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# Vice Chancellor's Message

Dear Students.

Welcome to Muhammad Nawaz Sharif University of Agriculture, Multan (MNSUAM), a rapidly emerging centre of excellence in education, research, and innovation. Your decision to consider MNSUAM as your academic home marks the beginning of a transformative journey towards knowledge, discovery, and purposeful service to society.

In just over a decade since its establishment, MNSUAM has made remarkable progress. Within the first year of its inception, the university earned recognition as one of the fastest-growing institutions in the region and proudly secured its place in international university rankings. This growth is a testament to our unwavering commitment to academic excellence and societal impact.

At MNSUAM, we believe in the transformative power of education. Our academic programs are thoughtfully designed to cultivate critical thinking, practical skills, and a deep sense of social responsibility. With state-of-the-art teaching laboratories, well-equipped research farms, modern residences, and cutting-edge research infrastructure, we provide an enabling environment where innovation thrives, and futures are shaped. Diversity and inclusion lie at the heart of our values. We celebrate the unique perspectives and backgrounds of our students and faculty, fostering an academic culture where every individual feels respected, inspired, and empowered to reach their full potential

We are proud of our dedicated faculty, vibrant student community, and strong collaborations with local, national, and international partners. Our linkages with the farming community, industry stakeholders, and global research networks ensure that the knowledge we generate is relevant, applied, and impactful.

Recognizing the vital role of entrepreneurship in today's dynamic world, we have established the Business Incubation and Agriculture Entrepreneurship Center (BIAEC) to nurture innovation and enterprise among our students. We also offer a wide range of support services, including academic advising, career counselling, and mentoring programs to ensure holistic student development.

As you embark on this journey, I urge you to explore your potential, engage deeply with your academic pursuits, and contribute meaningfully to society. Let curiosity guide your path and service define your purpose.

We welcome you to the MNSUAM family to support you in your academic endeavours and pursuit of happiness.

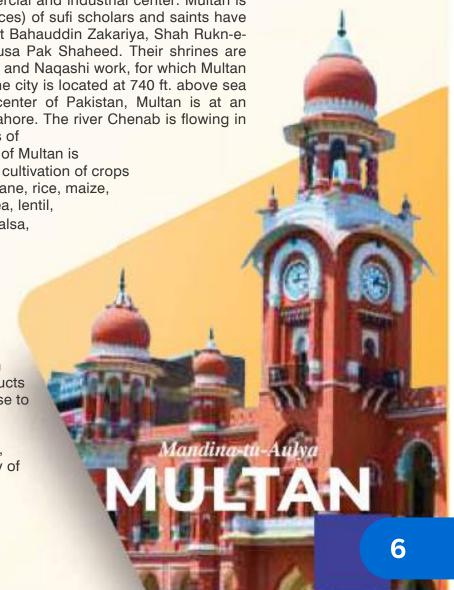
Good luck!



Prof. Dr. Zulfiqar Ali
Vice Chancellor

Multan has remained a center of learning, culture and civilization from ancient times. It is one of the oldest living cities in the world. A Chinese traveler, Hiuen Tsang, visited this city in 641 A. D. and mentioned its name as 'Mu-lo-san-pu-lu", a translation of 'Mulasthana-Pura. The famous Iranian scholar, AlBeruni came to this city with his master, Sultan Mahmud Ghaznavi, in 1015 A.D., and referred to it as 'Mulatana'. Other historians namely Masudi (915 A.D.) and Ibn-eBatuta (1334 A.D.) also wrote about the city in their travelogues. For centuries, Multan has served as a trade hub between South and Central Asia. The city now stands as a combination of old and new Pakistan culture and has developed into a commercial and industrial center. Multan is also known as "Mandina-tu-Aulya", the city of saints. Several tombs and "Khangahs" (hospices) of sufi scholars and saints have become the architectural landmark of this city. Some eminent saints buried here are Hazrat Bahauddin Zakariya, Shah Rukn-e-Alam, Shamsuddin Sabzwari (also known as Shah Shams), Shah Yousaf Gardez and Musa Pak Shaheed. Their shrines are beautifully decorated and ornamented with blue tiles, mosaic work and delightful Kashi Gari and Nagashi work, for which Multan is famous. The tomb of Shah Rukn-e-Alam is on the list of UNESCO World Heritage Site. The city is located at 740 ft. above sea level and spread over an area of 3,721 square kilometers. Positioned almost in the center of Pakistan, Multan is at an approximate distance of 950 km from Karachi, 630 km from Islamabad and 356 km from Lahore. The river Chenab is flowing in the west of Multan at a distance of six kilometers. The City is well connected with other parts of the country via excellent road and rail network 4 and an International Airport. The vast plain of Multan is dissected by numerous canals and water channels, which make its soil ideal for agriculture, cultivation of crops and growing fruits and vegetables. The major crops of Multan include wheat, cotton, sugarcane, rice, maize, sunflower, fodder crops etc., minor crops involve rapeseed and mustard, pulses i.e. chickpea, lentil, mung bean and mush bean etc., whereas mango, citrus, guava, date-palm, pomegranate, falsa, jujube, banana, strawberry and grapes are among popular fruits grown in the area. Multan is called the city of Mangoes for a reason, as its stiflingly hot climate provides the f ruit a perfect environment to ripe into juiciest, thickest and the most aromatic mangoes in the world. Some popular varieties of Multani mangoes are 'Anwar Rat ole', 'Langra', 'Dusehri' and 'Chaunsa'. Each of them is different in taste, size and quality of pulp. Multani Sohan Halwa, made of sugar, desighee and wheat flour and garnished with nuts and pistachios, is a special dessert, that every visitor to Multan takes with him as a compulsory item. Beautiful blue tiles, blue pottery, Multani Khussa (shoes), embroidered clothes for men and women and camel skin wares and camel bone jewelry are some other designated products of Multan. The reminiscence of old Multan city around the fort with its six gates give a glimpse to the visitors of its past glory. The new city has all hustle and bustle of a modern habitat, with wider roads, overhead bridges, glass showcased shops of electronics, furniture and clothes, busy markets, desi and fast food restaurants etc. All facilities like hospitals, schools, colleges, universities, banks, parks and other public utilities are available in the city. Majority of

Multani people speak Saraiki language, but Punjabi and Urdu are also widely spoken.



The MNS University of Agriculture, Multan (MNSUAM) is an HEC recognized higher education institution established in 2012. Within a short span of time, the University has made rapid progress in terms of expanding its academic programs, students' enrolment, physical infrastructure, campus network, and hiring highly qualifed and experienced academic and administrative staff. As a matter of fact, MNSUAM is considered as one of the fastest growing academic institutions of Pakistan, which is evident in the reports and comments made by officials from HEC, NAEAC, Agriculture Department, Representatives of the Government, and local and foreign experts, who visit the varsity from time to time. The main campus of the University is located at Old Shujabad Road, Multan, neighboring several different wings and formations of Punjab Agriculture Department positioned within a radius of 2-3 kilometers. These include Mango Research Institute, Central Cotton Research Institute, Cotton Research Station, Agricultural Mechanization Research Institute, Soil and Water Testing Laboratory, Directorate of Water Management, Agricultural Extension Wing, Pest Warning and Quality Control of Pesticides, Fisheries Department, Federal Seed Certification and Registration Department. All these offices and the University have combined into an "Agriculture Complex" with a common agenda offacilitating the farming community of the region. The University's main campus is spread on an area of 180 acres at a prime location in Multan and consists of purposefully built buildings including Academic Block, Administration Block, Girls and Boys hostels, Library, Faculty and Staff residences etc. For carrying out agricultural research activities, the University has established a separate graduates block, centralized labs system, agricultural farms at the main campus as well as at Jalalpur Pirwala comprising 500 acres. Over the years, the University has introduced several new degree programs to provide multidisciplinary education to the students with innovative approaches. Besides Bachelor's level degree programs in Agriculture, Agribusiness, Computer Science and Information Technology, the University also offers F.Sc. Pre Agriculture, and M.Sc. and Ph.D in various disciplines of Agricultural Sciences. The University has also started B.Sc. (Hons.) Human Nutrition and Dietetics, B.Sc. (Hons.) Poultry Science, B.Sc. Agro-industrial Engineering Technology, whereas 6 new undergraduate degree programs and 5 MS/M.Sc./PhD programs are being initiated this year. The University has strengthened its teaching resources by hiring new qualfied faculty through regular, TTS and IPFP appointments following a transparent and rigorous process of recruitment. The administrative offices have also been manned with qualifed and experienced staff members to provide necessary support to the University for carrying out its functions. The University has instituted a Center for Agricultural Sustainability in South Punjab (CAS-SP) and Department of Outreach and Continuing Education this year to strengthen it research and outreach initiatives. The Offce of Research, Innovation and Commercialization (ORIC) is working for capacity building of the faculty for enhancing research activities. The Quality Enhancement Cell (QEC) is mandated to ensure quality teaching and research through continuous assessment for better outcomes. The Directorate of Students Affairs provides all necessary support to students with respect to their admission, selection of subjects, registration, financial support etc., whereas the Career Development Center helps them and suitable jobs after completion of their degrees. It is worth mentioning here that the University manages more than 60 percent of its final semester internships as paid internships which provide an excellent learning environment to the young graduating students.

Furthermore, overwhelming employability of MNSUAM graduates in the private sector shows the competitive strength of the university graduates. The University regularly conducts national and international events including conferences, seminars, workshops, and festivals. Some activities have now become the trademark of this University such as Dice AFS, Sino-Pak International Cotton Conference, Climate Smart Agriculture Conference, Smart Plant Protection Conference, Spring Festival, Kisan Mela, Fish Mela, Annual Cotton Seminar and Mango Festival. The University has the honor of among the top 5 teams in the national Microsoft Imagine Cup during the last two consecutive years. Acknowledging the efforts for developing a Sustainable Campus, the UI GreenMetric World University Rankings 2023 has ranked MNSUAM at number 1 among the universities across Pakistan. With a vision to highlight a positive image of our country onto the canvas of the world and lure international markets for bilateral trade, investment and business, University is actively playing its part to explore new horizons for economic betterment of Pakistan.



# UNIVERSITY ADMINISTRATION

"the team beyond the success"

The Syndicate is the highest executive body of the University, while Academic Council, Selection Board, Finance and Planning Committee, Board of Advanced Studies and Research, Board of Faculty, and Departmental Board of Studies are the other statuary bodies of the University. The administrative setup of the University is as follows:



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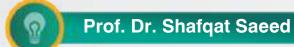


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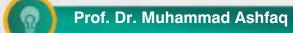


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# HARASSMENT MONITORING CELL



## **Registrar Office**

Harassment Monitoring Cellregistrar@mnsuam.edu.pk

# UNDERGRADUATE PROSPECTUS COMMITTEE (SESSION-2025)



Prof. Dr. Muhammad Ashfaq PO (Student Affairs) Convener



**Dr. Amar Matloob**Associate Professor, SES
Member



**Dr. Umair Sultan** Assistant Professor, Agri. Engr. Member



**Dr. Nadeem Iqbal** Assistant Professor, IoC Member



**Dr. M. Haseeb Raza** Assistant Professor, A&ED Member



**Dr. M. Akhtar Hameed**Assistant Professor, IPP



**Dr. Asif Farooq** Assistant Professor, IPP Member



**Dr. Umair Riaz** Assistant Professor, SES Member



**Dr. Mirza Abdul Qayyum** PRO Member



**Ms. Aisha Bibi** Deputy Registrar, Academic's Member



Mr. Muhammad Usman Lecturer, HND Member



**Ms. Shafa Nayab** Lecturer, Horticulture Member



**Mr. Hamza Munir** Lecturer, V&AS Member



**Mr. Fahad Ahmad** Graphics Designer



**Dr. Fawad Zafar Ahmad Khan** Assistant Professor, Entomology **Secretary** 





# Faculty of Agriculture & Environmental Sciences

- 1. Department of Agronomy
- 2. Department of Forestry and Range Management
- 3. Department of Horticulture
- 4. Department of Soil and Environmental Sciences
- 5. Institute of Plant Breeding and Biotechnology
  - Plant Breeding and Genetics
  - Seed Science and Technology
  - Biotechnology
- 6. Institute of Plant Protection
  - Entomology
  - Plant Pathology



# **DEAN'S MESSAGE**

My Dear Students,

Welcome to the Faculty of Agriculture and Environmental Sciences (FA&ES) at MNS-University of Agriculture, Multan.

As one of the founding faculties of the University, FA&ES has played a central role in its academic and research development since its inception. The faculty comprises two institutes and several departments, each dedicated to providing a dynamic and forward-thinking academic environment.

Our faculty members are highly qualified and bring a wealth of experience from leading institutions around the world. They are actively engaged in cutting-edge research and innovative teaching practices that respond to the evolving challenges of agriculture and environmental sciences. At FA&ES, we view every challenge as an opportunity to contribute through impactful research and practical solutions.

Our research addresses a wide range of critical areas, including healthy seed production, sustainable soil and crop management, development of climate-resilient crop varieties, integrated pest and weed management, insect toxicology, advanced irrigation systems like drip and hydroponics, tunnel farming, agro-forestry, and pre- and post-harvest technologies. We are committed to supporting national food security and actively advising policymakers in times of agricultural crises such as disease outbreaks and pest invasions.

The learning environment of the faculty is built on modern and flexible teaching systems, including blended and modular learning approaches. This adaptability has positioned us to deliver high-quality education both online and on campus, preparing our students to thrive in a rapidly changing world.

At FA&ES, our core mission is to create a vibrant academic community where students are empowered with skill-based knowledge, critical thinking abilities, and research competencies. Our graduates go on to serve as professionals, innovators, and leaders in the agriculture and environmental sectors, contributing to a knowledge-based economy. We are proud to collaborate with national and international institutions, and together with our stakeholders, we continue to move towards our goal of making MNSUAM a globally recognized center of excellence.

Join us to build a better future—for yourself, your community, and the world. Warm regards,



Prof. Dr. Shafqat Saeed

Dean, Faculty of Agriculture and Environmental Sciences



# DEPARTMENT OF AGRONOMY





# DEPARTMENT OF AGRONOMY

The Department of Agronomy is excelling to earn repute of excellence in outcome based agronomic education with focus on problem-oriented research related to crop production and soil management under changing climate scenario. A dedicated and highly qualified faculty, having hands on experience in agronomic teaching and research at national and international institutes, makes it one of the most accomplished departments in the University. So far, the Department of Agronomy at MNS-University of Agriculture, Multan has published more than 370 international publications in referred journals, won 16 research projects and submitted several others competitive grants. The Department also organizes international conferences. workshops seminars/webinar on contemporary issues of agriculture in changing climate scenario. Advisory services to farmers are also being provided. The Department has all the basic facilities like lecture rooms, well-equipped research laboratories, text books and reference materials for undergraduate and postgraduate degree programs. The students are blessed with diverse learning facilities ranging from lectures to interactive tutorials, brain storming sessions and field work involving advanced audio-visual aids, and paid internships.



# **VISION**

To achieve excellence in agronomic education and provide leadership with focus on problem oriented research related to sustainable crop production and soil management for the development of farming community



# **MISSION**

To provide technically trained human resource in the field of Agronomy with disciplinary knowledge to cope crop production under dwindling natural resources and climate change



DR. ABDUL GHAFFAR Professor and Chairman

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- P Climate Smart and Sustainable Agriculture





DR. HAFIZ MOHKUM HAMMAD Associate Professor

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- Trop Growth Modeling, Climate Change



DR. NABEEL AHMAD IKRAM Lecturer

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- Agronomic Biofortification, Weed Crop Interference



DR. RAO MUHAMMAD IKRAM **Associate Professor** 

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- Weed Science, Allelopathy



DR. ABDUL MAJEED

- **IPFP-Fellow**
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- Integrated Nutrient Management



DR. KHURAM MUBEEN Associate Professor

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- Weed Science, Climate Smart Agriculture



DR. HAFIZ SAQIB HAYAT **IPFP-Fellow** 

- P Crop Nutrition, Agronomic Biofortification



DR. MUDASSIR AZIZ Lecturer

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- Stress Agronomy, Crop Nutrient Management







### DEPARTMENT OF HORTICULTURE

The Department of Horticulture began its academic journey in 2015 with a vision to serve as a centre of excellence in R&D based Horticultural education, research, and community outreach. Since its inception, the department has grown into a vibrant academic community, driven by a dynamic team of highly motivated faculty members and staff. The distinguished faculty comprise of one professor, two associate professors, three assistant professors, and three lecturers. All bring with them diverse expertise and commitment to advancing R&D driven knowledge to address practical challenges horticultural stakeholders. This collective scholarly strength brings extensive teaching and research experience that reflect in their above 220 publications in national and international peer-reviewed journals and conference proceedings.

The Department of Horticulture offers comprehensive academic programs leading to B.Sc. (Hons.), M.Sc. (Hons.), and Ph.D. degrees with specialization in various fields of horticulture including pomology, olericulture, and floriculture along-with postharvest science and technology all horticultural perishable crops to reduce postharvest losses. The curriculum for these programs is carefully designed and regularly updated, considering the Higher Education Commission (HEC) guidelines, emerging national trends, and needs of horticultural stakeholders particularly farming community. Moreover, all academic programs are duly approved by the university's statutory bodies to ensure relevance and quality in education.





A leading hub of excellence in horticultural sciences through innovative education, research, and sustainable practices for horticultural advancement and community impact.

### **MISSION**



Ensure food security and foster a knowledge-based economy through education, research, and innovation in horticultural sciences for sustainable development and community transformation.

B.Sc. (Hons.)

With Major

- Horticulture
- **Porestry**







Since its establishment, the department has produced about 272 undergraduates, 100 postgraduates and 4 PhD scholars who are contributing to academia, industry, and the community at large. Presently, the department hosts about 12 PhD scholars, 34 postgraduate and 56 undergraduate students who are actively engaged in various R&D based on-going projects, thereby advancing the horticulture R&D and technology-based knowledge.

Additionally, the faculty members of the department has been working on different ongoing projects of about PKR 131 million on various applied and problem solving approaches through R&D on plant physiological based technological interventions including certified horticultural propagation and nursery management, high density fruit orchards, vegetable grafting, soil/ soilless protected/ greenhouse farming, landscape and ornamental Horticulture, introduction, adaptation and promotion of exotic high value crops, phytoremediation of rhizosphere together with reducing postharvest losses through different interventions.

Besides, the Department actively engages with farming community, industrial stakeholders, urban gardeners, and policymakers. Moreover, the department plays an important role in disseminating recent technologies and improved production practices by organising workshops, conferences, training programs, and collaborative partnerships. Thereby, it has been contributing to a sustainable development of Pakistan's horticultural sector through a following vision and mission.

### B.Sc. (Hons.) Agriculture major in Forestry

The importance and role of forests have increased dramatically over time as human cultures have developed and flourished. Thus, the program B.Sc. (Hons.) Agriculture major in Forestry was initiated in 2023 and currently, twenty three (23) undergraduate students are enrolled. Currently this major program is working under the umbrella of Department of Horticulture. The curriculum of the degree program is regularly reviewed and revised keeping in view the HEC guidelines, needs of farming community and global developments that is duly approved through statuary bodies.



DR. KASHIF RAZZAQ Associate Professor and Chairman

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- Pomology, Postharvest, Physiology of Fruits





DR. ISHTIAQ AHMAD RAJWANA Pro Vice Chancellor/Professor

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- Genetic Conservation of Fruits



DR. GULZAR AKHTAR Assistant Professor

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- Floriculture and Landscaping, Plant Tissue Culture



DR. TANVEER AHMAD Associate Professor

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- Olericulture



### DR. SYEDA ANUM MASOOD BOKHARI Lecturer

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- P Crop Improvement (Breeding, Tissue Culture)



**DR. HAFIZ NAZAR FARIED**Assistant Professor

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- Olericulture, Protected Farming (Soil & Soilless)



MS. SHAFA NAYAB

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- Pomology, Postharvest



DR. SAMI ULLAH Assistant Professor

- Pomology, Postharvest, Physiology of Fruits



MR. MUHAMMAD USMAN KHAN

- usman.khan@mnsuam.edu.pk M.Sc. (Hons.)
- Pomology, Plant propagation





## DEPARTMENT OF SOIL & ENVIRONMENTAL SCIENCES

The economic prosperity, agricultural advancement, and sustainable growth of a country intricately hinge upon the potential of its soil and environment. The intricate nexus between soil quality, environmental conditions, and agricultural practices under changing climate becomes a key indicator for fostering resilience, productivity, and ultimately, the overall development of the country. The interdependence of soil and life is undeniable, as they have evolved in tandem. A profound understanding of soil is crucial for achieving optimal crop production, effective natural resource management, sound climate change mitigation strategies, and robust environmental policy and protection.

In our department, we have a team of passionate, distinguished, and internationally qualified staff members. Additionally, our state-of-the-art laboratories serve as valuable resources for both teaching and research endeavors for the students and staff. Currently, department has following six research focused groups; 1) Saline Agriculture, 2) Soil Microbiology and Biochemistry, 3) Soil Fertility and Plant Nutrition, 4) Soil and Environmental Chemistry, 5) Soil Physics and 6) Climate Change. Department offers both undergraduate [B.Sc. (Hons.) Agriculture – Soil Science, B.Sc. (Hons.) Environmental Science] and postgraduate programs [M.Sc. (Hons.) Soil Science, M.Sc. (Hons.) Climate Change and Ph.D. Soil Science].

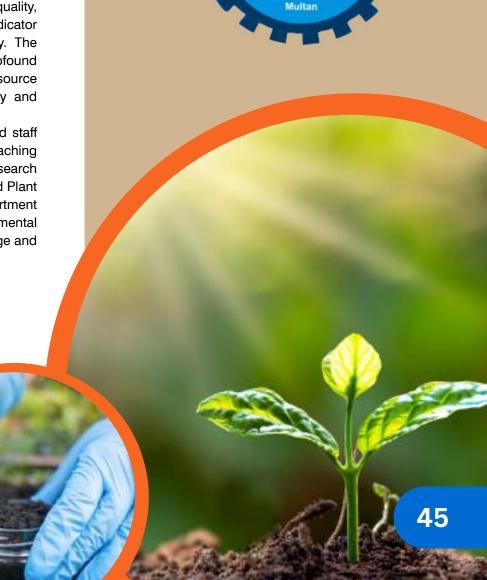




To be a center of excellence in soil and environmental sciences, committed to producing technically proficient graduates and conducting need-based research that addresses environmental challenges and supports national progress.

### **MISSION**

To promote effective management of soil and environment for sustainable agriculture and national food security.



Muhammad Nawaz Shareef

University of Agriculture



## DEPARTMENT OF SOIL & ENVIRONMENTAL SCIENCES

We roll up our sleeves and get our hands dirty to accomplish great things. Our under and postgraduate programs prepare students to address agricultural, environmental and climate change challenges in Pakistan and around the globe, and our focus is on the sustainable agriculture and food security. We train our graduates to collaborate with stakeholders for effective utilization of acquired knowledge and skills to shape better tomorrow. After graduation, our students serve in Public and Private sectors, research, academia, industry and advisory. We have managed to win 17 competitive grants of worth Rs. 35 million both from national and international funding agencies. We have also signed AOCs/MoUs with Shandong University in China, Fauji Fertilizers Company, Pakistan and Engro Fertilizers, Pakistan, Bulleh Shah Packages and Syngenta Pakistan for joint research ventures.

We have recently launched an outreach program aimed at establishing connections between the local farming community and researchers, with the objective of offering advisory services to farmers directly at their doorstep. Furthermore, we are actively engaged in providing consultancy services to fertilizer and pesticide industries to ensure compliance with ISO/IEC 17025 and 9001 international standards. We aso established Mobile Soil and Water Testing Laboratory under Industrial funded project. We also arrange seminars, webinars, conferences, and workshops with the aim of disseminating the most upto-date knowledge and facilitating the exchange of thought-provoking ideas.





# DEPARTMENT 8



DR. TANVEER UL HAQ Professor & Chairman

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Saline Agriculture, Plant Stress Physiology



DR. AMAR MATLOOB Associate Professor

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Ph.D

uhammad Nawsz Sharpet

Weed Science



DR. M. BAQIR HUSSAIN Associate Professor

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Soil Microbiology and Biochemistry



DR. WAZIR AHMAD **Associate Professor** 

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Ph.D

Soil Fertility and Plant Nutrition



DR. UMAIR RIAZ Assistant Professor

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Ph.D

Soil & Environmental Chemistry, Nanotechnology



DR. MUQARRAB ALI Associate Professor

Sustainable Agriculture



DR. WASEEM HASSAN Assistant Professor

Soil and Environmental Sciences



DR. MUHAMMAD IMRAN Assistant Professor

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Ph.D

Soil Physics, Solute Movement in Soil



DR. SHAKEEL AHMAD Assistant Professor

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Soil Fertility and Plant Nutrition

# & ENVIRONMENTAL SCIENCES



### DR. M. USMAN JAMSHAID

Soil Microbiology and Biochemistry



### DR. ZEESHAN ALI IPFP Fellow

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uhammad Nawsz Sharpet

Soil chemistry, Heavy metal removal, Pesticides extraction



### DR. MUHAMMAD ARIF

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Soil and Environmental Chemistry







## INSTITUTE OF PLANT BREEDING & BIOTECHNOLOGY



### Introduction of Institute of Plant Breeding and Biotechnology

The Institute of Plant Breeding and Biotechnology (IPBB) at MNSUAM offers undergraduate and postgraduate degree programs in the subjects of Plant Breeding and Genetics, Seed Science & Technology and Biotechnology. The institute was established with the aim of developing improved crop varieties and improving seed systems through the integration of conventional plant breeding techniques with modern biotechnological tools. The institute has qualified faculty actively involved in developing the latest curriculum and promoting effective research and development activities in the University. The institute is running several research projects funded by national and international funding agencies including Agricultural Development Program (ADP), Govt. of the Punjab, Punjab Agricultural Research Board (PARB), Higher Education Commission (HEC), Agricultural Linkages Program (ALP), DFID, ACIAR, USAID, Guard Agri., BRICAAS, Jinghua seed industry, MSI-Turkiye, Chengdu institute of Biology-CAS, WGGC-China Agricultural University, BGI Genomics, Mehmood textile Group and Nestle Pakistan. The Institute is also running a project for establishing "National Crop Genomics and speed Breeding Centre for Agriculture Sustainability" for conducting research focused on genetic improvement of crops using genomic techniques and speed breeding protocols shortening the duration of developing varieties with desirable traits. The institute has also initiated an outreach program for establishing linkages between the farming community, industry, and the researchers to solve the problems of the stakeholders. The institute frequently arranges seminars, conferences and workshops to discuss burning issues of agriculture and also to bring new research ideas for the young faculty and postgraduate students.



### **VISION**

To produce skilled human resource in conventional and advanced techniques of plant breeding, seed science and biotechnology to meet the needs of breeding systems, seed industry, and farming community.



### **MISSION**

Improvement in Plant Breeding System through integrating conventional plant breeding techniques and modern biotechnological tools, Seed Production and Supply System, and good agriculture practices at farmer's field to obtain high yield of better quality produce to ensure food security.



### DR. ASIF ALI (T.I) Professor Emeritus

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Ph.D, Post-Doc

Cotton and Vegetable Molecular Breeding





DR. M. HAMMAD NADEEM TAHIR **Professor and Director** 

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- Genetic Improvement of Oilseeds and Fodder Crops, Breeding Soybean for Adaptability in Climate Change



DR. MUHAMMAD ASAF KHAN Associate Professor

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Hormonal Regulation of Stress
Tolerance in Crop Plants, Bioinfo



DR. M ABU BAKAR SADDIQUE **Assistant Professor** 

- Pulses and Vegetables Molecular Breeding



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- Genetic Transformation, Tissue Culturing and Genom



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- Genome Editing and Plant Transformation



DR. SHOAIB UR REHMAN Assistant Professor

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- Marker Assisted Breeding, SNP Based Gel Free and Gel-Based Markers, Germplasm



DR. MUHAMMAD FAISAL

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- Genomics, Genetics, NGS, Bioinformatics



**DR. AKASH FATIMA** Assistant Professor

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- Precision cotton breeding



DR. MUHAMMAD AMIR BAKHTAVAR **Assistant Professor** 

Seed Physiology, Seed Storage, Seed





DR. MUAMMAD ASIF SHEHZAD
Assistant Professor

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Abiotic Stresses



**DR. SHAHID IQBAL** Assistant Professor

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Crop Physiology, Seed Physiology, Crop Diversification



DR. BABAR FARID Lecturer

Doubled Haploid Technologyn Maize Breeding, Maize Developmental Biology and Plant Architecture



DR. FURQAN AHMAD Lecturer

Cotton Genetics and Molecular Breeding for Abiotic Stress



DR. MUHAMMAD ALI SHER

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Ph.D

Association Mapping, Hybrid Wheat Development, Wheat Breeding



DR. PLOSHA KHANAM Lecturer

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Tissue Culture of Date Plam,Sugarcane and Ornamental Flowers



MR. MAHMOOD ALAM KHAN

Farm Management, Seed Production



### MS. SAIMA RASHEED Lecturer (STUDY LEAVE)

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M.Phil.

Plant Abiotic Stress



### DR. SEHRISH IJAZ

Lecturer



Molecular Biology, Plant Microbe interactions, Next Generation Sequencing





### MS. MADIHA GOHAR Lecturer (EOL)

Hybrid Speciation, Cytogenetics





### DR. UMAR AKRAM **Assistant Professor**

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Genome Editing, Genetic Transformation, Abiotic Stresses

















# INSTITUTE OF PLANT PROTECTION





### Institute of Plant Protection

Climate change is a global phenomenon putting diverse cascading effects on every sphere of life on the earth, including agriculture. On the other hand, the world's population is increasing which demands to produce sufficient amount of food. With the prevailing scenario of climate change, a vast diversity of insect pests, diseases, and weeds invade crops, vegetables, fruit, and forest trees and cause huge losses to their production both in on-farm and post-harvest / storage. This Institute has inherited ties with local research institutes like CCRI, CRS, MRI, AMRI, and Agri. Extension, Pest Warning, and Quality Control of Pesticides. These links will pave the path to grooming the Institute's students professionally and. Several research projects have been submitted to renowned funding agencies of National and International fame like Higher Education Commission (HEC), USAID, Pakistan Science Foundation, Pakistan Agriculture Research Board (PARB), International Foundation for Science (IFS), ACIAR, and JICA. Moreover, five research projects have been funded by PARB, HEC, and IFS on Cotton Whitefly and Pink bollworm, Mango Fruit and Shoot Borer and Mango Fruit Fly, and viruses of onion and garlic, respectively. Currently, active programs are B.Sc. (Hons.) Agriculture (Entomology & Plant Pathology), M.Sc. (Hons.) Entomology, M.Sc. (Hons.) Plant Pathology, Ph.D. Entomology, and Ph.D. Plant Pathology. The Institute of Plant Protection (IPP) has developed a blended teaching system for effective learning. IPP has been practicing a learning management system (LMS) without compromising the standards of teaching. The IPP faculty has recently organized two conferences i.e. International Conference on Smart Plant Protection and International Conference for Bee Pollination & Conservation. Many scientists, academia, policymakers, students, and farmers have participated in these gatherings. At the end, besides other technical policy points about locust management, all speakers agreed that collaborative efforts at the national and international level are necessary for effective pest management. Moreover, the Institute is also actively engaged in developing a biological control of locusts, which threatens the commercial production of various crops in Southern Punjab. Similarly, the regional community is also getting benefits from the institute in the form of diagnostic facilities for pests and diseases and the best possible solution for their management.



### VISION



To uplift the agricultural community by enhancing productivity through the reduction of losses caused by insect pests and plant diseases, using modern, environmentally friendly approaches while promoting the stability of natural ecosystems.



### **MISSION**

To develop an integrated system of research and outreach focused on sustainable and effective plant protection.



PROF. DR. MUHAMMAD ASHFAQ **Director IPP/Professor** 

Molecular Plant Virology







PROF. DR. SHAFQAT SAEED Professor

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Integrated Pest Management, Pollination Ecology



**DR. NADEEM AHMED**Assistant Professor

Plant Disease Epidemiology



DR. UNSAR NAEEM-ULLAH Associate Professor

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Medical Entomology, Insect Taxonomy



DR. HASAN RIAZ **Assistant Professor** 

Evolutionary virology, Endophyte based biostimulants, Aflatoxin testing



DR. MIRZA ABDUL QAYYUM

**Associate Professor** 

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 □ Ph.D

Microbial Pest Management



DR. MUDSSAR ALI **Assistant Professor** 

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Ph.D

Pollination Ecology, Bee Conservation



DR. RANA BINYAMIN **Associate Professor** 

Plant Virology



DR. NAEEM IQBAL Assistant Professor

P Household Pest Management



DR. MUHAMMAD ISHTIAQ **Assistant Professor** 

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Ph.D.

Pest Management, Insecticide Resistance





DR. AKHTAR HAMEED

**Assistant Professor** 

P Bacteriology, Microbiology



DR. HAFIZA TAHIRA GUL Lecturer

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Pi Entomopathogenic fungi, Termite Management



DR. MUHAMMAD NADIR NAQQASH **Assistant Professor** 

Planning, Biopesticides



DR. MIRZA ABID MEHMOOD Lecturer (Ex-Pakistan Leave)

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Microbiome, Phytobiome, Meta-omics



DR. FARRUKH BAIG

**Assistant Professor** 

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Insect Chemical Ecology



MR. ASIF MAHMOOD ARIF Lecturer

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Plant Bacteriology, Epidemiology of fruit diseases and management



DR. MUHAMMAD ASIF FAROOQ **Assistant Professor** 

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Pesticide residues, Fruit IPM



### DR. MUHAMMAD ARSLAN KHAN Lecturer

Plant Nematology, Biopesticides









**Scheme of Studies** 

BSC (Hons.)
Agriculture (Semester I-IV)

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Category
SES-301	Introduction to Environmental Science	3(2-1)	General Education
GE-303	Functional English	3(3-0)	General Education
GE-407	Ideology and Constitution of Pakistan	2(2-0)	General Education
GE-305	Quantitative Reasoning (I)	3(3-0)	General Education
AEE-301	Introduction to Agri, Extension	2(1-1)	Interdisciplinary
AH-301	Introduction to Animal Husbandry	3(2-1)	Interdisciplinary
AGRON- 301	Basic Agriculture	2(1-1)	Major
AGRON- 303	Field Crop Production	2(1-1)	Major
	Total	2	(15-5)

GE: 11 CH 4 CH Interdisciplinary: 5 CH Major:

### **SEMESTER-II**

Course Code	Course Title	Credit Hours	Category
GE-403	Expository Writing	3(3-0)	General Education
GE-307	Islamic Studies OR Ethics (for Foreigners / Non- Muslims)	2(2-0)	General Education
GE-309	Applications of Information and Communication Technologies	3(2-1)	General Education
GE-405	Quantitative Reasoning (II)	3(3-0)	General Education
FMP-405	Farm Mechanization	2(1-1)	Interdisciplinary
ID-304	Irrigation and Drainage Practices	2(1-1)	Interdisciplinary
HORT- 302	Introductory Horticulture	3(2-1)	Major
SST-301	Fundamental of Seed Science and Technology	3(2-1)	Major
	Total	2	1(16-5)

GE: 11 CH Major: 6 CH Interdisciplinary: 4 CH



BSC (Hons.)
Agriculture (Semester I-IV)

### **SEMESTER-III**

Course Code	Course Title	Credit Hours	Category
GE-301	Social and Religious Tolerance	2(2-0)	General Education
RS-409	Rural Sociology and Development	2(2-0)	General Education
GE-402	Entrepreneurship	2(2-0)	General Education
AE-401	Principles of Agricultural & Resource Economics	3(3-0)	Interdisciplinary
MB-401	Basic Microbiology	3(2-1)	Interdisciplinary
BIOTECH- 401	Introduction to Biotechnology and Molecular Genetics	3(2-1)	Major
FRW-401	Agro-Forestry, Range and Wildlife Management	3(2-1)	Major
	Total	1	8(15-3)

GE: 6 CH Major: 6 CH Interdisciplinary: 6

CH

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours	Category
GE-404	Civics and Community Engagement	2(2-0)	General Education
ENT-402	General Plant Protection	3(2-1)	Major
PBG-402	Introductory Plant Breeding	3(2-1)	Major
PP-402	Introductory Plant Pathology	3(2-1)	Major.
FST-402	Essentials of Food Science and Technology	3(2-1)	Major
AGRON- 402	Principles of Agronomy	2(1-1)	Major
SES-402	Introduction to Soil Science	3(2-1)	Major
	Total	1	9(13-6)

GE: 2 CH Major: 17 CH Interdisciplinary: 0 CH



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major: Agronomy

### **SEMESTER-V** (Students will opt for 3 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Category
AGRON-501	Agro-Ecology	3(2-1)	Major
AGRON-503	Irrigation Agronomy	3(2-1)	Major
AGRON-505	Field Crop Physiology	3(2-1)	Major
AGRON-507	Principles of Weed Science	3(2-1)	Major
AGRON-509	Sustainable Agriculture and Organic Farming	3(2-1)	Major
FME-503	Fundamentals of Precision Agriculture	2(1-1)	Interdisciplinary
	Sub-Total Credit Hours	10. 07	17
AGRON-511	Global Agriculture	3(3-0)	Major (Elective)
AGRON-513	Crop Management under stressful Environments	3(2-1)	Major (Elective)
AGRON-515	Outreach in Agronomy-I	3(2-1)	Major (Elective)
	Total Credit Hours		20

### **SEMESTER-VI** (Students will opt for 5 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Category
AGRON-502	Seed Production Technology	3(2-1)	Major
AGRON-504	Arid and Rainfed Agriculture	3(2-1)	Major
AGRON-506	Agro-technology of Major Field Crops	3(2-1)	Major
AGRON-508	Plant Nutrients and Growth Regulators	3(2-1)	Major
AGRON-510	Biological Data Science	3(1-2)	Major
	Sub-Total Credit Hours		15
AGRON-512	Crop Growth Modeling and its Application in Agriculture	3(2-1)	Major (Elective)
AGRON-514	Eco-Physiological aspects of Weeds	3(2-1)	Major (Elective)
AGRON-516	Layout of Field Experiments	2(0-2)	Major (Elective)
AGRON-518	Agro-technology of Special Crops	2(1-1)	Major (Elective)
AGRON-520	Outreach in Agronomy-II	3(2-1)	Major (Elective)
	Total Credit Hours	10 m 2000	20



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major: Agronomy

### **Semester-VII** (Students will opt for 3 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Category
AGRON-601	Digital Agriculture	3(2-1)	Major
AGRON-603	Biological Crop Potential	3(2-1)	Major
AGRON-605	Conservation Agronomy	3(2-1)	Major
AGRON-607	Environment and Crop Production	3(2-1)	Major
AGRON-609	Farming Systems and Record Management	3(2-1)	Major
AGRON-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major
	Sub-Total Credit Hours	9	17
AGRON-613	Application of Allelopathy in Agriculture	3(2-1)	Major (Elective)
AGRON-615	Plant and Soil Analysis	3(2-1)	Major (Elective)
AGRON-617	Spate Irrigated Agriculture	3(2-1)	Major (Elective)
AGRON-619	Medicinal and Special Crops	3(2-1)	Major (Elective)
	Total Credit Hours	1000000	20

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours	Category
AGRON-612	Internship and External Evaluation	3(0-3)	Major
AGRON-614	Capstone Project	3(0-3)	Major
	Total Credit Hours		5



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major: HORTICULTURE

### **SEMESTER-V** (Students will opt. 5 credit hours from major elective courses)

Course Code	Course Title	Credit Hours	Course Type
HORT-501	Principles of Fruit Production	3(2-1)	Major
HORT-503	Principles of Vegetable Production	3(2-1)	Major
HORT-505	Principles of Ornamental Crop Production	3(2-1)	Major
HORT-507	Medicinal and Aromatic Plants	2(1-1)	Major
HORT-509	Propagation and Nursery Management	3(2-1)	Major
Sub-Total Credit	Hours	14	
HORT-511	Nutrient Management of Horticultural Crops	3(1-2)	Major (Elective)
HORT-513	Protected Horticulture	3(1-2)	Major (Elective)
HORT-515	Indoor Plant Culture and Scaping	2(1-1)	Major (Elective)
HORT-S17	Outreach in Horticulture-I	2(1-1)	Major (Elective)
2	Total Credit Hours		19 (11-8)

### **SEMESTER-VI** (Students will opt. 5 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Course Type
HORT-502	Tropical and Sub-Tropical Fruits	3(2-1)	Major
HORT-504	Summer Vegetables	3(2-1)	Major
HORT-506	Landscape Horticulture	3(2-1)	Major
HORT-508	In Vitro Propagation	2(1-1)	Major
HORT-510	Breeding of Horticultural Crops	3(2-1)	Major
Sub-Total Credit	Hours	14	Inc. meet
HORT-512	Minor Fruit Crops	3(2-1)	Major (Elective)
HORT-514	Organic Horticulture Production and Certification	3(2-1)	Major (Elective)
HORT-516	Good Agricultural Practices in Horticulture	2(1-1)	Major (Elective)
HORT-518	Business Management in Horticulture	2(1-1)	Major (Elective)
HORT-520	Outreach in Horticulture-II	2(1-1)	Major (Elective)
	Total Credit Hours		19 (12-7)



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major: HORTICULTURE

### **SEMESTER-VII** (Students will opt. 2 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Course Type
BIOCHEM-502	Chemistry and Fundamental Biochemistry	3(2-1)	Inter-disciplinary
HORT-605	Research Methods in Horticulture	3(2-1)	Major
HORT-607	Winter Vegetables	3(2-1)	Major
HORT-609	Commercial Flower Production	3(2-1)	Major
HORT-611	Preparation of Research Projects And Scientific Writing	2(1-1)	Major
HORT-613	Post-Harvest Horticulture	3(2-1)	Major
	Sub-Total Credit Hours	17	
HORT-615	Temperate Fruits	2(1-1)	Major (Elective)
HORT-617	Vegetable and Flower Seed Production	2(1-1)	Major (Elective)
HORT-619	Food Safety in Horticultural Crops	2(1-1)	Major (Elective)
PORTOCO PORTOC	Total Credit Hours		19 (12-7)

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours
HORT-612	Internship	3(0-3)
HORT-614	Capstone Project	3(0-3)
	Total Credit Hours	6(0-6)



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major: FORESTRY

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Type
FRW-501	Energy Plantations	3 (2-1)	Major
FRW-503	Forest Policy and Law	3 (3-0)	Major
FRW-505	Wood Science and Technology	3 (2-1)	Major
FRW-507	Forest Survey and Leveling	3 (2-1)	Major
FRW-509	Forest Engineering	3 (2-1)	Major
FRW-511	Forest Ecology	3 (3-0)	Major
FRW-513	Study Tour (Forest Types)	1 (0-1)	Major
	Total Credit Hours	19(1	4-5)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Type
FRW-502	Forest Management	3 (2-1)	Major
FRW-504	Watershed Management	3 (2-1)	Major
FRW-506	Range Management	3 (2-1)	Major
FRW-508	Wildlife Management	3 (2-1)	Major
FRW-510	Forest Biometrics	3 (2-1)	Major
FRW-512	Non-Wood Forest Products	2 (2-0)	Major
FRW-514	Study Tour (Forest Management)	1 (0-1)	Major
	Total Credit Hours	18(1	2-6)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Type
FRW-601	Ecotourism and Park Management	3(2-1)	Major
FRW-603	Forest Resource Economics	3(3-0)	Major
FRW-605	Silviculture	3 (2-1)	Major
FRW-607	Forest Management Plan	3(2-1)	Major
FRW-609	Forest Carbon and Climate Change	3(2-1)	Major
FRW-611	Preparation of Research Project and Scientific Writing	3(2-1)	Major
Total Credit Hos	urs	18 (	13-5)

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours
FRW-612	Internship	3(0-3)
FRW-614	Capstone Project	3(0-3)
Total Credit Hours	6	(0-6)



## Bsc (Hons.) Scheme of Studies Agriculture (Semester V-VIII) Major: SOIL SCIENCE

### **SEMESTER-V** (Students will opt for 05 credit hours from major elective courses)

Course No.	Title of Course	Credit Hours	Course type
SES-501	Physical Properties of Soils	3(2-1)	Major
SES-503	Chemical Properties of Soils	3(2-1)	Major
SES-505	Soil Genesis and Morphology	3(2-1)	Major
SES-507	Instrumentation and Laboratory Techniques	3(1-2)	Major
MATH-509	Applied Mathematics for Soil Science	3(3-0)	Interdisciplinary
Sub-Total Credit Hours	1	5(10-5)	
SES-511	Plant Growth under Stress Environment	3(2-1)	Major Elective
SES-513	Microbial Ecology and Plant Growth	3(3-0)	Major Elective
SES-515	Soil, Water and Air Pollution	2(2-0)	Major Elective
SES-517	Soil Fertility Evaluation	2(1-1)	Major Elective
Total credit hours	15	5+5=20	12.

### SEMESTER-VI (Students will opt for 06 credit hours from major elective courses)

Course No.	Title of Course	Credit Hours	Course type
SES-502	Salt-Affected Soils and Water Quality	3(2-1)	Major
SES-504	Soil Fertility and Fertilizer Use	3(2-1)	Major
SES-506	Soil Survey and Land Evaluation	3(2-1)	Major
SES-508	Nutrient Management in Degraded Soils	3(2-1)	Major
CHEM-502	Environmental Chemistry and Biochemistry	3(2-1)	Interdisciplinary
Sub-Total Credit Hours	1	5 (10-5)	- 1000000 ACC - ACC -
SES-510	Soil - Water - Plant Relationships	3(3-0)	Major Elective
SES-512	Soil Chemistry and Plant Growth	3(3-0)	Major Elective
SES-514	Application of GIS and Remote Sensing in Land Use	3(2-1)	Major Elective
SES-516	Carbon Sequestration and Environment	3(2-1)	Major Elective
Total credit hours		1 (15-6)	



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major: SOIL SCIENCE

### **SEMESTER-VII** (Students will opt for 02 credit hours from major elective courses)

Course No.	Title of Course	Credit Hours	Course type
SES-601	Soil Microbiology and Environment	3(2-1)	Major
SES-603	Environment Pollution and Management	3(3-0)	Major
SES-605	Soil, Water and Environment Conservation	3(3-0)	Major
SES-609	Elements of Soil Physics	3(2-1)	Major
SES-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major
STAT-601	Applied Statistics for Soil and Environment	3(2-1)	Interdisciplinary
Sub-Total Credit Hours	17 (14	4-3)	
SES-607	Saline Agriculture	2(1-1)	Major Elective
SES-613	Experimental Planning	2(1-1)	Major Elective
Total credit hours	19 (17	+2)	100

### **SEMESTER-VIII**

Course No.	Title of Course	Credit Hours
SES-612	Internship	3(0-3)
SES-614	Capstone Project	3(0-3)
Sub-Total Credit Hours		6 (0-6)



B.Sc. (Hons.)

Scheme of Studies
Agriculture (Semester V-VIII)

Major:

PLANT BREEDING AND BIOTECHNOLOGY

### **SEMESTER-V**

Course #	Title	Credit Hours	Course Type
PBG-501	Principles of Genetics	3(2-1)	Major
PBG-503	Breeding Field Crops	3(2-1)	Major
PBG-505	Cytogenetics	3(2-1)	Major
PBG-507	Germplasm Resources of Field Crops	3(2-1)	Major
PBG-509	Experimentation in Plant Breeding	3(2-1)	Major
PBG-511	Hybrid Seed Production Technology	3(2-1)	Major
and the same	Sub-Total Credit Hours	18	· · · · · · · · · · · · · · · · · · ·
PBG-513	Heteroploidy and Apomixis in Crop Breeding	2(1-1)	Major (Elective)
PBG-515	Mutation Breeding in Crop Plants	2(1-1)	Major (Elective)
	Total Credit Hours	20	A THE RESERVE OF THE PARTY OF T

### **SEMESTER-VI**

Course #	Title	Credit Hours	Course Type
PBG-502	Breeding Climate Smart Crops	3(2-1)	Major
PBG-504	Modern Concepts in Plant Breeding	3(2-1)	Major
PBG-506	Genetics and Breeding of Fibre Crops	3(2-1)	Major
PBG-508	Genetics and Breeding of Oilseed Crops	3(2-1)	Major
PBG-510	Genetics and Breeding of Vegetable Crops	3(2-1)	Major
PBG-512	Variety Registration, Seed Certification and IPRs	2(1-1)	Major
	Sub-Total Credit Hours	17	rana ta da a seri se cara
PBG-514	Genetics and Breeding of Sugar Crops	3(2-1)	Major (Elective)
PBG-516	Genetics and Breeding of High-value Crops	3(2-1)	Major (Elective)
	Total Credit Hours	20	

### SEMESTER-VII

Course #	Title	Credit Hours	Course Type
PBG-601	Genetics and Breeding of Cereal Crops	3(2-1)	Major
PBG-603	Genetics and Breeding of Pulse Crops	3(2-1)	Major
PBG-605	Genetics and Breeding of Fodder and Forage Crops	3(2-1)	Major
PBG-607	Bioinformatics in Plant Breeding	3(2-1)	Major
PBG-609	Quantitative Genetics and Biometry	3(3-1)	Major
PBG-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major
Biotech503	Biosafety and Stewardship	3 (2-1)	Major
	Sub-Total Credit Hours	20	

### **SEMESTER-VIII**

Course #	Title	Credit Hours	Course Type
PBG-612	Internship	3(0-3)	Major
PBG-614	Capstone Project	3(0-3)	Major
	Total Credit Hours	06S	



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major:
SEED SCIENCE AND
TECHNOLOGY

### **SEMESTER-V**

Course #	Title	Credit Hours	Course Type
SST-501	Principles of Seed Science	3(2-1)	Major
SST-503	Physiology of Seed Development	3(2-1)	Major
SST-505	Seed Production in Various Crops	3(2-1)	Major
SST-507	Seed Health and Vigour	3(2-1)	Major
PBG-511	Hybrid Seed Production Technology	3(2-1)	Major
SST-511	Experimentation in Seed Science	3(2-1)	Major
	Sub-Total Credit Hours		18
SST-509	Seed Production of Transgenic Crops	2(1-1)	Major (Elective)
PBG-515	Mutation Breeding in Crop Plants	2(1-1)	Major (Elective)
	Total Credit Hours		20

### **SEMESTER-VI**

Course #	Title	Credit Hours	Course Type
SST-502	Principles of Seed Technology	3(2-1)	Major
SST-504	Seed Germination and Dormancy	3(2-1)	Major
SST-506	Seed Enhancement	2(1-1)	Major
PBG-512	Variety Registration, Seed Certification and IPRs	2(1-1)	Major
Hort-617	Vegetable and Flower Seed Production	2(1-1)	Major
FMP-510	Seed Processing Industries & their maintenance	3(2-1)	Interdisciplinary
MAB-516	Seed Trade Policies and Regulations	2(1-1)	Interdisciplinary
0.0	Sub-Total Credit Hours		17
Agron502	Seed Science and Technology	3(2-1)	Major (Elective)
ENT-508	Stored Products Pests & their Management	3(2-1)	Major (Elective)
	Total Credit Hours		20

### **SEMESTER-VII**

Course #	Title	Credit Hours	Course Type
SST-601	Seed Testing	3(1-2)	Major
SST-603	Seed Storage	3(2-1)	Major
Hort-510	Propagation and Nursery Management.	3(2-1)	Major
SST-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major
PP-601	Plant Disease Management	3(2-1)	Major
Biotech503	Biosafety and Stewardship	3(2-1)	Major
MAB-615	Seed Marketing and Logistics	3(2-1)	Major
	Sub-Total Credit Hours	200 000	20

Course #	Title	Credit Hours	Course Type
SST-612	Internship	3(0-3)	Major
SST-614	Capstone Project	3(0-3)	Major
	Total Credit Hours	1 1	06



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major:
BIOTECHNOLOGY

### **SEMESTER-V**

Course #	Title	Credit Hours	Course Type
Biotech-501	Principles of Biotechnology	3 (2-1)	Major
Biotech-503	Biosafety and Stewardship	3 (2-1)	Major
Biotech-505	Molecular Cell Biology	3 (2-1)	Major
Biotech-507	Plant Tissue Culture and its Applications	3 (2-1)	Major
Biotech-509	Fundamentals of Bioinformatics	3 (2-1)	Major
SST-509	Seed Production of Transgenic Crops	2 (1-1)	Major
	Sub-Total Credit Hours	17	
Biotech-511	Experimentation in Biotechnology	3 (2-1)	Major (Elective)
PBG-505	Cytogenetics	3 (2-1)	Major (Elective)
i.	Total Credit Hours	(A)	20

### **SEMESTER-VI**

Course #	Title	Credit Hours	Course Type
Biotech-502	Genomics and Proteomics	3(2-1)	Major
Biotech-504	Epigenetics	3(2-1)	Major
Biotech-506	Plant Transformation Methods	3(2-1)	Major
Biotech-508	Principles of Plant Molecular Physiology	3 (2-1)	Major
Biotech-512	Plant Microbiology	3(2-1)	Major
Biochem502	Fundamental Biochemistry	3 (2-1)	Major
	Sub-Total Credit Hours	18	AC - C
Biotech-510	Nanobiotechnology	2 (1-1)	Major (Elective)
PP-518	Biotechnology and its applications in Plant Pathology	2 (1-1)	Major (Elective)
	Total Credit Hours		20

### **SEMESTER-VII**

Course #	Title	Credit Hours	Course Type
Biotech-601	Agricultural Biotechnology	4 (3-1)	Major
Biotech-603	Genome Editing and its Applications	3 (2-1)	Major
Biotech-605	Fundamentals of Seed Molecular Biology	3 (2-1)	Major
Biotech-607	Biotechnology Entrepreneurship	3 (2-1)	Major
Biotech-611	Preparation of Research Project and Scientific Writing	2 (1-1)	Major
FST-621	Food Biotechnology	3 (2-1)	Major
	Sub-Total Credit Hours	18	
Biotech-609	Industrial Biotechnology	2(1-1)	Major (Elective)
Biotech-613	Animal Biotechnology	2 (1-1)	Major (Elective)
	Total Credit Hours		20

Course #	Title	Credit Hours	Course Type
Biotech 612	Internship	3(0-3)	Major
Biotech-614	Capstone Project	3(0-3)	Major
	Total Credit Hours		6



Bsc (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major: ENTOMOLOGY

### **SEMESTER-V** (Students will opt for 5 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Course Type
ENT-501	Insect Morphology	3(2-1)	Major
ENT-503	Principles of Insect Taxonomy	3(2-1)	Major
ENT-505	Insect Ecology	3(2-1)	Major
ENT-507	Insect Pests of Household, Human & Animals	3(2-1)	Major
ENT-509	Insect Behavior	3(2-1)	Major
CCC0000000	Sub-Total Credit Hours	15	Thuske
ENT-511	Vertebrate Pests and their Management	3(2-1)	Elective
ENT-513	Pest Management and Phytosanitary Measures	3(2-1)	Elective
ENT-515	Insect Biodiversity Management	2(1-1)	Elective
ENT-517	Entomological History and Literature	2(1-1)	Elective
	Total Credit Hours	15+5=20	

### **SEMESTER-VI** (Students will opt for 2 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Course Type
ENT-502	Insect Physiology	3(2-1)	Major
ENT-504	Insect Classification and Biodiversity	3(2-1)	Major
ENT-506	Agricultural Pests and Their Management	3(2-1)	Major
ENT-508	Stored Products Pests & their Management	3(2-1)	Major
ENT-510	Beneficial Insects	2(1-1)	Major
ENT-512	Biological Control of Insect Pests	3(2-1)	Major
	Sub-Total Credit Hours	17	CO-anci-no
ENT-514	Introduction to Insect Molecular Genetics	2(1-1)	Elective
ENT-516	Arachnid Pests and Their Management	2(1-1)	Elective
	Total Credit Hours	17+2=19	114-51-513-51-51-51

### SEMESTER-VII (Students will opt for 2 credit hours from elective courses)

Course Code	Course Title	Credit Hours	Course Type
ENT-601	Integrated Pest Management	3(2-1)	Major
ENT-603	Plant Resistance to Insect Pests	2(1-1)	Major
ENT-605	Insecticides and their Application	3(2-1)	Major
ENT-607	Range and Forest Entomology	3(2-1)	Major
ENT-609	Agriculture and Environmental Pollution	3(2-1)	Major
ENT-611	Preparation of Research Project and Scientific Writing	3(2-1)	Major
ENT-613	Apiculture	2(1-1)	Major
	Sub-Total Credit Hours	19	
ENT-615	Post-Harvest Protection of Cereals	2(1-1)	Elective
ENT-617	Agricultural Pesticide Legislation	2(2-0)	Elective
	Total Credit Hours	(19+2)=21	1929

Course Code	Course Title	Credit Hours	Course Type
ENT-612	Internship	3(0-3)	Major
ENT-614	Capstone Project	3(0-3)	Major



BSC (Hons.)
Scheme of Studies
Agriculture (Semester V-VIII)
Major:
PLANT PATHOLOGY

**SEMESTER-V** (students can opt 3 credithours from major elective course)

Course code	Course Title	Credit Hours	Category
PP-501	Introductory Mycology	3(2-1)	Major
PP-503	Introduction to Plant Parasitic Nematodes	3(2-1)	Major
PP-505	Introduction to Plant Prokaryotes	3(2-1)	Major
PP-507	Introduction to Plant Viruses	3(2-1)	Major
PP-509	Abiotic Diseases of Plants	3(2-1)	Major
Williamo	Subtotal Credit Hours	15	1,00000
PP-511	Beneficial Microorganisms for sustainable Agriculture	3(2-1)	Major
PP-513	Soil-Borne Plant Pathogens	3(2-1)	Major
	Total Credit Hours	15+3=	:18

**SEMESTER-VI** (students can opt 3 credithours from major elective course)

Course code	Course Title	Credit Hours	Category
PP-504	Diseases of Field Crops	3(2-1)	Major
PP-506	Diseases of Fruits and Omamentals	3(2-1)	Major
PP-508	Pesticides, their Action and Application	3(2-1)	Major
PP-510	Plant Disease Epidemiology	3(2-1)	Major
PP-512	Biology and Cultivation of Edible Fungi	3(2-1)	Major
PP-514	Diseases of Vegetable Crops	3(2-1)	Major
	Subtotal Credit Hours	18	
PP-518	Biotechnology and its Application in Plant Pathology	3(2-1)	
	Total Credit Hours	18+3=	21

### **SEMESTER-VII** (students can opt 2 credit hours from major elective course)

Course code	Course Title	Credit Hours	Category
PP-601	Plant Disease Management	3(2-1)	Major
PP-603	Methods and Techniques in Plant Pathology	3(1-2)	Major
PP-605	Seed and Postharvest Pathology	3(2-1)	Major
PP-607	Plant Resistance to Diseases	3(2-1)	Major
PP-609	Introductory Molecular Plant Pathology	3(2-1)	Major
PP-611	Preparation of Research Projects and Scientific Writing	2(1-1)	Major
	Subtotal Credit Hours	17	
PP-613	Introductory Range and Forest Pathology	2(1-1)	Major
PP-615	Plant Quarantine and SPS Measures	2(1-1)	Major
	Total Credit Hours	17+2=19	100

Course code	Course Title	Credit Hours	Category
PP-612	Internship and External Evaluation	3(0-3)	Major
PP-614	Capstone Project	3(0-3)	Major



Bsc (Hons.)
Scheme of Studies
Agriculture (Semester I-VIII)
Major:
ENVIRONMENTAL SCIENCE

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Course Type
ENV-301	Introduction to Environmental Science	3(2-1)	Major
ENV-303	Introduction to Earth Science	3(2-1)	Major
BIO-301	Essentials of Biology	3(2-1)	GC
GE-303	Functional English	3(3-0)	General
GE-305	Quantitative Reasoning-I	3(3-0)	General
GE-309	Applications of Information and Communication Technologies	3(2-1)	General
GE-402	Entrepreneurship	2 (1-1)	General
Total Credit Hou	rs 20(15-5)		

### SEMESTER-II

Course Code	Course Title	Credit Hours	Course Type
CHEM-302	Basic Chemistry	3 (2-1)	Interdisciplinary
AIEH-222	Professional Ethics	2 (2-0)	Interdisciplinary
GE-307	Islamic Studies / Ethics (for Foreigners / Non-Muslims)	2(2-0)	General
ENV-304	Biology for Environmental Studies	3 (2-1)	Major
ENV-306	Introduction to Predictive Modeling for Environment	2(1-1)	Interdisciplinary
GE-403	Expository Writing	3 (3-0)	General
GE+405	Quantitative Reasoning-II	3 (3-0)	General
Total Credit Hou	irs 18(15-3)		

### **SEMESTER-III**

Course Code	Course Title	Credit Hours	Course Type
ENV-403	Environmental Chemistry	3 (2-1)	Major
ENV-405	Emironmental Physics	3 (2-1)	Major
ENV-407	Fundamentals of Ecology	3 (3-0)	Major
ENV-409	Environmental Pollution	3 (2-1)	Major
RS-409	Rural Sociology and Development	2 (2-0)	General
GE-301	Social and Religious Tolerance	2 (2-0)	General
GE-407	Ideology and Constitution of Pakistan	2 (2-0)	General
Total Credit Hou	rs 18(15-3)		

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours	Course Type
ENV-404	Environmental Microbiology	3(2-1)	Major
ENV-408	Research Methods in Environmental Science	3(2-1)	Major
ENV-410	Climatology	3(2-1)	Major
ENV-412	GIS and Remote Sensing	3(2-1)	Major
ECON-418	Environmental Economics	3(3-0)	Interdisciplinary
STAT-302	Introductory Statistics	2(2-0)	Interdisciplinary
GE-404	Civics and Community Engagement	2(1-1)	General
Total Credit Hou	rs 19(14-5)		



Bsc (Hons.)
Scheme of Studies
Agriculture (Semester I-VIII)
Major:
ENVIRONMENTAL SCIENCE

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Type	
ENV-501	Applied Ecology	3(2-1)	Major	
ENV-503	Environmental Toxicology	3(2-1)	Major	
ENV-505	Environmental Profile of Pakistan	3(3-0)	Major	
ENV-507	Population and Environment	3(2-1)	Major	
ENV-509	Analytical Techniques in Environmental Science	3(1-2)	Major	
ENV-511	Solid Waste Management	2(2-0)	Major	
ENV-513	Soil and Environment	2(2-0)	Major	
Total Credit Hou	irs 19(14-5)	1000000	11/0/07/201	

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Type
ENV-502	Environmental Management Systems	3(2-1)	Major
ENV-504	Biodiversity and Conservation	3(2-1)	Major
ENV-506	Environmental Monitoring	3(2-1)	Major
ENV-508	Introduction to Climate Change	3(2-1)	Major
ENV-510	Environmental Impact Assessment	3(2-1)	Major
ENV-512	Water Resources Management	3(2-1)	Major
EW-514	Pollutants Movement in Soil	2(2-0)	Major
Total Credit Hou	rs 20(14-6)	100000	

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Type
ENV-601	Environmental Governance	3(3-0)	Major
ENV-603	Public Health and Environment	3(3-0)	Major
ENV-605	Pollution Control Technologies	3(2-1)	Major
ENV-607	Natural Resources Management	3(3-0)	Major
ENV-609	Environmental Biotechnology	2(2-0)	Major
ENV-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major
SES-605	Soil, Water and Environment Conservation	3(3-0)	Interdisciplinary
Total Credit Hou	rs 19(16-3)	13273077	

Cre Ho	edit Course ours Type
3(0	0-3) Internship
3(0	0-3) Capstone Proj
	3(



# FACULTY OF FOOD AND HOME SCIENCES



### **FACULTY OF FOOD AND HOME SCIENCES**

### Dean's Message

Welcome to the Faculty of Food and Home Sciences! I am delighted to express my views that you are going to join a fast growing faculty where commitment, adherence to the standards of academic excellence is among the top core values. For the last many years; our degree programs have been the leading choices of the students. We offer an enriched and comprehensive education in the fields of food, nutrition and home sciences and believe in the power of knowledge and its transformative impact on individuals and society.

Our dedicated faculty members are experts in their respective fields and are committed to providing you with a world-class education that will equip you with the skills and expertise needed to excel in your chosen career path.

As you embark on your academic journey with us, you will have the opportunity to explore a wide range of subjects within the fascinating domains of food, nutrition and home sciences. In nutritional sciences, we have unique shared program and activities with Nishtar Medical University of Multan which reflects a dynamic approach of the institutions.

We believe in fostering a collaborative and inclusive learning environment, where students are encouraged to ask questions, engage in critical thinking, and actively participate in hands-on experiences. Our state-of-the-art facilities and well-equipped laboratories provide the perfect platform for you to apply your knowledge and gain practical skills.

Furthermore, our faculty maintains strong ties with industry leaders, professional organizations, and research institutions, ensuring that our curriculum remains relevant and up-to-date. Through internships, field visits, and guest lectures from industry experts, you will have the opportunity to connect theory with real-world practice, preparing you for a successful career upon graduation.

Moreover, we value the personal and professional development of our students. Alongside academic excellence, we offer various extracurricular activities, clubs, and student organizations that provide a platform for you to explore your interests, develop leadership skills, and build lifelong friendships.

Whether you aspire to become a nutritionist, a food scientist, an interior designer, or a family counselor, the Faculty of Food and Home Sciences is committed in supporting your ambitions and helping you to achieve your goals. We take pride in nurturing well-rounded individuals who are not only academically accomplished but also socially responsible, compassionate, and equipped to make a positive difference in the world.



Prof. Dr. Umar Farooq Dean, FF&HS





### Welcome to the Faculty of Food and Home Sciences!

Faculty of Food and Home Sciences was first established during the year 2016 as Department of Food Science and Technology upgraded as Faculty in the year 2023. At the Faculty of Food and Home Sciences, we are committed to advancing knowledge and innovation in the fields of food science, nutrition, and home sciences. Our 11 dedicated permanent faculty members, 10 visiting faculty members and students from three well defined departments work collaboratively to address challenges related to food production, nutrition, health, and the sustainable management of households

With the recent upgrade from the Department of Food Science and Technology, we have expanded our focus to include a broader range of interdisciplinary areas related to food, nutrition, and the home environment. This transformation reflects our commitment to staying at the forefront of cutting-edge research and education in these critical domains.

Our faculty comprises distinguished experts who bring a wealth of experience and expertise to the table. They are at the forefront of research, exploring novel approaches to enhance food safety, develop innovative food processing techniques, optimize nutritional content, and promote healthy lifestyles. Our faculty members are actively engaged in collaborations with industry partners, government agencies, and international organizations, ensuring that our research has real-world impact and relevance.

Beyond the classroom, the Faculty of Food and Home Sciences offers a vibrant and inclusive community. We encourage students to participate in various student organizations, clubs, and events that foster networking, leadership development, and a sense of belonging. Our faculty and staff are dedicated to providing a supportive and nurturing environment, fostering a culture of academic excellence and personal well-being.

We invite you to explore our website to learn more about the Faculty of Food and Home Sciences, our programs, faculty members, research initiatives, and student opportunities. Join us in shaping the future of food, nutrition, and home sciences through innovation, collaboration, and transformative education.

Welcome to the Faculty of Food and Home Sciences – where knowledge, health, and sustainability meet. Faculty of Food and Home Sciences has comprised of following three departments

- 1. Department of Food Science and Technology
- 2. Department of Human Nutrition and Dietetics
- 3. Department of Home Sciences

Programs being offered at Main Campus

Following Undergraduate degree programs are being offered at Main Campus.

**Undergraduate Programs** 

- 1.B.Sc. (Hons.) Food Science and Technology
- 2. B.Sc. (Hons.) Human Nutrition and Dietetics
- 3. B.Sc. (Hons.) Home Economics

### VISION



Our aim is to enhance the learning capabilities of our graduates through regular practical classes and internship training programs. This vision is pursued under/in equivalence with the core values of the university i.e. integrity, excellence, teamwork, discipline and dedication to work.

### **MISSION**



Department's mission is to equip and prepare young minds for meeting challenges of global food safety and food security situations. Provision of healthy, friendly, safe and educational environment for students is the main edge of the Department of Food Science and Technology.



# Faculty of dead Home \$



PROF. DR. UMAR FAROOO Dean FFHS, Chairman Department of HND

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DR. AMBREEN NAZ
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### DR. MUHAMMAD SIBT-E-ABBAS **Assistant Professor**

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### MR. MUHAMMAD USMAN

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- Human Nutrition and Dietetics

# Faculty of Food and Home Sciences





### **MS. UMRAH ZAFAR** Lecturer

- Human Nutrition and Dietetics





### **MS. MISBAH SHARIF**

- misbah.sharif@mnsuam.edu.pk M.Sc. (Hons.)
- Food Science and Technology









BSC (Hons.)
FOOD SCIENCE AND
TECHNOLOGY

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Category
GE-309	Applications of Information and Communication Technologies	3(2-1)	General Education
GE-303	Functional English	3(3-0)	General Education
GE-407	Ideology and Constitution of Pakistan	2(2-0)	General Education
MATH-301/ BIO-301	Elementary Mathematics (for Pre-Medical) Essentials of Biology (for Pre-Engineering)	3(3-0) 3(2-1)	General Education
AGRON-301	Basic Agriculture	2(1-1)	Interdisciplinary
FST-301	Introduction to Food Science and Technology	3(2-1)	Major
QS-302	Quranic Studies	1(1-0)	Audit/Non-credit
1890 0000 P	Total Credit Hours	1	6 (12-4)

### **SEMESTER-II**

Course Code	Course Title	Credit Hours	Category
GE-403	Expository Writing	3(3-0)	General Education
GE-307	Islamic Studies OR Ethics (For foreigners/Non- Muslims)	2(2-0)	General Education
RS-409	Rural Sociology and Development	2(2-0)	General Education
HORT-302	Home Gardening	3(2-1)	Interdisciplinary
MICRO-301	Fundamentals of Microbiology	3(2-1)	Interdisciplinary
FST-302	Food Processing and Preservation	3(2-1)	Major
	Total Credit Hours	16	5 (13-3)

### **SEMESTER-III**

Course Code	Course Title	Credit Hours	Category
GE-305	Quantitative Reasoning (I)	3(3-0)	General Education
GE-301	Social and Religious Tolerance	2(2-0)	General Education
GE-404	Civics and Community Engagement	2(1-1)	General Education
HND-301	Micro and Macronutrients in Human Nutrition	3(3-0)	Interdisciplinary
ENT-508	Stored Products Pests and their Management	3(2-1)	Interdisciplinary
FST-401	Global Food Issues	3(3-0)	Major
FST-403	Food Business Management	3(2-1)	Major
QS-302	Quranic Studies	1(1-0)	Audit/Non-credit
	Total Credit Hours	19	(16-3)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Category
GE-405	Quantitative Reasoning (II)	3(3-0)	General Education
GE-402	Entrepreneurship	2(2-0)	General Education
FST-402	Food Toxicology and Safety	3(3-0)	Major
FST-404	Community nutrition and dietetics	2(2-0)	Major
FST-406	Unit Operation in Food Processing	3(2-1)	Major
FST-408	Poultry and Egg Processing	3(2-1)	Major
FST-410	Food Process Engineering	3(3-0)	Major
	Total Credit Hours	19	9 (17-2)

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BSC (Hons.)
FOOD SCIENCE AND
TECHNOLOGY

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Category
FST-501	Dairy Technology	3(2-1)	Major
FST-503	Technology of Fats and Oils	3(2-1)	Major
FST-505	Food Microbiology	3(2-1)	Major
FST-507	Food Plant Layout and Sanitation	2(2-0)	Major
FST-509	Meat Technology	3(2-1)	Major
FST-511	Cereal Milling Technology	3(2-1)	Major
FST-513	Food Analysis and Sensory evaluation	3(2-1)	Major
QS-302	Quranic Studies	1(1-0)	Audit/Non-credit
	Total Credit Hours	20	(14-6)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Category
FST-502	Extrusion Technology	3(2-1)	Major
FST-504	Beverage Technology	3(2-1)	Major
FST-506	Food Laws and Regulations	3(3-0)	Major
FST-508	Bakery Products Technology	3(2-1)	Major
FST-510	Food Packaging	2(2-0)	Major
FST-512	Food Product Development	3(2-1)	Major
FST-514	Sugar Technology	3(2-1)	Major
0.511,000.0	Total Credit Hours	20 (	15-5)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Category
FST-601	Instrumental Techniques in Food Analysis	3(1-2)	Major
FST-603	Food Safety and Quality Management	3(3-0)	Major
FST-605	Food Biotechnology	3(2-1)	Major
FST-607	Fundamentals of Halal Foods	3(3-0)	Major
FST-609	Fundamentals of Food Systems	3(3-0)	Major
FST-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major
FST-613	Confectionery and Snack Foods	3(2-1)	Major
QS-302	Quranic Studies	1(1-0)	Audit/Non-credit
	Total Credit Hours	20	(15-5)

Course Code	Course Title	Credit Hours	Category
FST-612	Internship and External Evaluation	3(0-3)	Major
FST-614	Capstone Project	3(0-3)	Major
	Total Credit Hours	6 (	0-6)



B\_SC\_(Hons.)
HUMAN NUTRITION &
DIETETICS

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Course Category
GE-303	Functional English	3(3-0)	General Course
BIOCHEM-309	Medical and Clinical Biochemistry	3(1-2)	General Course
GE-305	Quantitative Reasoning (I)	3(3-0)	General Course
HND-301	Micro and Macronutrients in Human Nutrition	3(3-0)	Major Course
HND-303	Human Physiology-I	3(2-1)	Major Course
HND-305	Human Anatomy	3(2-1)	Major Course
	Total Credit Hours	18	(14-4)

### SEMESTER-II

Course Code	Course Title	Credit Hours	Course Category
GE-301	Social and Religious Tolerance	2(2-0)	General Course
GE-403	Expository Writing	3(3-0)	General Course
GE-405	Quantitative Reasoning (II)	3(3-0)	General Course
GE-407	Ideology and Constitution of Pakistan	2(2-0)	General Course
FST-412	Essentials of Food Science and Technology	3(2-1)	Interdisciplinary Course
HND-302	Pharmacology	3(3-0)	Major Course
HND-304	Human Physiology-II	3(2-1)	Major Course
	Total Credit Hours	19	(17-2)

### SEMESTER-III

Course Code	Course Title	Credit Hours	Course Category
GE-307	Islamic Studies/Ethics (for Foreigners/ Non-Muslims)	2(2-0)	General Course
GE-309	Applications of Information and Communication Technologies	3(2-1)	General Course
FST-506	Food laws and Regulation	2(2-0)	Interdisciplinary Course
PSYCHO-406	Nutrition and Psychology/Behavior	2(2-0)	General Course
HND-401	General Human Pathology	3(2-1)	Major Course
HND-403	Nutritional Deficiency Disorders	3(3-0)	Major Course
	Total Credit Hours	11	5(13-2)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
GE-402	Entrepreneurship	2(1-1)	General Course
GE-404	Civics and Community Engagement	2(1-1)	General Course
FST-513	Food Analysis and Sensory Evaluation	3(2-1)	Interdisciplinary Course
HND-402	Community Nutrition and Dietetics	3(3-0)	Major Course
HND-404	Nutritional Epidemiology	3(3-0)	Major Course
HND-406	Nutrition Policies and Programs	3(3-0)	Major Course
HND-408	Nutrition Through the Life Cycle	3(3-0)	Major Course
QS-302	Quranic Studies	1(1-0)	Audit
	Total Credit Hours		19(16-3)

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B\_SC\_(Hons.)
HUMAN NUTRITION &
DIETETICS

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Category
FST-505	Food Microbiology	3(2-1)	Interdisciplinary Course
HND-501	Dietetics-I	3(2-1)	Major Course
HND-503	Assessment of Nutritional Status	3(2-1)	Major Course
HND-505	Functional Foods and Nutraceuticals	3(3-0)	Major Course
HND-507	Public Health Nutrition	3(2-1)	Major Course
HND-509	Nutritional Education and Awareness	3(2-1)	Major Course
QS-301	Quranic Studies	1(1-0)	Audit
-30-1-500	Total Credit Hours	1000000	18(13-5)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
PH-406	Health Promotion, Advocacy and Social Mobilization	3(2-1)	Interdisciplinary Course
HND-502	Dietetics-II	3(2-1)	Major Course
HND-504	Sports Nutrition	3(2-)	Major Course
HND-506	Nutritional Practices in Clinical Care	3(2-1)	Major Course
HND-508	Food Toxins and Allergens	3(3-0)	Major Course
HND-510	Drug-Nutrient Interactions	2(2-0)	Major Course
HND-512	Meal Planning and Management-I	3(3-0)	Major Course
QS-302	Quranic Studies	1(1-0)	Audit
	Total Credit Hours		20(16-4)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Category
FST-609	Fundamentals of Food Systems	3(3-0)	Interdisciplinary Course
HND-601	Preventive Nutrition	3(3-0)	Major Course
HND-603	Meal Planning and Management-II	3(2-1)	Major Course
HND-605	Nutrition in Emergencies	3(3-0)	Major Course
HND-607	Infant and Young Child Feeding	3(2-1)	Major Course
HND-609	Global Food Issues	3(3-0)	Major Course
HND-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major Course
QS-301		1(1-0)	Audit
	Total Credit Hours		20(17-3)

Course Code	Course Title	Credit Hours	Course Category
HND-612	Internship and External Evaluation	3(0-3)	Major Course
HND-614	Capstone Project	3(0-3)	Major Course
	Total (	Credit Hours	06(0-6)



B.SC. (Hons.)
HOME ECONOMICS

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Course Category
GE-309	Applications of Information and Communication Technologies	3(2-1)	General Course
GE-407	Ideology and Constitution of Pakistan	2(2-0)	General Course
GE-301	Social and Religious Tolerance	2(2-0)	General Course
GE-303	Functional English	3(3-0)	General Course
GE-402	Entrepreneurship	2(1-1)	General Course
BIOCHEM-301	Elementary Chemistry	3(2-1)	General Course
HE-301	Fundamentals of Food and Nutrition	3(3-0)	Major Course
HE-303	Introduction to Home Economics	2(2-0)	Major Course
QS-301	Quranic Studies I	1(1-0)	Audit Course
	Total Credit Hours	20	(17-3)

### SEMESTER-II

Course Code	Course Title	Credit Hours	Course Category
HE- 302	Introduction to Art and Design-I	3(1-2)	Major Course
HE- 306	Family Clothing and Consumer Education	3(2-1)	Major Course
HE- 308	Home Management and Housing I	3(2-1)	Major course
SOC-306	Pakistani Society and Culture	3(3-0)	Interdisciplinary Course
HE-310	Sustainable Design	2(2-0)	Major Course
GE-403	Expository Writing	3(3-0)	General Course
HND-301	Micro and Macronutrients in Human Nutrition	3(3-0)	Interdisciplinary Course
QS-302	Quranic Studies II	1(1-0)	Audit Course
515010WK - 4	Total Credit Hours	20	(16-4)

Course Code	Course Title	Credit Hours	Course Category
HE-410	Theme Research/Story & Mood Board	2(2-0)	Major Course
GE-307	Islamic Studies or Ethics (for non- Muslims/foreigners)	2(2-0)	General Course
GE-305	Quantitative Reasoning (I)	3(3-0)	General Course
HE-401	Life span Development	2(2-0)	Major Course
HE-403	Fashion Designing	2(1-1)	Major Course
HE-405	Introduction to Art and Design-II	2(0-2)	Major Course
AIT-311	Cotton Ginning and Fiber Technology	3(2-1)	Interdisciplinary Course
HE-409	Home Management and Housing II	3(2-1)	Major Course
QS-301	Quranic Studies I	1(1-0)	Audit Course
A. C. C. C. C.	Total Credit Hours	20	(16-4)



B.SC. (Hons.)
HOME ECONOMICS

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours	Course Category
HE-412	Couture Finish	3(0-3)	Major Course
HE-305	Home Gardening	3(2-1)	Major Course
FST-412	Essentials of Food Science & Technology	3(2-1)	Interdisciplinary Course
GE-405	Quantitative Reasoning (II)	3(3-0)	General Course
GE-404	Civics and Community Engagement	2(1-1)	General Course
GE-406	Nutrition and Psychology/Behavior	2(2-0)	Social Science
HE-404	Landscape	3(2-1)	Major Course
HE-408	Meal Management	3(2-1)	Major Course
QS-302	Quranic Studies II	1(1-0)	Audit Course
103333	Total Credit Hours	22	(15-8)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Category
FN-501	Physiological aspects of Nutrition	3(3-0)	Major Course
FN-503	Applied Nutrition	3(3-0)	Major Course
FN-505	Experimental study of local cuisines	3(1-2)	Major Course
FN-507	Nutritional Epidemiology in Public Health	3(2-1)	Major Course
MICRO-501	Introduction to Microbiology & Immunology	3(2-1)	Major Course
PHYSIO-501	Human Physiology I	3(2-1)	Major Course
	Total Credit Hours	18	(13-5)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
FN-502	Dietetics	3(2-1)	Major Course
FN-504	Nutrition & Diet Therapy	3(2-1)	Major Course
FN-506	Institutional and Food Service Management	3(2-1)	Major Course
FN-508	Infant Nutrition and Child Health	3(2-1)	Major Course
FN-510	Nutritional Management in Disasters	3(3-0)	Major Course
FN-512	Advanced Nutrition	3(2-1)	Major Course
	Total Credit Hours	18	(13-5)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Category
FN-601	Nutritional Practices in Clinical care	3(2-1)	Major Course
FN-603	Nutritional Disorders	3(3-0)	Major Course
FN-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major Course
FST-601	Instrumental Techniques in Food Analysis	3(1-2)	Major Course
FST-607	Food Product Development	3(1-2)	Major Course
Elective Courses	Choose 1 course of 3 credit hours	0.0000000	The state of the s
FN-605	Nutrition, Health and Prevention	3(3-0)	Major Course
FN-607	Sports Nutrition	3(3-0)	Major Course
FN-609	Food Allergens	3(3-0)	Major Course
	Total Credit Hours	17	(11-6)

Course Code	Course Title	- 43	Credit Hours	Course Category
FN-612	Internship and External Evaluation		3(0-3)	Major Course
FN-614	Capstone Project		3(0-3)	Major Course
7000000	To	tal Credit Hours	17	(11-6)



BSC (Hons.)
HOME ECONOMICS
MAJOR:
TEXTILE AND CLOTING

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Category
TC-501	Textile Designing	3(1-2)	Major Course
TC-503	Textile Designing & weaving	3(2-1)	Major Course
TC-505	Pattern making	3(1-2)	Major Course
TC-507	Fiber Science	3(3-0)	Major Course
TC-509	Fashion Designing and Illustrations	3(1-2)	Major Course
TC-511	Textiles Chemistry I	3(2-1)	Major Course
	Total Credit Hours	18	(10-8)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
TC-502	Art of Draping	3(1-2)	Major Course
TC-504	Textiles Computer aided design	3(2-1)	Major Course
TC-506	Clothing Styles	3(1-2)	Major Course
TC-508	Advanced Textiles	3(2-1)	Major Course
TC-510	Economic, Social and Psychological aspects of Clothing and Textile	3(3-0)	Major Course
TC-512	Textiles Chemistry II	3(2-1)	Major Course
	Total Credit Hours	18	(11-7)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Category
TC-601	Textile Testing	3(2-1)	Major Course
TC-603	Dyeing and Printing	3(1-2)	Major Course
TC-605	Textile Industrial Management	3(2-1)	Major Course
TC-607	Decorative Fabrics	3(1-2)	Major Course
TC-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major Course
Elective	Choose one course of 3 credit hours		
TC-609	Historic Costume	3(3-0)	Major Course
TC-613	Fashion and Boutique Management	3(2-1)	Major Course
TC-615	Fashion Photography	3(1-2)	Major Course
	Total Credit Hours		17

Course Code	Course Title	Credit Hours	Course Category
TC-612	Internship and External Evaluation	3(0-3)	Major Course
TC-614	Capstone Project	3(0-3)	Major Course
	**************************************	al Credit Hours 6	(0-6)



BSC (Hons.)
HOME ECONOMICS
MAJOR:
HUMAN DEVELOPMENT
AND FAMILY STUDY

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Category
HDF-501	Development from prenatal to infancy	3(3-0)	Major Course
HDF-503	Childhood Care and Development	3(2-1)	Major Course
HDF-505	Theoretical Perspectives of Human Development	3(3-0)	Major Course
HDF-507	Adolescent Development	3(2-1)	Major Course
HDF-509	Early Childhood and Guidance	3(3-0)	Major Course
HDF-511	Educational Psychology	3(2-1)	Major Course
Grantenar.	Total Credit Hours	18	(15-3)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
HDF-502	Exceptional Children	3(2-1)	Major Course
HDF-504	Gender Identity and Expression	3(3-0)	Major Course
HDF-506	Positive Psychology	3(3-0)	Major Course
HDF-508	Abnormal Psychology	3(3-0)	Major Course
HDF-510	Human and Family Ecology	3(3-0)	Major Course
HDF-512	Planning and Managing Human Services	3(3-0)	Major Course
Total Credit Hours		18	(17-1)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Category
HDF-601	Counseling and Guidance	3(2-1)	Major Course
HDF-603	Elementary Education and Administration	3(2-1)	Major Course
HDF-605	Psychological Testing	3(2-1)	Major Course
HDF-607	Adulthood and Aging	3(2-1)	Major Course
HDF-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major Course
	Total Credit Hours	-14	(9-5)

Course Code	Course Title	Credit Hou	rs   Course Category
HDF-612	Internship and External Evaluation	3(0-3)	Major Course
HDF-612	Capstone Project	3(0-3)	Major Course
ACTUAL DESCRIPTION OF THE PROPERTY OF THE PROP	To	al Credit Hours	6(0-6)



BSC (Hons.)
HOME ECONOMICS
MAJOR:
ART & DESIGN

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Category
AD-501	Commercial Art	3(1-2)	Major Course
AD-503	Essentials of Interior Design I	3(1-2)	Major Course
AD-505	Painting and Print Making	3(1-2)	Major Course
AD-507	Interior Design	3(1-2)	Major Course
AD-509	Applied Art-I	3(1-2)	Major Course
AD-511	Art Education-I	3(1-2)	Major Course
	Total Cr	redit Hours 18	(6-12)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
AD-502	Applied Art-II	3(1-2)	Major Course
AD-504	Art Education-II	3(1-2)	Major Course
AD-506	Hand Built Pottery	3(1-2)	Major Course
AD-510	Drawing and Painting	3(0-3)	Major Course
AD-512	Textile Design and Printing	3(1-2)	Major Course
	Total Credit Hours	15	(4-11)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Category
AD-601	Weaving	3(1-2)	Major Course
AD-603	Graphic Communication	3(1-2)	Major Course
AD-605	Essentials of Interior Design II	3(1-2)	Major Course
AD-607	Ceramics	3(1-2)	Major Course
AD-609	Islamic Art	3(1-2)	Major Course
AD-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major Course
	Total Credit Hours	17	(6-11)

Course Code	Course Title	Credit Hour	s Course Category
AD-612	Internship and External Evaluation	3(0-3)	Major Course
AD-614	Capstone Project	3(0-3)	Major Course
- Constanting	Total	Credit Hours	6(0-6)



Bsc (Hons.)
HOME ECONOMICS
MAJOR:
INTERIOR AND
ENVIRONMENTAL DESIGN

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Category
IED-501	Interior Space Planning I	3(3-0)	Major Course
IED-503	Fundamentals of Interior Architecture I	3(3-0)	Major Course
IED-505	Designing the Furniture	3(2-1)	Major Course
IED-507	Interior Design Application	3(1-2)	Major Course
IED-509	Consumer Marketing Strategies	3(2-1)	Major Course
IED-511	Advance Computer Applications for Interior Design.	3(1-2)	Major Course
	Total Credit Hours		(12-6)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
IED-502	Designing functional spaces for special needs	3(2-1)	Major Course
IED-504	Designing for Soft Furnishing	3(2-1)	Major Course
IED-506	Interior Environment	3(2-1)	Major Course
IED-508	Fundamentals of Interior Architecture II	3(1-2)	Major Course
IED-510	Environmental Aesthetics	3(2-1)	Major Course
IED-512	Interior Design Project 1	3(0-3)	Major Course
100.02011	Total Credit Hours	18	3(9-9)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Category
IED-601	Interior Space Planning II	3(1-2)	Major Course
ED-603	Environmental Management	3(1-2)	Major Course
ED-605	Interior Design Professional practice management	3(2-1)	Major Course
ED-609	Interior Design Project II	3(0-3)	Major Course
ED-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major Course
	Total Credit Hours	14	(5-9)

Course Code	Course Title	Credit Hours	Course Category
IED-612	Internship and External Evaluation	3(0-3)	Major Course
IED-614	Capstone Project	3(0-3)	Major Course
(Managere)	Tota	I Credit Hours	6(0-6)



B.S.C. (Hons.)
HOME ECONOMICS
MAJOR:
RESOURCE AND
FACILITY MANAGEMENT

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Category
RFM-501	Essentials of Management	3(3-0)	Major Course
RFM-503	Small Business Management	3(2-1)	Major Course
RFM-505	Hotel Management	3(2-1)	Major Course
RFM-507	Fundamentals of Marketing	3(3-0)	Major Course
RFM-509	Management of Household Affairs	3(2-1)	Major Course
RFM-511	Family Finance	3(3-0)	Major Course
	Total Credit Hours	18	(15-3)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Category
RFM-502	Essentials of communication	3(3-0)	Major Course
RFM-504	House Keeping Management	3(2-1)	Major Course
RFM-506	Home Management Supervision	3(2-1)	Major Course
RFM-508	Organizational Behavior	3(3-0)	Major Course
RFM-510	Money Banking and Finance	3(3-0)	Major Course
RFM-512	Environmental Management	3(3-0)	Major Course
your cento	Total Credit Hours	18	(16-2)

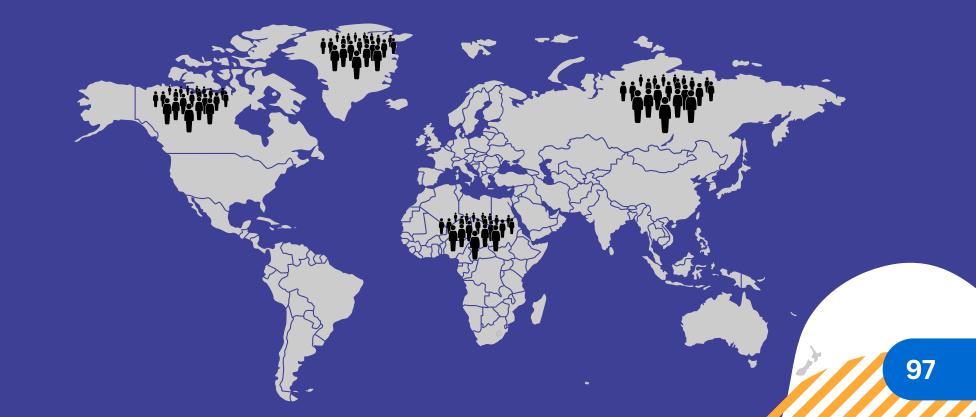
### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Category
RFM-601	Consumer Economics	3(2-1)	Major Course
RFM-603	Human Resource Management	3(3-0)	Major Course
RFM-605	Management in Institutions	3(3-0)	Major Course
RFM-609	Human Resource Development	3(3-0)	Major Course
RFM-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major Course
	Total Credit Hours		(12-2)

Course Code	Course Title	Credit Hou	rs   Course Category
RFM-612	Internship and External Evaluation	3(0-3)	Major Course
RFM-612	Capstone Project	3(0-3)	Major Course
	Tot	al Credit Hours	6(0-6)

## FACULTY OF SOCIAL SCIENCES & HUMANITIES





### **COORDINATOR MESSAGE**

Faculty of Social Sciences and Humanities

Dear Prospective Students,

Welcome to the Faculty of Social Sciences and Humanities at MNS University of Agriculture, Multan. As the Dean, it is my honor to introduce you to an enriching academic journey that will shape your future and to introduce you to a world of opportunities and transformative learning experiences that await you here.

Our faculty is dedicated to fostering an environment where academic excellence, innovation, and practical skills converge. We offer a diverse range of undergraduate programs designed to equip you with the knowledge and competencies needed to excel in the dynamic and ever-evolving field of economics, management and social sciences in the realm of cultural dynamics and ethical guidelines. Our aim is to equip you with the analytical skills and critical thinking abilities necessary to understand and address the challenges of our world.

I gain pride of introducing my distinguished faculty who bring a wealth of experience and expertise from both academia and industry. They are committed to mentoring and guiding you, ensuring that you not only grasp theoretical concepts but also understand their real-world applications. Our curriculum is carefully crafted to balance foundational theories with hands-on learning.

Beyond academics, we encourage you to engage in our vibrant campus life. Participate in various student organizations, attend guest lectures by industry leaders, and take advantage of networking opportunities. These experiences will enrich your time at MNSUAM and help you build a strong professional network.

Our team is excited to have you join our community of aspiring leaders, innovators, and changemakers. Together, we will embark on a journey of discovery, growth, and success.

- 1.Department of Agricultural and Resource Economics
- 2.Department of Agribusiness and Entrepreneurship Development
- 3.Department of Outreach and Continuing Education
- 4. Department of Islamic Studies
- 5.Department of English
- 6.Department of Statistics
- 7.Department of Agricultural Extension
- 8. Center for Agricultural Sustainability in South Punjab



Prof. Dr. Irfan Ahmad Baig Coordinator- FSS&H



### DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

Population of Pakistan is increasing at an alarming rate and its majority depends directly or indirectly on agriculture sector for their livelihood. Therefore, agriculture development is inevitable for ensuring food security, improving quality of life, alleviation of poverty and overall development in the rural areas. The Department of Agricultural and Resource Economics is well aware of changing scenarios of the sector and emerging challenges of rural economy of Pakistan and is committed to equip the young social and agricultural scientists with updated knowledge and sophisticated research skills enabling them to handle economic, social and environmental challenges in the achieving the goal of sustainable rural development. To cater the needs, the department offers following undergraduate programmes.



### VISION

Department's vision is to play a leading role in the field of Agricultural and Resource Economics through imparting quality education and maintaining higher standards of research. It also has vision to develop strong research and industry linkages.



### **MISSION**

The Department is aimed to provide education, training and research on decision making, resource allocation, business management and public policy for the people of South Punjab and beyond. The department focuses on providing quality education at undergraduate and graduate level, and strengthening the locality through its outreach efforts.

### B.Sc. (Hons.) Agricultural and Resource Economics

B.Sc. (Hons.) Agricultural and Resource Economics program aims to produce professional graduates with the knowledge, skills and attributes required for problem solving and economic decision making across a diverse range of agricultural and natural resource issues. This degree provides students with a strong economic and quantitative background that allows them to explore a variety of professional career options or to advance to higher degree studies.

### BS Sociology

BS Sociology program aim is to foster positive social change through rigorous research, empathetic understanding, and effective advocacy. Through research, advocacy, and analysis of societal structures, to address inequalities, promote social justice, and enhance community well-being. Also, it strives to contribute to creating inclusive and equitable societies by applying sociological principles to tackle systemic issues and foster sustainable change.

### • B.Sc. (Hons.) Agriculture with major Agricultural and Resource Economics

B.Sc. (Hons.) Agriculture in Agricultural and Resource Economics degree seeks to promote tertiary education and human capacity building in agricultural and resource economics. Programme mission includes achieving food security and sustainable agricultural development by providing qualified professionals to contribute in various national as well as international organizations for the purpose.

### • B.Sc. (Hons.) Agriculture major in Farm Management

B.Sc. (Hons.) Agriculture major in Farm Management is aimed at improving the skills of future farm managers to prepare them for the challenges and opportunities of a dynamic and complex agri-system.

## Resource Economics 8



DR. NASIR NADEEM Professor and Chairman

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DR. IRFAN AHMAD BAIG

Coordinator & Dean

- irfan.baig@mnsuam.edu.pk @ Ph.D.
- Climate Change, Resource Use Efficiency, Water Resource Management



- MR. SHOAIB NASIR Lecturer (On Study Leave)
- Natural Resource Economics, Global GAP & International Standards Compliance



DR. UMAR IJAZ AHMED

- **Associate Professor**
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- Food Security, Agricultural Policy Analysis, Market integration



MR. ABD-UR- REHMAN

Lecturer

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International Agribusiness and Rural Development Economics



DR. SAMI ULLAH **Assistant Professor** 

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- Productivity and Efficiency Analysis, Dairy Markets, Agricultural Policy



### DR. HAFIZ ZAHID MEHMOOD

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- Climate Change, Sustainable Agriculture Production



MR. M. ARQAM IQBAL Lecturer

- Resource Use Efficiency and Productivity, Agricultural Policy Analysis







# DEPARTMENT OF AGRIBUSINESS AND ENTREPRENEURSHIP DEVELOPMENT





### DEPARTMENT OF AGRIBUSINESS AND ENTREPRENEURSHIP DEVELOPMENT

The Department of Agribusiness and Entrepreneurship Development focuses on the intersection of agriculture, business, and entrepreneurial skills. It aims to provide education, training and skills on decision making in the complex business environment for the youth in South Punjab and beyond. The department focuses on providing quality education at undergraduate and graduate level and strengthening the network with industry through its outreach activities. The department is equipped with well-established business incubation centre to inculcate a culture of entrepreneurship to produce innovative business enterprises.

## BBA Agribusiness

The vision of BBA Agribusiness degree program is the expansion of the self-importance and a sense of pride in Agri-business profession in our students, in the direction to construct an excellent Agri Entrepreneur and Fostering Agribusiness & Management and the Food Security. BBA Agribusiness primarily focuses on polishing the personality and intellectual capability of our students through personal meetings, guidance in combination with presentations and extensive discussions in the classrooms. Above all, the achievement of this degree is to provide an excellent blend of faculty from academia as well as executives from industry (businesses, banks, and other financial and marketing fields) because we believe in excellence in agriculture business education.



### **VISION**

Department's vision is to play a leading role in the field of Agribusiness and entrepreneurship development through imparting quality education and inculcating a culture of entrepreneurship to produce innovative business leaders.



### **MISSION**

The Department is aimed to provide education, training and skills on decision making in the complex business environment for the youth in south Punjab and beyond. The department focuses on providing quality education at undergraduate and graduate level, and strengthening the network with industry through its outreach efforts.

# **Jepartment of** Ш



DR. MUBASHIR MEHDI Professor, Director (BIAEC) and Chairman

mubashir.mehdi@mnsuam.edu.pk 🍙 Ph.D.

Value Chain Research and Development, Marketing, Agribusiness Management and Entrepreneurship





DR. MUHAMMAH HASEEB RAZA **Assistant Professor** 

Maseeb.raza@mnsuam.edu.pk Ph.D.

Natural resource management, Impact assessments,Farmers' decision making, Institutions and governance, Innovations for sustainable development



### DR. MUHAMMAD ALI IMRAN Lecturer

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Economics of Climate smart agriculture (CSA),
Resource management and sustainable agriculture
analysis, Productivity, and efficiency analysis



MR. MANAN ASLAM **Lecturer (On Study Leave)** 

Manan.aslam@mnsuam.edu.pk MS Agribusiness and Marketing

Agribusiness, Agricultural Marketing, Consumer Behaviour, Business Ethics and Entrepreneurship



MS. BENISH SARFRAZ Lecturer

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Consumer Behaviour, Marketing and Management, Business ethics



MR. MUHAMMAD BILAL AHSAN Lecturer

Supply chain/ Value chain research and development





Department of
Outreach and
Continuing Education
(DOCE)





### **Department of Outreach and Continuing Education (DOCE)**

The Department of Outreach and Continuing Education (DOCE) at MNS-UAM offers various short courses associated with skill development and community education. The department was established in 2015 with the aim of developing proactive agricultural outreach along with the community training through skill development courses. The postgraduate program in Agriculture Extension is going to be offered. The department has qualified faculty, which is actively involved in developing latest courses and promoting effective outreach activities. The Institute is running several research projects funded by National Vocational and Technical Training Commission, Punjab Skill Development Fund, and other funding bodies. Keeping in view the gap in digital agriculture, department is also planning to launch e-outreach program for establishing linkages among the farming community, industry and the researchers to address the problems of the stakeholders through the digital transformation in agriculture. The department will also be frequently organizing the faculty and student training programs.



### **VISION**

To engage and empower individuals and communities, to become innovative, sustainable, resilient, and healthy.



### **MISSION**

To create a positive impact on the agricultural community by engaging diverse stakeholders in the planning and delivery of meaningful content and evidence-based programs.



# **Department** and Outreach



DR. RANA BINYAMIN **Chairman/Associate Professor** 

- Plant Virology





DR. MUDASSAR YASIN **Assistant Professor** 

- mudassar.yasin@mnsuam.edu.pk 🌳 Ph.D.
- Agri. Extension



MR. AZHER KHAN

- Pakistani Literature in English, Postcolonial and Postmodern Literature, Translation Studies, Communication Skills, Academic Writing



DR. RASHEED AHMAD **Assistant Professor** 

- Islamic Social Thoughts & Tafseeri Literature in Colonial Era of Subcontinent



MS. AIMEN BATOOL

Lecturer

- aimen.batool@mnsuam.edu.pk 📦 M.Phil.
- Postmodernism, Feminism, women's writings, post colonialism



DR. FAWAD ZAFAR AHMAD KHAN

- **Assistant Professor**
- s fawad.zafar@mnsuam.edu.pk Ph.D.
- Piological control, Pollination Ecology



MS. BUKHTAWAR RANA Research Officer (On study leave)

- bukhtawar.rana@mnsuam.edu.pk 📦 M.Phil.
- Poetry and character analysis









یو بیورٹی آگ ایگر بیگیر ملتان ذراعت ، جاتات ، خوراک ، جوانات ، تیکنالو تی اور ساتی علوم کی جر رہی و تحقیق کا ادارہ اور تربیت گاہ ہے۔ یہ بیورٹی انتقام نے اس بات کا اوراک کیا کہ طلبہ وطالبات کے لیے جس قدر زر تی علوم کا جانا تھ ہے اتناہی وہی و ساتی علوم سے واقلیت حاصل کرنا بھی ضروری ہے۔ زراعت ، خیارت ، صحت ، تیکنالو تی کے علوم کا ارتقاء ایک ساج ہی جس جوتا ہے۔ ساج می موجود افر او کا آیک و مرے ہے گر اربیا و تعلق ہوتا ہے۔ تمام لوگ آیک و مرے ہے کی نہ کی (محاشر تی و کسی ، نسی و قری کی انسان کے شبت یا مقبی و قری اور بیات وہ بیت اضافی اس کے ساتی کر وارے نما بیاں ہوتے جی ۔ اولی "کروار کی اقیر کے لیے کی اظہار و حالیات جی وین اسلام کی جو ۔ تاکہ ہوتا ہے۔ تاکہ ہوتا ہے کہ انسان کے شبت یا جی اساق می موجود وافر اوک باہمی تعلقات کی اساس کیا ہے ؟انسانوں کے مسلمہ اضافی کون سے جی ؟ طلباء وطالبات جی وین اسلام کی اس کی اضافی کی وان چڑھا کی اور اجتماع کو نقصان و ہے والے برے اضافی ہے محفوظ رہیں۔ ان اہم حاشر تی امور کو عمل میں لائے کے لیے بی ویور دی میں جمعید علوم اسلام یک کا قیام محل میں لایا گیا۔ جس کا مقصد یو خور ش کے طلباء وطالبات جی دی علوم کے اساک محفوظ آن محکوم کے افکار عالیہ ، خان انسان محفوظ کے اساس کی تقوی میں دیا تھ میں افران کی تحفوظ کی اضاف کی بیوار کی اساس کی تقوی میں معبد میں معبد علوم اسلام کی تقیم میں اور تاریخ کی اضاف کے ساتھ میں تھ دی آن افلان کی اساس کی تافیون ، ساتھ دی خواف کی اساس کی تافیون ، ساتھ دی خواف کی سات ، معیشت کا تعاد ف چید اکر کا خواف کے بیوار کی تھی اور کی تھیں ، اصاف تھیدہ کی افرائش کی تقیم ، او صاف تھیدہ کی افرائش کی نام دی کی افرائش کی تقیم ، او صاف تھیدہ کی افرائش کی نام دی کی افرائش کی تقیم ، او صاف تھیدہ کی افرائش کرنا ہے۔

### مقاصد

ظلیا۔ وطالبات میں انڈ سے تعلق ، انسان و دستی اور ساتی عدمت جیے اعلی استورات کو پروان چڑھانا۔ تاکہ وہ خلوص نیت ، پلنداخلاق اور شعور می کروار کے حامل ہوں۔ وہ انسان دوست جذب کے ساتھ زرعی علوم کو ترقی ویں اور قومی و بین الاقوامی سطیر ملک وطت کا نام روشن کریں۔

### غرض وغايت:

ظیار وظالبات کو و بی تقلیمات ہے روشناس کروائے کے ساتھ ساتھ ا۔ عصر حاضر کے نظریاتی الخلاقی ساتی ، سیاسی اور معنا ٹی ربحانات ہے انگاہ کر نا۔ ۳۔ جذباتیت ہے بلند ہو کر عصر حاضر کے چیلنجر کوشھوری بنیاد واں پر سجھنے کااٹی بنانا۔ ۳۔ دین اسلام کی آفاقی تعلیمات کو ساتھ کا تھک اور مکوثر انداز ہے چیش کرنے کی صلاحیت پیدا کرنا۔ ۳۔ جدید میکنالو بی کے استعمال کے ساتھ ساتھ اس کے شبت ساتی کروار واثرات ہے انگاہ کرنا۔

### ابداف:

طلبا، وطالبات کے سحت مندروایوں کی تقییر کرنااور تربیت دیناتا کہ وہ ا۔ دینی شعائر کا احترام کریں اور دینی احکامات کو قبل میں لائیں۔ حر معاشر و میں بر دیاری ، بھائی جارہ ، ذہبنی و سعت اور اعتدال جیسی سحت بخش اقدار کا مقام و کریں اور ان کاپر جار کریں۔ سر فرقہ واریت ، سروبیت ، صعبیت اور طبقاتیت کے مقابلہ پر وحدت انسانیت ، بھائی جارہ ، اس لیندی اور مساوات کا عملی نمونہ بیس ۔ سم۔ شعبہ زراعت میں ایجاوات کے ذریعہ انسانوں کو سمولیات بھم باتھائے میں کرواراواکریں۔





# Agricultural Extension



Agricultural Extension education plays multipurpose role in the provision of needbased and demand-based knowledge by serving as a bridge between research and farming community.



# **Department of**

# **Statistics**

The agricultural investigations are based on the application of statistical methods and procedures which are helpful in testing hypotheses using observed data in estimations of parameters and predictions. Department of Statistics at MNS University of Agriculture Multan puts all efforts to equip the students with effective training in the field of statistics by teaching them basic and modern knowledge of the subject. The ambition is to produce graduates with skills to predict, forecast and estimate the real time data.



### MS. SAMRA NASEEM

Position: Lecturer Qualification: M.Phil Statistics Expertise: Applied statistics, Data analyses Email: samra.naseem@mnsuam.edu.pk



# B.SC. (HONS.) AGRICULTURAL AND RESOURCE ECONOMICS (Semester I-VIII)

**SEMESTER-I** 

Course Code	Course Title	Credit Hours
ARE-301	Principles of Microeconomics	3(3-0)
LM-301	Livestock Management	2(1-1)
AEE-301	Introduction to Agri. Extension	3(2-1)
GE-303	Functional English	3(3-0)
ENV-301	Introduction to Environmental Science	3(2-1)
GE-305	Quantitative Reasoning (I)	3(3-0)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
OS-301 (Part I)	Quranic Studies	1(1-0)
7. (*)	Total Credit Hours	19(16-3)

### SEMESTER-II

Course Code	Course Title	Credit Hours
ARE-302	Principles of Macroeconomics	3(3-0)
AGRON-302	Principles of Agronomy	3(2-1)
H0RT-302	Introductory Horticulture	3(2-1)
GE-307	Islamic Studies OR Ethics (for Foreigners / Non-Muslims)	2(2-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
GE-405	Quantitative Reasoning (II)	3(3-0)
GE-403	Expository Writing	3(3-0)
	Total Credit Hours	20(17-3)

### SEMESTER-III

Course Code	Course Title	Credit Hours
GE-301	Social and Religious Tolerance	2(2-0)
ARE-401	Intermediate Microeconomics	3(3-0)
SES-401	Introduction to Soil Science	3(2-1)
FRW-401	Agro-Forestry, Range and Wildlife Management	3(2-1)
GE-402	Entrepreneurship	2(1-1)
ARE-403	Intermediate Mathematics	3(3-0)
ARE-405	Principles of Agricultural Marketing	3(3-0)
RS-409	Rural Sociology and Development	2(2-0)
QS-301 (Part II)	Quranic Studies	1 (1-0)
And the second s	Total Credit Hours	21(18-3)

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
ARE-402	Intermediate Macroeconomics	3(3-0)
ENT-402	General Plant Protection	3(2-1)
GE-404	Civics and Community Engagement	2(1-1)
ARE-404	Agriculture Production Economics	3(3-0)
ARE-406	Economy of Pakistan	3(3-0)
ARE-408	Human Resource Management and Organizational Behavior	3(3-0)
HND-408	Nutrition Policies and Programs	3(3-0)
	Total Credit Hours	20(18-2)



# B.SC. (HONS.) AGRICULTURAL AND RESOURCE ECONOMICS (Semester I-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours
STAT-501	Statistical Methods for Economists	3(2-1)
ARE-501	Microeconomic Analysis	3(3-0)
ARE-503	Farm Planning and Budgeting	3(2-1)
ARE-505	Introduction to International Trade	3(3-0)
ARE-507	Mathematical Economics	3(3-0)
ARE-509	Introduction to Environmental Economics	2(2-0)
ARE-511	Principles of Agribusiness Management	3(3-0)
QS-301 (Part III)	Quranic Studies	1(1-0)
7/1 VV	Total Credit Hours	20(18-2)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours
ARE-502	Macroeconomic Analysis	3(3-0)
ARE-504	Development Economics	3(3-0)
ARE-506	Econometrics-I	3(2-1)
ARE-508	Natural Resource Economics	3(3-0)
ARE-510	Livestock Economics	3(3-0)
ARE-512	Agricultural Finance	3(3-0)
	Total Credit Hours	18(17-1)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
ARE-601	Econometrics-II	3(2-1)
ARE-603	Issues and Policies of Agriculture, Resources and Environment	3(3-0)
ARE-607	Software Applications in Economic Analysis	2(0-2)
ARE-605	Project Management and Evaluation	3(3-0)
ARE-609	Islamic Economics	3(3-0)
ARE-611	Research Methods in Social Sciences	3(2-1)
QS-301 (Part IV)	Quranic Studies	1(1-0)
reconstruction and	Total Credit Hours	17(13-4)

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours
ARE-612	Field Experience/ Internship	3(0-3)
ARE-614	Capstone Project	3(0-3)
D-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	Total Credit Hours	6(0-6)
	Grand Total Credit Hours	141(117-24)



B.SC. (HONS.)
AGRICULTURE MAJOR IN
AGRICULTURAL AND
RESOURCE ECONOMICS
(Semester V-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Category
AE-501	Microeconomics – I	3(3-0)	Major
AE-503	Macroeconomics – I	3(3-0)	Major
AE-505	Mathematics for Economists	3(3-0)	Major
AE-507	Agricultural Finance	3(3-0)	Major
AE-509	Food and Agricultural Marketing	3(3-0)	Major
STAT-501	Statistical Methods for Economist	3(3-0)	Interdisciplinary
	Elective from Group 1	2(2-0)	Major
	Total Credit Hours	2	0

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Category
AE-502	Microeconomics -II	3(3-0)	Major
AE-504	Macroeconomics - II	3(3-0)	Major
AE-506	Econometrics – I	3 (2-1)	Major
AE-508	Agricultural issues and Policies of Pakistan-I	3(3-0)	Major
AE-510	Agribusiness Supply Chain Management	3(3-0)	Major
AE-512	Development Economics	3(3-0)	Major
	Elective from Group 2	2(2-0)	Major
	Total Credit Hours	2	0

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Category
AE-601	Econometrics – II	3(2-1)	Major
AE-603	Natural Resource Economics	3(3-0)	Major
AE-605	International Economics	3(3-0)	Major
AE-607	Agricultural Production Economics	3(3-0)	Major
AE-609	Islamic Economics	3(3-0)	Major
AE-611	Preparation of Research Project and Scientific Writing	2(1-1)	Major
	Elective from Group 3	2(2-0)	Major
	Total Credit Hours		9

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours	Category
AE-612	Internship	3(0-3)	Internship
AE-614	Capstone Project	3(0-3)	Capstone Project
	Total Credit Hours	6	(0-6)



B.SC. (HONS.)
AGRICULTURE MAJOR IN
AGRICULTURAL AND
RESOURCE ECONOMICS
(Semester V-VIII)

### **Elective Courses**

Course Title	Credit Hours
Group 1	
Agriculture and Rural Development	2(2-0)
Introduction to Rural Sociology	2(2-0)
Economics of Livestock Production	2(2-0)
Group 2	
Project Management and Evaluation	2(2-0)
Introduction to Labor Economics	2(2-0)
Pricing of Agricultural Products	2(2-0)
Group 3	
Economics of Climate Change	2(2-0)
Introduction to Environmental Economics	2(2-0)
Ecological Economics	2(2-0)



# B.SC. (HONS.) AGRICULTURE MAJOR IN FARM MANAGEMENT (Semester V-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Category
FM-501	Precision Agriculture	3(2-1)	Major
FM-503	Introduction and Role of ICT in Agriculture	3(2-1)	Major
FM-505	Agribusiness Marketing Strategies	3(3-0)	Major
FM-507	Introduction to Agricultural Laws	3(3-0)	Major
FM-509	Agricultural Production Economics	3(3-0)	Major
FM-511	Farm Planning and Budgeting using ICT	3(2-1)	Major
FM-513	Horticulture	3(1-2)	Major
	Total Credit Hours	21(1	6-5)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Category
FM-502	Risks Assessment and Mitigation	3(2-1)	Major
FM-504	Human Resource Management and Business Ethics	3(3-0)	Major
FM-506	Sustainable Agriculture and Organic Farming	3(2-1)	Major
FM-508	Good Agricultural Practices (GAP) and other International Standards	3(3-0)	Major
FM-510	Preparation of Research Project and Scientific Writing	2(1-1)	Major
FM-512	Integrated Pest Management	3(2-1)	Major
FM-514	Post-Harvest Management and Value Addition	3(2-1)	Major
	Total Credit Hours	20(15-5)	

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Category
FM-612	Internship	10(0-10)	Internship

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours	Category
FM-614	14 Capstone Project	10(0-10)	Capstone
	N N		Project



# BS SOCIOLOGY (Semester I-VIII)

### **SEMESTER-I**

Course Code	Course Title	Credit Hours
MATH-301	Elementary Mathematics	3(3-0)
GE-303	Functional English	3(3-0)
ARE-301	Principles of Microeconomics	3(3-0)
SOC-301	Introduction to Social Work	3(2-1)
S0C-303	Principles to Sociology	3(3-0)
GE-305	Quantitative Reasoning (I)	3(3-0)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
	Total Credit Hours	20(19-1)

### SEMESTER-II

Course Code	Course Title	Credit Hours
SOC-302	Introduction to Political Science	3(3-0)
SOC-304	Sociology of Religion	3(3-0)
SOC-306	Pakistani Society and Culture	3(3-0)
GE-307	Islamic Studies OR Ethics (for Foreigners / Non-Muslims)	2(2-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
GE-403	Expository Writing	3(3-0)
GE-405	Quantitative Reasoning (II)	3(3-0)
QS-302	Quranic Studies	1(1-0)
	Total Credit Hours	20(19-1)

### **SEMESTER-III**

Course Code	Course Title	Credit Hours
GE-301	Social and Religious Tolerance	2(2-0)
ENV-301	Introduction to Environmental Science	3(2-1)
SOC-401	Sociology of Human Rights	3(3-0)
SOC-403	Development of Social Thoughts	3(3-0)
SOC-405	Rural Development	3(3-0)
SOC-407	Comparative Social Institutions	3(3-0)
	Total Credit Hours	17(16-1)

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours	Ξ
GE-402	Entrepreneurship	2(1-1)	_
SOC-402	Sociological Theories	3(3-0)	
GE-404	Civics and Community Engagement	2(1-1)	
PSY-404	Introduction to Psychology	2(2-0)	ī
SOC-404	Introduction to Social Research	3(2-1)	П
SOC-406	Social Anthropology	3(3-0)	7
SOC-408	Gender Studies	3(3-0)	
	Total Credit Hours	18(15-3)	

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# BS SOCIOLOGY (Semester I-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours
SOC-501	Governance and Social Policy	3(3-0)
S0C-503	Sociology of Development	3(3-0)
S0C-505	Community Development	3(3-0)
SOC-507	Sociology of Globalization	3(3-0)
S0C-509	Sociology of Social Change and Development	3(3-0)
ARE-617	Project Management and Evaluation	3(3-0)
	Total Credit Hours	18(18-0)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours
SOC-502	Qualitative and Quantitative Research Methodology	3(2-1)
SOC-504	Sociology of Health	3(3-0)
SOC-506	Population Studies	3(3-0)
SOC-508	Rural Sociology	3(3-0)
	Major/ Elective-I (Group A)	3(3-0)
	Major/ Elective-II (Group A)	3(3-0)
	Total Credit Hours	18(17-1)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
SOC-601	Political Sociology	3(3-0)
SOC-603	Sociology of Education	3(3-0)
SOC-605	Urban Sociology	3(3-0)
BBAA-609	Organizational Behavior	3(3-0)
	Major/ Elective-III (Group 8)	3(3-0)
	Major/ Elective-IV (Group B)	3(3-0)
	Total Credit Hours	18(18-0)

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours
SOC-612	Internship	3(0-3)
SOC-614	Capstone Project	3(0-3)
	Total Credit Hours	6(0-6)



# BS **SOCIOLOGY** (Semester I-VIII)

### **Major Elective Courses**

Sr. No.	Course Code	Course Title	Credit Hours	Group*
1	SOC-510	Islamic Sociology	3(3-0)	A
2	SOC-512	NGO Management	3(2-1)	
3	SOC-514	Criminology	3(3-0)	
4	SOC-607	Corporate Social Responsibility	3(3-0)	В
5	SOC-609	Conflict Resolution	3(3-0)	1000
6	SOC-611	Social Impact Assessment	3(3-0)	
		Total	12(11-1)	



# BBA AGRIBUSINESS (Semester I-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours
BBAA-301	Introduction to Agribusiness	3(3-0)
ENV-301	Introduction to Environmental Science	3(2-1)
GE-303	Functional English	3(3-0)
GE-305	Quantitative Reasoning (I)	3(3-0)
H0RT-305	Orchard Planning and Management	3(2-1)
AEE-309	Agricultural Knowledge and Information System	3(2-1)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
Q5-301 (Part-I)	Quranic Studies	1(1-0)
	Total Credit Hours	20(17-3)

### SEMESTER-II

Course Code	Course Title	Credit Hours
GE-301	Social and Religious Tolerance	2(2-0)
BBAA-302	Principles of Management	3(3-0)
BBAA-304	Principles of Microeconomics	3(3-0)
GE-307	Islamic Studies OR Ethics (for Foreigners / Non- Muslims)	2(2-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
GE-403	Expository Writing	3(3-0)
GE-405	Quantitative Reasoning (II)	3(3-0)
	Total Credit Hours	19 (18-1)

### SEMESTER-III

Course Code	Course Title	Credit Hours
SES-303	Soil Science and Crop Production	3(2-1)
BBAA-401	Principles of Marketing	3(3-0)
ENT-402	General Plant Protection	3(2-1)
GE-402	Entrepreneurship	2(1-1)
BBAA-403	Principles of Macroeconomics	3(3-0)
BBAA-405	Natural Resource Management	3(3-0)
RS-409	Rural Sociology and Development	2(2-0)
QS-301 (Part-II)	Quranic Studies	1(1-0)
	Total Credit Hours	19(16-3)

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
SPS-401	Social Psychology and Self Development	2(2-0)
BBAA-402	Food and Agricultural Marketing	3(3-0)
BBAA-404	Consumer Behavior	3(3-0)
GE-404	Civics and Community Engagement	2(1-1)
FMP-405	Farm Mechanization	3(2-1)
BBAA-406	Livestock Business Management	3(2-1)
FST-501	Food Service Industry	3(3-0)
W24116001	Total Credit Hours	19(16-3)

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# BBA AGRIBUSINESS (Semester I-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours
BBAA-501	Agribusiness Supply Chain Management	3(3-0)
BBAA-503	Poultry Business Management	3(3-0)
BBAA-505	Agriculture Finance Management	3(3-0)
BBAA-507	Business Mathematics & Statistics	3(3-0)
BBAA-509	Business Ethics	3(3-0)
BBAA-511	Irrigation and Water Management	3(3-0)
QS-301 (Part-III)	Quranic Studies	1(1-0)
District Miles de	Total Credit Hours	18(18-0)

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours
BBAA-502	Business Research Methods	3(3-0)
BBAA-504	Agribusiness Strategic Management	3(3-0)
BBAA-506	Retail Management	3(3-0)
BBAA-508	Basic Econometrics	3(2-1)
BBAA-510	Advertisement & Sales Management	3(3-0)
BBAA-512	Financial Accounting	3(3-0)
QS-302 (Part-IV)	Quranic Studies	1(1-0)
	Total Credit Hours	18(17-1)

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
BBAA-601	Introduction to International Trade	3(3-0)
BBAA-603	Human Resource Management in Agriculture	3(3-0)
BBAA-605	Artificial Intelligence	3(2-1)
BBAA-607	Cluster and Corporate Farm Business	3(3-0)
BBAA-609	Organization Behavior	3(3-0)
BBAA-611	Agricultural Price Analysis	3(3-0)
QS-301 (Part-IV)	Quranic Studies	1(1-0)
	Total Credit Hours	18(17-1)

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours	
BBAA -612	Field Experience/ Internship	3(0-3)	
BBAA -614	Capstone Project	3(0-3)	
	Total Credit Hours	6(0-6)	
	Grand Total Credit Hours	137(119-18)	



# Institute of Computing



### **Director Message:**

Welcome to the Institute of Computing (IOC). At IOC, our dedicated faculty members are committed to exploring innovative approaches in collaboration with industry, as well as national and international organizations. Our research is focused on solving community problems using cutting-edge computing technologies, with a strong emphasis on addressing local issues.

Established in 2023, the Institute of Computing stands as an independent and prestigious entity. Our energetic team comprises 17 faculty members with diverse expertise in Artificial Intelligence, Computer Vision, IoT, Computer Networks, Software Engineering, Natural Language Processing, Cyber Security, and Databases. We actively encourage our students to participate in international hackathons and competitions, fostering a spirit of innovation and excellence. Since 2019, we have consecutively won regional positions at the Microsoft Imagine Cup and secured the National position in 2023. Our team achieved first place at the National Level in the Berlin Falling Walls Idea Pitch competition. We look forward to your contributions and achievements as part of the IOC family.



### **VISION**

To develop a Centre of excellence for Education, Research and Innovation in Computer Technology by developing Effective Systems and provision of Services for Agriculture development.



### **MISSION**

To empower society with computer technology and skills to take knowledge-based decisions for ensuring sustainable growth and community development. This can be witnessed by career satisfaction, role in management and leadership level of graduates in respective professions.



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Wireless Communications, Computer and Communication



MR. SHARAIZ SHAHID **Research Officer** 

Artificial Intelligence, Machine Learning, Text Mining



### MS. RAMSHA AHMAD **Research Officer**

Artificial Intelligence, Machine Learning, Text Mining, Bioinformatics













## BS COMPUTER SCIENCE (SEMESTER I-VIII)

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Course Type
GE-309	Application of Information & Communication Technologies	3 (2-1)	GER
CS-303	Programming Fundamentals	4 (3-1)	Core
PHY-305	Applied Physics	3 (2-1)	GER
GE-407	Ideology & Constitution of Pakistan	2 (2-0)	GER
GE-303	Functional English	3 (3-0)	GER
	Total Cr. Hrs.: 15		
MATH-311	General Mathematics	3(3-0)	Deficiency
GE-301	Social & Religious Tolerance	2(2-0)	Audit

### **SEMESTER-II**

Course Code	Course Title	Credit Hours	Course Type
GE-305	Quantitative Reasoning - I	3 (3-0)	GER
CS-304	Object Oriented Programming	4 (3-1)	Core
GE-403	Expository Writing	3 (3-0)	GER
GE-307	Islamic Studies \ Ethics (Non-Muslims)	2 (2-0)	GER
CS-312	Digital Logic Design	3 (2-1)	Core
	Total Cr. Hrs:15	11 AMONDA 11 1	E VANCE
MATH-314	Elementary Mathematics	3(3-0)	Deficiency
QS-302	Quranic Studies	1(1-0)	Audit

### SEMESTER-III

Course Code	Course Title	Credit Hours	Course Type
CS-401	Data Structures	4 (3-1)	Core
CS-403	Comp. Organization & Assembly Language	3 (2-1)	Core
MATH-405	Linear Algebra	3 (3-0)	Allied
CS-407	Computer Networks	3 (2-1)	Core
GE-405	Quantitative Reasoning II	3 (3-0)	GER
CS-409	Software Engineering	3 (3-0)	Core
	Total Cr. Hr	rs:19	

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours	Course Type
MATH-402	Multivariable Calculus	3 (3-0)	Allied
CS-404	Operating Systems	3 (2-1)	Core
CS-406	Database Systems	4 (3-1)	Core
CS-408	Analysis of Algorithms	3 (3-0)	Core
CS-410	Computer Architecture	3 (3-0)	CS Core
STAT-412	Probability & Statistics	3 (3-0)	Allied
V.,	Total Cr. Hrs:1	9	
QS-302	Quranic Studies	1(1-0)	Audit



## BS COMPUTER SCIENCE (SEMESTER I-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Type
CS-501	Artificial Intelligence	3 (2-1)	Core
CS-503	Theory of Automata	3 (3-0)	CS Core
IT-506	Web Technologies	3 (2-1)	CS Elective
CS-507	Information Security	3 (2-1)	Core
CS-504	Digital Image Processing	3 (2-1)	DS Core
BBAA-505	Financial Accounting	3 (3-0)	Allied
	Total Cr. Hrs:1	8	

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Type
CS-502	Advance Database Management Systems	3 (2-1)	CS Core
CS-610	Game Development	3 (2-1)	CS Core
CS-506	Compiler Construction	3 (2-1)	CS Core
DS-508	Machine Learning	3 (2-1)	DS Elective
CS-505	Advanced Programming	3 (2-1)	CS Elective
GE-512	Introduction to Management	2 (2-0)	GER
	Total Cr. Hrs:17		
QS-302	Quranic Studies	1(1-0)	Audit

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Type
CS-601	Parallel & Distributed Computing	3 (2-1)	CS Core
CS-603	Mobile Application Development	3 (2-1)	CS Elective
CS-605	HCI & Computer Graphics	3 (2-1)	CS Core
CS-609	Software Testing & Quality Assurance	3(2-1)	CS Elective
DS-607	Big Data Analytics	3(2-1)	DS Core
GE- 402	Entrepreneurship	2(2-0)	GER
GE-611	Professional Practices	2 (2-0)	GER
Distantino.	Total Cr. Hrs:19		189

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours	Course Type
CS-612	Internship	3 (0-3)	Core
CS-614	Capstone Project	3(0-3)	17.50
	Total Cr. Hrs: 6(0-6)		
QS-302	Quranic Studies	1(1-0)	Audit

Total Cr. Hours:	130
Deficiency Courses Cr.	06
Hours	

### Note:

- F.Sc. (Pre-medical) will study MATH-311 in 1st samester & MATH-314 in 2nd semester as deficiency course.
- 2. 1 CrHr of practical refers to 3 Contact Hours in lab.



# BS INFORMATION TECHNOLOGY (SEMESTER I-VIII)

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Course Type
GE-309	Application of Information & Communication Technologies	3 (2-1)	GER
CS-303	Programming Fundamentals	4 (3-1)	Core
PHY-305	Applied Physics	3 (2-1)	GER
GE-407	Ideology & Constitution of Pakistan	2 (2-0)	GER
GE-303	Functional English	3 (3-0)	GER
	Total Cr. Hrs:15		
MATH-311	General Mathematics	3(3-0)	Deficiency
GE-301	Social & Religious Tolerance	2(2-0)	Audit

### SEMESTER-II

Course Code	Course Title	Credit Hours	Course Type
GE-305	Quantitative Reasoning - I	3 (3-0)	GER
CS-304	Object Oriented Programming	4 (3-1)	Core
GE-403	Expository Writing	3 (3-0)	GER
GE-307	Islamic Studies \ Ethics (Non-Muslims)	2 (2-0)	GER
CS-312	Digital Logic Design	3 (2-1)	Core
	Total Cr. Hrs:18		
MATH-314	Elementary Mathematics	3(3-0)	Deficiency
QS-302	Quranic Studies	1(1-0)	Audit

### **SEMESTER-III**

Course Code	Course Title	Credit Hours	Course Type
CS-401	Data Structures	4 (3-1)	Core
CS-403	Comp. Organization & Assembly Language	3 (2-1)	Core
MATH-405	Linear Algebra	3 (3-0)	Allied
CS-407	Computer Networks	3 (2-1)	Core
GE-405	Quantitative Reasoning II	3 (3-0)	GER
CS-409	Software Engineering	3 (3-0)	Core
	Total Cr. Hrs: 19		

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours	Course Type
MATH-402	Multivariable Calculus	3 (3-0)	Allied
CS-404	Operating Systems	3 (2-1)	Core
CS-406	Database Systems	4 (3-1)	Core
CS-408	Analysis of Algorithms	3 (3-0)	Core
CS-410	Computer Architecture	3 (3-0)	CS Core
STAT-412	Probability & Statistics	3 (3-0)	Allied
NATION AND PROPERTY.	Total Cr. Hrs:	19	
QS-302	Quranic Studies	1(1-0)	Audit

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## BS INFORMATION TECHNOLOGY (SEMESTER I-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Type
CS-501	Artificial Intelligence	3(2-1)	Core
CS-503	Theory of Automata	3(3-0)	IT Elective
IT-505	Database Administration & Management	3(2-1)	IT Core
CS-507	Information Security	3(2-1)	Core
IT-509	Virtual Systems & Services	3(2-1)	IT Elective
BBAA-505	Financial Accounting	3(3-0)	Allied
	Total Cr. Hrs:18		

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Type
IT-502	Network Security	3 (2-1)	IT Elective
IT-504	Enterprise Systems	3 (2-1)	IT Elective
IT-506	Web Technologies	3 (2-1)	IT Core
DS-508	Machine Learning	3 (2-1)	IT Elective
IT-510	Information Technology Infrastructure	3 (2-1)	IT Core
GE-512	Introduction to Management	2 (2-0)	GER
GE-404	Civics and Community Engagement	2(2-0)	GER
and the value	Total Cr. Hrs: 19		
QS-302	Quranic Studies	1(1-0)	Audit

### **SEMESTER-VII**

Course Code	Course Title	Credit Hours	Course Type
CS-601	Parallel & Distributed Computing	3(2-1)	IT Core
CS-603	Mobile Application Development	3(2-1)	IT Elective
IT-605	Systems & Network Administration	3(2-1)	IT Core
IT-607	Cyber Security	3(2-1)	IT Core
IT-609	Cloud Computing	3(2-1)	IT Elective
GE-402	Entrepreneurship	2(2-0)	GER
GE-611	Professional Practices	2(2-0)	GER
GL-011	Total Cr. Hrs: 19	2(2-0)	GL

### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours	Course Type
CS-612	Internship	3(0-3)	Core
CS-614	Capstone Project	3(0-3)	177.50
	Total Cr. Hrs: 6(0-6)	8	
QS-302	Quranic Studies	1(1-0)	Audit

Total Cr. Hours: 130 Bellsiency Courses Cr. Hours

### Note:

- F.Sc. (Pre-medical) will study MATH-311 in 1st samester & MATH-314 in 2nd semester as deficiency course.
- 2. 1 CrHr of practical refers to 3 Contact Hours in lab.



# BS DATA SCIECNE (SEMESTER I-VIII)

### **SEMESTER-I**

Course Code	Course Title	Credit Hours	Course Type
GE-309	Application of Information & Communication Technologies (ICT)	3(2-1)	General
CS-303	Programming Fundamentals	4(3-1)	Core
PHY-305	Applied Physics	3(2-1)	General
GE-407	Ideology & Constitution of Pakistan	2(2-0)	General
GE-303	Functional English	3(3-0)	General
	Total Credit Hours:	1	5
MATH-311	General Mathematics	3(3-0)	Deficiency
GE-301	Social & Religious Tolerance	2(2-0)	Audit

### **SEMESTER-II**

Course Code	Course Title	Credit Hours	Course Type
GE-305	Quantitative Reasoning - I	3(3-0)	GER
CS-304	Object Oriented Programming	4(3-1)	Core
GE-403	Expository Writing	3(3-0)	GER
GE-307	Islamic Studies / Ethics (Non-Muslims)	2(2-0)	GER
CS-310	Digital Logic Design	3(2-1)	Core
	Total Credit Hours	1	5
MATH-314	Elementary Mathematics	3(3-0)	Deficiency
QS-302	Quranic Studies	1(1-0)	Audit

### **SEMESTER-III**

Course Code	Course Title	Credit Hours	Course Type
CS-401	Data Structures	4(3-1)	Core
CS-403	Computer Organization & Assembly Language	3(2-1)	Core
MATH-405	Linear Algebra	3(3-0)	Allied
GE-405	Quantitative Reasoning-II	3(3-0)	GER
CS-407	Computer Networks	3(2-1)	Core
CS-409	Software Engineering	3(3-0)	Core
	Total Credit Hours		9

### **SEMESTER-IV**

Course Code	Course Title	Credit Hours	Course Type
MATH-402	Multivariable Calculus	3(3-0)	Allied
CS-404	Operating Systems	3(2-1)	Core
CS-406	Database Systems	4(3-1)	Core
CS-408	Analysis of Algorithms	3(3-0)	Core
DS-410	Introduction to Data Science	3(2-1)	DS Core
STAT-412	Probability & Statistics	3(3-0)	Allied
	Total Credit Hours	- 1	9
QS-302	Quranic Studies	1(1-0)	Audit

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## BS DATA SCIECNE (SEMESTER I-VIII)

### **SEMESTER-V**

Course Code	Course Title	Credit Hours	Course Type
CS-501	Artificial Intelligence	3(2-1)	Core
CS-503	Theory of Automata	3(3-0)	DS Elective
DS-505	Data Mining	3(2-1)	DS Core
CS-507	Information Security	3(2-1)	Core
DS-509	Advanced Statistics	3(2-1)	DS Core
BBAA-505	Financial Accounting	3(3-0)	Allied
	Total Credit Hours	- 1	8

### **SEMESTER-VI**

Course Code	Course Title	Credit Hours	Course Type
DS-502	Text Mining	3(2-1)	DS Elective
DS-504	Data Warehousing & Business Intelligence	3(2-1)	DS Core
DS-506	Data Visualisation	3(2-1)	DS Core
DS-508	Machine Learning	3(2-1)	DS Elective
DS-510	IoT in Digital Agriculture	3(2-1)	DS Elective
GE-512	Introduction to Management	2(2-0)	GER
	Total Credit Hours		9
QS-302	Quranic Studies	1(1-0)	Audit

### SEMESTER-VII

Course Code	Course Title	Credit Hours	Course Type
CS-601	Parallel & Distributed Computing	3(2-1)	DS Core
IT-603	Mobile Application Development	3(2-1)	DS Elective
DS-605	Artificial Neural Networks & Deep Learning	3(2-1)	DS Elective
DS-607	Big Data Analytics	3(2-1)	DS Elective
IT-609	Cloud Computing	3(2-1)	DS Elective
GE-402	Entrepreneurship	2(1-1)	GER
GE-611	Professional Practices	2(2-0)	GER
M8530000	Total Credit Hours	2023	9

### **SEMESTER-VIII**

Course Title	Credit Hours	Course Type
Field Experience/ Internship	3(0-3)	Core
Capstone Project	3(0-3)	Core
Total Credit Hours		6
Quranic Studies	1(1-0)	Audit
Total Cradit Hours of the Drogram	1	20
	Field Experience/ Internship Capstone Project Total Credit Hours	Field Experience/ Internship 3(0-3) Capstone Project 3(0-3)  Total Credit Hours  Quranic Studies 1(1-0)

### Note

- F.Sc (Pre-medical) will study MATH-311 in 1st semester & MATH-314 in 2nd semester as deficience course.
- 2. 1 CrHr of practical refers to 3 Contact Hours in lab.





### Coordinator's Message:

The Faculty of Agricultural Biosystems Engineering and Technology at MNSUAM is dedicated to delivering a globally competitive education, supported by modern infrastructure, innovative teaching models, and impactful research. The internationally trained faculty aims to develop engineers and technologists with strong technical expertise, entrepreneurial skills, and ethical values to address the evolving needs of Pakistan's agriculture and agro-based industries. As a proud member of the MNSUAM family, we uphold excellence, innovation, collaboration, and student-centered learning, while fostering diversity, integrity, and mutual respect in a culture dedicated to academic and personal growth. The faculty offers a range of programs aligned with national accreditation bodies (HEC, PEC, NTC) and developed in collaboration with industry stakeholders. These include:

### **Undergraduate Programs:**

- BSc Agro-Industrial Engineering Technology (AIET), launched in Winter 2018 and recognized by NTC, with high industry placement during internships.
- BSc Agricultural Engineering, launched in Winter 2024, accredited by PEC, offering broad career prospects. Postgraduate Programs (launched in Winter 2022 with HEC approval):
- MSc (Hons) Agro-Industrial Engineering Technology
- MSc (Hons) Agricultural Engineering
- MSc (Hons) Energy Systems Engineering

The faculty promotes Outcome-Based Education (OBE) to meet international standards and emphasizes innovation, critical thinking, and real-world problem-solving. Alumni are successfully contributing to industry and academia, both nationally and internationally. The Dean invites students, researchers, industry leaders, and policymakers to join hands in driving sustainable transformation across Pakistan's agricultural and industrial sectors.



Engr. Dr. Alamgir A. Khan
Faculty Coordinator / Interim Dean
Faculty of Agricultural Biosystems Engineering and Technology
MNS University of Agriculture, Multan (MNSUAM)



### **VISION**

Be a leading source of knowledge and support for agricultural engineering and technology by developing innovative technologies through advanced research and producing qualified professionals with problem-solving approach.



### **MISSION**

Develop and promote the latest techniques in Agricultural Engineering and Technology domain with respect to water use efficiency, farm mechanization, irrigation, agriculture processing, agro based industries, and natural resource management.



# Department of Agricultural Engineering





### **Department Introduction:**

The Department of Agricultural Engineering at MNS-University of Agriculture, Multan (MNSUAM) integrates engineering principles with natural and artificial systems to support agriculture, agro-industries, and engineering business enterprises. Engineers/technologists would focus on solving complex, rapidly changing problems and develop technology related to agro-industrial machinery and processes, energy and water use efficiency, renewable energy development, and instrumentation and robotics.

Internship programs are a distinction of this Department. These would emphasize hands-on practice; therefore, internship programs make these degree programs unique in the country. The department also focuses on developing leadership and entrepreneurial skills, providing opportunities for community service and professional and personal growth through specialized partner institutions and professional organizations.

### **Programs Offered:**

- 1. B.Sc. Agro Industrial Engineering Technology
- 2. B.Sc. Agricultural Engineering



1. B.Sc. Agro Industrial Engineering Technology

### a.Program Mission:

To produce Agro based industrial technologists equipped with knowledge, skill, entrepreneurial and ethical attributes for enhancing viable industrial growth on sustainable goals.

### b. Program Introduction

The Bachelor of Science in Agro-Industrial Engineering Technology (AIET) is a forward-looking, interdisciplinary undergraduate program designed to produce industry-ready technologists equipped with applied knowledge, hands-on skills, entrepreneurial vision, and ethical responsibility. Rooted in Pakistan's agricultural strengths and evolving industrial demands, the program bridges the gap between agriculture and industrial processes to enhance sustainable economic development.

This four-year, eight-semester program offers a blend of theoretical knowledge and practical expertise through classroom instruction, laboratory work, field exposure, and a comprehensive industrial internship. It prepares students to become valuable contributors in agro-based industries including food processing, post-harvest systems, feed milling, cotton ginning, seed processing, sugar and oil industries, and emerging agro-industrial sectors.

### c.Program Educational Objectives (PEOs)

- 1. Demonstrate technical knowledge and skills in agro-based industries.
- 2. Identify and solve technical and societal problems.
- 3. Apply advanced skills for improving professional abilities to contribute in the technology domain.
- 4. Work effectively as a team member or lead multidisciplinary teams while demonstrating the interpersonal, management skills, social and ethical responsibilities.



d Program Learning Outcomes (PLOs)

Characteristic	Engineering Technologist Graduate			
Engineering Technology Knowledge:	SA1: Apply knowledge of mathematics, natural science, computing and			
Breadth, depth and type of knowledge, both	engineering fundamentals and an engineering specialization as specified in SK1			
theoretical and practical	to SK4 respectively to defined and applied engineering procedures, processes,			
	systems, or methodologies.			
Problem Analysis Complexity of analysis	SA2: Identify, formulate, research literature and analyse broadly defined			
1 10000111 711101yolo Complexity of analysis	engineering problems reaching substantiated conclusions using analytical tools			
	appropriate to the discipline or area of specialization. (SK1 to SK4)			
Design/development of solutions:	SA3: Design solutions for broadly- defined engineering technology problems and			
Breadth and uniqueness of engineering	contribute to the design of systems, components, or processes to meet identified			
problems i.e., the extent to which problems	needs with appropriate consideration for public health and safety, whole-life cost,			
are original and to which solutions have not	net zero carbon as well as resource, cultural, societal, and environmental			
previously been identified or codified	considerations as required (SK5)			
Investigation:	SA4: Conduct investigations of broadly- defined engineering problems; locate,			
Breadth and depth of investigation and	search, and select relevant data from codes, data bases and literature, design			
experimentation	and conduct experiments to provide valid conclusions (SK8)			
Tool Usage:	SA5: Select and apply, and recognize limitations of appropriate techniques,			
Level of understanding of the appropriateness	resources, and modern engineering and IT tools, including prediction and			
of technologies and tools	modelling, to broadly defined engineering problems (SK2 and SK6)			
The Engineer and the World:	SA6: When solving broadly defined engineering problems, analyse and evaluate			
Level of knowledge and responsibility for	sustainable development.			
sustainable development	impacts* to: society, the economy, sustainability, health and safety, legal			
FILL	frameworks, and the environment (SK1, SK5, and SK7)			
Ethics:	SA7: Understand and commit to professional ethics and norms of engineering			
Understanding and level of practice	technology practice including compliance with national and international laws.			
Individual and Collaborative Teamwork: Role	Demonstrate an understanding of the need for diversity and inclusion (SK9)			
in and diversity of	SA8: Function effectively as an individual, and as a member or leader in diverse and inclusive teams and in multi-disciplinary, face-to-face, remote, and			
team	distributed settings (SK9)			
Communication:	SA9: Communicate effectively and inclusively on broadly defined engineering			
Level of communication according to type of	activities with the engineering community and with society at large, such as being			
activities performed	able to comprehend and write effective reports and design documentation, make			
dodinaco periorifica	effective presentations, considering cultural, language, and learning differences.			
Project Management and Finance:	SA10: Apply knowledge and understanding of engineering			
Level of management required for	management principles and apply these to one's own work, as a			
differing types of activity	member or leader in a team and to manage projects in			
unioning types of activity	5 · ·			
	multidisciplinary environments.			
<b>Lifelong learning</b> : Duration and	SA11: Recognize the need for, and have the ability for i)			
manner	independent and life- long learning and ii) critical thinking in the			
	face of new specialist technologies (SK8)			



### **Eligibility Criteria:**

F.Sc. (Pre-Engineering, Pre-Medical, Pre-Agriculture)/ICS/A-Level/DAE (Three Years) i.e Civil, Mechanical, Auto and farm, Electrical, Electronics, Chemical, Instrumentation and any relevant with minimum 50 % marks.

### Merit Criteria:

- Intermediate 50%
- Matric 20%
- Entry Test 30%

MNSUAM will accept entry test taken by MNSUAM, UET, UAF and HEC.

\*The Pre-Medical students will study the deficiency course of Mathematics.

### 2. B.Sc. Agricultural Engineering

### **Program Mission:**

Develop and promote the latest techniques in Agriculture Engineering with respect to water use efficiency, farm mechanization, irrigation, agriculture processing and natural resource management.

### **Program Introduction:**

Agriculture is a cornerstone of Pakistan's economy, contributing around 21% to GDP and employing 45% of the workforce. However, the sector faces major challenges including water scarcity, low mechanization, high input waste, and significant post-harvest losses—up to 40% in fruits and vegetables. These challenges demand skilled professionals equipped with modern engineering solutions. To address these needs, the Government of Punjab established the Muhammad Nawaz Shareef University of Agriculture, Multan (MNSUAM) in 2012. Located in the agriculturally rich region of South Punjab, MNSUAM aims to promote innovation in farming and agro-industry through modern education and research. The BSc Agricultural Engineering program at MNSUAM is tailored to produce graduates with expertise in mechanized farming, precision agriculture, energy-efficient practices, irrigation technologies, and post-harvest management. The program combines sound engineering knowledge with critical thinking, research capability, and professional ethics to develop future-ready engineers capable of solving real-world agricultural problems locally and globally.



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

The Program will prepare and produce graduate Agricultural Engineers who will be able to:

- 1. Demonstrate sound Agricultural Engineering knowledge and skills in public and private sectors at national and international level.
- 2. Execute and manage teamwork, interpersonal skills, and professional growth in the field of Agricultural Engineering.
- 3. Conduct Agricultural Engineering professional practice considering societal, ethical, and environmental aspects.

### **Program Learning Outcomes (PLOs)**

Program outcomes are the narrower statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills and attitude that the students acquire while progressing through the program. Specifically, it is to be demonstrated that the students have acquired the following graduate attributes (GAs):

- **PLO1 Engineering Knowledge:** An ability to apply knowledge of Mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- **PLO2 Problem Analysis:** An ability to identify, formulate, search literature, and analyse complex engineering problems reaching substantiated conclusions using principles of Mathematics, natural and engineering sciences.
- **PLO3 Design/Development of Solutions:** An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- **PLO4 Investigation**: An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysisand interpretation of experimental data, and synthesis of information to derive firm conclusions.
- **PLO5 Modern Tool Usage:** An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.



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

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

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

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

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

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

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

### **Eligibility Criteria:**

Intermediate Science (Pre-Engineering and Pre-Medical\*) / Intermediate with combination of Physics, Mathematics, Biology\* & Computer Studies\*\* / ICS\*\* / Three years Diploma of Associate Engineer (DAE) in Civil, Mechanical, Auto & Farm Machinery, Auto & Diesel, Mechanical/Machinery, Automation securing 60% marks i.e. 660/1100 with Securing Minimum 33% marks is compulsory in Entry test.



### **Merit Criteria:**

• HSSC/ A level: 50%

• Matric: 17%

• Entry Test: 33%

MNSUAM will accept entry tests taken by MNSUAM, UET (ECAT), UAF and HEC.

\* The biology/ pre-medical students will enroll in the remedial subject of Mathematics

\*\*The ICS students will enroll in the remedial subject of Chemistry.

### Engineering **Department of** Agricultural



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Farm Mechanization and Postharvest Engineering

## Department of Agricultural Engineering





















## B S C Agro Industrial Engineering Technology

### SEMESTER-I

Course Code	Course Title	Credit Hours	Course Type
AIET-101	Technical Drawing and Graphics	2(1-1)	E.F
AIET-103	Workshop Technology	3(1-2)	M.B.D
AIET-105	Introduction to Agro-Based Industry	3(2-1)	M.B.D
CSIT-101	Information and Communication Technology	3(2-1)	C.S.LT
NS-101	Applied Mathematics-I	3(3-0)	N.S
SS-101	Islamic Studies/Ethics	2(2-0)	S.S
SS-103	Pakistan Studies	2(2-0)	S.S
MATH-301	Elementary Mathematics	3(3-0)	Deficiency
	Total Credit Hours	13+	5=18

### SEMESTER-II

Course Code	Course Title	Credit Hours	Course Type												
AIET-102	Computer Aided Drawing 20	Computer Aided Drawing 2(1-1)	ng 2(1-1)		2(1-1)		2(1-1)	ided Drawing 2(1-1)		puter Aided Drawing 2(1-1)	2(1-1)	E.F		E.F	E.F
AIET-104	Fluid Mechanics	3(2-1)	E.F												
AIET-106	-106 Industrial Material	trial Material 3(2-1)		3(2-1)	M.B.D										
NS-102	Applied Physics	3(2-1)	N.S												
NS-104	Applied Mathematics-II	3(3-0)	N.S												
SS-102	Composition and Communication Skills	3(3-0)	S.S												
22.55	Total Credit Hours	13+	4=17												

### SEMESTER-III

Course Code	Course Title	Credit Hours	Course Type
AIET-201	Applied Thermodynamics	3(2-1)	M.B.D
AIET-203	ET-203 Farm Mechanization		M.B.D
AIET-205	Environment Health and Safety	3(2-1)	E.F
AIET-207	Industrial Material Handling and Processes	3(2-1)	M.B.D
NS-201	Industrial Chemistry	3(2-1)	N.S
NS-203	Applied Statistics	3(2-1)	N.S
	Total Credit Hours	13+	5=18

### SEMESTER-IV

Course Code	Course Title	Credit Hours Course Ty	
AIET-202	Engine Operation and Maintenance	aintenance 3(2-1)	
AIET-204	Manufacturing Processes	3(2-1)	M.B.D
AIET-206	Post-Harvest Processes	3(2-1)	M.B.D
AIET-208	Grain Science for Industry	3(2-1) M.B.I	
MS-202	Project Management	2(2-0)	M.S
SS-202	Professional Ethics	2(2-0)	S.S
SS-204	Technical Report Writing	2(2-0)	S.S
	Total Credit Hours	14+	4=18



## B S C Agro Industrial Engineering Technology

### SEMESTER-V

Course Code	Course Title	Credit Hours	Course Type
AIET-301	Farm and Industrial Structures	3(2-1)	M.B.D
AIET-303	Instrumentation and Control	3(2-1)	M.B.D
AIET-305	Total Quality Management	3(2-1)	M.B.D
AIET-307	Industrial Processes and Management	3(2-1)	M.B.D
MS-301	Entrepreneurship	2(2-0)	M.S
Technology Electronic	ctive I (Student will opt one course)	NO CONTROL OF	
AIET-309	Feed Milling Technology	3(2-1)	M.B.D
AIET-311	Cotton Ginning and Fiber Technology	3(2-1)	M.B.D
AIET-313	Sugar Technology	3(2-1)	M.B.D
	Total Credit Hours	12+0	5=17

### SEMESTER-VI

Course Code	Course Title	Credit Hours	Course Type
AIET-302	Automation and Robotics	3(2-1)	M.B. D
AIET-304	Boiler Operation and Maintenance	3(2-1)	M.B. D
AIET-306	Industrial Software Applications	3(2-1)	M.B. D
AIET-308	High Efficiency Irrigation Systems	3(2-1)	M.B. D
MS-302	Supply Chain Management	2(2-0)	M.S
Technology Ele	ctive II (Student will opt one course)		
AIET-310	Grain Milling Technology	3(2-1)	M.B. D
AIET-312	Technology of Oils and Fats	3(2-1)	M.B. D
AIET-314	Seed Science and Seed Processing Technology	3(2-1)	M.B. D
	Total Credit Hours	12+0	5=17

### SEMESTER-VII

Course Code	Course Title	Credit Hours	Course Type
AIET-401	Supervised Industrial Training I	16(0-16)	M.B. D
	Total Credit Hours	00+1	6=16

### SEMESTER-VIII

	Total Credit Hours	00+1	6=16
AIET-402	Supervised Industrial Training II	16(0-16)	M.B. D
Course Code	Course Title	Credit Hours	Course Type

Total credit Hours = 137

E.F = Engineering Technology Foundation

M.B.D = Major-based Depth

N.S = Natural Science

S.S = Social Sciences

M.S = Management Sciences



## B.SC. AGRICULTURAL ENGINEERING (Semester I-VIII)

### **SEMESTER-I**

Sr. No.	CourseCode	Title	KnowledgeArea	Theory	Lab	Total
1	FMP-301	Engineering Drawing & Graphics	EngineeringFoundation	1	1	2
2	CSIT-101	Information and Communication Technology	Computer and InformationScience	2	1	3
3	NS-102	Applied Physics	Natural Sciences	2	1	3
4	MATH-303	Calculus and Analytical Geometry	Natural Sciences	3	0	3
5	AGRON-301	Basic Agriculture	Natural Sciences	1	1	2
6	SSH- 301	Functional English	Humanities	2	0	2
7	SS-101	Islamic Studies and Ethics	Humanities	2	0	2
8	IS-303	Translation of the Holy Quran I	Humanities	1	0	1
		Total		14	4	18

### **SEMESTER-II**

Sr. No.	CourseCode	Title	Domain	Theory	Lab	Total
1	AIET-104	Fluid Mechanics	Engineering	2	1	3
2	FMP- 302	Metallurgy and Workshop Practices	Engineering	5	1	2
3	WRE- 302	Surveying and levelling	Engineering	2	1	3
4	EE- 302	Engineering Materials	Engineering	1	- 1	2
5	MATH- 302	Linear Algebra	Non- Engineering	3	0	3
6	NS-201	Industrial Chemistry	Non- Engineering	1	- 1	2
7	SSH- 302	Communication Skills	Non- Engineering	2	0	2
8	S- 302	Translation of the Holy Quran II	Non- Engineering	1	0	1
		Total		13	5	18

### SEMESTER-III

Sr. No.	CourseCode	Title	Domain	Theory	Lab	Total
1	WRE-401	Soil Mechanics	Engineering	2	1	3
2	WRE-403	Engineering Mechanics	Engineering	2	- it	3
3	AIET-201	Applied Thermodynamics	Engineering	2	11	3
4	FMP- 403	Manufacturing Engineering	Engineering	1	1	2
5	MATH- 401	Differential Equations	Non- Engineering	3	0	3
6	SSH-401	Pakistan Studies and Global Perspective	Non- Engineering	2	0	2
7	IS- 401	Translation of the Holy Quran III	Non- Engineering	1	0	1
		Total		13	4	17



## B.SC. AGRICULTURAL ENGINEERING (Semester I-VIII)

### **SEMESTER-IV**

Sr. No.	CourseCode	Title	Domain	Theory	Lab	Total
1	WRE- 402	Open Channel Hydraulics	Engineering	2	1	3
2	EE- 402	Strength of Materials	Engineering	2	- 1	3
.3	EE- 404	Environmental Engineering	Engineering	2	1	3
4	AIET-303	Instrumentation and Control	Engineering	2	7	3
5	CS- 402	Artificial Intelligence (AI)	Engineering	1	1	2
6	SES- 402	Soil Science	Non-Engineering	2	1	3
7	IS- 402	Translation of the Holy Quran III	Non-Engineering	1	0	1
	Total				6	18

### **SEMESTER-V**

Sr. No.	CourseCode	Title	Domain	Theory	Lab	Total
1	WRE- 501	Pumps and Tube wells	Engineering	7	- 1	2
2	FMP- 501	IC Engines and Tractors	Engineering	2	1	3
3	FMP- 503	Machine Design	Engineering	2	1	3
4	STAT- 501	Probability and statistics	Non- Engineering	3	0	3
5	MATH- 501	Numerical Analysis	Non- Engineering	2	0	2
6	SSH- 501	Technical Writing and Presentation Skills	Non- Engineering	2	0	2
7	SSH- 503	Social Sci Elective-I	Non- Engineering	2	0	2
8	IS- 501	Translation of the Holy Quran III	Non- Engineering	1	0	1
Total				15	3	18

### **SEMESTER-VI**

Sr. No.	CourseCode	Title	Domain	Theory	Lab	Total
1	WRE- 502	Engineering Hydrology	Engineering	2	1	3
2	WRE- 504	Irrigation Engineering	Engineering	2	1	3
3	EE- 502	MDE Elective-I	Engineering	2	1	3
4	EE- 504	Rural Electrification	Engineering	1	1	2
5	FMP- 504	Earth Moving Machinery	Engineering	1	1	2
6	AENG- 502	Management Elective-I	Non- Engineering	2	0	2
7	SSH- 502	Social Sci Elective-II	Non- Engineering	2	0	2
8	IS- 502	Translation of the Holy Quran VI	Non- Engineering	1	0	- 11
	8 IS- 502 Translation of the Holy Quran VI Non- Engineering Total				5	18



## B.SC. AGRICULTURAL ENGINEERING (Semester I-VIII)

### **SEMESTER-VII**

Sr. No.	Course Code	Title	Domain	Theory	Lab	Total
1	WRE-601	GIS & Remote Sensing	Engineering	1.	1	2
2	EE- 601	Solid Waste Engineering	Engineering	2	1	3
3	FMP-601	Agricultural Process Engineering	Engineering	2	1	3
4	FMP-603	Farm Machinery and Automation	Engineering	2	1	3
5	WRE/EE/ FMP-605	Engg Elective-I	Engineering	1	1	2
6	AENG-601	Final Year Design Project (FYDP)-I	Engineering	0	3	3
7	MS-301	Management Elective- II	Non- Engineering	2	.0.	2
8	IS- 601	Translation of the Holy Quran VII	Non- Engineering	1	0	1
Total				11	8	19

### **SEMESTER-VIII**

Sr. No.	CourseCode	Title	Domain	Theory	Lab	Total
1	WRE-602	Drainage Engineering	Engineering	2	1	3
2	EE-802	Farm Structures and Control Sheds	Engineering	2	1	3
3	FMP-602	MDE Elective-II	Engineering	1	- 1	2
4	WRE/EE/ FMP-6xx	Engg. Bective-III	Engineering	2	9	3
5	WRE/EE/ FMP-6xx	Engg. Elective-III	Engineering	2	1	3
6	AENG-602	Final Year Design Project (FYDP) - II	Engineering	0	3	3
7	IS- 602	Translation of the Holy Quran VIII	Non- Engineering	1	0	1
Total				10	8	18



### B.SC. AGRICULTURAL ENGINEERING

### **Courses for Engineering Elective Streams Water Resources Engineering**

- Farm Irrigation System (WRE)
- Farm Water Management (WRE)
- Groundwater Hydrology(Elective WRE)
- Soil Dynamics(Elective WRE)
- Water Resources Assessment and Management (WRE)
- Soil and Water Conservation Engineering (WRE)
- Irrigation Water Management Techniques (WRE)

### **Farm Machinery and Power**

- Boiler Engineering & Power Plants (FMP)
- Energy in Agriculture (FMP)
- Agro-Industrial Engineering (FMP)
- Precision Agriculture (FMP)
- Robotics in Agriculture (FMP)
- Design of Agricultural Machinery (FMP)
- Post-Harvest Technologies (FMP/EE)
- Hydraulic Machinery and Automation (FMP)
- Emerging Farm Engineering Systems (FMP)
- Electronics Engineering (FMP)

### **Farm Structures and Environment**

- EIA and EMS for Industries (EE)
- Sustainable Environment (Elective EE)
- Environmental Modelling and Simulation
- Environmental Impact Assessment (EE)
- Cleaner Production Techniques (Elective EE)
- Landscape Engineering (EE)
- Quantity Survey and Cost Estimation (EE)



### B.SC. AGRICULTURAL ENGINEERING

### **Electives for Social Sciences**

- Sociology for Engineers
- Professional Ethics
- Economics for Engineers
- Sociology
- Social Anthropology
- Understanding Psychology and Human
- Social Psychology
- Organizational Behavior
- Critical Thinking
- Philosophy
- Human Resource Development
- Culture and Society
- Engineering Law

### **Electives for Management Science**

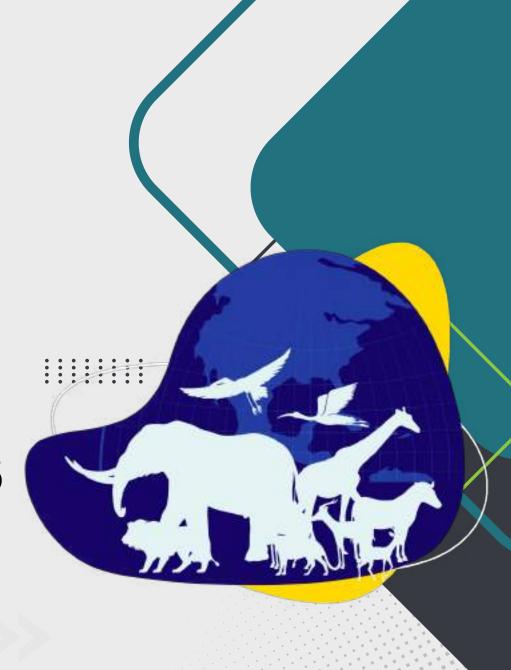
- Entrepreneurship
- Entrepreneurship and Marketing
- Engineering Project Management
- Principles of Management
- Engineering Management
- Quality Management Systems
- Textile Marketing
- Industrial Engineering and Management
- Total Quality Management
- Supply Chain Management
- Production Management

### **Courses for Computer Science**

- Information and Communication Technologies (ICS)
- Artificial Intelligence
- Cyber Security
- Data Science
- Computer Programming
- Modelling and Simulation



## FACULTY OF VETERINARY AND ANIMAL SCIENCES





### FACULTY OF VETERINARY AND ANIMAL SCIENCES



PROF. DR. MUHAMMAD ASIF RAZA DEAN FVAS

### Dean's Message

Welcome to the Faculty of Veterinary and Animal Sciences. I am honored to serve as Dean and to lead our efforts in Veterinary Sciences, Biomedical education, community outreach, and research in different areas. Faculty of Veterinary and Animal Sciences offers different Undergraduate and Postgraduate programs related to the domain of Life Sciences, Public Health, and Biomedical Sciences through a combination of traditional and innovative technological approaches for excellent teaching and learning. Collectively, our students benefited from the expertise and experience of our highly talented faculty members and the rich collaborative environment. As we focus on producing exceptional Animal Scientists, Specialists, and Biomedical Researchers, our administrative team and our faculty members never forget that academic excellence must be matched by passion, integrity, and professionalism. Our future depends on producing not only future scientists, but also leaders who will play an important role in ensuring Food Security, health, and well-being. We are committed to diversity and inclusion in our workplace and within our students and to ensuring that our Faculty is a place where every member of our Faculty family feels valued, seen, heard, and always welcomed. We appreciate your interest in our Faculty and invite you to visit or contact us for additional information.

### Faculty of Veterinary and Animal Sciences (FVAS)

Faculty of Veterinary and Animal Sciences (FVAS) was established during the academic year 2019-2020 as 4th faculty of MNS University of Agriculture, Multan. The faculty has an outstanding and dedicated team of 25 faculty members (15 PhD and 10 non-PhD) with diverse backgrounds and academic experiences at world-renowned universities in Germany, France, China, and Turkey. The faculty aims to earn repute of excellence with intellect and future foresight. Faculty of Veterinary and Animal Sciences comprises of following Seven Departments.

- 1. Department of Pathobiology and Biomedical Sciences
- 2. Department of Animal and Dairy Sciences
- 3. Department of Clinical Sciences
- 4. Department of Poultry Science
- 5. Department of Zoology, Wildlife and Fisheries
- 6. Department of Biochemistry and Biotechnology
- 7. Department of Pharmacy

### **Programs Offered at Main Campus**

Following Undergraduate and Postgraduate degree programs are being offered in the Faculty of Veterinary and Animal Sciences in addition to introductory courses of B.Sc. (Hons.) Agriculture and BBA Agribusiness.

- 1. B.Sc. (Hons.) Poultry Sciences (4 years)
- 2. B.Sc. (Hons.) Animal Sciences (4 years)
- 3. BS Zoology (4 years)
- 4. BS Microbiology (4 years)
- 5. BS Biochemistry (4 years)
- 6. BS Biotechnology (4 Years)
- 7. BS Medical Laboratory Technology (4 years)
- 8. BS Public Health (4 years)

Diploma Programs Offered

- 1. Livestock Assistant Diploma (2 years)
- 2. Livestock Assistant Diploma (3 years) Joint with China Collaboration

### **Programs Offered at Jalalpur Pirwala Campus**

- 1. BS Zoology (4 years)
- 2. Livestock Assistant Diploma (2 years)

The Department of Pathobiology and Biomedical Sciences has the following major sections: Microbiology, Pathology, Parasitology, Medical Lab and Molecular Biology, and Public Health. The Department is actively engaged in teaching, research, and outreach activities. Research is directed toward basic biomedical and allied health sciences, including microbiology, parasitology, pathology, immunology, molecular biology, epidemiology, and public health. Our faculty members' research ranges from the basic understanding of the mechanisms of disease caused by a wide range of agents, including emerging and zoonotic pathogens, to the different protective and pathological responses to host organisms. We offer basic to advanced training in diagnostic and clinical aspects of pathogens, disease control models, and preventative measures, as well as other public health concerns.

### **Programs Being Offered**

- BS Public Health (4 years)
- BS Medical Lab Technology (4 years)
- BS Microbiology (4 years)



### VISION

To generate and disseminate significant knowledge of biomedical and veterinary sciences and offer exemplary education to contribute to and innovatively influence national development



### **MISSION**

To produce highly skilled graduates to ensure human well-being and to combat challenges of food security through multidisciplinary scientific approaches

# Pathobiology and Biomedical Sciences



DR. MUHAMMAD ASIF RAZA **Professor and Chairman** 

asif.raza@mnsuam.edu.pk Ph.D (Germany), Post Doc (Mexico), CaBEA (South Korea





DR. ASGHAR ABBAS **Assistant Professor** 

asghar.abbas@mnsuam.edu.pk 🏟 Ph.D

Parasitology, Ethno-Medicine, Immunology



MR. MUHAMMAD UMAIR WAQAS Lecturer

Public Health



DR. HAFIZ MUHAMMAD ISHAQ **Assistant Professor** 

hafiz.ishaq@mnsuam.edu.pk

Ph.D.



DR. AHSAN ANJUM

Lecturer

ahsan.anjum@mnsuam.edu.pk Ph.D

Pathology, Histopathology and Histotechnology, Hematology, Clinical Pathology, Cytology and Cytogenetics, Forensic Pathology



DR. KASHIF HUSSAIN **Assistant Professor** 

kashif.hussain@mnsuam.edu.pk Ph.D

Parasitology

Microbiology



MR. WAOAR ZAIB Lecturer (Study Leave)

waqar.zaib@mnsuam.edu.pk

Microbiology

## Department of Animal and Dairy Sciences

The aim of Department of Animal and Dairy Sciences is to provide the qualified, trained, and skilled manpower that reports the Malnutrition and Metabolic diseases of both dairy and fattening industries of southern Punjab.

### **Programs being offered**

• B.Sc. (Hons.) Animal Sciences (4 years)



### **Vision**

To strive for sustainable animal production through advanced animal breeding techniques, livestock management, modernized feed technologies, and development of new diagnostics and treatments for nutritional diseases.



### **Mission**

To produce skilled animal scientists, for improving the economic status of livestock farmers ultimately the national GDP, trained in precision animal husbandry and breeding practices, and applied animal feed and nutrition sciences.





DR. JUNAID ALI KHAN **Professor and Chairman** 

junaidali.khan@mnsuam.edu.pk Ph.D Postdoc

P Endocrine and metabolic physiology





DR. BASEER AHMAD **Assistant Professor** 

Poultry Nutrition



MR. RANA MUHAMMAD SHAHBAKHT Lecturer

Tivestock management



DR. SHAHID ALI **Assistant Professor** 

shahid.ali@mnsuam.edu.pk 🌍 Ph.D.

Animal Nutrition



### MS. MOMNA MEHMOOD

momna.mehmood@mnsuam.edu.

Veterinary Physiology

The Department of Clinical Sciences is actively engaged in educational activities, research, and professional services for the general public. Clinical sciences encompass a broad range of animal species, both domesticated and wild, and a vast variety of diseases that may impact diverse species. We are aware of the possible difficulties and complications associated with animal health and work together with our clients and recommend vets to achieve effective results. The Clinical Sciences team at MNSUAM has a diverse spectrum of knowledge, interests, and clinical experience. Our staff is actively involved in clinical services, which include illness diagnosis, treatment, and complete counseling for clients and referring veterinarians on animal health problems, queries, and challenges. Additionally, faculty members guide students undergoing clinical training at the University Veterinary Hospital to treat clinical difficulties in sick animals. The department treats over 1000 clinical cases every year in and around Multan. Additionally, the department educates students on large and small animal reproductive, infertility issues, obstetrical techniques, and post-treatment care for animals. Students are also taught clinical and surgical judgment, and problem-based thinking abilities, all of which are necessary for the profession. The University Veterinary Hospital has been developed and coupled with an ambulatory service, to assist livestock producers at their farms. Additionally, the department has the capability of arranging trainings and seminars for veterinarians, paravets, farmers, and industry stakeholders.

### **Programs being offered**

- 1. Livestock Assistant Diploma (2 Years)
- 2. Livestock Assistant Diploma ( 3 Years)

### **Vision**



To become the hub of knowledge, applied scientific research and community services in the field of veterinary clinical sciences by addressing the challenges of sustainable animal production.

### Mission



To provide competent professional with hands-on training in veterinary clinical sciences through excellence in education, research, outreach, and civic engagement programs in the fields of Veterinary Medicine, Surgery, and Theriogenology

To strengthen and advancement of animal health services in the region for decent livelihood of the community



### DR. MUHAMMAD ASIF RAZA Chairman (Additional Charge)

Ph.b Pest Doc CaBEA

Post Doc





MS. SAMAR WAFA KABEER

Animal Reproduction



DR. ALI HAIDER **Assistant Professor** 

ali.haider@mnsuam.edu.pk 🌍 Ph.D

Veterinary Clinical and Nanomedicine



Mr. UMAIR IQBAL Research Officer

umair.iqbal@mnsuam.edu.pk

Veterinary Medicine



MR. HAFEEZ UR REHMAN ALI KHERA Lecturer (Study Leave)

Clinical Medicine and Surgery, Livestock and Poultry Diseases

Ever-growing Pakistan Poultry Industry needs skilled human resources. To cater this need, Department of Poultry Science was established in 2018 in the Faculty of Veterinary and Animal Science, MNS-UAM, Multan, which is focused on providing the qualified and trained manpower to smoothly address the issues at commercial farming level as well as initiating the problem-oriented research work to benefit the industry that can be devised through implementing effective strategies for enhancing poultry production and minimizing the constraints in poultry sector. The Department is facilitated with one undergraduate and one postgraduate laboratory. The Department of Poultry Science is successfully running a B.Sc. (Hons.) and MS programs. The students of B.Sc. (Hons.) and MS Poultry Science will serve the Pakistan Poultry Industry in a better way.

### **Programs being offered**

• B.Sc. (Hons.) Poultry Science (4 years)



### **Vision**

To combat the challenges of food security and nutritional deficiency through sustainable poultry production



### **Mission**

To produce professionals competitive in poultry husbandry practices, modern and rural farming systems, poultry nutrition, and disease management.

To provide students with advanced knowledge of precision poultry production in changing climate scenarios and training in entrepreneurial concepts for national development.

## Department of Poultry Science



### PROF. DR. JUNAID ALI KHAN Chairman (Additional Charge)

junaidali.khan@mnsuam.edu.pk Ph.D Post Doc

P Endocrine and metabolic physiology





### DR. ATIF REHMAN

**Assistant Professor** 

atif.rahman@mnsuam.edu.pk

Poultry Production, Poultry Nutrition

## Zoology, Wildlife and Fisheries **Department of**

Zoology and Wildlife are among the significant economic sectors in Pakistan, contributing to revenue generation, employment, poverty alleviation, and export revenues. Pakistan is gifted with large fishing resources. Fisheries sector has a significant contribution to the national economy, disbursing about one percent to GDP and providing job opportunities to about one percent of the country's manpower. Likewise, aquaculture is the fastest developing section of the agriculture industry. Attached with new emerging skills of the day, it has become one of the most expanding and rapidly changing fields. The Department is carrying out teaching and research in both basic and applied aspects in different areas such as freshwater biology, shrimp farming, development of cost-effective fish feed, fish breeding, aquaculture biotechnology, aquatic environment, fish disease management, use of biofertilizers in aquaculture, and saline water fisheries.

Our programs prepare students to address and provide immediate solutions to major problems and challenges faced by Fish Farmers in Pakistan. We conduct research that drives innovation and new technologies, expands understanding, and provides science-based information to solve problems. After graduation, our students will be able to serve in Government institutes such as Fisheries Research Institute, Fish Hatcheries and Laboratories, and Private sector, research, academia, industry, and advisory.

The construction of the new academic block and research laboratories has further strengthened our research and teaching activities. We are also organizing seminars, conferences, and workshops to share thought-provoking ideas.

### **Programs being offered**

BS Zoology (4 years)



### Vision

To create significant knowledge and conduct innovative research to impart exemplary education to address the challenges of food security



### Mission

To create significant knowledge and conduct innovative research to impart exemplary education to address the challenges of food security

## Zoology, Wildlife and Fisheries **Department of**







asif. raza@mnsuam.edu.pk







DR. NAHEED BANO **Assistant Professor** 

nahed.bano@mnsuam.edu.pk 😭 Ph.D



Freshwater fisheries, Fish farm management



MS. AMINA IRFAN Lecturer (Study Leave)

💌 <u>irfan@mnuam.edu.pk</u> 🤪 м.рыі.



Zoology



DR. KASHIF MANZOOR IPFP Fellow



Fish Microbiology, Molecular Genetics, Fish Nutrition

The Department of Biotechnology and Biochemistry started its academic program in 2022. Efforts are underway to provide world-class teaching and research facilities in the disciplines of Biotechnology and Biochemistry. The undergraduate program of Biotechnology & Biochemistry is designed to meet the need of well-trained manpower and to provide comprehensive education and training in the core areas of livestock/animal, industrial environmental, health, and medical disciplines. In addition to the hands-on practical sessions, students will be exposed to a progressive curriculum comprising scientific principles and knowledge in molecular cloning, genome editing, cell tissue culture techniques, Bioinformatics analysis, Bioprocessing technologies, techniques, and instrumentations in research and development, as well as business and entrepreneurship skills.

### **Programs being offered**

- BS Biochemistry (4 years)
- BS Biotechnology (4 years)

### **Vision**



To achieve both academic and research excellence, promote innovative scientific research and community services, and attain a leading role in technology development and promotion hub for industry and entrepreneurs.

### **Mission**



- The Department aspires to equip students with excellent theoretical knowledge, practical skills, and high-quality research-based education to produce quality students and leaders
- To discover, create, understand, and apply new knowledge to strengthen the state, region, and nation intellectually, technologically, and economically.
- To provide future employment and empowerment for the people of southern Punjab in health, livestock/animal, environment, food, cosmetics, forensic, analytical research, medical, agriculture, pharmaceuticals, diagnostics, quality control, biosafety, and biosecurity sectors.



### DR. JUNAID ALI KHAN Chairman

iunaidali khan@mnsuam.edu.pk Ph.D., Post Doc Endocrine and metabolic physiologyEndocrine and metabolic physiology





### DR. SARMAD FAROGH ARSHAD Assistant Professor

sarmad.arshad@mnsuam.edu.pk Ph.D.

Association Mapping and Family-based linkage analysis



### DR. MUHAMMAD USMAN Lecturer

muhammad.usman@mnsuam.edu.

Nanobiotechnology and Biotechnology



### Mr. MUHAMMAD HAMZA MUNEER Lecturer

Immunology, Cell Biology, Molecular Genetics

The Department of Pharmacy is a vibrant, multidisciplinary, highly collaborative, supportive, and dynamic department. It is dedicated to excellence in training the next generation of scientists, leadership in making discoveries in basic and translational science for the improvement of health, and providing quality service to the public and scientific communities. Our department is highly committed to providing an outstanding training environment for students.

### **Programs being offered**

• Currently, No Program is offered in Department.



### **Vision**

To develop and foster significant knowledge, advance research, and offer excellent education to contribute to the economic development of the nation

### **Mission**



- To carry out world-class scientific research and evidence-based teaching to expand our track record of innovation and excellence in both research and teaching.
- To teach and conduct internationally acclaimed, high-quality research in pharmacology and physiology.
- To develop a diverse pool of outstanding scientists trained in modern principles of drug action and discovery to ensure the well-being and better human health through organized efforts and informed choices of society.

## Department of Pharmacy



### DR. MUHAMMAD ASIF RAZA Chairman

asif.raza@mnsuam.edu.pk



Pidemiology (molecular) of public health, concerned pathogen, Drug development/ Ethno-Medicine, Parasitology



### MR. IMRAN AHMAD KHAN Lecturer

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Pharmacology, Drug Development, Pharmaceutics



Para-Veterinary School (PVS) is established during the academic year 2021-2022, in an animal-rich region of Jalalpur Pirwala with the objective to provide technical veterinary education to the youth of the region and exploit the potential of livestock resources of the Southern Punjab. Veterinary Teaching Hospital at campus and Mobile Veterinary Service is offering hands-on training to the Livestock Assistant Diploma (LAD) students and services to the local community.

### **Programs being offered**

- BS Zoology (4 Years)
- Livestock Assistant Diploma (LAD) (2-Years)



### **Vision**

Our vision is to create and maintain academic and clinical programs in the field of veterinary sciences for the general benefit of local society and humanity.



### **Mission**

Our focus is to build a diverse and inclusive community in South Punjab to improve the health of animals of South Punjab. This will be accomplished by disseminating new knowledge and skills to the youth of the region and providing innovative veterinary services in the region.



DR. MUHAMMAD ASIF RAZA Dean FVAS and Incharge

asif.raza@mnsuam.edu.pk



Pidemiology (molecular) of public health, concerned pathogen, Drug development, Ethno-Medicine, Parasitology





MR. NASIR NIAZ

Lecturer

nasir.niaz@mnsuam.edu.pk 📦 м.ры



Animal Physiology



Mr. IDREES RAZA

Lecturer



P Cell Biology, Molecular Genetics





# FACULTY OF VETERINARY AND PANIMAL COLLINS





# BS PUBLIC HEALTH (SEMESTER I-VIII)

#### **SEMESTER-I**

Course Code	Course Title	Credit Hours
GE-303	Functional English	3(3-0)
GE-307	Islamic Studies OR Ethics (for Foreigners / Non-Muslims)	2(2-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
RS-301	Aural Sociology and Development	2(2-0)
PH-301	Introduction to Public Health	3(3-0)
PH-303	Sociology of Health and Disease	3(2-1)
BIOCHEM-301	General Biochemistry	3(3-0)
	Total Credit Hours	19

#### **SEMESTER-II**

Gourse Code	Course Title	Credit Hours
GE-403	Expository Writing	3(3-0)
GE-402	Entrepreneurship	2(1-1)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
PH-302	Principles of Psychology	3(2-1)
PH-304	Medical Anthropology	3(2-1)
PH-306	Personal Hygiene	3(2-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	16

#### **SEMESTER-III**

Course Code	Course Title	Credit Hours
GE-305	Quantitative Reasoning (I)	3(3-0)
GE-301	Social and Religious Tolerance	2(2-0)
PH-401	Applied Epidemiology	3(3-0)
PH-403	Population Dynamics	3(3-0)
PH-405	Primary Health Care	3(2-1)
PH-407	Concept of Health and Disease	3(2-1)
PH-409	General Parasitology	3(2-1)
	Total Credit Hours	20

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# BS PUBLIC HEALTH (SEMESTER I-VIII)

#### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
GE-405	Quantitative Reasoning (II)	3(3-0)
GE-404	Clivics and Community Engagement	2(1-1)
PH-404	Basic Biostatistics	3(3-0)
PH-406	Health Promotion, Advocacy and Social Mobilization	3(2-1)
PH-408	Quality Management in Health Care	3(3-0)
MICRO-301	Fundamentals of Microbiology	3(2-1)
ENT-401	Insect Pests of of Household, Human and Animals	3(2-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	20

#### **SEMESTER-V**

Course Code	Course Title	Credit Hours
PH-501	Community Netrition	3(2-1)
PH-503	Community Pediatrics	3(3-0)
PH-505	Fundamental Principles of Infectious Disease	3(2-1)
PH-507	Epidemiology of communicable Diseases	3(2-1)
PH-509	Non Communicable Disease Epidemiology	3(3-0)
PH-511	Food Safety	3(3-0)
	Total Credit Hour	18

Course Code	Course Title	Credit Hours
PH-502	Reproductive Health	3(2-1)
PH-504	Environment and Occupational Health	3(2-1)
PH-506	Health Policy and Management	3(3-0)
PH-508	Health Planning	3(2-1)
PH-510	District Health Management	2(2-0)
PH-512	Health Professional Education	2(2-0)
PH-513	Introduction to Evidence based Public Health	2(2-0)
QS-302	Quran study	Audt
	Total Credit Hours	18



# BS PUBLIC HEALTH (SEMESTER I-VIII)

#### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
PH-601	Mental Health	3(2-1)
PH-603	Health Marketing	3(2-1)
PH-605	Preparation of Research Project and Scientific Writing	2(1-1)
MICRO-510	One Health	3(2-1)
MICRO-607	Biosafety and Risk Management	3(2-1)
PH-607	Health Economics	3(3-0)
QS-302	Quran study	Audt
	Total Credit Hours	17

Course Code	Course Title	Credit Hours
PH-612	Internship	3(0-3)
PH-814	Capstone Project	3(0-3)
	Total Credit Hours	06



# BS MEDICAL LABORATORY TECHNOLOGY PROGRAM (MLT) (SEMESTER I-VIII)

#### **SEMESTER-I**

Course Code	Course Title	Credit Hours
BIOCHEM-301	General Biochemistry	3(2-1)
GE-303	Functional English	3(3-0)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
GE-305	Quantitative Reasoning (I)	3(3-0)
MICRO-301	Fundamentals of Microbiology	3(2-1)
MLT-301	Human Anatomy	3(2-1)
MLT-303	Human Histology	3(2-1)
i i	Total Credit Hours	20

#### **SEMESTER-II**

Course Code	Course Title	Credit Hours
GE-403	Expository Writing	3(3-0)
GE-307	Islamic Studies OR Ethics (for Foreigners / Non-Muslims)	2(2-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
sssss-405	Quantitative Reasoning (II)	3(3-0)
MLT-302	Basic Human Physiology	3(2-1)
MLT-306	General Hematology	3(2-1)
MLT-308	Fundamentals of Medical Laboratory Technology	2(2-0)
QS-302 (Part-I)	Quranic Studies	Audit
	Total Credit Hours	19

Course Code	Course Title	Credit Hours
GE-301	Social and Religious Tolerance	2(2-0)
RS-409	Rural Sociology and Development	2(2-0)
GE-402	Entrepreneurship	2(1-1)
MICRO-304	Basic Immunology	3(2-1)
MICRO-502	Medical Microbiology	3(2-1)
MLT-401	General Pharmacology and Chemotherapy	3(2-1)
MLT-405	General Pathology	3(2-1)
	Total Credit Hours	18



# BS MEDICAL LABORATORY TECHNOLOGY PROGRAM (MLT) (SEMESTER I-VIII)

#### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
GE-404	Civics and Community Engagement	2(1-1)
MICRO-607	Biosafety and Risk Management	3(2-1)
MLT-402	Systemic Pharmacology	3(2-1)
MLT-404	Clinical Genetics	3(2-1)
MLT-406	Histopathology and Histotechnology	3(1-2)
MLT-408	Clinical Laboratory Practice-I	3(0-3)
QS-302 (Part-II)	Quranic Studies	Audit
	Total Credit Hours	17

#### **SEMESTER-V**

Course Code	Course Title	Credit Hours
MLT-501	Clinical Bacteriology	3(2-1)
MLT-503	Blood Disorder	3(2-1)
MLT-505	Clinical Pathology	3(1-2)
MLT-507	Clinical Parasitology	3(2-1)
MLT-509	Advances in Medical Laboratory Technology	3(2-1)
MLT-511	Clinical Laboratory Practice-II	3(0-3)
	Total Credit Hours	18

#### **SEMESTER-VI**

Course Code	Course Title	Credit Hours
MLT-502	Medical Laboratory Instrumentation	3(2-1)
MLT-506	Molecular Diagnostics	3(2-1)
MLT-508	Chemical and Forensic Pathology	3(2-1)
MLT-510	Cytology and Cytogenetics	3(2-1)
MLT-512	Clinical Virology and Mycology	3(2-1)
MLT-514	Clinical Laboratory Practice-III	3(0-3)
QS-302 (Part-III)	Quranic Studies	Audit
	Total Credit Hours	18

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# BS MEDICAL LABORATORY TECHNOLOGY PROGRAM (MLT) (SEMESTER I-VIII)

#### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
MLT-601	Medical Laboratory Management Skills	3(2-1)
MLT-605	Blood Banking	3(2-1)
MLT-607	Bioethics	2(1+1)
MLT-609	Advance Diagnostic Imaging Techniques	3(2-1)
MLT-611	Preparation of Research Project and Scientific Writing	2(1-1)
MLT-615	Clinical Laboratory Practice-IV	3(0-3)
MICRO-605	Diagnostic Microbiology	3(0-3)
QS-302	Quranic Studies	Audit
	Total Credit Hours	19

Course Code	Course Title	<b>Credit Hours</b>
MLT-612	Internship	3(0-3)
MLT-614	Capstone Project	3(0-3)
	Total Credit Hours	06



# BS MICROBIOLOGY (SEMESTER I-VIII)

#### **SEMESTER-I**

Course Gode	Course Title	Credit Hours
MICRO-301	Fundamentals of Microbiology	3(2-1)
MICRO-303	Molecular Cell Biology	3(2-1)
GE-309	Applications of Information and Communication Technologies	3(2-1)
BIOCHEM-301	General Biochemistry	3(2-1)
GE303	Functional English	3(3-0)
GE-307	Islamic Studies DR Ethics (for Foreigners /Non-Muslims)	2(2-0)
GE-402	Entrepreneurship	2(1-1)
	Total Credit Hours	19

#### **SEMESTER-II**

Course Code	Course Title	Credit Hours
MICRO-302	Introduction to Mycology	2(1-1)
MICRO-304	Basic Immunology	3(2-1)
MICRO-306	General Virology	3(2-1)
MLT-607	Bioethics	2(1-1)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
GE-403	Expository Writing	3(3-0)
Z00L-302	Animal Biodiversity	2(1-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	17

Course Code	Course Title	Credit Hours
MICRO-401	Introduction to Cell Culture	3(2-1)
MICRO-403	Bacterial Cell Physiology	3(2-1)
PATH-401	General Pathology	3(2-1)
B0T-401	Plant Diversity	3(2-1)
GE-301	Social and Religious Tolerance	2(2-0)
GE-305	Quantitative Reasoning (I)	3(3-0)
GE-409	Rural Sociology and Development	2(2-0)
	Total Credit Hours	19



# BS MICROBIOLOGY (SEMESTER I-VIII)

#### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
MICRO-402	Fundamentals of Microbial Genetics	3(2-1)
MICRO-404	Antimicrobial Resistance & Probiotics	2(1-1)
MICRO-406	Proteomics	2(1-1)
PATH-402	Clinical Pathology	3(1-2)
PARA-401	Clinical Parasitology	2(1-1)
MICRO-408	General Bacteriology	3(2-1)
GE-404	Civics and Community Engagement	2(1-1)
GE-405	Quantitative Reasoning (II)	3(3-0)
QS-302	Quranic Studies	Audit
	Total Credit Hours	20

#### **SEMESTER-V**

Course Code	Course Title	Credit Hours
PH-407	Concept of Health and Disease	3(2-1)
MICRO-503	Applied Immunology	3(2-1)
MICRO-505	Marine and Fresh Water Microbiology	3(2-1)
MICRO-507	Soil Microbiology	3(2-1)
MICRO-509	Food and Dairy Microbiology	3(2-1)
PH-505	Fundamental Principles of Infectious Disease	3(2-1)
	Total Credit Hours	18

Course Code	Course Title	Credit Hours
MICRO-502	Medical Microbiology	2(1-1)
MICRO-504	Systematic Virology	3(2-1)
MICRO-506	Emirrormental Microbiology	3(2-1)
MICRO-508	Industrial Microbiology	3(2-1)
PH-401	Applied Epidemiology	3(3-0)
MICRO-512	Quality Control in Biologics	2(1-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	16



# BS MICROBIOLOGY (SEMESTER I-VIII)

#### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
MICRO-601	Pharmaceutical Microbiology	3(2-1)
MICRO-603	Introduction to Vaccinology	3(2-1)
MICRO-605	Diagnostic Microbiology	3(0-3)
MICRO-607	Biosafety and Risk Management	3(2-1)
MICRO-609	Preparation of Research Project and Scientific Writing	2(1-1)
MICRO-602	Emerging Issues in Microbiology	2(2-0)
QS-302	Quranic Studies	Audit
	Total Credit Hours	16

Course Code	Course Title	Credit Hours
MICRO-612	Internship	3(0-3)
MICRO-614	Capstone Project	3(0-3)
	Total Credit Hours	6



# B.SC. (HONS.) ANIMAL SCIENCES (SEMESTER I-VIII)

#### SEMESTER-I

Course Code	Course Title	Credit Hours
LM-301	Introduction to Livestock Management	3(2-1)
AN-301	Fundamentals of Animal Nutrition	2(1-1)
ABG-301	Principles of Animal Breeding	3(2-1)
ANAT-301	Introduction to Veterinary Anatomy	2(1-1)
GE-303	Functional English	3(3-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
GE-402	Entrepreneurship	2(1-1)
2000000	Total Credit Hours	18

#### **SEMESTER-II**

Course Code	Course Title	Credit Hours
LM-302	Principles of Dairy Production	3(2-1)
LM-303	Introduction to Animal Reproduction	3(2-1)
AN-302	Metabolism of Primary Nutrients	2(1-1)
PHYSIO-302	Introduction to Animal Physiology	2(1-1)
BIOCHEM-301	General Biochemistry	3(2-1)
GE-403	Expository Writing	3(3-0)
IDC-302	Ideology and Constitution of Pakistan	2(2-0)
IS-301/SSH-301	Islamic Studies/Ethics (for Non-Muslims)	2(2-0)
QS-302	Quranic Studies	Audit
	Total Credit Hours	20

#### SEMESTER-III

Course Code	Course Title	Credit Hours
ABG-401	Introductory Population Genetics	3(2-1)
LM-401	Principles of Small Ruminant Production	2(1-1)
AN-403	Minerals and Vitamins in Nutrition	2(2-0)
AGRON-401	Fodders and Forages	2(1-1)
200L-401	Fish and Fisheries of Pakistan	2(1-1)
ENT-401	Insect Pests of Household, Human and Animals	2(1-1)
GE-301	Social and Religious Tolerance	2(2-0)
GE-305	Quantitative Reasoning (I)	3(3-0)
GE-409	Rural Sociology and Development	2(2-0)
	Total Credit Hours	20

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# B.SC. (HONS.) ANIMAL SCIENCES (SEMESTER I-VIII)

#### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
ABG-402	Introductory Molecular Genetics	3(2-1)
AN-402	Nutrient Requirements of Farm Animals	3(2-1)
LM-402	Animal House Design	3(2-1)
PS-401	Introduction to Poultry Science	2(1-1)
FRW-402	Agro-Forestry, Range and Wildlife Management	3(2-1)
GE-404	Civics and Community Engagement	2(1-1)
GE-405	Quantitative Reasoning (II)	3(3-0)
QS-302	Quranic Studies	Audit
MCLAIF.	Total Credit Hours	19

#### **SEMESTER-V**

Course Code	Course Title	Credit Hours
ABG-501	Utilization and Conservation of Animal Genetic Resources	3(2-1)
LM-501	Range Livestock Production	3(2-1)
AN-501	Feeding of Farm Animals	3(2-1)
MICRO-510	One Health	3(2-1)
LM-503	Management of Dairy Animals	3(2-1)
AE-501	Human Resource Management	2(2-0)
	Total Credit Hours	17

Course Code	Course Title	Credit Hours
ABG-502	Selection for Economic Traits in Farm Animals	3(2-1)
LM-502	Carnel Production	2(1-1)
AN-502	Principles of Poultry Nutrition	2(1-1)
P8-502	Poultry Feeding Practices	3(2-1)
LM-504	Equine Production	2(1-1)
AS-502	Livestock and Poultry Marketing Management	2(2-0)
PATH-502	Pathobiology	2(1-1)
LM-506	Record Keeping in Livestock	2(1-1)
LM-508	Lab and Zoo Animal Management	1(0-1)
QS-302	Quranic Studies	Audit
Total Credit Hours		19



# B.SC. (HONS.) ANIMAL SCIENCES (SEMESTER I-VIII)

#### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
ABG-601	Introduction to Animal Genomics	3(2-1)
LM-601	Principles of Meat Production	2(1-1)
LM-603	Behavior and Welfare of Farm Animals	2(1-1)
AN-601	Feed Evaluation, Formulation, and Processing Technology	3(2-1)
PS-601	Poultry Hygiene and Disease Prevention	3(2-1)
AS-601	Remote Sensing and GIS Applications in Animal Sciences	2(1-1)
FMP-601	Fundamentals of Mechanized Farming	2(1-1)
AS-609	Preparation of Research Project and Scientific Writing	2(1-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	19

Course Code	Course Title	Credit Hours
AS-612	Internship	3(0-3)
AS-614	Capstone Project	3(0-3)
	Total Credit Hours	6



# B.SC. (HONS.) POULTRY SCIENCE (SEMESTER I-VIII)

#### **SEMESTER-I**

Course Code	Course Title	Credit Hours
PS-301	Introduction to Poultry Science	3(2-1)
AN-301	Fundamentals of Animal Nutrition	3(2-1)
ABG-301	Principles of Heredity	3(2-1)
GE-303	Functional English	3(3-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
GE-402	Entrepreneurship	2(1-1)
	Total Credit Hours	17

#### **SEMESTER-II**

Course Code	Course Title	Credit Hours
PS-302	Poultry Breeding Practices	2(1-1)
PS-304	Pouttry Physiology	3(2-1)
BIOCHEM-301	General Biochemistry	3(2-1)
AN-302	Metabolism of Primary Nutrients	3(2-1)
GE-403	Expository Writing	3(3-0)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
Zool-302	Animal Biodiversity	2(1-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	18

Course Code	Course Title	Credit Hours
PS-401	Incubation Principles and Hatchery Management	3(2-1)
PS-403	Poultry Housing and Equipment	3(2-1)
AN-303	Mineral and Vitamin Metabolism	2(1-1)
GE-307	Islamic Studies/Ethics (for Non-Muslims)	2(2-0)
MICRO-301	General Microbiology and Immunology	3(2-1)
RS-409	Rural Sociology and development	2(2-0)
GE-301	Social and Religious Tolerance	2(2-0)
GE-305	Quantitative Reasoning (I)	3(3-0
	Total Credit Hours	20



# B.SC. (HONS.) POULTRY SCIENCE (SEMESTER I-VIII)

#### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
PS-404	Poultry Feeding Practices	3(2-1)
PS-406	Broiler Production and Management	3(2-1)
PS-408	Poultry Meat Inspection	2(1-1)
AN-404	Feed Evaluation, Formulation and Processing Technology	3(2-1)
ABG-402	Introductory Population Genetics	2(1-1)
AEE-402	Communication Skills and Leadership Development	2(1-1)
GE-404	Civics and Community Engagement	2(1-1)
GE-405	Quantitative Reasoning (II)	3(3-0)
QS-302	Quranic Studies	Audit
	Total Credit Hours	20

#### **SEMESTER-V**

Course Code	Course Title	Credit Hours
PS-501	Fancy Bird Production	3(2-1)
PS-503	Layer Production and Management	3(2-1)
PS-505	Poultry Farm Practices I	2(0-2)
ABG-501	Applied Poultry Breeding	3(2-1)
Path-505	Poultry Pathology	3(2-1)
FMP-507	Farm Equipment, Structure & Processing	3(2-1)
	Total Credit Hours	17

#### **SEMESTER-VI**

Course Code	Course Title	Credit Hours
ABG-602	Introductory Molecular Genetics	3(2-1)
PS-602	Production and Management of Breeder Flock	3(2-1)
PS-604	Rural Poultry Production	2(1-1)
PS-608	Farm Records and Data Analysis	2(1-1)
AN-602	Principles of Poultry Nutrition	3(2-1)
MAB-601	Agri-Business Management, Marketing and WTO	2(2-0)
PH-401	Applied Epidemiology	3(3-0)
QS-302	Quranic studies	Audit
	Total Credit Hours	18

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# B.SC. (HONS.) POULTRY SCIENCE (SEMESTER I-VIII)

#### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
PS-601	Poultry Products Technology	3(2-1)
PS-603	Poultry Marketing and Economics	3(2-1)
PS-605	Poultry Farm Practices	2(0-2)
PS-607	Poultry Farm Management & Biosecurity	2(1-1)
AN-603	Poultry Feed Industry	3(2-1)
PS-611	Preparation of Research Project and Scientific Writing	2(1-1)
PS-609	Poultry Medicine	3(2-1)
Q8-302	Quranic Studies	Audit
	Total Credit Hours	18

Course Code	Course Title	Credit Hours
PS-612	Internship	3(0-3)
PS-614	Capstone Project	3(0-3)
	Total Credit Hours	6



#### **SEMESTER-I**

Course Code	Course Title	Credit Hours
GE-303	Functional English	3(3-0)
GE-307	Islamic Studies OR Ethics (for Foreigners / Non-Muslims)	2(2-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
BOT-301	Diversity of Plants	3(2-1)
Z00L-301	Principles of Animal Life-I	3(2-1)
	Total Credit Hours	14

#### **SEMESTER-II**

Course Code	Course Title	Credit Hours
GE-403	Expository Writing	3(3-0)
GE-402	Entrepreneurship	2(2-0)
BIOCHEM-301	General Biochemistry	3(2-1)
BOT-302	Plant systematics, anatomy and development	3(2-1)
Z00L-302	Principles of Animal Life-II	3(2-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	14

Course Code	Course Title	Credit Hours
GE-407	Ideology and Constitution of Pakistan	2(2-0)
GE-305	Quantitative Reasoning (I)	3(3-0)
BOT-401	Plant physiology and ecology	3(2-1)
ZOOL-401	Animal Diversity: Invertebrates	3(2-1)
Z00L-403	Zoo and Wildlife	3(3-0)
GE-301	Social and Religious Tolerance	2(2-0)
	Total Credit Hours	16



#### **SEMESTER-IV**

Course Code	Course Title	Credit Hours
200L-402	Animal Diversity: Chordates	3(2-1)
Z0OL-404	Animal Form & Function-I	3(2-1)
Z00L-406	Aquatic Biology	3(2-1)
Z00L-410	Bioinformatics	3(1-2)
GE-405	Quantitative Reasoning (II)	3(3-0)
UAM-402	Civics and Community Engagement	2(2-0)
GE-409	Rural Sociology and Development	2(2-0)
QS-302	Quraric Studies Audit	Audit
	Total Credit Hours	19
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#### **SEMESTER-V**

Course Code	Course Title	Credit Hours
Z00L-501	Cell & Molecular Biology	3(2-1)
PBG-501	Principles of Genetics	3(2-1)
Z00L-503	Physiology	3(2-1)
200L-507	Animal Form & Function-II	3(2-1)
	Major (Elective)	3
	Major (Elective)	3
	Total Credit Hours	18

#### Major (Elective)

#### **Fisheries and Aquaculture**

Course Code	Course Title	Credit Hours
Z00L-510	Aquaculture and Fisheries	3(2-1)
Z00L-511	Fish and Fisheries of Pakistan	3(2-1)



#### **Parasitology**

Course Code	Course Title	Credit Hours
PARA-501	General Parasitology	3(2-1)
PARA-503	Protozoology	3(1-2)

#### Wildlife

Course Code	Course Title	Credit Hours
WDLF-501	Principles of Wildlife Management	3 (3-0)
WDLF -503	Biodiversity and Wildlife	3(2-1)

#### **SEMESTER-VI**

Course Code	Course Title	Credit Hours
200L-502	Evolution & Principles of Systematic	3(2-1)
ZOOL-504	Developmental Biology	3(2-1)
200L-506	Animal Behavior	3(2-1)
ZOOL-508	Biodiversity	3(2-1)
QS-302	Ouranic Studies	Audit
	Major (Elective)	3
	Major (Elective)	3
	Total Credit Hours	18

#### Major (Elective)

#### **Fisheries and Aquaculture**

Course Code	Course Title	Credit Hours	
200L-602	Limnology	3(2-1)	
Z00L-604	Aquaculture Nutrition	3(2-1)	

#### **Parasitology**

Course Code	Course Title	Credit Hours
PARA-502	Helminthology	3(2-1)
PARA-504	Insect Pests of Household, Human and Animals	3(2-1)



#### Wildlife

Course Code	Course Title	Credit Hours
WDLF-502	Biology of Birds and Mammals in Pakistan	3(2-1)
WDLF-504	Conservation Biology and Wildlife	3(2-1)

#### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
Z00L-601	Environmental Biology	3(2-1)
Z00L-603	Zoogeography & Paleontology	3(2-1)
200L-605	Aquatic toxicology	3(2-1)
Z00L-611	Preparation of Research Project and Scientific Writing	2(1-1)
QS-302	Quranic Studies	Audit
	Major (Elective)	3
	Major (Elective)	3
	Total Credit Hours	17

#### **Majors (Elective)**

#### **Fisheries and Aquaculture**

Course Code	Course Title	Credit Hours
Z00L-806	Sea Food Technology	3(2-1)
Z00L-609	ichthyology	3(2-1)

#### Parasitology

Course Code	Course Title	Credit Hours
PARA-601	Epidemiology and Public Health	3(2-1)
PARA-603	Clinical Parasitology	3(2-1)

#### Wildlife

Course Code	Course Title	Credit Hours
WDLF-601	Wildlife of Pakistan	3(2-1)
WDLF-603	Wildlife Diseases and Management	3(2-1)

#### **SEMESTER-VIII**

Course Code	Course Title	Credit Hours
Z00L-612	Internship	3(0-3)
Z00L-614	Capstone Project	3(0-3)
	Total Credit Hours	06

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# BS BIOCHEMISTRY (SEMESTER I-VIII)

#### **SEMESTER-I**

Course Code	Course Title	Credit Hours
GE-303	Functional English	3(3-0)
GE-307	Islamic Studies OR Ethics (for Foreigners / Non-Muslims)	2(2-0)
GE-309	Applications of Information and Communication Technologies	3(2-1)
BIOCHEM-305	Organic Chemistry	3(2-1)
BIOCHEM-307	Inorganic Chemistry	3(2-1)
BIOCHEM-303	Human Physiology	2(2-0)
BIOCHEM-301	Introductory Biochemistry	3(2-1)
	Total Gredit Hours	19

#### **SEMESTER-II**

Course Code	Course Title	Credit Hours
GE-403	Expository Writing	3(3-0)
GE-402	Entrepreneurship	2(1-1)
BIOCHEM-302	Carbohydrates & Lipids	3(2-1)
PH-404	Basic Biostatistics	3(3-0)
PATH-302	General Pathology	3(2-1)
MICRO-309	Fundamentals of Microbiology	3(2-1)
PH-401	Applied Epidemiology	3(3-0)
QS-302	Quranic Studies	Audit
	Total Credit Hours	20

Course Code	Course Title	Credit Hours
GE-407	Ideology and Constitution of Pakistan	2(2-0)
GE-305	Guantitative Reasoning (I)	3(3-0)
GE-301	Social and Religious Tolerance	2(2-0)
BIDCHEM-403	Proteins & Nucleic Acids	3(2-1)
BIOCHEM-405	Molecular Biology	3(3-0)
PH-302	Principles of Psychology	3(2-1)
PARA-401	General Parasitology	3(2-1)
	Total Credit Hours	19



# BS BIOCHEMISTRY (SEMESTER I-VIII)

#### **SEMESTER-VI**

Course Code	Course Title	Credit Hours
GE-405	Quantitative Reasoning (II)	3(3-0)
GE-404	Civics and Community Engagement	2(1-1)
RS-409	Rural Sociology and Development	2(2-0)
BIOCHEM-404	Analytical chemistry	3(2-1)
BIOCHEM-406	Enzymology	3(2-1)
BIOCHEM-408	Biosafety & Bioethics	3(2-1)
BIOCHEM-401	Physical Chemistry	3(2-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	19

#### **SEMESTER-V**

Course Code	Course Title	Credit Hours
BIOCHEM-501	Metabolism I	2(2-0)
BIOCHEM-503	Nutritional Biochemistry	3(2-1)
BIOCHEM-505	Immunology	2(2-0)
BIOCHEM-507	Plant Biochemistry	3(2-1)
BIOCHEM-509	Biofertilizers and their Formulations	3(2-1)
BIOCHEM-511	Bioinsecticides and their Formulations	3(2-1)
MICRO-510	One Health	3(2-1)
	Total Credit Hours	19

Course Code	Course Title	Credit Hours
BIOCHEM-502	Metabolism II	2(2-0)
BIOCHEM-504	Industrial Biochemistry	3(2-1)
BIOCHEM-506	Biotechnology	2(2-0)
BIOCHEM-508	Bioinformatics	3(2-1)
BIOCHEM-510	Biochemical Techniques	2(1-1)
BIOCHEM-512	Bioenergetics	3(3-0)
QS-302	Qurarric Studies	Audit
	Total Credit Hours	15



# BS BIOCHEMISTRY (SEMESTER I-VIII)

#### **SEMESTER-VII**

Course Code	Course Title	Credit Hours
BIOCHEM-601	Bio membranes & Cell Signaling	2(2-0)
BIOCHEM-603	Clinical Biochemistry	2(1-1)
BIOCHEM-605	Environmental Biochemistry	3(2-1)
BIOCHEM-607	Methods in Molecular Biology	3(2-1)
BIOCHEM-609	Current Trends in Biochemistry	3(3-0)
BIOCHEM-611	Preparation of Research Projec And Scientific Writing	2(1-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	15

Course Code	Course Title	Credit Hours
BIOCHEM-612	Internship	3(0-3)
BIOCHEM-614	Capstone Project	3(0-3)
	Total Credit Hours	06



#### **SEMESTER-I**

Course Code	Course Title	Credit Hours
GE-303	Functional English	3(3-0)
GE-307	Islamic Studies OR Ethics (for Foreigners/Non-Muslims)	2(2-0)
GE-309	Application of Information and Communication Technologies	3(2-1)
PBiotech-301	Principles of Genetics	3(2-1)
ABiotech-301	Cell Biology	3(2-1)
PATH-401	General Pathology	3(2-1)
	Total Credit Hours	17

#### **SEMESTER-II**

Course Code	Course Title	Credit Hours
GE-403	Expository Writing	3(3-0)
GE-402	Entrepreneurship	2(1-1)
BIOCHEM-301	General Biochemistry	3(2-1)
DS-410	Introduction to Data Science	3(2-1)
ENV-302	General Chemistry	3(2-1)
Biotech-503	Introduction to Biosafety	3(2-1)
Biotech-301	Molecular Biology	3(2-1)
QS-302	Quranic Studies	Audit
	Total Credit Hours	20

Course Code	Course Title	Credit Hours
Biotech-509	Introduction to Bioinformatics and Functional Genomics	3(2-1)
PBiatech-402	Recombinant DNA Technology	3(2-1)
BIOCHEM-401	Physical Chemistry	3(2-1)
MLT-406	Histopathology & Histotechnology	3(2-1)
GE-305	Quantitative Reasoning (I)	3(3-0)
GE-301	Social and Religious Tolerance	2(2-0)
GE-407	Ideology and Constitution of Pakistan	2(2-0)
	Total Credit Hours	19



#### SEMESTER-IV

Course Code	Course Title	Credit Hours
Biotech-601	Agricultural Biotechnology	4(2-1)
HBiotech-402	Health Biotechnology	3(2-0)
Biotech-615	Industrial Biotechnology	2(2-1)
Biotech-617	Animal Biotechnology	2(2-1)
0S-302	Quranic Studies	Audit
GE-405	Quantitative Reasoning (II)	3(3-0)
GE-404	Civics and Community Engagement	2(2-0)
RS-409	Rural Sociology and Development	2(2-0)
	Total Credit Hours	18

#### **SEMESTER-V / Animal Biotechnology**

Course Code	Course Title	Credit Hours
Biotech-507	Modern Concepts in Biolechnology	3(2-1)
HBiotech-501	Molecular Phanning and Biophannaceuticals	3(2-1)
PBiotech-505	Intellectual Property Rights	3(2-1)
HBiotech-503	Gene therapy and therapeutics	3(2-1)
Micro-301	Fundamentals of Microbiology	3(2-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
MLT-302	Basic Human Physiology	3(2-1)
HBiotech-505	Bio-imaging	2(1-1)
HBiotech-507	Biotechnological Approaches to Drug Resistance	3(2-1)
ABiotech-501	Animal Neurotoxicology	2(1-1)
	Total Credit Hours	20

#### Health/Medical Biotechnology

Course Code	Course Title	Credit Hours
Biotech-507	Modern Concepts in Biotechnology	3(2-1)
HBiotech-501	Molecular Pharming and Biopharmaceuticals	3(2-1)
PBiotech-505	Intellectual Property Rights	3(2-1)
HBiotech-503	Gene therapy and therapeutics	3(2-1)
Micro-301	Fundamentals of Microbiology	3(2-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
MLT-302	Basic Human Physiology	3(2-1)
HBiotech-505	Bio-imaging	2(1-1)
HBiotech-507	Biotechnological Approaches to Drug Resistance	3(2-1)
HBlotech-509	Biological Fluid Mechanics	2(1-1)
	Total Credit Hours	20



**Plant Biotechnology** 

Course Code	Course Title	Credit Hours
Biotech-507	Modern Concepts in Biotechnology	3(2-1)
HBiotech-501	Molecular Pharming and Biopharmaceuticals	3(2-1)
PBiotech-505	Intellectual Property Rights	3(2-1)
PBG-505	Cytogenetics	3(2-1)
PBiotech-503	Molecular Ecology and Evolution	3(2-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
Biotech-511	Experimentation in Biotechnology	3(2-1)
HBiotech-505	Bio-imaging	2(1-1)
HBiotech-507	Biotechnological Approaches to Drug Resistance	3(2-1)
Biotech-513	Biophysics and Computational Biology	2(2-0)
	Total Credit Hours	20

**Industrial Biotechnology** 

Course Code	Course Title	Credit Hours
Biotech-507	Modern Concepts in Biotechnology	3(2-1)
HBiotech-501	Molecular Pharming and Biopharmaceuticals	3(2-1)
PBiatech-505	Intellectual Property Rights	3(2-1)
Biotech-501	Microbial Biotechnology for Industrial Purposes	3(2-1)
Biotech-503	Biochemistry and Enzymology	3(2-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
Biotech-505	Principles of Biochemical Engineering	3(2-1)
HBiotech-505	Bio-imaging	2(1-1)
HBiotech-507	Biotechnology approaches to drug resistance	3(2-1)
Biotech-513	Biophysics and Computational Biology	2(2-0)
	Total Credit Hours	20



#### **SEMESTER-VI**

**Animal Biotechnology** 

Course Code	Course Title	Credit Hours
Biotech-502	Genomics and Proteomics	3(3-0)
Micro-304	Basic Immunology	3(2-1)
ABiotech-502	Analytical Techniques in Biotechnology	3(2-1)
ABiotech-504	Molecular Diagnostics	3(2-1)
Biotech-510	Nanobiotechnology	3(2-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
ABiotech-506	Animal Reproduction and Transgenesis	2(1-1)
HBiotech-506	Vaccine Production	3(2-1)
ABiotech-508	Animal Nutrition and Biochemistry	3(2-1)
ABiotech-510	Utilization and Conservation of Animal Genetic Resources	2(1-1)
	Total Credit Hours	20

**Health/Medical Biotechnology** 

Course Code	Course Title	Credit Hours
Biotech-502	Genomics and Profeomics	3(3-0)
Micro-304	Basic Immunology	3(2-1)
ABiotech-502	Analytical Techniques in Biotechnology	3(2-1)
ABiotech-504	Molecular Diagnostics	3(2-1)
Biotech-510	Nanobiotechnology	3(2-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	0200-3018
HBiotech-502	Drug Discovery	2(1-1)
HBiotech-504	Vaccine Production	3(2-1)
Micro-502	Medical Microbiology	3(2-1)
HBiotech-506	Metabolic and auto-immune Disorder	2(1-1)
	Total Credit Hours	20



#### **Plant Biotechnology**

Course Code	Course Title	Credit Hours
Biotech-502	Genomics and Proteomics	3(3-0)
Biotech-504	Epigenetics	3(2-1)
ABiotech-502	Analytical Techniques in Biotechnology	3(2-1)
PBG-504	Modern Concepts in Plant Breeding	3(2-1)
Biotech-510	Nanobiotechnology	3(2-1)
Elective Courses- 5	Students may opt for five credit hours from elective courses	
HBiotech-502	Drug Discovery	2(1-1)
Biotech-512	Plant Microbiology	3(2-1)
PBG-518	IPR and Variety Development	2(1-1)
Biotech-508	Principles of Plant Molecular Physiology	3(2-1)
	Total Credit Hours	20

#### **Industrial Biotechnology**

Course Code	Course Title	Credit Hours
Biotech-502	Genomics and Proteomics	3(3-0)
IBiotech-506	Biofuel and Biorefinery	3(2-1)
ABiotech-502	Analytical Techniques in Biotechnology	3(2-1)
Biotech-504	Fermentation Technology	3(2-1)
Biotech-510	Nanobiotechnology	3(2-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
HBiotech-502	Drug Discovery	2(1-1)
HBiotech-504	Vaccine Production	3(2-1)
PBG-518	IPR and Variety Development	2(2-0)
Biotech-508	Principles of Plant Molecular Physiology	3(2-1)
	Total Credit Hours	20



#### SEMESTER-VII Animal Biotechnology

Course Code	Course Title	Credit Hours
HBiotech-601	Stem Cell Biotechnology	3(2-1)
Micro-503	Applied Immunology	3(2-1)
ABiotech-601	Model Organisms for In vivo Studies	3(2-1)
Biotech-613	Biotechnology Entrepreneurship	3(2-1)
Biotech-611	Preparation of Research Project and Scientific Writing	2 (1-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
Micro-408	General Bacteriology	3(2-1)
MLT-303	Human Histology	3 (2-1)
ABiotech-603	Animal Parasitology	2(1-1)
ABiotech-505	Animal Infectious Disease	2(1-1)
	Total Credit Hours	19

#### Health/Medical Biotechnology

Course Code	Course Title	Credit Hours
HBiotech-601	Stem Cell Biotechnology	3(2-1)
Micro-503	Applied Immunology	3(2-1)
ABiotech-601	Model Organisms for In vivo Studies	3(2-1)
Biotech-613	Biotechnology Entrepreneurship	3(2-1)
Biotech-611	Preparation of Research Project and Scientific Writing	2 (1-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
HBiotech-603	Regenerative Medicine	3(2-1)
MLT-303	Human Histology	3 (2-1)
HBiotech-605	Human Molecular Genetics	2(1-1)
HBiotech-607	Cancer Biotechnology	2(1-1)
	Total Credit Hours	19



#### **Plant Biotechnology**

Course Code	Course Title	Credit Hours
Biotech-605	Fundamentals of Seed Molecular Biology	3 (2-1)
Biotech-603	Genome Editing and its Applications	3 (2-1)
PBG-607	Bioinformatics in Plant Breeding	3 (2-1)
Biotech-613	Biotechnology Entrepreneurship	3 (2-1)
Biotech-611	Preparation of Research Project and Scientific Writing	2 (1-1)
Elective Courses-	Students may opt for five credit hours from elective courses	
FST-621	Food Biotechnology	3(2-1)
PBG-615	Genomics in Agriculture	2(1-1)
PBG-613	Biosafety Measures in GM Crops	2(1-1)
PBG-507	Germplasm Resource of Field Crops	3(3-0)
	Total Credit Hours	19

#### **Industrial Biotechnology**

Course Code	Course Title	Credit Hours
IBiotech-601	Industrial Bioprocessing	3(2-1)
Biolech-631	Protein Engineering and Purification	3(3-1)
Biolech-605	Bioelectronics and Biosensor	3(3-1)
Biotech-613	Biotechnology Entrepreneurship	3 (2-1)
Biotech-611	Preparation of Research Project and Scientific Writing	2 (1-1)
Elective Courses-S	tudents may opt for five credit hours from elective courses	
ABiotech-601	Model Organisms for In vivo Studies	3(2-1)
FST-621	Food Biotechnology	3(2-1)
PBG-613	Biosafety Measures in GM Crops	2(1-1)
Biotech-615	Industrial Biotechnology	2(1-1)
	Total Credit Hours	19



Course Code	Course Title	Credit Hours
HBiotech-612	Internship	3(0-3)
HBioech-614	Capstone Project	3(0-3)
	Total Credit Hours	06

Course Code	Course Title	Credit Hours
ABiotech-612	Internship	3(0-3)
ABiotech-614	Capstone Project	3(0-3)
	Total Credit Hours	06

Course Code	Course Title	Credit Hours
Biotech-612	Internship	3(0-3)
Biotech-614	Capstone Project	3(0-3)
	Total Credit Hours	06

Course Code	Course Title	Credit Hours
PBiatech-612	Internship	3(0-3)
PBioech-614	Capstone Project	3(0-3)
	Total Credit Hours	06



### LIVESTOCK ASSISTANT DIPLOMA (3 YEARS) (SEMESTER I-VI)

#### **SEMESTER-I**

Course Code	Title of Course	Credit Hours
LAD-101	Anatomy	3(2-1)
LAD-102	Physiology	3(2-1)
LAD-103	Pharmacology	3(2-1)
AD-104	Veterinary Pathobiology I	3(2-1)
AD-105	Livestock Extension Education	3(2-1)
AD-111	Chinese Language I (Tang 1)	2(2-0)
Total	10-10-10-10-10-10-10-10-10-10-10-10-10-1	17

#### **SEMESTER-II**

Course Code	Title of Course	Credit Hours
LAD-106	Animal Nutrition	3(2-1)
LAD-107	Livestook Production	3(2-1)
LAD-108	Fisheries	2(1-1)
LAD-109	Veterinary Pathobiology II	3(2-1)
LAD-110	Veterinary Pathobiology III	3(2-1)
LAD-112	Chinese Language I (Tang 2)	2(2-0)
Total		16

Course Code	Title of Course	Credit Hours
LAD-201	Poultry Production	3(2-1)
LAD-202	Clinical and Preventive Medicine I	3(2-1)
LAD-203	Theriogenology I	3(2-1)
LAD-204	Clinical Surgery	3(2-1)
LAD-205	Basics of Farm Machinery	1(0-1)
LAD-211	Chinese Language II (1) (Tang 3)	2(2-0)
LAD-213	Understanding China (1)	2(2-0)
Total	155	17



### LIVESTOCK ASSISTANT DIPLOMA (3 YEARS) (SEMESTER I-VI)

#### **SEMESTER-IV**

Course Code	Title of Course	Credit Hours
LAD-206	Thertogenology II	3(2-1)
LAD-207	Clinical and Preventive Medicine II	3(2-1)
LAD-208	Basic Computer Applications	2(0-2)
AD-210	Internship	6(0-6)
LAD-212	Chinese Language II (2) (Tang 4)	2(2-0)
LAD-214	Understanding China (2)	2(2-0)
Total		18

#### **SEMESTER-V**

Course Code	Title of Course	Credit Hours
LAD-301	Specialized Vocabulary	3(1-2)
LAD-302	Intelligent Cattle Rearing Technology	3(2-1)
LAD-303	Sheep Rearing Technology	3(2-1)
LAD-304	Control of Common Diseases of Livestock and Poultry	3(2-1)
LAD-305	Zoonosis	2(2-0)
LAD-306	Animal Parasitism	2(2-0)
Total	INCOMPANIENT CONTRACTOR	16

Course Code	Title of Course	Credit Hours
LAD-307	Artificial Insemination Techniques for Livestock	2(1-1)
LAD-308	Veterinary Imaging	2(1-1)
LAD-309	Substitute Internship	10(0-10)
LAD-310	Graduation Design (thesis)	1(0-1)
LAD-311	Thesis Defense	1(0-1)
Total	1	16



## LIVESTOCK ASSISTANT DIPLOMA (2 YEARS) (SEMESTER I-IV)

## **SEMESTER-I**

Course Code	Title of Course	Credit Hours
LAD-101	Anatomy	3(2-1)
LAD-102	Physiology	3(2-1)
LAD-103	Pharmacology	3(2-1)
LAD-104	Veterinary Pathobiology I	3(2-1)
LAD-105	Livestock Extension Education	3(2-1)
Total		15

## **SEMESTER-II**

Course Code	Title of Course	Credit Hours
LAD-106	Animal Nutrition	3(2-1)
LAD-107	Livestock Production	3(2-1)
LAD-108	Fisheries	2(1-1)
LAD-109	Veterinary Pathobiology II	3(2-1)
LAD-110	Veterinary Pathobiology III	3(2-1)
Total		14

## **SEMESTER-III**

Title of Course	Credit Hours
Poultry Production	3(2-1)
Clinical and Preventive Medicine I	3(2-1)
Theriogenology I	3(2-1)
Clinical Surgery	3(2-1)
Basics of Farm Machinery	1(0-1)
	13
	Poultry Production  Clinical and Preventive Medicine I  Theriogenology I  Clinical Surgery



## LIVESTOCK ASSISTANT DIPLOMA (2 YEARS) (SEMESTER I-IV)

## **SEMESTER-IVI**

Course Code	Title of Course	Credit Hours
LAD-206	Theriagenology II	3(2-1)
LAD-207	Clinical and Preventive Medicine II	3(2-1)
LAD-208	Basic Computer Applications	2(0-2)
LAD-210	Internship	6(0-6)
Total		14







## THE STATUTES AND REGULATIONS RELATING TO THE DEGREES AWARDED BY MUHAMMAD NAWAZ SHAREEF UNIVERSITY OF AGRICULTURE, MULTAN

## I. STATUTES

- 1. In these Statutes unless there is anything repugnant in the subject or context;
  - (i) "Audit Course" means a course attended without any liability of taking its examination.
  - "Credit Hour" means the successful completion of a course of one semester hour in theory or 2-3 semesters' hours in practical per week. One credit hour will be equal to 50 minutes student teacher contact per week for 16 weeks and for laboratory/practical work its duration will be 2-3 hours.
  - (iii) "Deficiency Course" means a course in which a student has been adjudged deficient by a competent body of the University.
  - (iv) "Non Credit Course" means a course of study, successful completion of which would not be a requirement for the degree.
  - (v) "Semester" means teaching time of 19 weeks inclusive of admission, conduct of examination, preparation and declaration of results etc. and gazetted holidays.

## 2. Duration & Medium of the course

- (I) Theminimum number of semesters for completing the course for the degrees of B.Sc. (Hons.) Agriculture, B.Sc. (Hons.) Environmental Science, B.Sc. (Hons.) Agricultural and Resource Economics, B.Sc. (Hons.) Human Nutrition and Dietetics, B.Sc. (Hons.) Home Economics, BBA-Agri. Business, BS Computer Science, BS Data Science, BS Information Technology, B.Sc. Agro-Industrial Engineering and Technology, B.Sc. Agricultural Engineering, B.Sc. (Hons.) Poultry Sciences, B.Sc. (Hons.) Animal Science, BS Microbiology, BS Biotechnology, BS Biochemistry, BS Medical Laboratory, BS Public Health and BS Zoology shall be eight.
- (ii) The medium of instructions and examinations shall be English except in the case of Islamic Studies, which shall be in Urdu.

## 3. Duration of Semester

(i) Therewill be two semesters in each academic year, Winter and Spring of 19 weeks each. The commencement of the





semesters will be according to the academic calendar.

**Explanation:** Out of 19 weeks, 16 weeks shall be the actual teaching time, the rest may be utilized for admission, conduct of examinations, preparation and declaration of results etc.

(ii) There will also be a summer session of 8 to 10 weeks duration as part of an academic year, and shall be optional. Students who wish to pass 'F' grade(s) and to improve 'D' grade(s) course(s) may enroll in summer session in the courses offered. It shall not count towards residential requirements.

## 4. Scheme of Studies

The schemes of studies for various degree examinations shall be as given in the Appendices appended to the Statutes. This schedule may be amended from time to time.

## Minimum Requirements for various Degrees

The minimum credit requirement for instituting the various degrees shall be as follows. The limit of credit hours may be increased/decreased from time to time according to the requirements or as prescribed by HEC.

Sr. No.	Degree	Credit Hours		
1.	B.Sc. (Hons.) Agriculture	141 credit hours for duration of 8 semesters		
2.	B.Sc. (Hons.) Environmental Science	136 credit hours for duration of 8 semesters		
3.	BBA Agribusiness	132 credit hours for duration of 8 semesters		
4.	B.Sc. (Hons.) Agricultural and Resource Economics	138 credit hours for duration of 8 semesters		
5.	BS Computer Science	133 credit hours for duration of 8 semesters		
6.	BS Data Science	130 credit hours for duration of 8 semesters		
7.	BS Information Technology	135 credit hours for duration of 8 semesters		
8.	B.Sc. (Hons.) Home Economics	135 credit hours for duration of 8 semesters		
9.	B.Sc. Agro-Industrial Engineering Technology	137 credit hours for duration of 8 semesters		
10.	BS Poultry Science	131 credit hours for duration of 8 semesters		
11.	B.Sc. (Hons.) Animal Science	134 credit hours for duration of 8 semesters		
12.	BS Microbiology	131 credit hours for duration of 8 semesters		
13.	BS Zoology	129 credit hours for duration of 8 semesters		
14.	BS Biochemistry	131 credit hours for duration of 8 semesters		
15.	BS Medical laboratory	132 credit hours for duration of 8 semesters		
16.	BS Public Health	129 credit hours for duration of 8 semesters		
17.	B.Sc. (Hons.) Human Nutrition and Dietetics	141 credit hours for duration of 8 semesters		
18.	BS Biotechnology	133 credit hours for duration of 8 semesters		
19.	B.Sc. Agricultural Engineering	144 credit hours for duration of 8 semesters		





## II. REGULATIONS

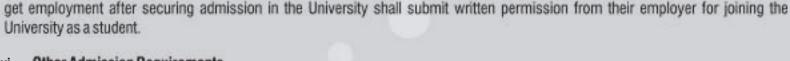
## 1. ADMISSION REQUIREMENTS

## i. Minimum Academic Requirements

The relevant qualification/requirements for various undergraduate degree programs are as under:

Sr. No.	Degree	Academic Qualification	Marks Requirements
Ĺ	B.Sc. (Hons.) Agriculture	Intermediate Science (Pre-Medical/ Pre-Engineering)/ Pre Agriculture DAS on reserved seats only	
2	B.Sc. (Hons.) Environmental Science	Intermediate Science (Pre-Medical/ Pre-Engineering) or Equivalent qualification	
3	BBA Agribusiness	Intermediate	
4	B.Sc. (Hons.) Agricultural and Resource Economics	Intermediate Science (Pre-Medical/Pre-Engineering) or ICS with Economics or I.COM /A-Level	
5	BS Computer Science/BS Data Science/BS Information Technology	F.Sc. (Pre-Engineering/Pre-Medical)/ ICS/ A-Level students (with Mathematics/Biology)     Minimum 50% marks in intermediate     DAE (specialized in electrical, mechanical, electronics and Telecommunication) (two (02) reserved seats only).  Note: Students of F.Sc. (Pre-Medical)/ A-level students (with Biology) must have to take deficiency courses of Mathematics of 6 credit hours within one year of their regular studies.	Minimum 50% of total marks
6	B.Sc. (Hons.) Home Economics	F.Sc. Pre-Medical/ Pre Engineering/ FA Home Economics/A-Level	
7	B.Sc. Agro Industrial Engineering Technology	F.Sc. (Pre-Engineering, Pre-Medical*, Pre-Agriculture)/ICS/A-Level/DAE (Three Years) i.e. Civil, Mechanical, Auto and farm, Electrical, Electronics, Chemical, Instrumentation and any relevant with minimum 50 % marks.	
8	B.Sc. Agricultural Engineering	Intermediate Science (Pre-Engineering and Pre-Medical*) / Intermediate with combination of Physics, Mathematics, Biology* & Computer Studies** / ICS** / Three years Diploma of Associate Engineer (DAE) in Civil, Mechanical, Auto & Farm Machinery, Auto & Dieset, Mechanical/Machinery, Automation securing 60% marks i.e. 660/1100 with Securing Minimum 33% marks is compulsory in Entry test.	Minimum 60% of total marks
9	BS Poultry Science		
10	B.Sc. (Hons.) Animal Science	Minimum 50% of total marks	
11	BS Microbiology	deficiency course in Biology: Essentials of Biology BIO-301, 3(2-1).  Intermediate science (Pre-medical) or Equivalent	
12	BS Zoology	F.Sc. (Pre - Medical) or Equivalent	
13	BS Biochemistry	F.Sc. (Pre -Medical) or Equivalent	
14	BS Botany	F.Sc. (Pre -Medical) or Equivalent	
15	BS Public Health	FA/F.Sc. (Pre-Medical/ Pre-Engineering) or Equivalent	





## vi. Other Admission Requirements

- The schedule of fees /dues payable by the candidates selected for the admission shall be as prescribed.
- The University Authorities shall have the discretion to refuse admission in any case without assigning any reason.
  All admissions secured by providing wrong information or concealment of relevant information or the admissions made in contravention of these Regulations shall be void/liable to be cancelled.
- Medical Certificate shall be submitted by selected candidates at the time of payment of dues by the Medical Officer (MO) appointed by the University.
- d) The selected Candidates shall present at the time of admission, the following documents in original and two sets of attested photocopies of these Certificates i.e. Academic Certificates, Hafiz-e-Quran Certificate, Under taking and Medical Certificate.
- Lists of selected candidates will be displayed on the notice board/website of Muhammad Nawaz Shareef University of Agriculture Multan, Old Shujaabad Road Multan.

The Admission Committee of the MNSUA, Multan will entertain the appeals of the aggrieved persons regarding admission.

## 2. DEFICIENCY

If the schedule of courses pursued by a candidate does not provide adequate background for the 1-degree course which he/she intends to take up, he/she may be required to make up the deficiency by taking one or more additional course(s) of deficiency level as may be prescribed by the Admission and Prospectus Committee.

## 3. TIME FOR ADMISSION

The candidates may be admitted at the beginning of the Winter Semester of each academic year. They are required to deposit dues/complete other admission/enrolment formalities within the dates notified by the Admission and Prospectus Committee, failing which his/her admission shall stand cancelled automatically. Provided that the admission of such candidates may be allowed by the Vice- Chancellor subject to availability of seat and on the recommendations of the Admission and Prospectus Committee till such time as it does not conflict with the prescribed requirements of 75% attendance in lectures and practicals of each subject which will be counted from the notified date of commencement of classes for fresh entrants.







Twenty Marks are added to the Academic marks in the H.S.S.C or equivalent Examination of the applicant who is Hafiz-e-Quran. The Candidates gets the benefit only if he/she has filled in the necessary column provided in the application form, and submitted the documentary proof of Hafiz-e-Quran. Moreover, Hafiz-e-Quran applying for admission will have to appear before a Committee constituted by the Vice Chancellor, MNSUA, Multan and get a Certificate from the Committee.

- Determination of merit in the case of equal percentage of admission marks: if two or more applicants have equal marks, they shall be treated at par and shall be admitted.
- b) The admission to B.Sc. (Hons.) Agriculture shall be made on the basis of common "Scheme of Studies" for first four semesters. On completion of four semesters, the candidates have a choice to opt any of the offered Major Subjects which will be exercised on the basis of their CGPA secured at the end of 4th semester, order of preference and availability of seats in the respective discipline.
- Both males and females are eligible to apply.

## ii. Age

A candidate must not be more than 23 years of age on the last date of admission forms submission, provided that after provisional selection, the Vice-Chancellor may relax upper age limit in very exceptional cases on the recommendations of Admission and Prospectus Committee.

## iii. Domicile

The candidate domiciles in other Provinces but passing Intermediate examination from the Board of Intermediate and Secondary Education of the Punjab may be considered for admission against Provincial quota of the respective Province.

## iv. Affidavit

Every candidate and his/her parent/guardian shall at the time of admission give an affidavit/undertaking on stamp paper, that candidate shall not indulge in politics and shall follow University Rules and Regulations, failing which candidate shall not be allowed admission/to continue his/her degree. In the event of violation of such an undertaking after admission, he/she shall be expelled from the University without Notice. The finding with regard to "indulgence in politics" given by the Head of the Institution under his seal and signature shall be final and shall not be questioned except only before the Supreme Court of Pakistan. (Added under decision of Supreme Court of Pakistan dated 01-07-1992 on a Human Rights cases Nos. 175,218/1992).

## v. Permission for In-service candidates

Candidates who are in the service of Government /Semi Government or Autonomous Organization at the time of admission or seek /





Explanation: Admission/Enrolment will only be considered completed when UG-I form is deposited to the Dean Office of respective Faculty. Only depositing of fee will not serve the purpose.

## 4. ENROLMENT

(i) A candidate admitted to the course shall for so long as he/she has not completed all the requirements for the degree, enroll himself/herself for each semester subject to the maximum admissible limit of 12 semesters including terminal summer session, failing which his/her admission shall stand cancelled. In case a student discontinues a semester without permission, he/she may seek re-admission, in the same semester next year with the approval of the Vice Chancellor on the recommendations of the Admission and Prospectus Committee or in the subsequent year, provided that he/she has not already exhausted the maximum residential requirements for the course. In case a student does not avail both the admissible opportunities for seeking re- admission, he/she shall not be eligible for re-admission in future. Provided that after the first eight semesters, a candidate may enroll in the semester in which his/her failing/remaining subject(s) is/are offered in accordance with his/her "Scheme of Studies" subject to the maximum admissible limit of 12 semesters. Provided further that the semester meant for Internship as per approved scheme of studies shall be meant for Internship only.

## Clarification of Regulation 4(I)

The four semesters provided in excess of the normal duration of the course have to be treated as exactly identical to the original minimum duration in matters of regulating the course conduct. This provision does not place any bar on the students' right to discontinue their studies during these extra four semesters. But what is inviolable in their case is their consecutive nature. One cannot skip a semester during this extra period and recover it beyond the maximum admissible semesters after it has ended. For instance, if a student discontinues studies in the 11th semester, and the course in question is not offered in the next 12th semester, he/she cannot claim a right to further enroll in the next (13th) semester, except that he/she avails himself/herself of the terminal summer session. He/she has come to the end of his/her studies. The law provides him/her no further chance. Provided further that the semester meant for Internship as per approved scheme of studies shall be meant for Internship only.

(ii) An application for enrollment on the prescribed form (UG-I) accompanied by the prescribed fee paid receipt, shall be presented by regular students in Dean Office of respective Faculty on the days notified by University. The date for enrollment with normal late fee will also be announced by the University in the same notification. Provided that after the expiry of last date with normal late fee notified by the University, the Competent Authority (Dean/Director as the case may be) may permit a student for late enrollment on payment of prescribed double late fee (Fee within one week after expiry of single late fee notified). Provided further that the Vice- Chancellor may allow late enrollment to a student after the expiry of seven days period granted by the Competent Authority.





This permission will be granted under special circumstances in individual cases on the recommendations of the Prospectus and Admission Committee on the written request of a student on payment of double late fee till such time as it does not conflict with the prescribed requirement of 75% attendance in lectures and practicals of each subject which will be counted from the date of commencement of regular semester. After the expiry of prescribed period, permission for late enrollment shall not be granted in any case. In that eventuality, the concerned applicant will be treated as discontinued studies without permission of the Competent Authority and his/her request for continuation of studies, if received, may be dealt with in accordance with the provisions of relevant regulations.

## 5. MINIMUM AND MAXIMUM CREDIT HOURS

## A. Regular Semester

- Each student shall register himself/herself in the first and second semesters for all the credit hours prescribed for these semesters. In subsequent semester(s), he/she shall have to register for courses maximum 20-23 credit hours for undergraduate programs.
- b) In two semesters falls before the semester meant for internship, a student may register himself/herself up to 27 credit hours for undergraduate degree programs. Provided further that the Dean of respective Faculty may allow to enroll extra credit hours on the written request submitted by a student well in time up to 30 credit hours subject to the condition that he/she will complete his/her degree after enrollment of extra credit hours.
- c) No course shall be offered during the regular semester which does not fall within the "Scheme of Studies" in the respective semester.

## B. Summer Session

- The students who wish to pass 'F" and or to improve 'D' grade(s) may enroll during the summer session normally for not more than 12 credit hours.
- After 8th regular semester of four years degree programs, if a student has yet to qualify fail courses of more than 16 credit hours, he/she will enroll only up to the normal limit of 12 credit hours, which may include 'P' and 'D' grade courses. He/she will enroll the remaining course(s) in the forthcoming regular semester(s) or the summer session(s) following as per scheme of studies.
- c) In summer sessions following 8th, 10thand 12thregular semesters for the students of four years degree programs and a student may enroll fail course(s) only, upto 16 credit hours with the permission of the Competent Authority provided that he/she will complete her/his degree program after that session. In this situation, he/she will not be able to enroll any "D" grade course(s).

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d) In summer session double classes will be held to compensate the normal study hours of a regular semester. The prescribed attendance requirements and relevant Regulations will strictly be adhered. Departmental Chairpersons will decide the teacher(s) for the summer session.

## 6. NUMBER OF COURSES

The courses will be numbered to a scheme such as B.Sc. (Hons.) Agriculture 1st and 2nd semester (301-302), 3-and 4-(401-402) and so on. This number will be preceded by two to four letters indicating the field of study i.e. AGRON-301.

## 7. IMPROVEMENT OF 'D' GRADE

- (i) In any regular or summer session a student may repeat once those course(s) of the previous semester(s) in which he/she has secured the lowest grade i.e.'D' only within the prescribed limit of credit hours. However, after completion of courses prescribed under the 'Scheme of Studies', a student stands ineligible to enroll 'D' grade course(s) for improvement of CGPA even if she/he has not exhausted the maximum admissible limit of semesters.
- (ii) Any improved grades will substitute 'F' and 'D' grades of the previous semester for calculating CGPA but 'F' and 'D' grades will form part of the transcript.

## 8. EXAMINATION AND WEIGHTAGE

- (i) A mid-term examination will be held during 9th week of the semester which shall carry 30% of the total marks allocated for the course. This examination shall be conducted by the teachers concerned who shall determine the form of the examination.
- (ii) In addition, quizzes, special home assignments and/or term papers shall carry 10% of the total marks allocated which shall uniformly split over the whole semester. The final examination to be held at the end of the semester shall carry 60% of the total marks allocated.
- (iii) For the purpose of evaluation, one credit will carry 20 marks e.g. a 4 credit course will carry 80 marks. These marks will be divided in accordance with the credit assigned to Theory/Practical of each course.

## 9. UNIFORMITY/STANDARD IN TESTS

Examination Committee will examine all problems regarding uniformity/standards in tests, examinations, assignments etc. before the declaration of results for the semester, or any appeal from the student or teacher of any other related matter. The decision of the Committee shall be final. The students will be permitted to go through their answer books in the presence of teachers concerned within three days before the award list is sent to the Controller of Examinations.



# UNDERGRADUATE STATUTES AND REGULATIONS



## 10. PRACTICAL EXAMINATION

The practical, each laboratory experiment, exercise, operation etc., shall be considered an examination and 40% marks shall be assigned for overall general performance and 60% for the final examination.

## 11. DECLARATION OF RESULT

- (i) The result of all the examinations shall be completed and delivered within 7 to 10 days of the date of examination under sealed cover to the Controller of Examinations at the end of each semester.
- (ii) One copy of the award of each subject shall be forwarded to the Faculty Dean and Departmental Chairperson under sealed cover.
- (iii) GPA/CGPA at the end of 1st, 2nd and subsequent Semesters: A student is required to secure minimum GPA 0.5 at the end of first and CGPA 0.75 after 2nd semester enabling him/her to continue studies, failing which he/she will cease to be on the rolls of the University. In 3rd or any subsequent semester(s), a student is required to secure a minimum CGPA of 1.00, so that he/she feels impelled to get the minimum CGPA of 2.20 required for qualifying for the award of the degree, failing which he/she would cease to be on the rolls of the University and shall not be re-admitted afresh in the University.
- (iv) Calculation of GPA/CGPA: GPA/CGPA will be calculated at the end of each semester in accordance with the relevant Regulations.

## 12. MINIMUM PASS MARKS

In order to complete a course successfully, a student is required to obtain at least 40% marks each in Theory and Practical separately.

## 13. INCOMPLETE GRADE

No makeup examination shall be given to a student who does not appear in Mid-term examination. In case a student is unable to appear in one or more courses in the Final Examination of semester on medical ground, he may be allowed to appear in the Special Final Examination to be arranged by the Department provided:

- a) He/She fulfills the conditions of having attended the prescribed number of lectures as laid down in the regulations.
- b) He/She is laid down as an indoor patient of a recognized Hospital, or if lie/she is not hospitalized as defiance above, the candidate shall be examined by the Medical Superintendent of Civil Hospital who may certify the inability of the student to appear in the examination or otherwise.
- Application of the student must reach the department on ot before the day of Examination.
- d) Such a student shall be driven incomplete grade ('I' Grade). He shall be required to appear in the Special Final Examination to semester to be held within four weeks from the commencement of the next semester.
- He shall also be required to follow the schedule of the next semester.
- The student shall have to pay a fee of Rs. 1000/- per course for special final examination.





## 14. GRADE POINT AVERAGE

(I) Grade points will be as follows: 4 for A, 3 for B, 2 for C, 1 for D and Zero for F or failure. W for withdrawal and I for Incomplete may also be used. Maximum grade point average: 4.00, Minimum grade point average for obtaining a degree: 2.20

Grade	Value	Marks	Remarks
A	4	80 -100%	Excellent
В	3	65 - 79%	Good
C	2	50 -64%	Satisfactory
D	1	40 - 49%	Pass
F	0	Below 40%	Fail

(i) The grade point will be worked on the basis of percentage of marks obtained by a student in each course separately according to conversion table and not on the percentage of total marks obtained by a student.

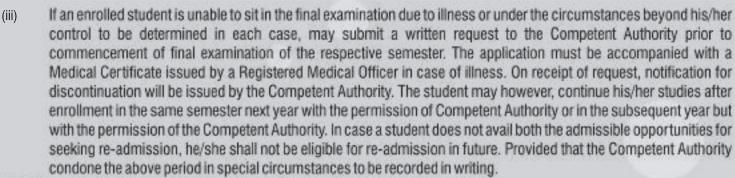
## 15. ATTENDANCE REQUIREMENTS

- (i) A candidate with less than 75% of the attendance in Theory and Practical of each course separately shall not be allowed to take the final examination of the course in a semester. Provided that the period of absence in the case of participation in co-curricular/sports activities with the permission of Competent Authority may not be counted.
- (ii) The teacher concerned shall send the attendance percentage to the Dean Office of the respective Faculty through the Chairman of the Department, prior one week to final exam for each course, theory and practicals separately on the prescribed form.
- (iii) If a student fails to fulfill minimum attendance requirement, will be treated as discontinued without prior permission of the competent authority and his/her request for continuation of studies, if received, may be dealt with in accordance with the provisions of relevant Regulations.

## 16. CONDUCT OF EXAMINATIONS

- (i) The final examination of each course (Theory and Practical) shall be held during the last week of a semester at a time and place notified by the Secretary Time-table Committee.
- (ii) All teachers teaching the various sections of a class will set their individual examination papers. The answer books will be marked by the respective teachers individually or collectively. The Coordinator Undergraduate Studies will arrange the supervision of the examination of the course, marking of the answer books and preparation of award lists.





## 17. MARKS/GRADE OF DEFICIENCY COURSE

The marks/grade required to pass a deficiency course shall be the same as in the regulations relating to the examination/course concerned.

## 18. SCRIPT OF EXAMINATIONS

The script of each examination may be shown to the students by the concerned teacher taken back immediately and then forwarded to the Controller of Examinations within three weeks, who shall preserve the scripts for a year. If a mistake or a discrepancy in the marking of the scripts of a serious nature comes to the notice of the Controller of Examinations, he shall take action to get it rectified in a suitable manner after obtaining proper orders from the Vice-Chancellor.

## 19. EXAMINATION FEES

University examination fee shall be charged at the prescribed rates.







## **Disciplinary Rules and Regulations**

## Short title, Commencement and Application

The rules and regulations to be implemented in MNS University of Agriculture, Multan (MNS-UAM) are to be addressed as MNS-UAM students (Discipline and conduct) regulations. These rules will be applicable to all the students of MNS-UAM. Any students violating these Regulations will be considered as an act of indiscipline and misconduct.

## A. Discipline

No students shall:

- (i) Utter, do, or propagate, anything repugnant to Islam within and outside the confines of the University
- Say or do anything which might adversely affect the honor and prestige of Pakistan, University teachers and his / her educational institution
- (iii) Smoking in University premises including classroom, laboratory, workshop, library, examination hall and University buses etc.
- (iv) Form, or associate with an organization/ society/ club, or any other body promoting caste distinction and inciting unsophisticated/ linguistic/regional feelings
- Collect money or receive donations or pecuniary assistance privately or on behalf of the University or any University organization except with the written permission of the Competent Authority
- (vi) Stage, incite, or participate in a walkout, strike or any other form of agitation which might create or is likely to create law and order problem for the University and affect or is likely to affect its smooth functioning
- (vii) Indulge in immoral activities, use indecent/filthy language, insolence, wear immodest dress, make indecent remarks, jokes or gesture or behave in an improper manner within University premises
- (viii) Cause disturbance to others or threat his/her fellows and any University official/employ
- (ix) Quarrel, abuse, shout and fight within the bounds of University
- (x) Disturb peace and tranquility of the institution or use force to enter University
- (xi) Damage any kind of property of the University
- (xii) Keep or carry licensed or unlicensed weapons, narcotics, immoral or rebellious literature; and use in-salutary or abusive language or resort to violence against a fellow student or employee of the University
- (xiii) Disobeying the authority





- (xiv) Use camera cellphone/digital camera for photography and recording (audio/video) in premises of campus unless permitted by the Competent Authority
- (xv) Giving false information/statement, willful suppression of information, cheating, deceiving, stealing, forgery etc.

## B. Disciplinary Actions and Penalties

Disciplinary action may be taken in one or more of the following forms depending upon the severity of the offence as per decision of Disciplinary Committee:

- (i) A student may be issued /imposed;
- a) Warning letter
- A fine of Rs.2000/- as a minor penalty
- A fine of Rs.5000/- to Rs.10,000/- as major penalty

In case the student fails to deposit the imposed penalty/fine within due date he/she will not be allowed to attend his/her lectures and conditions will be applicable as notified in MNSUA/Acc-001/2014, dated: 07.08.2014.

Explanation: A total of three warning letters will be issued to the guilty and the final one will be sent through surface registered mail to his /her mailing address given in admission proforma. Upon failing the compliance of the letter, the concerned student will be rusticated from the rolls of University

- (ii) A student may be placed on probation for a fixed period not exceeding one academic year
- (iii) Withdrawal of financial concessions (installments, fee waivers, stipend etc.)
- (iv) Any loss or breakage of the University property will be recovered
- (v) If during the period of probation he/she fails to improve his/her conduct, he/she may be rusticated or expelled
- (vi) A student may be suspended from the rolls of a University for a period not exceeding two weeks at a time, excluding the suspension if any, not exceeding 10 days, at one time ordered by the competent authorities
- (vii) A student may be rusticated/ expelled, or asked to withdraw from the University in the manner hereinafter mentioned
- (viii) Debarring from seeking admission to higher studies at University for one academic year or forever

## c. Reclaiming of damage, breakage or loss of any University property

A student shall be responsible to recover the loss or damage caused by him to any property of the University not more than fifteen (15)





days of the first notification by the Disciplinary Committee. If the student fails to do so, it will be considered an act against discipline and misconduct, within the meaning of Regulation A (xiii). As a consequence, the student will be struck off from the rolls of University for failure of making good the loss by him. Further, the Competent Authority may take legal proceedings against him in a Court of Law.

## D. Regulations Relating to Rustication, Expulsion and withdrawal

Rustication, whenever imposed on University student, shall always mean the loss of one academic year so far as his/her Examination is concerned. The period of absence from the University Teaching Department will, however, depend upon the time of the year when the penalty is imposed. The student under rustication may at the discretion of the competent authority of the University be permitted to rejoin the class in the same Department in the beginning of the next academic year. A rusticated student once re-admitted and again found creating disturbance/indiscipline, etc. will be expelled from the University. A student committing a major act of indiscipline expelled from a University shall not be re-admitted. Further, the University shall not issue migration certificate to rusticated or expelled student.

## E. Code of Honor

The following Code of Honor expresses the basic principles of conduct expected to be followed by students:

- All students must have faith in and respect for the ideology of Pakistan
- (ii) All students in matters of religion must respect the conviction of others
- (iii) Every student is expected to:
  - a) Be loyal to Pakistan
  - Obey the laws of the land order as well as the rules& regulation of the University
  - Maintain law and order as well as the dignity and prestige of the University
  - d) Protect the property of the University
  - Show due respect to elders, teachers and outside visitors
  - f) Work hard and co-operate in completing the courses of study within the prescribed period
  - g) No indulgence in sectarian activities

## F. Disciplinary Committee

A Disciplinary Committee of MNSUA, Multan, constituted by the Competent Authority shall investigate, deal with, hear and decide the cases of misconduct and indiscipline among the students on the rolls of the University in accordance with the aforementioned Rules and Regulations and amendments made from time to time as per need.





## G. Appeal

- (i) The student(s) who has/have been rusticated /expelled by the Disciplinary Committee for violation of discipline may submit an appeal to the Vice Chancellor within 15 days of the date of notification of rustication/expulsion or withdrawal
- (ii) The Vice-Chancellor shall have the power to pass such orders as he may deem fit
- (iii) Case of indiscipline/disturbance from students of University shall be referred to the Disciplinary Committee





## **Hostel Rules and Regulations**

## Admission to MNS-UAM hostel

The residents shall abide by the following rules and regulations and other rules as may be framed from time to time by the Competent Authority.

- The hostel accommodation will be provided to the bonafide students of the University, subjected to the availability of seats.
- On allotment slip full particulars including recent photograph, permanent address with phone number and complete address of the student will be given.
- Seats within the hostel are allotted by the Hostel Superintendent on the commencement of the semester on seniority/merit basis, which will be determined by the semester of the study taking into consideration GPA/CGPA and student's behavior during stay.
- In making the allotment, the hostel authorities will also take into account the conduct and character of a boarder. Those, with penalties being imposed shall lose their seniority.
- The allotment of such students whose hostel dues are in arrears shall be cancelled.
- No boarder is allowed to change his/her seat without prior permission of the hostel authorities.
- The Vice Chancellor and Hostel Warden may refuse admission or expel any student if he/she has any qualms about a student conduct or character.

## Hostel fee and subscription

- Hostel fee and security deposits as determined by the University from time to time are payable by the student in each semester.
- Hostel allotment of a student shall be cancelled, if, he/she fails to pay hostel dues. However, he/she may seek readmission in a hostel as admissible under rules.
- Students staying for additional semester/summer session/thesis examination/ research work etc. will have to pay the hostel fee and subscription etc.
- If any student leaves the hostel without paying hostel dues including mess, canteen and other charges, the amount
  outstanding against him/her along with a fine equal to 10% of the hostels dues will be recovered at the time of next
  enrolment.





In case such a student leaves hostel qualifying a degree, the outstanding amount along with a fine shall be recovered at the time of issuance of provisional certificate, degree etc., by the Controller of Examination.

## Mess rules

- Hostel mess will be managed by the students and supervised by the Assistant Superintendent.
- Nobody other than bonafide student will be allowed to become a mess member. Moreover members will elect their own mess manager/mess committee.
- Mess manager/mess committee will be responsible for proper maintenance of mess and cleanliness of kitchen, utensils, dining hall and its surroundings.
- Members will pay their dues to the mess manager on or before 7th of every month. Arrears of previous month must be cleared by 7th of the following month.
- Meals will be served only in the Dining Hall and room service will not be provided.
- 6. A member intending to cancel a meal must inform the mess manager a day before, otherwise he/she will be charged for it.

## General rules

- Furniture items such as charpai, table, chair and almirah assigned to a particular room shall not be shifted from that
  room. The residing students of that allotted room shall return these articles, when leaving the hostel. He/she will also be
  responsible for any loss or damage of these articles.
- 2. Students must treat the hostel staff politely. Misbehavior with the staff is strictly prohibited.
- The hostel staff is not supposed to render any private service to any student. Complaints regarding misbehavior of the hostel staff will be reported to the relevant Assistant Superintendent / Hostel Superintendent.
- The telephone provided in a hostel is only meant for inter hostel contact/incoming calls only and no local or prank calls will be entertained through these telephones.
- The students must make entry in the "In/Out Register" kept in hostel.
- Resident is bound to make entries in the hostel leaving register and mess closure register before leaving for home.
- The visitors (parents/guardians) are allowed to meet the resident only before the closing time of the hostel. (They should observe the summer and winter closing hours).
- Every resident has to mark his/her attendance in the office and mess register, those missing at the time of attendance will be considered absent and if they keep on doing this, they may be expelled from the hostel.





- Day scholars are not allowed to stay in hostel. However, may visit and/ or stay with prior permission from the Hostel Assistant Superintendent/Superintendent along with subscribed charges.
- 10. Security Officer of MNS- University of Agriculture Multan will be responsible for hostel security and public related matters.

## **Visitors**

- Visitor's rights to a hostel premises are reserved.
- Details about the authorized visitors to the hostel along with a photocopy of their CNIC should be submitted to the Hostel administration office at the time of admission to the hostel.
- Authorized visitors will visit only during visiting hours.
- Students are prohibited from giving shelter to any other student/outsider in the rooms. In case of breach, the student will be liable to disciplinary action.
- Parents/authorized guardians of a boarder may be allowed to stay for a night with prior permission of the Hostel Warden/Superintendent. However no male visitors are allowed to enter the female hostel in any case.
- Parents/authorized guardians of the female students are allowed to see the students in a specified visiting room during visiting hours.
- Boarders will observe the hostel opening and closing timings. Boarders who enter after closing time without any prior permission, following action will be taken against them:
  - Verbal warning will be communicated at first instance. In case of unceasingly violation of this rule, warning letter will be issued by the hostel administration.
  - b. Disciplinary action will be taken against boarder especially female boarder violating rules again and again.

## Discipline

All bonafide University students are governed by MNSUA Disciplinary and Conduct rule. However, the following additional rules have been framed to regulate day to day activities of boarders.

- Disciplinary action will be taken against habitual late comers.
- 2. Roll will be called daily at 8:00 to 9:00 p.m.
- 3. No gathering, meeting or group activities of unauthorized student bodies will be allowed within the premises of hostel.
- No religious/social ceremony likely to injure the sentiments of other boarders will be allowed in the hostel.
- Every part of the hostel premises shall freely be opened to the hostel authorities for inspection at any time.





- 6. No boarder shall indulge in any amusement which may disturb other boarders.
- Other than electric lights and fans no electric appliances will be used in a hostel. However, air cooler and exhaust
  fans can be used after getting prior permission from the Superintendent/Hostel warden. But the boarder will have to
  pay prescribed amount for this purpose.
- Before leaving the room, all electric articles must be switched off, even for a short while. Leaving the room with light
  or fan switched on is an offence punishable with fine.
- It is the paramount duty of all the residents of the hostels to maintain cleanliness and healthy surroundings both in and outside their rooms and hostel premises.
- Firearms and other weapons, liquor, intoxicants, hukka, cigarette or other prohibited/ objectionable article is not allowed to be kept or used in the hostel. An addict student will be expelled.
- 11. Spitting, smoking, defacing hostel premises will strictly be prohibited.
- Boarders are required to observe necessary precautions for the safe custody of their belongings/valuables. The hostel administration will not be responsible for any loss of property.
- All cases of sickness must be reported to the hostel authorities for necessary help and assistance to the student concerned.
- 14. The allotment of a student will be cancelled who remains absent for 30 days from the hostel without prior permission/intimation to the hostel authority. However, he/she may seek readmission as admissible under rules.
- 15. Breach of any rule of public morals, such as:
  - Use of indecent or fithy language in the premises of residential hall.
  - b. Use of immodest, improper and provocative dress.
  - Use of undesirable remarks or gestures.
  - Disorderly behavior such as fooling, shouting, abusing, quarrelling, fighting, insolence, indecency, profligacy and dishonesty.
  - Impersonation perjury, giving false information, willful suppression of information, cheating, deceiving and stealing etc;
  - Shouting of slogans derogatory to the prestige of the University or the reputation of its teachers and officers.
  - g. Use of intoxicants, immorality, failure to comply with a penalty imposed by a disciplinary authority.





- h. Misbehavior with a teacher or any other University official
- 16. The hostel authorities are responsible for maintaining discipline in the hostel and are authorized to admonish students for any irregularity or breach of discipline.
- 17. The Assistant Superintendent may punish a student for breach of any discipline by way of a fine not exceeding to Rs. 500/-, Hostel Superintendent Rs. 1000/- and Associate Hostel Warden or Hostel Warden Rs. 5000/- in each case. Admonitions will be reported in writing to the University authorities for appropriate action.
- Boarders violating the above mentioned rules shall be fined, suspended, rusticated or expelled from the hostel. Any
  rusticated or expelled student will not be readmitted in any university hostel.





## **Regulations Relating to Committee on Unfair Means**

- a. The Unfair Means Committee shall be notified by the Vice Chancellor of the University for a period of two calendar years. There will be as many committees as the Vice Chancellor deem it. Each committee will comprise of two senior faculty members of the MNSUA and/or other universities. The Controller of Examinations will be ex-officio member and Chairman of each committee. The allocation of the case to a committee will be discretion of the Controller of Examinations.
- Committee on Unfair Means shall deal with the cases of the alleged use of unfair means in connection with the Examinations under all systems of examinations.
- c. The committee shall give the accused candidate a reasonable chance of showing cause against the charge leveled against him and afford him a fair opportunity of defense through written response to the charge sheet followed by the personal appearance.
- d. The unanimous decision of the Committee on Unfair Means in dealing with cases of the alleged use of unfair means in connection with the Examinations shall be final. If the Committee on Unfair Means is not unanimous, the matter shall be referred to the Vice Chancellor who shall either decide himself or refer it to the Disciplinary Committee of the University. The decision of the Vice Chancellor/ disciplinary committee shall be final.
- e. If a candidate to whom the decision of the competent authority is communicated has valid reasons to appeal against such decision, he/she may do so within 30 days of the date of receipt of the decision in writing and by depositing Rs. 1000/-. The appeal shall be referred to the Appeal Committee.
  - In line with the procedure adopted for Unfair Means Committee the Appeal Committee will be notified for a period of two calendar years and will comprise of Three Senior Faculty Members of MNSUA or other universities who are not part of any Unfair Means Committees of MNSUA.
  - ii. The appellant will be given an opportunity to be heard in person by the Appeal Committee. The decision of the Appeal Committee will be communicated to the appellant. Superintendent of the Examination Hall will register an Unfair Means Case against him/her.
  - The appellant may file a revision against the decision of the Appeal Committee with the Vice Chancellor within 15 days after such decision by depositing a sum of Rs.2000/-. The Vice Chancellor may constitute a review committee and refer the case to it. The review committee will prepare its recommendations for the perusal of the Vice Chancellor who shall decide the case finally.
- The accused will appear before the all the committees in person and will not be allowed to be accompanied by anybody including lawyer, family member, friend, or any person.





- g. Notwithstanding anything to the contrary in these rules, no act or proceeding by the any of these committees to deal with case of alleged use of unfair means in connection with the examinations shall be invalidated merely by reason of the existence of a vacancy or vacancies on the committees; absence of a member; or, by reason of any question regarding the appointment or any member of the committees.
- The Unfair Means Case will be registered against a candidate if any of the following happens. The In Charge Examinations/ Superintendent of the Examination Hall will register an Unfair Means Case against him/her.
  - He/she is found to have in his/her possession or accessible to him some material relating to the subject of Examination of that paper in any format (hand-written, printed, electronic etc.) or
  - ii. Is detected in giving or receiving assistance from any source (including fellow examinees, invigilating/facilitating staff etc.), or
  - iii. He/she is using or attempting to use any other unfair means in connection with the Examination, or
  - iv. He/she is creating disturbance in the conduct of the examination, or
  - He/she is disobeying the supervisory staff
  - vi. A candidate is being impersonated by an impersonator
  - vii. The answer book is smuggled in to the examination hall or smuggled out of the examination hall.
- Any candidate detected in giving or receiving assistance, or found guilty of possessing and/or using any cheating material in any format, or allowing any other candidate to copy his/her answer-book, or using or attempting to use these or any other unfair means, shall be disqualified from passing in the subject.
- Notwithstanding any other law for the time being in force and without prejudice to any remedy open to the University under such law
  - Any candidate found guilty of deliberate previous arrangements to cheat in the Examination such as smuggling in another answer-books, smuggling out his answer book, impersonation or misconduct of a serious nature and the person who gets himself/herself impersonated shall be disqualified for a period of not less than one and not more than two years and will be declared as not a fit and proper person to be admitted to any future Examination of the University within the period of disqualification. The university will deny issuance of NOC/ Migration certificate to enforce its decision. The impersonator, if he/she is on the rolls of the University, will be awarded the same punishment as the one who was getting impersonated. If the impersonator is not on the rolls of the University, the Controller of Examinations shall report the matter to the police and get an FIR registered against the impersonator with the permission of the Vice Chancellor. If the impersonator is convicted from the court of law then the case will be sent to the syndicate for possible quashment



## ACADEMIC CALENDAR 2025-2026



Α	Enrollment Winter Semester 2025-2026	01-09-2025 to 08-09-2025
1.	Commencement of Semester/Classes	08-09-2025
2.	Mid-Term Examination	10-11-2025
3.	Final Term Examination	12-01-2026
4.	Termination of Semester (After completion of 20 weeks including examination)	23-01-2026
5.	Break	24-01-2026 to 01-02-2026
В	Enrollment Spring Semester 2026	02-02-2026 to 06-02-2026
1.	Commencement of Semester/Classes	02-02-2026
2.	Mid-Term Examination	30-03-2026
3.	Final Term Examination	01-06-2026
4.	Termination of Semester (After completion of 20 weeks including examination)	19-06-2026
5.	Break	20-06-2026 to 28-06-2026
С	Enrollment Summer Semester 2026	29-06-2026 to 03-07-2026
1.	Commencement of Semester/Classes	29-06-2026
2.	Mid-Term Examination	27-07-2026
3.	Final Term Examination	24-08-2026
4.	Termination of Semester (After completion of 09 weeks including examination)	28-08-2026
5.	Break	29-08-2026 to 06-09-2026



# FEE STRUCTURE



# Fee Structure 2025-26\*

Sr. No.	Particulars	1st Semester	Subsequent Semesters*
1	B.Sc. (Hons.) Agriculture	44,770	33,520
2	B.Sc. (Hons.) Poultry Sciences	44,770	33,520
3	B.Sc. (Hons.) Fisheries and Aquaculture	44,770	33,520
4	BBA Agri Business	44,770	33,520
5	BS Zoology	44,770	33,520
6	B.Sc. (Hons.) Home Economics	44,770	33,520
7	B.Sc. (Hons.) Environmental Sciences	44,770	33,520
8	B.Sc. (Hons.) Animal Sciences	44,770	33,520
9	B.Sc. (Hons) Agricultural Resources Economics	44,770	33,520
10	B.Sc. (Hons.) Dairy Sciences	44,770	33,520
11	BS Bioinformatics	40,700	30,470
12	BS Sociology	44,770	33,520
13	BS Bio-Chemistry	44,770	33,520
14	BS Biotechnology	46,810	33,520
15	B.Sc. (Hons.) Remote Sensing and GIS	40,700	30,470
16	B.Sc. (Hons.) Microbiology	46,810	33,520
17	BS Medical Laboratory Technology	53,130	48,710
18	BS Public Health	57,480	48,710
19	B.Sc. Agro Industrial Engineering Technology	46,200	37,270
20	B.Sc. Agricultural Engineering	46,200	37,270
21	B.Sc. Food Engineering	46,200	33,880
22	BS Computer Science	58,080	46,590
23	BS Information Technology	58,080	46,590
24	BS Data Science	58,080	46,590
25	B.Sc. (Hons.) Human Nutrition and Dietetics	54,450	48,400
26	Hostel Fee	18,000	17,000
27	Hostel Fee (F.Sc Pre Agriculture)	6,200	3,200
28	Hostel Fee Foreign Students (USD) "Subjected to 5% increase per annum	500	300



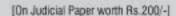


- of any degree/ medal/ honor given by the university to the impersonator.
- ii. The actual candidate or the impersonator may, on the expiry of two years including the Examination in connection with which he/she was declared to be not a fit and proper person to be admitted to any future Examination, may as a special case, be exempted by the Syndicate from further operation of this Regulation with the sanction of the Vice Chancellor.
- Any candidate using abusive or obscene language in the answer-book shall be disqualified from the Examination of that subject.
- Any candidate found guilty of making peculiar remarks in his/her answer book shall be disqualified in that subject.
- m. Candidates guilty of communicating or attempting to communicate, with examiners with the objective of influencing them in the award of their marks, shall be deemed to have used, or attempted to use, unfair means shall be punished accordingly. Communications of this nature addressed to the Controller of Examinations or other officers of the University, shall be treated as falling in the same category and the candidate concerned shall be punished appropriately by the unfair means committee
- Any candidate found in possession of fire arms or anything capable of being used as a weapon of offence in or around any Examination Hall, shall be liable to expulsion by the Officer and to disqualification ranging between one to three years.
- Possession of cell phone or any similar gadget, no matter if it is switched off, will be considered like having cheating material in possession and will be treated accordingly.



## **AFFIDAVIT** (UNDERTAKING)

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Chancellor, Univ before the Supre	ersity of Agr me Court of I	culture, Multan Pakistan.	(Head of the	ound ind institution	ulging in 'po on) shall be	litics', t final and	he finding/de not be ques	ecision of the Vice stioned except only as been concealed.
DEPONENT								
B) I, Mr			_ father/guar	dian of	Mr. /Miss _			do hereby
	dings / decisi	on of the Vice C	hancellor (He	ead of the	Institution)	regarding	son/da g indulgence	o the best of my aughter/deponent is in 'Politics', of my akistan.
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Oath Commissio Respective Nazin Official Stamp Name:								
Designation:								



(Specimen of declaration/undertaking to be submitted by provisionally selected candidates at the time of enrollment formalities)

## **DECLARATION**

I, Mr./Miss.	s/o, d/o			r	esident
			have	been	selec
provisionally for admission to		(name of certificate/deg	gree) a	t the M	uhamn
Nawaz Sharif University of Agriculture, Multan. A	ccordingly, I hereby declare on oath	on solemnly affirm that:-			

- On admission to the privilege of being a student, I shall under take on oath and solemnly affirm to abide by the following:
- 1.1 that during my stay in the University I shall diligently apply myself to acquire and develop the skills necessary for the practice and advancement of the field of study in which I am enrolled;
- 1.2 I shall participate fully and whole heartedly in sports, games, extra-curricular activities as would be compatible with my physical traits and mental aptitude;
- 1.3 I shall have minimum attendance of 75% in order to qualify for sitting in the examination;
- 1.4 That I shall maintain identity as student of the university by wearing University ID Card and gown as may be prescribed by the University.
- 1.5 That I shall never use violence or threat of violence or pressure, and in any dispute with other all means and methods shall only be logic, persuasion, petition, appeal ,revision, review and other legal and peaceful methods for the settlement of differences and disputes;
- 1.6 In case of dispute, if any, with fellow students or teachers or employees of the University, I shall accept the judgment of the authorities constituted by the University for decision or settlement of the wrong doers;
- 1.7 That I shall abide by all provision of the statutes, regulation and rules as may hereafter be framed by the appropriate authorities of the University. It is certified that the conditions and all the relevant regulations have been read and understand by us.
- 1.8 I shall not carry with me any objectionable material in the examination hall and shall volunteer to be searched, if necessary before entering examination hall.





# ECLARATION

2 Further,	I undertake on oath	and solemnly	affirmed	to refrain from
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- 2.1 doing anything which may cause injury and insult to Head of Institution , teacher, officers and other staff of the Institution;
- 2.2 holding a gathering, or meeting or taking out processions in any part of University Campus other than areas specified for the purpose;
- 2.3 Indulge in any kind of unfair means, malpractice in examination and coercion by any means;
- 2.4 allowing or abetting the entry to the premises of University of punished students, anti social elements or other groups presence of whom on the campus should cause conflict amongst the students;
- 2.5 bringing into the campus, consuming or encouraging consumption of alcoholic products, drugs and narcotics, and indulging in acts of moral turpitude;
- 2.6 bringing or keeping any type of weapons within the University premises;
- 2.7 using or occupying any room or part of any building of the institution without lawful authority;
- 2.8 misuse or damaging any University property, including, equipment's vehicles, etc. in any manner;
- 2.9 all such acts and deeds as might bring dis-grace and bad name to the University;
- 3 breach of any above instructions is liable for disciplinary action according to the University rules.
- 4 I undertake that if I am found involved in any unlawful activity/providing incorrect information at any stage of study, violating the above he declaration or using bogus/fake/tempered educational certificate/any other document, the University shall have the right to cancel my admission without assigning any reason.
- Further undertake that I was not involved in any indiscipline and misconduct case(s) during my stay at the institution last attended. In case it is proved anti at a later stage, the University shall have the right to cancel my admission without assigning any reason.

Signature of father/guardian	Date	Signature of the applicant
Please attach attested copies	of CNIC/B form of applicant and father/guardian	



# Important Instructions (1) If a candidate (fresh entrant) once admitted on merit, deposits the pres

(1) If a candidate (fresh entrant) once admitted on merit, deposits the prescribed dues and enrolls himself/ herself by submitting or not submitting GS-10 Form and subsequently leaves the university under any circumstances, total dues except "admission fee" deposited by him/her shall be refunded as per percentage and time limit given below.

Dues Refund Policy	Time Limit	
Full (100%) Refund of Entry fee and total dues/hostel dues deposited excluding admission fee	Upto 7th day of commencement of classes	
Half (50%) Refund of entry fee and total dues/hostel dues deposited Excluding admission	From 8th-15th day of commencement of classes	
No (0%) Refund	From 16th day of commencement of classes	

(2) If a Regular student after depositing dues leaves the University at his/her own either submitting or without submitting GS-10 form, the normal dues/hostel dues and entry fee deposited by him/her shall not be refunded



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