty of Social Sciences and Humanities. The Department aims to deliver excellent, stimulating and research-led teaching across undergraduate and graduate program to develop critical thinking in students. We are not only committed to the development of human recourse by imparting quality education but also inculcating

human values in them to promote a peaceful and harmonious society. We prepare students by enhancing their ability to contribute productively in their careers using knowledge learned during their study of economics. Our graduates have been readily absorbed in various jobs with private and public sector institutions. The department is playing a vital role in providing experts to overcome the scarcity of professional in the field of Economics.



## **Faculty**

#### Dr. Khadim Hussain

Designation Chairman/Assistant Professor

Qualification Ph.D., Northwest A&F University, China

Area of interest International Trade, Regional Economics, Environmental Economics, Agricultural Economics

Contact hussain.eco@must.edu.pk

+92 5828 961015

## Mr. Muhammad Ajmair

Designation Assistant Professor

Qualification M.Phil., Federal Urdu University of Arts, Science & Technology, Islamabad

Area of interest Development Economics, Microeconomics, Mathematical Economics

Contact ajmair@must.edu.pk

#### Dr. Nasim Akhter

Designation Assistant Professor

Qualification Ph.D., Preston University, Islamabad

Area of interest Microeconomics, Development Economics, Human Resource Development

Contact nasim.eco@must.edu.pk



#### Dr. Muhammad Saim Hashmi

Designation Assistant Professor

Qualification Ph.D., Huazhong University of Science and Technology, China

Area of interest Development Economics, International Trade Theory, Cross Cultural Development Studies

Contact saim.eco@must.edu.pk

#### Mr. Tanveer Bashir

Designation Lecturer

Qualification M.Phil., Riphah International University, Islamabad

Area of interest Statistics, Econometrics, Mathematical Economics, Population Economics

Contact tanveer.eco@must.edu.pk

#### Ms. Mehreen Zaid Ullah

Designation Lecturer

Qualification M.Phil., International Islamic University, Islamabad

Area of interest Microeconomics, Econometrics, Agricultural Economics

Contact mehrin.eco@must.edu.pk



#### Ms. Rani Saima Noureen

Designation Junior Lecturer

Qualification M.Phil., Allama Iqbal Open University

Area of interest Development Economics, Econometrics, International Trade Theory

Contact saima.eco@must.edu.pk

#### Ms. Mariam Yassar

Designation Junior Lecturer

Qualification M.Phil., National University of Science and Technology, Islamabad

Area of interest Microeconomics, Macroeconomics, Development Economics

Contact mariam.eco@must.edu.pk

## Ms. Aneeda Ayub

Designation Junior Lecturer

Qualification M.Sc., The University of Azad Jammu & Kashmir, Muzaffarabad Area of interest Microeconomics, Agricultural Economics, Islamic Economics

Contact aneeda.eco@must.edu.pk



# **BS Economics**About the Program

An understanding of economics is a vital component of education in social sciences and absolutely necessity for anyone interested in areas as business, environmental policy, welfare reform, international trade and finance, or globalization. BS Economics is a four-year degree program comprising of eight regular semesters. This program is designed to familiarize students with the broad range of issues and situations studied by economists and the tools they use. The curriculum starts at the very basic introductory level. As such no specific high school preparation is required, therefore students with diversified background equally fit in the program. However, an appreciation for mathematics and statistics shall prove to be useful. All economics undergraduates study a significant core of economic theory, mathematical and statistical methods, that will enable them to choose among a wide variety of higher electives.

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

BS Economics program is designed to equip the graduates with the knowledge of economic theory, so that they could understand that how economic agents interact, and economy operates. The graduates of this program are expected not only to identify the economic problems, but also to suggest set of alternative solutions. In specific, following are the objectives of this program:

- The graduates shall be equipped with the comprehensive theoretical and practical knowledge and skill set in order to contribute competently as economists and analysts in various capacities.
- 2. The graduate shall have cross-disciplinary knowledge of the core functions and operations of the economy.
- 3. The graduate shall be prepared to respect diversity and endeavor to work ethically.



#### **Program Learning Objectives (PLOs)**

- Critical Thinking Skills: An ability to optimally apply economic analysis to everyday economic problems in the real world. This shall allow them to understand current events and evaluate potential policy proposals. Moreover, an appreciation shall be developed to evaluate the role played by assumptions in situations that reach various conclusions to a specific economic or policy problem.
- Quantitative Reasoning Skills: An ability to use empirical
  evidence to assess the validity of an economic argument.
  This shall involve the use of statistical data and
  methodology, ability to interpret statistical results and
  conduct appropriate statistical analysis independently.
- 3. **Problem-Solving Skills:** An ability to solve problems that have precise solutions as well as those that do not have

- precise answers and clarify conditions under which these solutions may be correct.
- 4. **Specialized Knowledge and Application of Skills:** An ability to develop critical as well as quantitative thinking skills specific to economics and related fields.
- 5. **Communication Skills:** An ability to communicate effectively in written, oral and graphical form about concrete questions and to prepare well-organized written arguments that clearly state assumptions/hypotheses supported by evidence.



#### **Admission Criterion:**

Must have passed F.A/ F.Sc. /I.Com./I.C.S. or equivalent, with at least 45% marks

#### **Selection Criterion:**

A candidate shall be selected on the basis of cumulative merit to be determined from his/her past academic record and achievements in the written tests conducted by the university.

## **Degree Requirements:**

A student of BS Economics is required to complete 130 credit hours of study, pass comprehensive oral exam. on S/U basis and minimum CGPA 2.5/4.0 to qualify for the degree.

## **Scholarships Offered:**

- 1. HEC
- 2. MUST
- 3. HBL Foundation

And others on merit and need base scholarships are available

#### **Duration:**

08-12 Semesters



## **Scheme of Studies**

Semester	Course Code	Course Title	Credits
	ENG-1107	English I	3
	ISL-1112	Islamic Studies	2
	ECO-1101	Principles of Microeconomics	3
First	MAT-1115	Mathematics I	3
	COM-1105	Introduction to Computer	3
		Optional (Non-Economic)	3
		Tota	al 17
	ENG-1207	English II	3
	PS-1217	Pakistan Studies	2
	ECO-1201	Principles of Macroeconomics	3
Second	MAT-1215	Mathematics II	3
		Optional (Non-Economics)	3
		Optional (Non-Economics)	3
		Tota	al 17
	ENG-2107	English III	3
	ECO-2101	Intermediate Microeconomics	3
	ECO-2102	Development Economics	3
Third	STA-2120	Statistics I	3
		Optional (Non-Economics)	3
		Optional (Non-Economics)	3
		Tota	al 18



	ARA-2201	Arabic	3
	ECO-2201	Intermediate Macroeconomics	3
	ECO-2202	History of Economic Thought	3
Fourth	STA-2220	Statistics II	3
		Optional (Non-Economics)	3
		Optional (Non-Economics)	3
		Tot	al 18
	ECO-3101	Microeconomics	3
	ECO-3102	Macroeconomics	3
Fifth	ECO-3103	Mathematical Economics I	3
FIIGH	ECO-3104	Islamic Economics	3
		Optional (Non-Economics)	3
		Tot	:al 15
	ECO-3201	Economic Growth	3
	ECO-3202	Econometrics I	3
Sixth	ECO-3203	Mathematical Economics II	3
SIXIII		Elective I	3
		Elective II	3
		Tot	al 15



	ECO-4101	International Trade Theory	3
	ECO-4102	Econometrics II	3
Seventh	ECO-4103	Issues in Pak Economy	3
Seventin	ECO-4104	Research Methods	3
		Elective III	3
		Total	15
	ECO-4201	Entrepreneurial Economics	3
	ECO-4202	Public Sector Economics	3
Eight	ECO-4203	Monetary Economics	3
Eigiit		Elective IV	3
		Elective V	3
		Total	15



## **List of Elective Courses**

	Group A		
Code	Course Title		
ECO-3204	Labor Economics		
ECO-3205	Population Economics		
ECO-3206	Comparative Economic System		
ECO-3207	Environmental Economics		
ECO-3208	Rural Development		
ECO-3209	Ethics in Economics		
ECO-3210	Industrial Economics		
ECO-3211	Urban Economics		
ECO-3212	Managerial Economics		
ECO-3213	Economics of Education		
ECO-3214	Transport Economics		
ECO-3215	World Trade Organization (WTO)		

Group B		
Code	Course Title	
ECO-4105	International Finance	
ECO-4106	Institutional Economics	
ECO-4107	Financial Markets	
ECO-4108	Regional Economics	
ECO-4109	Political Economy	
ECO-4110	Dynamic Macro Economics	
ECO-4111	Human Resource Development	



	Group C		
Code	Course Title		
ECO-4204	Agricultural Economics		
ECO-4205	Health Economics		
ECO-4206	Public Finance		
ECO-4207	Experimental and Behavioral Economics		
ECO-4208	Development Policy		
ECO-4209	Poverty and Income Distribution		
ECO-4210	Energy Economics		
ECO-4211	Research Project/Internship		
ECO-4212	Institutional Economics		
ECO-4213	Welfare and Happiness Economics		
ECO-4214	Project Appraisal and Investment Analysis		
ECO-4215	Research Paper		



#### M.Sc. Economics

A deep understanding of economics is key to our continuing function as a global economy, helping to establish successful trade, monetary and welfare policies across nations. The M.Sc. Economics program provides a foundation in the tools of economic policy and data analysis. The program focusses on the development of strong analytical and quantitative skills. Students are well-trained in the application of economic theory and methods of statistical analysis. The program provides students with a number of skills and preparation for entering professional world. Employers from the public to private and non-profit sector value the knowledge base and skills, both analytical and empirical, that economists acquire. Students who wish to proceeded for higher studies, will also be well placed with a strong foundation of economic theory, practice and application to real world phenomenon.

## **Program Objectives**

The objectives of program are:

- To provide the quality education based on sound theoretical and applied knowledge of the subject.
- To develop an understanding of microeconomics, macroeconomics, econometrics and their application in applied research.
- To develop critical thinking skills and the accumulation of factual knowledge
- To prepare students for advance based studies in economics.
- To train the students to disseminate subject knowledge and perform research-based jobs in the market.
- To enable students to solve problems and answer questions that arise in the private and public sectors by applying acquired economic knowledge and research tools.



#### **Admission Criterion:**

Must have passed B.A/ B.Sc. /B.Com. or equivalent with at least second division or CGPA 2.5/4.0

#### **Selection Criterion:**

A candidate shall be selected on the basis of cumulative merit to be determined from his/her past academic record and achievements in the written tests conducted by the university.

## **Degree Requirements:**

A student of M.Sc. Economics is required to complete 63 credit hours of study, pass comprehensive oral exam. on S/U basis and minimum CGPA 2.5/4.0 to qualify for the degree.

## **Scholarships Offered:**

- HEC
- MUST
- HBL Foundation
- Others on merit and need based scholarships are available

#### **Duration:**

04-06 Semesters



## **SCHEME OF STUDIES**

Semester	Course Code	Course Title	Credit Hrs.
First	ECO-5101	Microeconomics-I	03
	ECO-5102	Macroeconomics-I	03
	ECO-5103	Mathematical Economics-I	03
	ECO-5104	Statistics for Economists	03
	ECO-5105	Islamic Economics	03
		Total	15
Second	ECO-5201	Microeconomics-II	03
	ECO-5202	Macroeconomics-II	03
	ECO-5203	Mathematical Economics-II	03
	ECO-5204	Econometrics-I	03
	ECO-5205	Development Economics	03
		Optional-I	03
		Total	18



Third	ECO-6101	International Trade Theory	03
	ECO-6102	Major Issue in Pak Economy	03
	ECO-6103	Research Methods	03
	ECO-6104	Econometrics-II	03
		Optional –II	03
		Т	otal 15
Fourth	ECO-6201	Entrepreneurial Economics	03
	ECO-6202	Public Sector Economic	03
	ECO-6203	Monetary Economics	03
	ECO-6204	Research Thesis or Two Optional courses	06
	ECO-6205	Comprehensive Oral Exam.	S/U Basis
		Optional –III	03
		Optional –IV	03
		Т	otal 15



# LIST OF OPTIONAL COURSES

Group A		
ECO-5206	Labor Economics	
ECO-5207	Comparative Economic System	
ECO-5208	Environmental Economics	
ECO-5209	Rural Development	
ECO-5210	Ethics in Economics	
ECO-5211	Urban Economics	
ECO-5212	Economics of Education	
ECO-5213	Transport Economics	
ECO-5214	Natural Resource Economics	

	Group B		
ECO-6105	International Finance		
ECO-6106	Institutional Economics		
ECO-6107	Financial Markets		
ECO-6108	Regional Economics		
ECO-6109	Political Economy		
ECO-6110	Dynamic Macro Economics		
ECO-6111	Money Banking and Finance		
ECO-6112	Business Economics		
ECO-6113	Human Resource Economics		

	Group C		
ECO-6206	Agricultural Economics		
ECO-6207	Health Economics		
ECO-6208	Public Policies		
ECO-6209	Experimental and Behavioral Economics		
ECO-6210	Development Policy		
ECO-6211	Poverty and Income Distribution		
ECO-6212	Energy Economics		
ECO-6213	Institutional Economics		
ECO-6214	Population Economics		
ECO-6215	Managerial Economics		
ECO-6216	Welfare and Happiness Economics		
ECO-6217	Project Appraisal and Investment Analysis		
ECO-6218	Sustainable Development		
ECO-6219	World Trade Organization (WTO)		
ECO-6220	Industrial Economics		



## M.Phil. Economics

The M.Phil. Economics program is designed to give students a quantitative approach to economics providing a rigorous combination of economic theory, quantitative methods and applied research experience. The program combines theoretical rigor in core areas of economics with exceptional flexibility in course requirements to encourage students to explore their academic interests. It offers comprehensive instruction in a wide range of areas within the discipline, including advance microeconomics, advance macroeconomics, advance econometrics and a dynamic list of elective courses that enables students to receive a well-rounded graduate training. Through expanded course work requirements, students develop a breadth of exposure to empirical methods and analytical approaches to undertaking policy analysis and research, and enhanced communication skills. Program graduates with an excellent set of specialist and transferable

skills go on to obtain a wide range of positions in the private and public sectors, as well as continuing academic careers by pursuing a Ph.D degree.

## **Program Objectives**

The objectives of the **M.Phil. programs** are to develop students with the following capabilities:

- A fundamental understanding of economic principles and their application in the relevant field.
- An appropriate level of problem identification and conceptualization skills to focus on realistic and relevant research problems.
- A capability to integrate theory, technical information and appropriate methods in effectively analyzing and solving economic problems.
- An appropriate level of communication skills to effectively disseminate research output and technical information, including the practical implications of research analyses.



Graduate students are expected to have developed self-learning abilities and to be able to apply critical and innovative thinking. Courses, assignments, seminars, the writing of a thesis based on original research ideas for degree and the comprehensive examination, are the means by which the program meets and verifies its objectives.

#### **Admission Criterion:**

A candidate seeking admission to M.Phil. Economics program must:

- (a) have passed 16-year education with at least 65% marks in semester system and 50% marks in annual system of examination.
- (b) Have no 3<sup>rd</sup> division in his/her academic career.

  Have passed the GAT/NTS general test or any other test as required by the University

### **Selection Criterion:**

A candidate shall be selected on the basis of cumulative merit to be determined from his/her past academic record and achievements in the written tests conducted by the Controller of Examinations and interview by Admission Committee of Department of Economics.

# **Degree Requirements:**

A student of M.Phil. Economics is required to complete 31 credit hours of study and have to pass comprehensive oral examination on S/U basis. A candidate who fulfills all the requirements prescribed in University calendar volume-II, Chapter 29, shall be awarded the degree.

#### **Duration:**

03-08 Semesters



# **Scheme of Studies**

Semester	Course Code	Course Title	Credit Hours
F'	ECO-701	Advanced Microeconomics*	3
<b>First</b> Course work	ECO-702	Advanced Macroeconomics*	3
Credit Hours: 12		Optional-1	3
Credit Hours, 12		Optional -2	3
Carand	ECO-703	Advanced Econometrics*	3
<b>Second</b> Course Work	ECO-704	Research Methods in Economics*	3
Credit Hours: 12		Optional-3	3
Credit Hours. 12		Optional-4	3
Third & Fourth Research Work	ECO-798	Seminar	1
Credit Hours: 07	ECO-799	Research Thesis	6
Total Credit Hours			31

<sup>\*</sup> Compulsory course



# **List of Optional Courses**

Course Code	Course Title
ECO-711	Current Issues in Pakistan's Economy
ECO-712	Topics in Environmental and Natural Resource Economics
ECO-713	Issues in Development Economics
ECO-714	Topics in International Economics
ECO-715	Topics in Financial Economics
ECO-716	New Institutional Economics
ECO-717	Topics in Islamic Economic
ECO-718	Topics in Labor Economics
ECO-719	Topics in Public Sector Economics
ECO-720	Globalization and Economic Integration
ECO-721	Topics in Monetary Economics
ECO-722	General Equilibrium and Welfare Economics
ECO-723	Issues in Health Economics
ECO-724	Topics in Agricultural Economics
ECO-725	Topics in Urban Economics
ECO-726	Globalization and Socio- Economic Change



#### **Alumni Comments**

I'm privileged to have the honor of being a part of MUST, as the institution has helped me a lot to gain enough knowledge about my field. I must say this is the best place to learn in a good environment. The devotion and hard work of faculty members is admirable as they've prepared me well to work confidently anywhere.



Hira Azmi
M.Sc. Economics
Session 2017-19

Finding the right path to success at the right time is really very important and for that way I had selected Department of Economics, MUST. The friendly environment, the systematic approach towards imparting education at the Department made me a competent individual. The wide range of activities- both curricular and co-curricular- along and the support from the Department is really very helpful for my future.



Muhammad Nadeem
M.Sc. Economics
Session 2017-19

Choosing Department of Economics was simply one of the best decisions I have ever made. The Department doesn't just give you a degree in Economics, they prepare you to use everything you learn in your future. I can honestly say the Department of Economics is the reason I have been able to step in and not only succeed in this career but excel beyond expectations.



Gul Sanober M.Sc. Economics Session 2016-18







### **Coordinator:**

Dr. Sehrish Shafi

Tel: +92-5828-92023

E-mail: chairperson.eng@must.edu.pk

### **Message from Coordinator:**

On this new academic year, I warmly welcome to our prospective students here to the Department of English at Mirpur University of Science & Technology (MUST). I believe that university education is beyond the classroom or textbooks therefore our courses offered are designed to impart key skills – thinking critically, communicating persuasively, and appreciating the people and culture through language and literature. We aim to prepare our students for success in the workplace and in life. We have the qualified and devoted faculty and we are continuously expanding as per the requirement. We are committed to developing and supporting a new generation of academic leadership. In the coming years we are focused on expanding of our programs by offering MPhil and PhD. We believe that World has become the global village and language plays a role of bridge. We are launching institute of languages as an off shoot of Department of English in which we will offer different world languages, for instance Arabic, Chinese, German and Turkish at first stage. This will provide wider opportunities to all the students and community to widen the horizons and prospects for students to venture new avenues. I believe that this department will prove as one of the best choices for the batch of 2020.





**Faculty members of English Department** 

Row-1: Ms Ambreen Rahim, Mr. Sabir Naqvi, Ms Asma Iqbal Kayani, Mr. Toqeer Ahmed, Ms. Saima Yasmeen Row-2: Ms Saba Chaman, Ms Samia Anwar, Ms Asma Riaz, Ms Sania Ratyal, Ms Hina Mirza



# **Faculty Members**

Dr. Sehrish Shafi

**Designation:** Coordinator/Lecturer

Qualification: Ph.D.

Area of interest: Phonetics & Phonology,

Loanword Phonology, Language Variation and

Change, Multilingualism

**E-mail**: chairperson.eng@must.edu.pk

Ms. Saima Yasmin

**Designation**: Lecturer

**Qualification:** MPhil

Area of interest: Discourse Analysis

E-mail: Saima.eng@must.edu.pk

Mr. Farooq Ahmed

**Designation:** Lecturer **Qualification:** MPhil

Area of interest: Applied Linguistics; Semantics

**E-mail:** farooq.eng@must.edu.pk

Mr. Toqeer Ahmed

**Designation**: Assistant Professor

**Qualification:** MPhil

Area of interest: Modern and Post-modern

Literature

**E-mail:** toqeer.eng@must.edu.pk

Ms. Ambreen Rahim

**Designation:** Lecturer **Qualification:** MPhil

**Area of interest: Pragmatics** 

**E-mail:** Ambreen.eng@must.edu.pk

Ms. Lubna Aram Azam

**Designation:** Lecturer **Qualification:** MPhil

**Area of interest:** Sociolinguistics **E-mail:** Lubna.eng@must.edu.pk



# **Faculty Members**

#### Ms. Saba Chaman

**Designation:** Jr. Lecturer **Qualification:** MPhil

Area of interest Sociolinguistics

**E-mail:** saba.eng@must.edu.pk

### Ms. Sania Nawaz Ratyal

**Designation**: Jr. Lecturer **Qualification**: MA English

Area of interest: Communication Skills

**E-mail**: sania.eng@must.edu.pk

#### Ms. Samia Anwar

Designation: Jr. Lecturer Qualification: MA English Area of interest: Literature E-mail: samia.eng@must.edu.pk

### Ms. Shereen Ahmed

**Designation**: Jr. Lecturer (On contract) **Qualification**: MPhil (University of Gujrat)

Area of interest: Psycholinguistics

**E-mail:** Shereen.eng@must.edu.pk

#### Ms. Asma Riaz

**Designation:** Jr. Lecturer **Qualification:** MPhil

Area of interest: Learning English as a Second Language

**E-mail:** asma.eng@must.edu.pk

#### Ms. Hina Mirza

**Designation**: Jr. Lecturer **Qualification**: BS Hons,

**Area of interest:** Contemporary Literature

E-mail: hina.eng@must.edu.pk

## Mr. Muhammad Jahangir Akhtar

**Designation**: Jr. Lecturer **Qualification**: MPhil (MUL)

Area of interest: Literature and Translation Studies

**E-mail**: Jahangir.eng@must.edu.pk



## **BS English**

The 4-year BS program in English is an amalgamation of subjects that fall under English literature and linguistics. The learners are familiarized with eras of English literature and their prototype literature; prominent themes, writers, and characters of both poetry and prose. Keeping in view the significance that linguistics has attained in the past two decades, the learners are trained to analyze various text genres, comprehend contemporary grammars, speech processes, methods and approaches of English language teaching, as well as achieve a grasp on computational tools required to handle large scale data for more informed and reliable researches. Learners are further exposed to some allied courses to diversify their learning.

In the first two years of the program, the students will study compulsory, foundation, and general courses; whereas, in years two and three, the students take elective/major courses, and in the final year of their study, the students are offered specialization in Literature or Linguistics.



Plantation day

#### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

BS English program is designed, considering the need of English Language and Literature in modern society which is multilingual and advancing toward globalization due to the rapid development in technology. This program introduces the students with multi-cultural literature, its impact on society and



recent development in different disciplines of linguistics. The interaction of both disciplines at the same level shall bring diversity in students thinking, language variations and its influence on the learners.

### **PROGRAM LEARNING OBJECTIVES (PLOS)**

- To enable the students to identify the current global trends in linguistics and literature.
- To provided them opportunities to critically analyze cultural growth in different societies across the globe
- To familiarize them with different writing styles and recurring ideas in different genera of the literature.
- To equip them with language learning theories and their classroom applications.



**Group photo of students during the Recreational Trip** 



#### **Admission Criterion:**

- Intermediate or equivalent qualification with at least 45% marks.
- Entry Test conducted by the University

### **Degree Requirements:**

A student shall be awarded the degree in respective discipline provided that he/she has completed the fundamental courses, faculty courses, project/fieldwork/thesis/ internship/practical training and comprehensive oral examination within the prescribed time period with atleast57.5%cumulative percentage.

#### **Duration:**

8-12 Semesters

# Scholarships Offered:

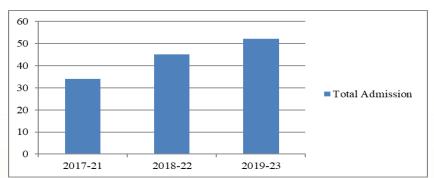
On the basis of different criteria following scholarships are offered:

- 1. Merit Based Scholarship
- 5. Ehsas Scholarships
- 2. HBL Foundation Scholarship
- 6. MUST scholarship
- 3. Allied Bank Scholarship
- 7. Baitul Mall -Scholarship

4. HEC need-base

8. NGOs scholarships.

#### Graphical Representation of Yearly Enrollment Progress





# **Scheme of Study: BS Program**

	YEAR ONE - SEMESTER ONE		
Course Code	Course Title	Credit Hrs.	
ENG-1101	English Language in Use	3+0	
ENG-1102	Academic Reading and Writing	3+0	
ENG1103	Introduction to English Literature	3+0	
ENG-1104	Introduction to Linguistics	3+0	
IR-1110	International Relations (Optional)*	3+0	
ISL-1112	Islamic Studies (Optional)*	2+0	
	Total 17		
	YEAR ONE – SEMESTER-TWO		
Course Code	Course Title	Credit Hrs.	
ENG-1201	Study Skills	3+0	
ENG-1202	Advanced Academic Reading and Writing	3+0	
ENG-1203	Introduction to Phonetics & Phonology	3+0	
ENG-1204	History of English Literature	3+0	
PS-1217	Pakistan Studies (Optional)*	2+0	
SOC-1221	Sociology (Optional)*	3+0	
	Total	17	



YEAR TWO - SEMESTER THREE		
Course Code	Course Title	Credit Hrs.
ENG-2101	English Communication Skills	3+0
COM-4102	Introduction to Computing & IT (Optional)*	3+0
STA-0020	Introduction to Statistics (Optional)*	3+0
PSY-0019	Introduction to Psychology (Optional)*	3+0
ENG-2102	Classics in Drama	3+0
ENG-2103	Introduction to Morphology	3+0
	Total	18
	YEAR TWO - SEMESTER FOUR	
Course Code	Course Title	Credit Hrs.
ENG-2201	Introduction to English Novel	3+0
HRC-2402	Human Rights and Citizenship (Optional)*	3+0
	Introduction to Education(G)	3+0
LAW-	Introduction to Law (Optional)*	3+0
ENG-2202	Introduction to Short Stories	3+0
ENG-2203	Introduction to Syntax	3+0
	Total	18



YEAR THREE - SEMESTER FIVE			
Course Code	Course Title	Credit Hrs.	
ENG-3101	Introduction to Sociolinguistics	3+0	
ENG -3102	Literary Criticism-I	3+0	
ENG -3103	Testing and Evaluation	3+0	
ENG -3104	Introduction to Prose	3+0	
ENG -3105	Research Methodology	3+0	
ENG -3106	Introduction to Semantics	3+0	
	Tota		
	YEAR THREE - SEMESTER SIX		
Course Code Course Title		Credit Hrs.	
ENG-3201	Literary Theories	3+0	
ENG-3202	Modern Drama (19 <sup>th</sup> Century)	3+0	
ENG-3203	Classics in Poetry-I (14 <sup>th</sup> -18 <sup>th</sup> Century)	3+0	
ENG-3204 Stylistics		3+0	
ENG-3205	Pragmatics	3+0	
ENG-3206	Psycholinguistics	3+0	
	Total	18	



YEAR FOUR - SEMESTER SEVEN: LITERATURE		
Course Code	Course Title	Credit Hrs.
ENG-4101-a	Classics in Poetry-II (19 <sup>th</sup> Century)	3+0
ENG-4102-a	American Literature	3+0
ENG-4103-a	South Asian Literature	3+0
ENG-4104-a	Literary Theories	3+0
	Elective Courses (A minimum of 1 course is to be selected from the list	i)
ENG-4105-a	American Drama	3+0
ENG-4106-a	Afro-American Literature	3+0
ENG-4107-a	Continental Literature	3+0
ENG-4108-a	Pakistani Literature in English	3+0
Total		15
	LINGUISTICS: CORE COURSES	
ENG-4101-b	Language Teaching Methodologies	3+0
ENG-4102-b	Discourse Analysis	3+0
ENG-4103-b	Second Language Acquisition	3+0
ENG-4104-b World Englishes		3+0
Elective Courses (A minimum of 1 course is to be selected from the list)		
ENG-4105-b	Media Discourse Analysis	3+0
ENG-4106-b	Translation Studies	3+0
	15	



YEAR FOUR - SEMESTER EIGHT			
LITERATURE: CORE COURSES			
Course Code	ode Course Title Credit Hrs.		
ENG-4201-a	20 <sup>th</sup> Century Fiction	3+0	
ENG-4202-a	Literary Criticism-II	3+0	
ENG-4203-a	Postcolonial Literature	3+0	
	Elective Courses (A minimum of 2 courses are to be selected from the li	st)	
ENG-4204-a	Literary Movements	3+0	
ENG-4205-a	Literary Stylistics	3+0	
ENG-4206-a	Emerging Forms of Literature	3+0	
ENG-4207-a	Term Paper	3+0	
Total 15		15	
	LINGUISTICS: CORE COURSES		
ENG-4201-b	Creative Writing	3+0	
ENG-4202-b	Language and Gender	3+0	
ENG-4203-b Language Culture & Identity		3+0	
	Elective/Major Courses (A minimum of 2 courses are to be selected from the list)		
ENG-4204-b	Genre Analysis	3+0	
ENG-4206-b	Anthropological Linguistics	3+0	
ENG-4205-b	English for Specific Purpose	3+0	
ENG-4207-b	Term Paper	3+0	
	Total 15		

**Note:** Any of these (Optional)\* courses shall be offered subject to the availability of expert.



## **MA English (2-Years Program)**

MA English 2-year program serves as a platform for the potential graduates in literature and linguistics. Literature is the reflection of a society expressed through variety of genres of its kind. It

provides a fine analysis of strengths, weaknesses, opportunities, and threats of the contemporary society in order to guide its development. Literature serves critical role in social development that encourages values and norms that bind



**2<sup>nd</sup> Departmental Council meeting** 



society in a harmonious manner with a delicate sense of aesthetics. Linguistics focuses on the study of language that explores the development and use of language in context. Communication is at the core of personal, professional, and social roles. Linguistics equips with the necessary tools and techniques to share ideas efficiently and effectively. Creative and communicative aspects of the graduates are polished besides inculcating the necessary value of civic responsibility. The department aims to provide graduates with academic accomplishment and personal development:

#### **PROGRAM OBJECTIVES**

- 1. To enable the graduates to apply knowledge gained in the degree program effectively and efficiently.
- 2. To encourage critical thinking and effective communication skills.
- 3. To step into Research and Development (R&D) effectively.

- 4. To pursue higher studies in any international University of high repute.
- To enable the students to identify the current global trends in linguistics and literature



#### **Admission Criterion:**

### **Entry Requirement:**

- B.A at least 2<sup>nd</sup> Division
- Entry Test conducted by the University

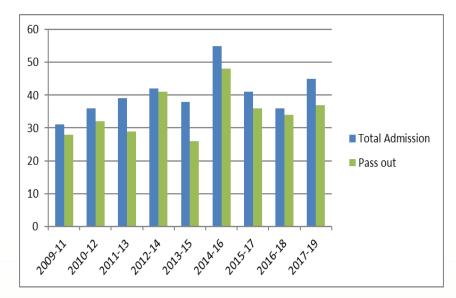
# **Degree Requirements:**

A student shall be awarded the degree in respective discipline provided that he/she has completed the fundamental courses, faculty courses, project/fieldwork/thesis/ internship/practical training and comprehensive oral examination within the prescribed time period with at least 57.5%cumulative percentage.

### **Duration:**

4-6 semester

#### **Graphical Representation of Yearly Enrollment & Pass-out Ratio**





# Scheme of Studies for MA- English 2-year program

Semester	Code	Course Title	Credit Hrs
	ENG-5101	Academic Discourse	3
	ENG-5102	Phonetics and Phonology	3
	ENG-5103	Introduction to Language & Linguistics	3
<b>1</b> st	ENG-5104	History of English Literature	3
	ENG-5105	Poetry-I	3
	ENG-5201	Sociolinguistics	3
	ENG-5202	TESOL	3
	ENG-5203	Literary Criticism	3
2 <sup>nd</sup>	ENG-5204	Classical Drama	3
	ENG-5205	Victorian English Novels	3
	ENG-6301	Stylistics	3
	ENG-6302	Poetry-II	3
	ENG-6303	Shorter Fiction	3
3 <sup>rd</sup>	ENG-6304	Prose	3
	ENG-6305	Research Methodology	3
	ENG-6306	Semantics	3
	ENG-6401	Pragmatics	3
	ENG-6402	Modern Drama	3
	ENG-6403	Modern English Novels	3
4 <sup>th</sup>	ENG-6404	Introduction to Morphology & Syntax	3
	ENG-6405	Comprehensive Oral Examination	S/U
	ENG-6406	Internship	S/U
	ENG-6407	Thesis (Optional)*	6



#### **ALUMNI MESSAGES**

Assalam-Alikum, I am umm-e-Ruman, student of BS-5, department of English. With the passage of time I realized that MUST is a place where the dreams come true. It not only offers gold standard qualification but also focuses on nurturing the individual's skills. My teachers help me to enhance my skills how to deal with future challenges. It groomed me intellectually and made me morally strong to be an effective global citizen. Must join MUST.



Umm-e-Ruman BS English 5<sup>th</sup> Semester

It's been a great honour for me to be a part of MA English in MUST. Ever since I took admission here I feel my personality grown up both ethically and morally. It is just because of highly qualified teachers who are very sincere to their work. The attitude of all the teachers especially Ma'am Sehrish is highly supportive and full of motivation. I would prefer you to take admission here if you really want to enhance your knowledge and your personality.



Uzair Chohan MA English 3<sup>rd</sup> Semester

I have relished attending 'MUST' in exploring new horizons in English Language and Literature. All faculty members of English Department are immensely cooperative and friendly. Indubitably, it is one of the most prestigious universities in Pakistan whence I have had the most overwhelming experience!



Rida Fatima MA English 3<sup>rd</sup> Semester





# **Faculty Members**

**Dr Amir Saghir** 

Associate Professor **Designation** 

Qualification PhD

Area of interest Statistical Process Monitoring

Email

aamir.stat@must.edu.pk

Dr Tassaddaq Hussain

**Assistant Professor Designation** 

Qualification PhD

Area of interest Mathematical and Applied Statistics

**Email** tassaddag.stat@must.edu.pk

Mr. Zahid-ur-Rehman

Designation Lecturer Qualification M.Phil. Area of interest **Statistics** 

Contact zahid.ms@must.edu.pk Mr. Tanveer Bashir

**Designation** Lecturer Qualification M.Phil. Area of interest **Statistics** 

**Email** tanveer.eco@must.edu.pk

**Mr Muhammad Rafaqat** 

**Designation** Jr. Lecturer Qualification M.Phil.

Area of interest Stochastic Modelling

**Email** mrafagat.maths@must.edu.pk Ms Asma Rashid

**Designation** Jr. Lecturer

Qualification M.Sc.

Area of interest **Applied Statistics** 

**Email** asma.maths@must.edu.pk



#### **BS Statistics**

The Mirpur University of Science and Technology (MUST) is going to start the Department of Statistics from the academic session Fall 2020. The core objective of the Department is to acquaint students with statistical ideas and methods. This department provides not only a good combination of pure and applied statistics but also strong knowledge of mathematical statistics which enables passed out graduates to successfully play their respective role in the country development.

In the upcoming session, we are planning to offer BS programme in Statistics. This programme will be generally a career oriented and provides graduates of the program with professional flexibility and exciting opportunities for rewarding careers in different fields such as biostatistics, market research,

econometrics, actuarial science, and statistical computing.

### **Program Mission**

To train the next generation professionals to gain advanced knowledge in Statistics that is required to design and implement novel methods, useful to define and solve problems with emphasis on acquisition, representation, retrieval, visualization and analysis of statistical data.

#### **Admission Criterion:**

Intermediate (F.Sc. Pre-Engineering or Intermediate or General Science Group with Statistics)

## **Duration:**

8-12 Semesters



# Scheme of Study (BS Statistics)

Course Code	1 <sup>st</sup> Semester	Credit hour
Course Code	Courses	Credit nour
STA- 1101	Introductory Statistics	3+0
COM- 1105	Introduction to Computer	3+0
ENG- 1107	English-I (Functional English)	3+0
MAT-1115	Calculus-I	3+0
ISL-1112	Islamic Studies	2+0
	General-I	2+0
	General-II	3+0
	То	tal Credit Hours 19
0	2 <sup>nd</sup> Semester	Credit hour
Course Code	Courses	Credit nour
STA- 1201	Introduction to Probability Distributions	3+0
ENG- 1207	English-II	3+0
MAT-1215	Calculus-II	3+0
PS-1217	Pakistan Studies	2+0
	General-III	3+0
	General-IV	3+0
	То	tal Credit Hours 17



Causaa Cada	3 <sup>rd</sup> Semester	Credit hour
Course Code	Courses	
STA- 2301	Basic Statistical Inference	3+0
	Communication Skills	3+0
ENG- 2307	English-III	3+0
MAT-2315	Calculus-III	3+0
	General-V	3+0
	General-VI	3+0
	Total Credit Hours	18
Course Code	4 <sup>th</sup> Semester	Credit hour
	Courses	
STA- 2401	Sampling Theory	3+0
STA- 2402	Introduction to Regression Analysis and Experimental Design	3+0
STA- 2403	Applied Statistics	3+0
MAT-2415	Linear Algebra	3+0
MAT-	Differential Equations	3+0
MAT-	Numerical Methods	3+0
	Total Credit Hours	18



Course Code	5 <sup>th</sup> Semester	Cua dit la accu	
Course Code	Courses	Credit hour	
STA- 3501	Probability Theory-I	3+0	
STA- 3502	Parametric Statistical Methods	3+0	
STA- 3503	Sampling Techniques	3+0	
STA- 3504	Econometric Theory-I	3+0	
STA- 3505	Mathematical Methods for Statistics	3+0	
	Total Credit Hours	15	
Cauras Cada	6 <sup>th</sup> Semester	Credit hour	
Course Code	Courses	Credit flour	
STA- 3601	Probability Theory-II	3+0	
STA- 3602	Experimental Design-I	3+0	
STA- 3603	Statistical Inference-I (Estimation)	3+0	
STA- 3604	Econometric Theory-II	3+0	
STA- 3605	Research Methodology	3+0	
	Total Credit Hours	15	



Course Code	7 <sup>th</sup> Semester	Our die broom	
Course Code	Courses	Credit hour	
STA- 4701	Experimental Design-II	3+0	
STA- 4702	Statistical Inference-II (Hypothesis Testing)	3+0	
STA- 4703	Statistical Quality Control	3+0	
STA- 4704	Multivariate Analysis	3+0	
STA- 4705	Non-Parametric Methods	3+0	
	Total Credit Hours	15	
Caumaa Caala	8 <sup>th</sup> Semester	Credit hour	
Course Code	Courses	Credit nour	
STA- 4801	Bayesian Inference	3+0	
STA- 4802	Statistical Packages	3+0	
STA- 4803	Operation Research	3+0	
STA- 4804	Time Series Analysis	3+0	
	Elective Course	3+0	
	Total Credit Hours	15	

**Course and Credit Hour Requirements:** A total of 132 credit hours (as per HEC Policy) are required to complete Bachelor of Science in Statistics.



## **Admission Policy 2020**

The Admission Policy is hereby disseminated with effect from Semester Fall-2020. This policy shall be read in coincidence with the Academic Rules/Regulations of the university (university calendar Vol-II). In matters where this policy is silent, relevant rules, regulations mentioned in calendar Vol-II shall apply. The admission requirements are revised by the HEC from time to time which shall be complied with, and shall take primacy over this policy.

#### 1. Overview of Admission Policy

- **1.1.** This document contains the admission policy & procedures of Mirpur University of Science and Technology. When any conflict or difference of interpretation occurs, this document shall hold precedence over all others except the University Ordinance
- **1.2.** These policies and procedures are subject to change from time to time on recommendations of Statutory Bodies of the University.

#### 2. Admission Policy Statement

To fascinate students who are academically sound and have the ability to enhance their knowledge and contribute to the learning environment and benefit from the ethos and activities at the University.

#### 3. Purpose

To provide a clear set of principles to the applicants, parents and advisors about admission in all courses of study at University and to ensure processes are transparent and decisions are consistent and fair.

### 4. Aims and Objectives

The aims and objectives of the Admissions Policy are to:

- a. Provide guidance to applicants about the admission process.
- b. Improve the quality and receptiveness of the admission process;
- c. Ensure fairness and equitable access to academic programs;
- d. Empower applicants by allowing them to manage their applications online;



- e. Ensure that the university's legal liabilities are managed effectively through consistent and appropriate admissions processes.
- f. Encouraging students to benefit from higher education being offered at University.

#### 5. Principles of Admission Policy

The University is committed to

- a. Maintain the highest academic standards
- b. Ensure that its admissions and recruitment processes are fair, open and transparent
- c. Apply transparent, explicit, clear and consistent policy and procedure to all students.
- d. Select students on the basis of their individual merits, abilities and aptitudes.
- e. Constantly monitor and review of admissions practices and procedures to respond to any changes in the institutional mission and external factors including changing patterns in the applicant market.
- 6. Admission Procedure

- 6.1. The University shall advertise admissions for all the disciplines of undergraduate, graduate and postgraduate programs through electronic and print media and Website of the University on dates as may be fixed by the University from time to time.
- 6.2. University offers applicants the facility to apply online for admission to its academic programs.
- 6.3. Only online application shall be accepted on or before the stipulated deadline and No hard copy of the form/ and credentials shall be required. However, all responsibilities of the provided data in the application shall rest upon the applicant. In case of any discrepancy, the admission shall be cancelled at any stage of the degree.
- 6.4. Applicants should be aware, that the presentation of incorrect information or document(s) in connection with admission is a criminal offense and the University reserves the right to initiate appropriate action.
- 6.5. The submitted applications shall be acknowledged by the text message on the applicant's given cell number.



Degree wise electronic list of all applicants shall be displayed on MUST admission portal (https:/MUST.edu.pk) after the closing date of the admission. The missing candidates (if any) may contact, Director Students Affairs, MUST (dsa@must.edu.pk) before the date of merit list. Otherwise, the claim shall not be entertained after the display of Merit Lists.

- 6.6. The University shall establish Admission Facilitation Centre's at the following venues, equipped with IT services, for the guidance of the desiring applicants;
  - a) Director Students Affairs

City Campus MUST Mirpur

Ph.: 05827-961045, 05827-960096

b) MUST Campus Bhimber Office of the coordinator campus

Ph.: 05828-960007

MUST Campus Palandri Office of the coordinator campus

Ph.: 05825-960031

6.7. All admissions in under graduation and graduation shall be made through Admission Committee consisting of

- three members recommended by the concerned Dean of the Faculty and approved by the Vice Chancellor. The Senior most member of the Committee shall be the Chairperson and junior most member shall be the Secretary of the Committee
- 6.8. List of selected candidates shall be displayed on the notice board and MUST admission portal (https:/must.edu.pk) as per admission calendar.
- 6.9. An applicant can file the admission grievance(s) (if any) in writing along with all required documents to the office of the respective Faculty Dean for redressed.
- 6.10. All the selected candidate mentioned in any merit list shall present all the credentials in original for verification to respective Faculty Admission Committee (FAC). Verified applicants shall submit two sets of attested copies of all certificates/degrees and four recent passport size photographs (with blue background). Faculty Admission Committee (FAC) shall issue Chillan form for the deposit of 1st-semester dues/Fee.



- 6.11. The admission dues/fee shall be deposited during the stipulated period in the designated branches of banks.
- 6.12. The undergraduate degree programs shall be offered on the basis of relevant first (1st) year examinations of Intermediate or equivalent, BA, BSc or equivalent or first two-year results of Diploma of Associate Engineering (DAE) duly recognized by Pakistan Board of Technical Education (PBTE).
- 6.13. For MS/MPhil & PhD, all the selected candidates mentioned in any merit list shall present all the credentials in original for verification to respective Departmental Admission Committee (DAC). Verified applicants shall submit two sets of attested copies of all certificates/degrees and four recent passport size photographs (with blue background). The Convener of DAC shall issue challan form for the deposit of 1st-semester dues/Fee.
- 6.14. The graduate and postgraduate degree programs shall be offered on the basis of complete terminal degree.

- 6.15. There will be no reserved seat(s) for graduate and postgraduate degree programs.
- 6.16. Considering resources, the minimum required number of seats to initiate degree program(s) shall be decided by the notified committee.
- 6.17. The Campus/Faculty wise number of seats for various Undergraduate degree programs are mentioned however, in special circumstances (not to be mentioned) University reserves the rights not to offer degree program(s). In such cases, the deposited fee/dues shall be refunded as per MUST policy.
- 6.18. A candidate can mark his/her preference for admission for more than one-degree programs within a Faculty; however, for other Faculty a separate admission form shall be submitted.
- 6.19. A candidate shall have to pay @ Rs 1500/= as admission processing fee, whereas Rs 300/= shall be charged for each extra degree program of the same faculty within the stipulated time as mentioned in the admission advertisement/calendar. A separate admission



- application/processing fee shall be submitted by candidate(s), if they are desirous to apply in programs of different faculties.
- 6.20. Subject to the availability of seat/merit and prior to the submission of application in more than one discipline(s), a candidate shall be allowed changing major discipline within the stipulated time.
- 6.21. In case of "O", "A" level education in Pakistan or abroad a Marks Equivalence Certificate (MEC) from Inter Board Committee of Chairmen (IBCC), Islamabad, Pakistan or Higher Education Commission (HEC), Islamabad, Pakistan shall be required respectively.

- 6.22.In case of any other relevant equivalent degree, the Equivalence Certificate from HEC shall be required.
- 6.23. The required calculation of percentage from CGPA for other than MUST candidates (if any), MUST, CGPA conversion formula shall be followed.
- 6.24.In case seats remain vacant after the completion of admission process, the late admission may be offered to the candidates falling next in merit not later than 3rd week after the commencement of the semester. However, in such case the student shall be responsible to make up any kind of deficiencies.

# Age relaxation Policy of Azad State Jammu and Kashmir

Degree Program	Upper Age Limit	Maximum Age Relaxation
All Undergraduate Degree Programs including; BS/BBA (4 years)/LLB/ BS-Engineering Technology /BSc-Engineering and Associate Degrees (after 12 years of education)	24	Five Year for Females Two Year for Males
All Undergraduate degree programs including; MA/MSc (2 years)/M-Com (after 14 years of education)	26	Five Year for Females Two Year for Males

**Note:** For MUST Business School (MBA)'s Master Program and graduate, post graduate degree programs there is no upper age limit of applicants.



# 7. Degree Programs:

The following degree programs shall be offered in the University

# 7.1. Faculty of Arts and Humanities

1- Undergraduate Degree Programs (Full Time Morning)
1. BS-English (Bimber Campus)
2. BS- Sociology
3. BS-Islamic Studies
4. BS-Media & Communication Studies
5. BS- International Relation
6. BS- Economics (Bimber Campus)
7. BS- Home Economics
8. BS-Fashion Designing
9. BS- Tourism & Hospitality (Pllandri Campus)
2- Undergraduate 05 Years Degree Programs
1. BA-LLB
3- Master 02 Years Degree Programs
1. Arabic
2. Education
3. English (Bimber Campus)
4. Islamic Studies
5. Economics (Bimber Campus)

4-Teacher Training Degree Programs						
1. B.Ed. Secondary (1.5 Yrs.)						
2. B.Ed. Elementary (2.5 Yrs.)						
3. B.Ed Elementary (4 Yrs.)						
5- Graduate Degree Programs MS/MPhil (Full Time						
Morning)						
1. Economics (Bhimber Campus)						
2. Islamic Studies						
3. Education						



# 7.2. Faculty of Engineering and Technology

7.2.1 dealty of Engineering and recimology
1-Undergraduate Degree Programs (Full Time Morning)
1. BS- Civil Engineering
2. BS- Computer System Engineering
3. BS- Electrical Engineering
4. BS-Mechanical Engineering
5. BS- Software Engineering
2-Undergraduate (Full Time Morning)
BS-Civil Engineering Technology
BS-Electrical Engineering Technology
3. BS-Mechanical Engineering Technology
3-Graduate Degree Programs M.Sc./MS (Full Time Morning)
1. Civil Engineering
2. Computer Systems Engineering
3. Electrical Engineering
4. Energy Systems Engineering
5. Mechanical Engineering
6. Software Engineering
4-PhD
1. Civil Engineering
2. Electrical Engineering
3. Mechanical Engineering

# 7.3- Faculty of MUST Business School

7.5 Tatanty of Meet Basiness concer
1-Undergraduate Degree Programs (Full Time Morning)
BBA-Accounting and Finance
1. BBF-Banking and Finance
2. BS-Commerce
2-Master Degree Programs (Full Time Morning)
1. MBA (3.5 Yrs.)
2. M.Com (2 Yrs.)
3-Master Degree Programs (Full Time Evening)
1. MBA (2 Yrs. Executive)
2. MBA (1.5 Yrs.)
4-Graduate Degree Programs MS/MPhil (Full Time Morning)
1. Management Sciences



# 7.3- Faculty of Natural & Applied Sciences

1-Undergraduate Degree Programs (Full Time Morning)				
BS-Biotechnology				
BS-Botany (Bhimber Campus)				
3. BS-Chemistry				
BS-Computer Science				
5. BS-Information Technology				
6. BS-Mathematics				
7. BS-Physics				
8. BS-Statistics (Bhimber Campus)				
9. BS-Zoology				
10. BS- Forestry (Pllandri Campus)				
2-Graduate Degree Programs MS/MPhil (Full Time Morning)				
1. Computer science				
2. Mathematics				
3. Physics				
4. Chemistry				
5. Zoology				
6. Biotechnology				
7. Botany (Bhimber Campus)				

3-PI	nD (Full Time)
1.	Mathematics
2.	Physics
3.	Chemistry
4.	Biotechnology
5.	Botany (Bhimber Campus)

# 7.4- Faculty of Health and Medical Sciences

<b>1-</b> L	Jnde	rgradı	uate [	Degr	ee F	Prog	gra	am	s (Full	Time	Morning	)
						)			// // //			

- 1. BS Human Nutrition & Dietetics (HND)
- 2. Doctor of Physical Therapy (DPT)
- 3. BS Medical Lab Technology (MLT)



- 8. Basic Criteria to apply for Undergraduate Degree Programs (BS/BBA(04 Years/8 semesters)/LLB/DPT(5 Years/10 semesters)/BS-Engineering Technology/BS-Engineering (04 Years / 08 semesters)/ after 12 Years of Education)
  - 8.1. Subject to the verification of the minimum required criteria and relevance of the subject by the Faculty Admission Committee (FAC), the provisional admission shall be awarded on the Merit of the First (1st) Year examination of Intermediate or equivalent or the First Two Years' accumulative results of DAE or equivalent marks obtained; however, the fulfillment of relevant minimum criteria shall be required to apply for admission.
  - 8.2. In this regard, the candidate shall have to submit an affidavit (already given in the online admission application form) confirming that he/she shall meet all

the required respective minimum criteria mention in the advertisement with at least 45%, 50%, and 60% respectively required marks in the 2nd / Final Year of the relevant annual examinations; otherwise, the provisional admission shall stand cancelled and The cancelled admission in this category full fee shall be refund according to HEC policy.

#### 8.3. Merit Determination Criteria

The merit shall be determined of above mentioned degree programs as fellow.

1-	Weightage of Entry Test Marks	30%
2-	Weightage of Matric Marks	25%
3-	Weightage of FA/F.Sc (Ist Year) Marks	45%
Total	: 100	



### 8.4. Pre-requisites for Admission:

The pre-requisites and other requirements (if any) for admission in Undergraduate Degree Programs are as under

Degree Program	Pre-Requisites
1- BS-English	
2- BS-Islamic Studies	
3- BS-Media and Communication Studies	
4- BS-Economics	
5- BS-International Relations	
6- BS-Sociology	Intermediate or equivalent with at least 45% marks
7- BS-Tourism & Hospitality	Intermediate or equivalent with at least 45% marks
8- BS-Fashion Designing	
9- BS Home Economics	
10- B.Ed. Elementary	
11- BS-Banking and Finance	
12- BS-Commerce	
13- BBA-(Bachelor of Business Administration)	
14- BS-Biotechnology	
15- BS-Botany	Intermediate (F.Co. Dro Modical only) with 4EV morte for all EOV mortes for Distantials
16- BS-Zoology	Intermediate (F.Sc. Pre-Medical only) with 45% marks for all, 50% marks for Biotechnology
17- BS- Human Nutrition and Dietetics	and 60% for Human Nutrition and Dieteticsand Medical Lab Technology (MLT)
18- BS – Medical Lab Technology (MLT)	
19- BS- Forestry	



20- BS-Chemistry	Intermediate (F.Sc. Pre-Engineering or F.Sc. Pre Medical)
21- BS-Mathematics	F.Sc. (Pre-Engineering), ICS in Mathematics and any one of Physics, Statistics or Economics or equivalent or F.A. in Mathematics, Statistics and Economics marks (2nd Division)or F.Sc Pre Medical with Additional Mathematics with minimum 45%
22- BS-Physics	F.Sc. (Pre-Engineering) in Physics, Mathematics or equivalent or F.Sc Pre Medical with Additional Mathematics with minimum 45% marks (2nd Division).
23- BS-Statistics	Intermediate (F.Sc. Pre-Engineering or Intermediate or General Science Group with Statistics)
24- BS-Computer Science	F.Sc./ F.A (Economics/ Statistics, Mathematics, Physics), ICS, I.Com, Diploma in IT/
25- BS-Information Technology	Electronics or equivalent to Intermediate with 50% marks.
26- LLB	Intermediate or equivalent with at least 45% marks  NOTE: Qualified Law Admission Test (LAT) conducted by HEC shall be required.
27-Doctor of Physical Therapy (DPT)	F. Sc. (Pre-medical) with minimum 60% Marks
28- BS Civil Engineering 29- BS Computer System Engineering 30- BS Electrical Engineering 31- BS Mechanical Engineering 32- BS Software Engineering	<ul> <li>At least 60% marks in Intermediate (FSc; Pre-Engineering or Pre-Medical with additional Mathematics or equivalent)</li> <li>NOTE: Three-year Diploma in Associate Engineering (DAE) in the relevant technology duly recognized by Pakistan Board holders may apply against reserved seats in relevant BS-Engineering degrees. However, MUST Entry Test shall be required to apply for BS Engineering degrees</li> </ul>
<ul><li>33- BS Civil Engineering Technology</li><li>34- BS Electrical Engineering Technology</li><li>35- BS Mechanical Engineering Technology</li></ul>	Intermediate FSc Pre-Engineering, FSc Pre-Medical with additional Mathematics or relevant DAE with at least 50% marks  NOTE: No Entry Test is required



- 9. Basic Criteria to Apply for Degree Programs: MA/MSc/MBA/MCom (after 14 Years of education);
  - 9.1. Subject to the verification of the minimum required criteria and relevance of the subject by the Faculty Admission Committee (FAC), the provisional admission shall be awarded on the Merit of BA/BSc/B Com (third semester or third year results) or equivalent marks obtained; however, at least 45% marks to apply for admission to all Undergraduate degree programs MA/MSc/ MBA and M-Com (after 14 years of education) shall be required.
  - 9.2. In this regard, the candidate shall have to submit an affidavit (already given in the online admission application form) confirming that he/she shall meet all required respective minimum criteria with at least 45% required marks in the final year / 4th Semester; otherwise, the provisional admission shall stand cancelled. The cancelled admission in this category the

fee shall be refunded according to HEC fee refund policy.

9.3. Merit Evaluation Criteria

The merit shall be determined for admission in above mentioned degree programs as fellow.

- Weightage of Entry Test Marks30%
- 2- Weightage of Matric Marks 10%
- 3- Weightage of FA/F.Sc. Marks 20%
- 4- Weightage of BA/B.Sc. (3rd Year) Marks 40%



#### 9.4. Pre-requisites for Admission

The pre-requisites and other requirements (if any) for admission in this category are as under:

Degree Program	Pre-Requisites
<ol> <li>MA Islamic Studies</li> <li>MA Arabic</li> <li>MA English</li> <li>MSc Botany</li> <li>MSc Computer Science (MCS)</li> <li>MA Economics</li> <li>MSc Physics</li> <li>MSc Chemistry</li> <li>MSc Zoology</li> </ol>	200 marks in the relevant subject in the last degree and overall at least 2 <sup>nd</sup> division.
10. MBA: 3.5 Years	BA/BSc/BCom or equivalent with at
11. MA Education	least 2 <sup>nd</sup> division.
12. MBA Executive 2 Years	BA/B.Sc./B.Com (14 years of Education) with at least 2 <sup>nd</sup> division, plus 4 years' experience or 16 years of Education with 2 years' experience at administrative/Industry Level.
13. MBA 1.5 Years	BBA/ B.Com (4 Years) with 2 <sup>nd</sup> division

14. MSc Mathematics	Mathematics with 400 with 2 <sup>nd</sup> division
15. M.Com	B.Com (IT) / Associate Degree in Accounting & Finance with 2 <sup>nd</sup> division.
16. B. Ed Elementary 2.5 years (after 14 years Education)	BA/B.Sc. or equivalent with 2 <sup>nd</sup> division.
17. B. Ed Secondary 1.5 years (after 16 years Education)	MA/MSc/BS Graduates or equivalent with at least 2 <sup>nd</sup> division.

- 10. Admission Regulations For MS/ M.Phil Degree Programs (after 16 Years of education)
  - 10.1. The departmental admission committee (DAC) shall ascertain the eligibility of the candidates by scrutinizing the admission form. The provisional list of shortlisted candidates shall be displayed on departmental notice board and MUST website.
  - 10.2. The short listed candidates shall provide the GAT-General (www.nts.org.pk/gat/gat.asp) conducted by the National Testing Service with a minimum 50% cumulative score. The GAT-General test is valid for a period of two years.



- 10.3. If the Test is not available in NTS subject list, then a University Committee consisting of at least 3 PhD faculty members in the subject area and approved by the HEC will conduct the Test and qualifying score for this will be 60%.
- 10.4. The interviews of short listed candidates shall be conducted by the DAC with intimation to the Director ASRB.
- 10.5. The Admission Committee will grant admissions subject to the approval by the Advanced Studies & Research Board (ASRB). The cases need to be submitted before the start of sessional examination of the first semester. The ASRB will be responsible to respond back before the start of terminal examination of the first semester.
- 10.6. The number of scholars to be admitted shall be such as may be determined by the competent authority in consultation with the Chairperson/ Director of the department.
- 10.7. There shall be an admission committee for each department which shall perform functions as specified

- from time to time. The four members committee shall have tenure of three years. It shall consist of the following: Dean of the concerned Faculty (Chairperson of the Committee), Chairperson/ Director of the concerned Department/ Institute/ Centre/ School/ College/ Affiliated Institution, two Senior faculty members of the relevant discipline to be nominated by the Dean on the recommendation of concerned Head, approved by the Vice Chancellor.
- 10.8. Admissions will be granted on open merit basis (there is no quota seat). However, foreign candidates will be selected through the Federal Ministry of Education, Government of Pakistan.
- 10.9. The candidate has to produce at the time of the first enrolment, a certificate from the Medical Officer of any public sector hospital to the effect that he/ she is free of any communicable disease or mental or physical disability which is likely to stand in the way of his/ her pursuit of higher studies and research.



- 10.10. The candidate must also produce character certificate issued by the Head of Institution last attended by the student testifying good moral character of the student. All those candidates, who were punished by any Degree Awarding Institutions (DAI's) for acts of indiscipline and other undesirable activities and were awarded major penalties, shall not be admitted to postgraduate studies in the University under any circumstances. All other candidates, who were, awarded minor penalties for more than once shall not be admitted to the postgraduate studies in the University either.
- 10.11. All the employees of public sector organizations have to produce the certificate of study leave to pursue the

- studies as a regular student from their respective head offices.
- 10.12. The employees of the University appointed on permanent/ adhoc/ contract basis shall be allowed to join the programme, classes as whole time regular scholars without obtaining leave of absence. Such employees shall have to produce a certificate from the concerned Head to the effect that the normal work of the department will not be affected.
- 10.13. The selected candidates will have to produce HEC attested degree of previous class within a month of their admission.



#### 10.14. Merit Evaluation Criteria

- a) A candidate shall be selected on the basis of cumulative merit to be determined from his/ her past academic record and achievements in the written tests conducted by the Controller of Examinations and Interview by Admission Committee of the concerned discipline.
- b) The allocation of marks for determining merit shall be as follows:

i. Academic Record 55 marksii. Admission Test 35 marksiii. Interview 10 marks

- c) The distribution of marks allocated to the academic record shallbe as under:
- (a) [Marks obtained in B.Sc. (Engg.)/ BS (4 years) ÷ TotalMarks] × 40 + [Marks obtained in F.A./F.Sc. ÷ TotalMarks] × 15.
- (b) [Marks obtained in M.A./ M.Sc. ÷ Total Marks] × 20 +[Marks obtained in B.A./ B.Sc. ÷ Total Marks] × 20 +[Marks obtained in F.A./ F.Sc. ÷ Total Marks] × 15.
- (c) [Marks obtained in BS (5 years) ÷ Total Marks] × 40 +[Marks obtained in F.A./F.Sc. ÷ Total Marks] × 15.
- (d) [Marks obtained in BS (6 years) ÷ Total Marks] × 55.



#### 10.15. Pre-requisites for Admission

Degree Program	Pre-Requisites
<ol> <li>Civil Engineering</li> <li>Computer Systems         Engineering</li> <li>Electrical Engineering</li> <li>Energy Systems         Engineering</li> <li>Mechanical         Engineering</li> <li>Software Engineering</li> </ol>	<ul> <li>B.Sc. Engineering or equivalent qualifications in the relevant subject with at least 65% marks, no 3<sup>rd</sup> division in the academic record and duly registered with the Pakistan Engineering Council.</li> <li>For Energy Systems Engineering, B.Sc. Engineering in Mechanical, Electrical, Civil, Environmental or Chemical with at least 65% marks, no 3<sup>rd</sup> division in the academic record and duly registered with the Pakistan Engineering Council.</li> </ul>

- 1. Mathematics
- 2. Physics
- 3. Chemistry
- 4. Zoology
- 5. Biotechnology
- 6. Botany
- 7. Computer Science
- 8. Management Sciences
- 9. Education
- 10. Economics
- 11. Islamic Studies

- M.Sc./ BS (Hons) in equivalent qualifications in the relevant subject with at least 65% marks, no 3<sup>rd</sup> division in academic record.
- For Biotechnology M.Sc./ BS (4 Years) with at least 65% marks in Biotechnology/ Biology/ Bio-Chemistry/ Botany/ Zoology/ Molecular Biology/ Bio-informatics/ Pharm-D/ Medical Lab Technology/ DVM or Agriculture Science, no 3rd division in academic record.
- In case CGPA or %age obtained by the candidate is not mentioned on his/her transcript the academic qualification marks shall be calculated as per MUST evaluation policy.



#### 11. Admission Regulations For Ph.D. Degree Programm

- 11.1. The departmental admission committee (DAC) shall ascertain the eligibility of the candidates by scrutinizing the admission form. The provisional list of shortlisted candidates shall be displayed on departmental notice board and MUST website.
- 11.2.A 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 prior to admission for the PhD Program.
  - a) In the case of Graduate Assessment Test (GAT) (http://www.nts.org.pk/gat/gatsubject.asp) a minimum of 60% score is required.
  - b) In the case of GRE subject test a minimum of 60% (for admissions thereafter) percentile score is required.

- c) If the test is not available in NTS subject, then a University committee consisting of atleast 3 Ph.D. faculty members in the subject area, approved by the HEC will conduct the Test at par with GRE Subject Test and qualifying score for this test will be 70%.
- 11.3. The interviews of short listed candidates shall be conducted by the DAC with intimation to the Director ASRB.
- 11.4. The Admission Committee will grant admissions subject to the approval by the Advanced Studies & Research Board (ASRB). The cases need to be submitted before the start of sessional examination of the first semester. The ASRB will be responsible to respond back before the start of terminal examination of the first semester.



- 11.5. The number of scholars to be admitted shall be such as may be determined by the competent authority in consultation with the Chairperson/ Director of the department.
- 11.6.There shall be an admission committee for each department which shall perform functions as specified from time to time. The four members committee shall have tenure of three years. It shall consist of the following: Dean of the concerned Faculty (Chairperson of the Committee), Chairperson/ Director of the concerned Department/ Institute/ Centre/ School/ College/ Affiliated Institution, two Senior faculty members of the relevant discipline to be nominated by the Dean on the recommendation of concerned Head, approved by the Vice Chancellor.
- 11.7. Admissions will be granted on open merit basis (there is no quota seat). However, foreign candidates will be selected through the Federal Ministry of Education, Government of Pakistan.
- 11.8. The candidate has to produce at the time of the first enrolment, a certificate from the Medical Officer of any public sector hospital to the effect that he/ she is free of any communicable disease or mental or physical disability which is likely to stand in the way of his/ her pursuit of higher studies and research.
- 11.9.The candidate must also produce character certificate issued by the Head of Institution last attended by the student testifying good moral character of the student.

  All those candidates, who were punished by any Degree Awarding Institutions (DAI's) for acts of indiscipline and



other undesirable activities and were awarded major penalties, shall not be admitted to postgraduate studies in the University under any circumstances. All other candidates, who were, awarded minor penalties for more than once shall not be admitted to the postgraduate studies in the University either.

- 11.10. All the employees of public sector organizations have to produce the certificate of study leave to pursue the studies as a regular student from their respective head offices.
- 11.11. The employees of the University appointed on permanent/ adhoc/ contract basis shall be allowed to

join the programme, classes as whole time regular scholars without obtaining leave of absence. Such employees shall have to produce a certificate from the concerned Head to the effect that the normal work of the department will not be affected.

11.12. The selected candidates will have to produce HEC attested degree of previous class within a month of their admission.



#### 11.13. Merit Evaluation Criteria

- 1. A candidate shall be selected on the basis of cumulative merit to be determined from his/ her past academic record, achievements in Interview by Admission Committee of the concerned discipline and research publication.
- 2. The allocation of marks for determining merit shall be as follows:
- i. Academic Record 80 marks
- ii. Interview 15 marks
- iii. Research Publication 5 Marks
- 3. The distribution of marks allocated to the academic record shall be as under:
- a) [Marks obtained in M.Sc. (Egg.) ÷ Total Marks] × 25 + [Marks obtained in B.Sc. (Egg.)/ BS (4 years) ÷ Total Marks] × 40 + [Marks obtained in F.A./F.Sc. ÷ Total Marks] x 15.
- b) [Marks obtained in M.Phil. ÷ Total Marks] × 25 + [Marks obtained in M.A./ M.Sc. ÷
- c) Total Marks] × 20 + [Marks obtained in B.A./ B.Sc. ÷ Total Marks] x 20 + [Marks obtained in F.A./ F.Sc. ÷ Total Marks] x 15.
- d) [Marks obtained in M.Phil. ÷ Total Marks] × 25 + [Marks obtained in BS (5 years) ÷
- e) Total Marks]  $\times$  40 + [Marks obtained in F.A./F.Sc.  $\div$  Total Marks]  $\times$  15.
- f) [Marks obtained in M.Phil. ÷ Total Marks] × 25 + (Marks obtained in BS (6 years) ÷ Total Marks] x 55.



#### 11.14. Pre-requisites for Admission

The pre-requisites and other requirements (if any) for admission in this category are as under

	Degree Program	Pre-Requisites		
•	Biotechnology	• At least 18 years of education (MS/MPhil degree) or equivalent qualification in the relevant subject with at		
•	Botany	least 65% marks, no 3 <sup>rd</sup> Division in academic record.		
•	Mathematics	Mathematics • For Biotechnology MPhil in 1st Division or CGPA 3.0/4.0 with at least 65% marks in Biotechnology/ Biology/		
•	Physics	Bio-Chemistry/ Botany/ Zoology/ Molecular Biology/ Bio-informatics/ Agriculture Science or Pharmacy.		
•	Chemistry	Chemistry • 06 CH research in his/her MS/MPhil program.		
		<ul> <li>In case CGPA or %age obtained by the candidate is not mentioned on his/her transcript the academic</li> </ul>		
		qualification marks shall be calculated as per MUST evaluation policy.		

# 12. ADMISSION POLICY FOR RESERVED SEATS IN UNDERGRADUATE DEGREE PROGRAMS (EXCEPTIONS / CONDITIONS ARE MENTIONED WITH EVERY CATEGORY)

- a) The merit of the reserved seats shall be determined within the category; however, the applicant has to fulfil the general admission/minimum required eligibility criteria to apply for.
- b) A candidate can apply against both reserved and merit seats; however, separate application forms shall be filled
- c) The number of reserved seats are included in total allocated seats; however, unfilled reserved seat (if any) shall be dealt under open merit.
- d) In case more than required nominations against a particular degree program are received, MUST shall reserve the rights to prepare the merit list within the same category as per MUST policy.



- e) The nomination against a category shall not change, unless approved by the relevant nominated authority.
- f) Following is the detail of the admission against reserved seats.

t the Time of Registration
e a disability certificate, duly issued by the
nent of Azad Jammu and Kashmir before the admission. r before the MUST Medical Board/ Disable examination as per advertised g with original credentials. nd the elevators are not available.
MUST Campus and LLB except for Graduate
name(s) of the children applied for admission. ued by Registrar office.
r é r



S#	Reserved Seat Category	Percentage of the seats reserved in total Allocated Seats	Degree Programs allowed and Requirements at the Time of Registration
3	AJ&K Refugees (Refugees settled in Pakistan/ Refugees 1989)		<ul><li>a) In all degree programs offered at MUST.</li><li>b) Merit list shall be prepared by the relevant Admission Committee.</li></ul>
4	FATA/ KPK		<ul> <li>a) In all B.Sc. Engineering degree Programs, CS and IT Undergraduate Programs.</li> <li>b) The applicant shall provide a nomination letter from the respective nominating authorities.</li> </ul>
5	Punjab		<ul> <li>a) In all B.Sc. Engineering degree Programs, CS and IT Undergraduate Programs.</li> <li>b) The applicant shall provide a nomination letter from the respective nominating authorities.</li> </ul>
6	Sindh		<ul><li>a) In all B.Sc. Engineering degree Programs.</li><li>b) The applicant shall provide a nomination letter from the respective nominating authorities.</li></ul>
7	Baluchistan		<ul><li>a) In all B.Sc. Engineering degree Programs.</li><li>b) The applicant shall provide a nomination letter from the respective nominating authorities.</li></ul>



S#	Reserved Seat Category	Percentage of the seats reserved in total Allocated Seats	Degree Programs allowed and Requirements at the Time of Registration
8	Pakistan National		<ul> <li>a) In all BS and Masters Programs of Faculty of Natural &amp; Applied Sciences and Arts &amp; Humanities Programs.</li> <li>b) The applicant shall provide a nomination letter from the respective nominating authorities after selection in merit list produced by relevant Admission Committee.</li> </ul>
9	Gilgit-Baltistan		<ul><li>a) In all degree programs offered at MUST.</li><li>b) The applicant shall provide a nomination letter from the respective nominating authorities.</li></ul>
10	Diploma (DAE) Holder		<ul> <li>a) In relevant B.Sc. Engineering degree Programs.</li> <li>b) The applicant shall provide a nomination letter from the respective nominating authorities.</li> </ul>
11	Wards of Shuhada, War Disabled Serving and Retired Individuals of Pakistan Armed Forces	01 % (at least one seat)	In all degree programs offered at Mirpur University of Science and Technology The applicant shall produce a nomination letter from the GHQ. Without the nomination letter from GHQ, admission shall not be granted.



# DISCLAIMER

This Prospectus is intended for the guidance of persons applying for admission to the MUST. All reasonable care has been taken to ensure that the information published this prospectus is correct. However, the University provides no guarantee that the information is accurate nor it can be held responsible for any errors or omissions. The Prospectus is not deliberated to be and should not be regarded as a legal binding between the university and applicant/any person. The use and interpretation of information contained herein is to be done by the university only. The University reserves the right to change the information any time in its absolute discretion