

PROSPECTUS 2024

SINDH AGRICULTURE UNIVERSITY, TANDO JAM





PROSPECTUS
2024

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Mr. Muhammad Kamran Khan Tessori
Chancellor



Mr. Muhammad Ali Malkani
Pro-Chancellor



MESSAGE FROM THE VICE-CHANCELLOR

On behalf of our faculty, staff, and students, welcome to Sindh Agriculture University (SAU) website. In brief, the SAU was established in 1977 through the up gradation of the then Sindh Agriculture College. The university has achieved robust growth over the intervening period while pursuing its mission "Committed to contributing towards self-sufficiency and sustainability in agriculture to ensure food security by producing trained manpower, conducting problem-oriented research and establishing effective linkages with the stakeholders".

By now, SAU has produced over 44000 graduates and postgraduates who have been playing a pioneering role in the development of the agricultural system and agro-based economy of the country. They are also involved in various national and international services throughout the globe. The university has a current enrollment of over 8000 students. We are home to a community of over 257 distinguished faculty members with regional, national, and global connections, who take interdisciplinary approaches to offer 68-degree programs at the undergraduate, master, and Ph.D. levels. I am extremely proud of the rich tradition of providing practical, experience-based agriculture education tailored to market needs. Most of the programs incorporate experiential learning, community service, and wide-ranging regional, national, and global experiences.

Located in an economically and ecologically important agricultural zone of the province, SAU offers unique opportunities for students to engage with farming communities and stakeholders, equip with practical and field-oriented skills through agriculture and livestock farms and well-equipped labs, participate in internship opportunities with local partners and agri-business entities, and prepare for contribution to the agriculture sector in Sindh and the country at large. Another added dimension to the learning environment is that a constituent college and a sub-campus of the university are in diverse agro-ecological zones of Sindh at Khairpur, and Umerkot. All along, the students are supported through career

counseling services to shape up their careers while at the university and connect them with relevant organizations for their placement in suitable jobs after graduation.

The SAU enjoys enthusiastic backing from alumni, businesses, professionals, and the surrounding community. I wish to recognize and thank SAU Alumni and Friends for their continued support for the growth of the university and in making it highly relevant to clientele needs. The university also benefits from its location at Tando Jam, a center of agriculture industry and trade that places a high value on ingenuity and entrepreneurship.

As Vice-Chancellor and alumnus of SAU, my mission is to take out my alma mater to the next level of excellence where all can feel pride. I am honored to have some of the very best in the faculty. I am also fortunate to have very experienced officers and staff in the university. Similarly, the student body of our university has all the potential to excel with sheer hard work and commitment. Let us all pledge together to champion the principles of scholarship, research, professionalism, and diligence. Let us commit ourselves to excellence in teaching, learning, research, and administration. Let us make our generations proud of ourselves. I would like to cordially invite all of you who are interested in expanding your knowledge and enriching your careers to explore SAU further either online or through a campus visit.

Regards,

Prof. Dr. Fateh Muhammad Marri,

Vice-Chancellor,

Sindh Agriculture University Tando Jam, Sindh, Pakistan.

THE UNIVERSITY



Sindh inherits the fertile Indus Valley, which is well known for its glorious past. The excavations at Moen-Jo-Daro speaks about the prosperity of Sindh to produce agricultural commodities. Sindh was the breadbasket and a net exporter of food supplies to the entire sub-continent during the nineteenth century. Located in the extreme south of Pakistan as one of the five provinces. Sindh presents a variety of soil and climatic conditions compatible for growing various cereal, fruits, and vegetable crops and maintenance of a large livestock population.

With the construction of the Sukkur Barrage in Sindh Province (1932), the need for education and training in agricultural professions was realized and translated in the form of the establishment of King George-V Institute of Agriculture at Sakrand, District Shaheed Benazir Abad (Nawab shah) in 1939. Initial 02-year Diploma course was offered, later converted to a three-year B.Sc. Degree. The institute was moved to its present site in 1954 and was named



Sindh Agriculture College Tando Jam with specializations in various fields of Agriculture and Animal Sciences.

The college was able to promote agricultural education steadily in the province paving the way for raising the status of the college to the full-fledged university named Sindh Agriculture University, Tando Jam established under the Sindh Assembly Act on 1st March 1977, with the main objective of providing the qualified manpower in Agriculture, Engineering and Animal and Veterinary Sciences, well equipped with academic as well as problem-oriented research and capable enough to extend latest agricultural technology to the doorstep of farmers eventually leading to increased agricultural production.

MISSION

The university is committed to inculcate among students a sense of discipline, organization, refinement of their vision and skills, and help them graduate with maturity, distinction, and confidence to be useful citizens of society, to realize the dream of sustainability in agriculture for food security and safety.

LOCATION

The university is in Tando Jam town which is 180 KM North-East of Karachi, the largest city of Pakistan, and 15 KM East of Hyderabad city on Hyderabad-Mirpur Khas Dual Carriageway, Tando Jam. Karachi & Hyderabad are the closest airports. However, it is interconnected with all major cities of Pakistan through road, rail, and wire. The climate of Tando Jam is arid & sub-tropical. Summers are moderately hot, and winters are cool.



ADMINISTRATIVE/ACADEMIC HEADS

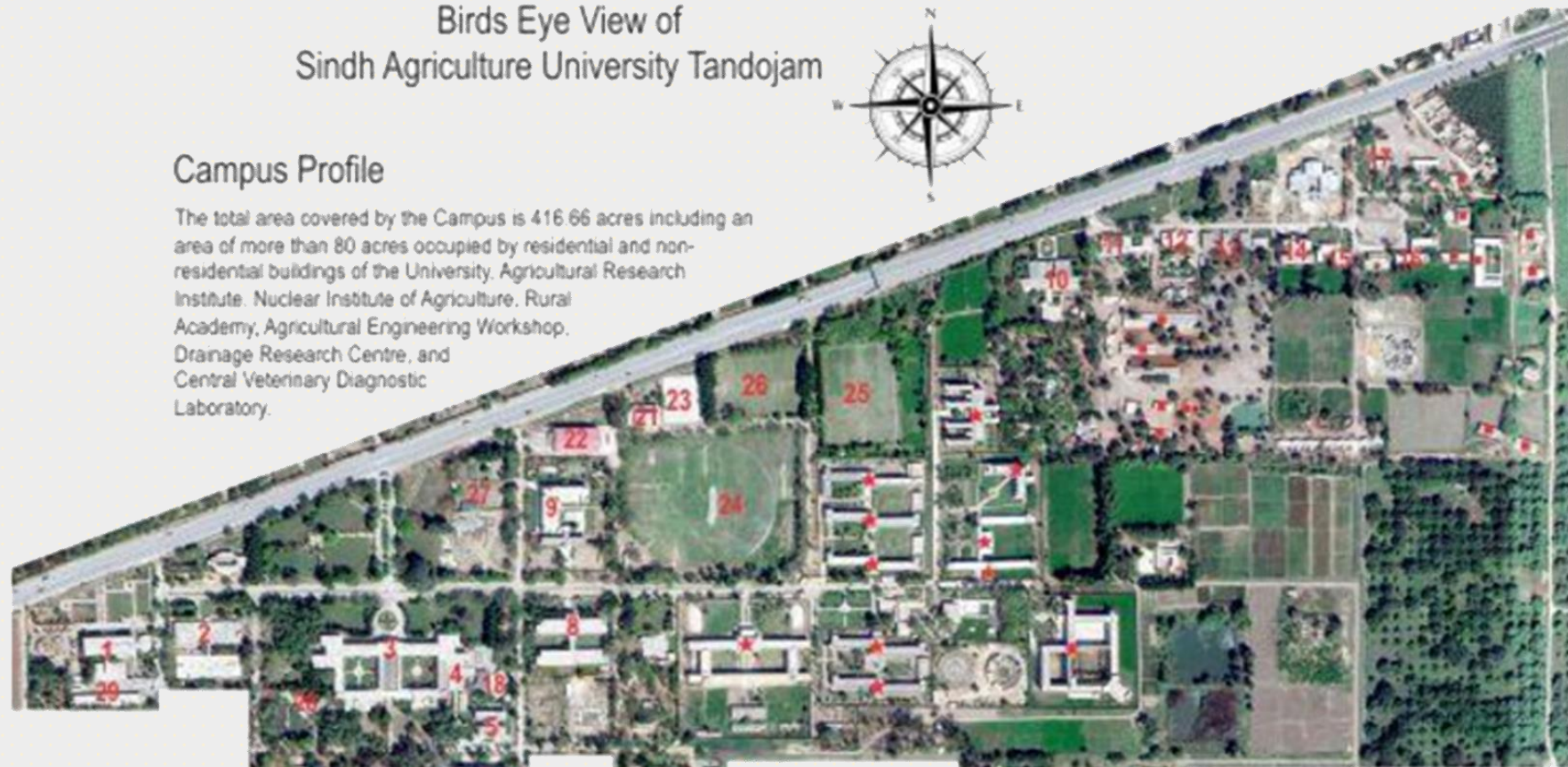
Syed Murad Ali Shah Chief Minister Sindh/Chancellor	Prof. Dr. Aijaz Hussain Soomro (PhD-UAAR-PK) Director, Institute of Food Sciences & Technology	Mr. Mumtaz Ahmed Jakhro (ME-SAU-PK) Director Campus Security
Mr. Muhammad Ali Malkani, Pro-Chancellor Advisor, Agriculture Department	Dr. Mir Sajjad Hussain Talpur (PhD-China) Director, Information Technology Centre	Prof. Dr. Zahoor Ahmed Soomro (PhD-SAU-PK) Director Seed Production & Development Centre
Prof. Dr. Fateh Muhammad Marri (PhD-SAU-PK) Vice Chancellor, SAU Tandojam	Mr. G. M. Qureshi (MA-US-PK), Registrar	Dr. Khadim Hussain Wagan (PhD-SAU-PK) Hostel Provost
Prof. Dr. Jan Muhammad Mari, (PhD-SAU) Pro-Vice-Chancellor, SAU Campus, Umerkot	Prof. Dr. Tanveer Fatima Miano (PhD-China) Director ORIC	Dr. Abdul Wahid Baloch (PhD-China) Director Students Affairs
Prof. Dr. Inayatullah Rajper (PhD-UK) Dean, Faculty of Crop Production	Prof. Dr. Muhammad Ismail Kumbhar (PhD-SAU-PK) Director, University Advancement & Financial Assistance	Mr. Muhammad Ashraf Rustamani (MSc. -US-PK) Director Planning & Development
Prof. Dr. Aijaz Ali Khooharo (PhD-SAU-PK) Dean, Faculty of Agricultural Social Sciences	Mr. Riasat Ali Kubar (ME-SAU-PK) Director QEC	Mr. Ghulam Hyder Joyo (MLS-US-PK) Librarian
Prof. Dr. S. Muhammad Ghiasuddin Rashdi (PhD-UAF-PK) Dean, Faculty of Animal Husbandry & Veterinary Sciences	Mr. Aneel Kumar (ICMAP) Director Finance	Dr. Faisal Ansari (MBBS-LUMHS-PK) I/C SAU Dispensary
Prof. Dr. Manzoor Ali Abro (PhD-France) Dean, Faculty of Crop Protection	Dr. Muhammad Mithal Lund (PhD. -SAU) Director Farms	Mr. Manzoor Ali Magsi (BE-MUET-PK) Director Transport
Prof. Dr. Altaf Ali Siyal (PhD-UK) Dean, Faculty of Agricultural Engineering	Mr. Anwar Hussain Khanzada (MH Ped-US-PK) Director Sports	Mr. Suhraab Gul Thaheem I/C, Computerization and Networking Section
Prof. Dr. Zia-UI-Hassan Shah (PhD-UAF-PK) Advisor (Planning & Development)	Mr. G. M. Qureshi (MA-US-PK) Director Admissions	Mr. Salahuddin Shaikh (B. Com-US-PK) Resident Auditor
Dr. Syed Ali Raza Shah (PhD-SAU) In-charge Principal, KCAET, Khairpur Mir's	Engr. Riaz Ahmed Soomro (BE-MUET-PK) Project Director	Mr. Gulsher Lochi (MA-US-PK) Public Relation Officer
	Mr. Manzoor Ali Lakhiaar (M.Sc.-US-PK) Controller of Examination	

Birds Eye View of Sindh Agriculture University Tandojam



Campus Profile

The total area covered by the Campus is 416.66 acres including an area of more than 80 acres occupied by residential and non-residential buildings of the University, Agricultural Research Institute, Nuclear Institute of Agriculture, Rural Academy, Agricultural Engineering Workshop, Drainage Research Centre, and Central Veterinary Diagnostic Laboratory.

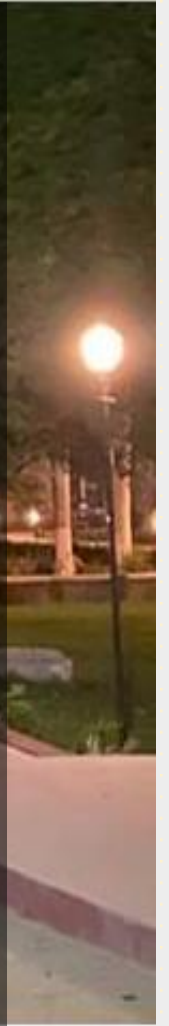


- ★ Boys Hostels
- Shades/Animal House

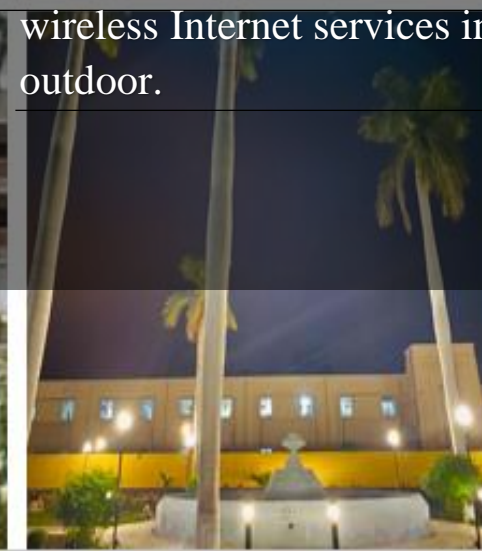
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|---------------------------------------|------------------------------|--------------------|
| 1 Admin Block | 10 Animal Product Technology | 18 QEC |
| 2 Information Technology Center | 11 Poultry Husbandry Lab. | 19 Green Houses |
| 3 Faculty of Crop Production | 12 Deans Office | 20 Central Library |
| 4 Food Sciences and Technology | 13 Animal Husbandry Lab. | 21 Gymnasium Hall |
| 5 Department of Soil Science | 14 M. A. Bhatti Hall / DVM | 22 Sports Complex |
| 6 Faculty of Agricultural Engineering | 15 Anat. & Hist. | 23 Tennis Court |
| 7 Engineering Workshop | 16 Animal Reproduction | 24 Cricket Ground |
| 8 Faculty of Crop Protection | 17 Hospital | 25 Football Ground |
| | | 26 Hockey Ground |
| | | 27 Nursery house |
| | | 28 Canteen |



The University offers its students an ideal environment for academic excellence and professional growth. Life at its campus is conducive for advanced studies. Students are also provided with ample social avenues to refine their personalities and skills. The infrastructure is very well developed with modern buildings, well-equipped classrooms, and research labs. Wide pathways, green parks, first-class sports facilities. The university is among the few public sector universities where Smart University Project of the Higher Education Commission has been deployed successfully. The project has enabled us to experience and advanced Wi-Fi Technology across the campus, enabling Teachers and Students to freely access wireless Internet services indoor and outdoor.



Life @ Campus

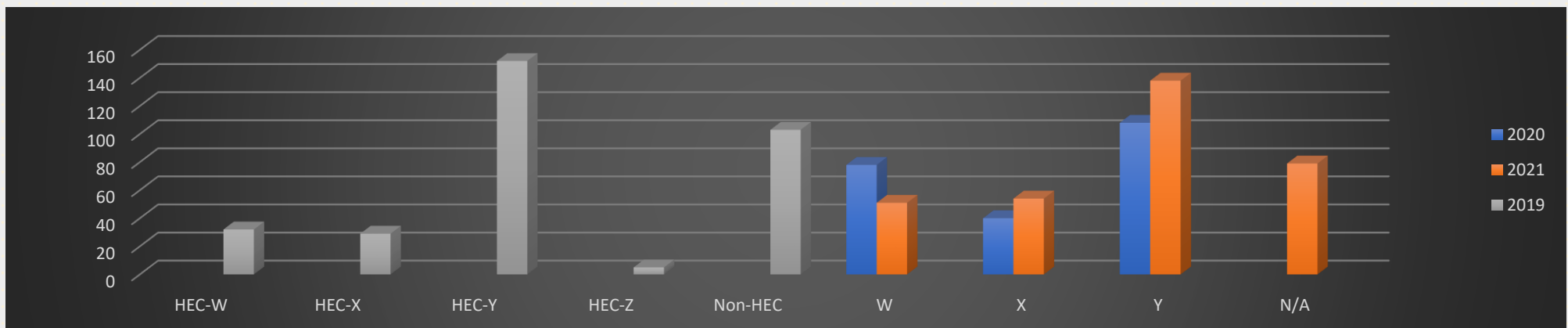


Academic Research

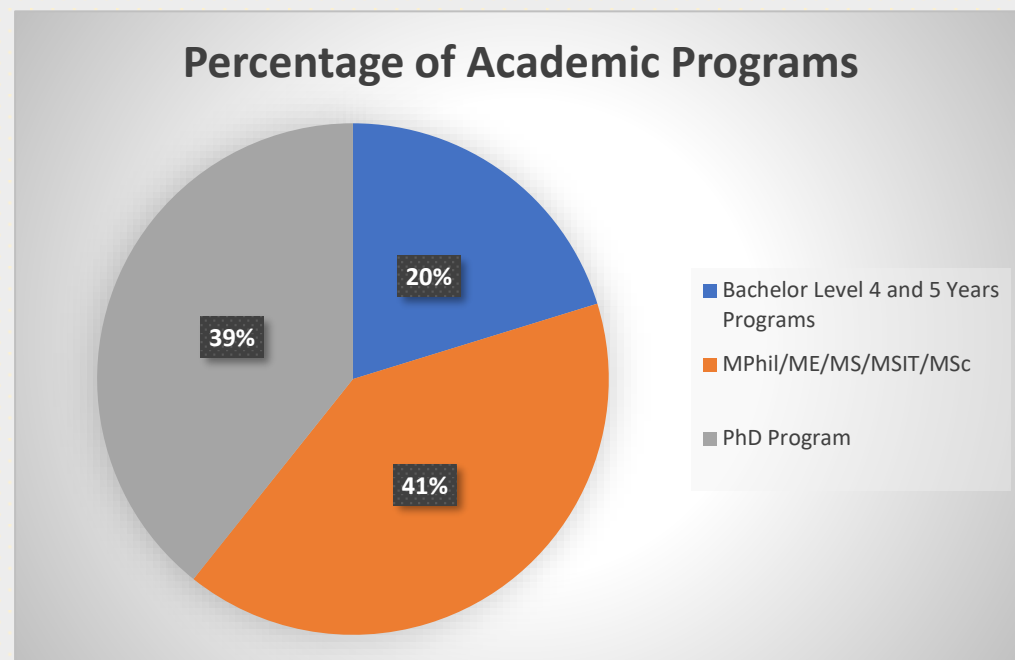
Promotion of research culture is one of the core strategic aims of the University. Besides providing state-of-the-art research lab facilities to its students, the University offers lucrative financial incentives to its productive faculty members for research projects and publications.

RESEARCH JOURNALS

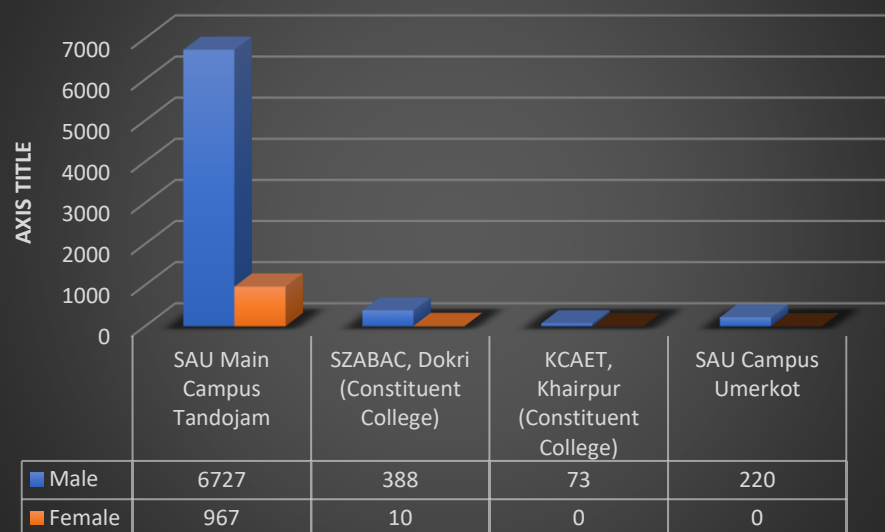
- Pakistan Journal of Agriculture, Agricultural Engineering and Veterinary Sciences (PJAAEVS)
- Monthly Sindh Zarai Science
- Journal of Journal as Frontiers in Agricultural Sciences and Technology (FAST)



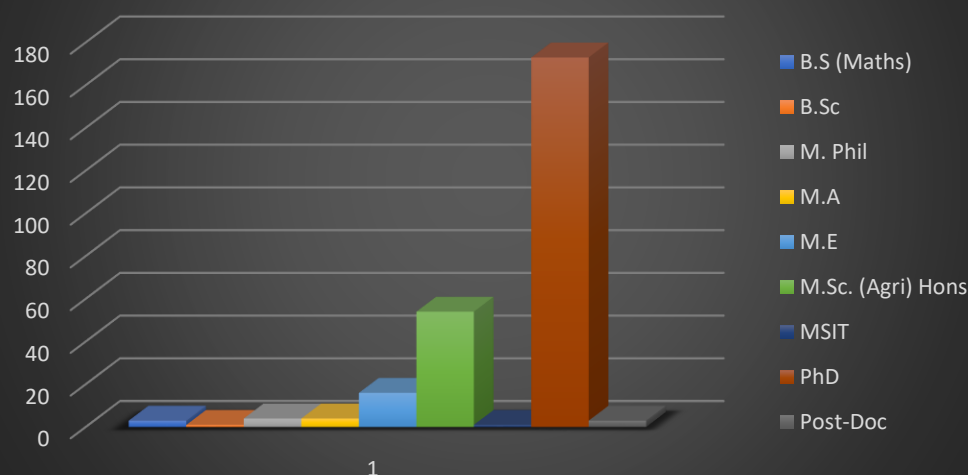
The University is undergoing an extensive reform process aimed at enhancing the standard of its research and studies. The preliminary impact of reforms is already visible in the form of enhanced level applications through online admissions, diversity of qualified faculty composition, consolidation of academic programs at all levels, gender-wise distribution of student enrollment, so on and so forth.



Gender Wise Enrollment



Qualification-wise Distribution of Faculty



Why

SAU

- ❖ Highly Qualified & Experienced Faculty
- ❖ National & International University Linkages

Research Funding Over

PKR

500

Millions

SINDEH AGRICULTURE UNIVERSITY
TANDO JAM



Strong Industrial &
International
Academia
Linkages

47

Years of Academic
Excellence



Rules

Regulations

GRADUATE DEGREE PROGRAMS

The graduate degree programs are offered by all five faculties, Institutes, Constituent colleges, and SAU Campus at Umerkot. The Faculty of Agricultural Engineering offers degree of B.E. (Agriculture), BS in Environmental Sciences, and BS in Agro-Industrial Engineering Technology. A composite professional degree of Doctor of Veterinary Medicine (D.V.M.) and three BS program in Dairy Technology, Fisheries and Aqua Culture and Poultry Sciences are offered by the Faculty of Animal Husbandry and Veterinary Sciences. The Faculty of Crop Production offers B.Sc. (Agri.) Hon's degree in the subject areas of Soil Science, Agronomy, Crop Physiology, Plant Breeding & Genetics, Horticulture, and Biotechnology. Whereas B.Sc. (Hons) four-year degree programs is offered by Institute of Food Sciences & Technology. The Faculty of Crop Protection offers B.Sc. (Agri.) Hon's degree in Entomology, Plant Pathology, and Plant Protection. The degree of B.Sc. (Agri.) Hons in Agricultural Economics, Agribusiness Management, Rural Sociology, Applied Statistics, Agricultural Education & Extension, and English (Language & Literature) is offered by Faculty of Agricultural Social Sciences. The Information Technology Centre offers a four-year BS (Hons) in Information Technology, BS Computer Sciences & BS Software Engineering, besides diplomas and short trainings in various Information Technology disciplines. Moreover, Shaheed Zulfiqar Ali Bhutto Agricultural College (SZABAC) Dokri offer B.Sc. (Agri.) Hons in various discipline at par main campus, Khairpur College of Agricultural Engineering and Technology, Khairpur Mir's offers degree B.E. in Agricultural Engineering, B.Sc. (Hons) in Food Sciences and Technology, B.Sc. (Hons) in Biotechnology & BS Software Engineering and SAU Campus at Umerkot offer B.Sc. (Agri.) Hons, BS Information Technology, BS Software Engineering and BS English (Language and Literature)

ACADEMIC CALENDAR

Each academic year shall start from January and comprises of two semesters (Spring and Fall) in all the five faculties of the University, the Information Technology Centre (ITC) and the Institute of Food Sciences & Technology (IFST). The duration of each semester is 20 weeks distributed as one week for registration, 14 weeks of actual teaching, two weeks for examination preparation, while the remaining 3 weeks are meant for conduct of semester examinations. An optional, 10-12 weeks summer semester (as part of Academic Year) shall be offered to students to cover failing and or deficiency courses or to improve poor grades.

ELIGIBILITY CRITERIA FOR ADMISSION TO GRADUATE DEGREE PROGRAM

To be eligible for admission to various graduate degree programs, candidates must hold a minimum qualification of Intermediate Science (Pre-Medical, Pre-Engineering, Pre-Computer) or equivalent examination with grade "C" or above (at least 50% marks) are eligible in different faculties depending upon the requirement of each faculty, ITC & IFST as specified in each one's profile.

STUDENTS COUNSELING AND PLACEMENT SERVICES

Students Counseling and placement center is responsible for guiding and counseling the students for getting admission to degree programs of their choice depending upon the availability of seats and other related factors. The center is also responsible for fetching jobs for university graduates in various public and private organizations. In this context, the center will maintain the record of addresses / contact numbers of all passing out graduates to keep them well informed of their proper placement in various jobs commensurate with their qualifications. It will also monitor the market demand of our graduates and will guide them to start their career in the disciplines where they can seek suitable jobs immediately after their graduation. It will also be responsible for solving day-to-day problems of the university students.

DIRECTORATE OF STUDENT AFFAIRS

This directorate facilitates the local and foreign students seeking admission to this university, accommodation, local problems, visa facilities, etc.

BANK

A full-fledged branch of Habib Bank Limited is situated adjacent to the administration block which provides all sorts of banking facilities to the staff members and students.

POST AND TELEGRAPH SERVICES

University has a well-staffed post office on the campus that provides all the necessary facilities including telegraph service.

COMPUTING, INTERNET, AND INTRANET FACILITIES

Information Technology Centre (ITC) was established in 2002 to impart degree programs, PG Diploma, short term diploma and short courses of varying duration to the students at this university and to the youth of the province of Sindh in general. More than 100 of the latest computers are available along with all

necessary peripherals. The faculty and students, particularly the postgraduate students are provided the internet and intranet facility for literature search. The facility for data analysis is also provided to the postgraduate students and the faculty. The Higher Education Commission (HEC) has provided the internet connectivity under Pakistan Educational and Research Network (PERN). The university has its own website. The address is given at the end of this prospectus, where in all the information regarding the university is displayed. The e-mail facility is also available for the students and the faculty. Under the mega project, "Computerization and Networking Enhancement Project of SAU" all the faculties, departments, library, administration, Directorate of Advanced Studies, and Research (DASR) have been interconnected together through intranet and further integrated with the existing internet facility at the ITC through Smart University Project by HEC. More than 150 PCs are procured for the faculties and departments to establish computer labs in each faculty, library, DAS, Quality Enhancement directorate and administration block to provide internet access to all of them at their doorstep for the postgraduates and researchers.

CAMPUS SECURITY

To address security concerns of the staff and students residing on campus, a security system operates round the clock under the supervision of highly skilled manpower under the supervision of Director Campus Security to provide secured environment at campus.

UNIVERSITY PUBLICATIONS

Sindh Agriculture University publishes biannually Pakistan Journal of Agriculture, Agricultural Engineering and Veterinary Sciences (PJAAEVS), a yearly Sarang Student Magazine, SAUNI Newsletter and Seerat-ul-Nabi Islamic Magazine for spiritual inspirations of students. Research papers, popular articles and significant writings of the faculty and students are published in these periodicals.

FINANCIAL AID

The deserving students are awarded scholarships, free ships, or cash grants by the university. Some scholarships are also allocated by the Directorates of Education. The District Education Boards of Sindh also provide some scholarships every year for meritorious students of their districts. The Government of Sindh also grants scholarships to the deserving students on poverty cum merit basis. Financial assistance is also provided from Bait-ul-Mal.

The scholarships and free ships, etc. are awarded for one academic year. The continuation of the financial aid, however, is subject to a student's satisfactory performance each year. Scholarships to the students of the province of Baluchistan, KPK and Gilgit Baltistan are awarded by their respective governments through their Directorates of Agriculture and Animal Husbandry. Banks and other financial institutions also grant loans to the meritorious students on very soft terms of payment.

In addition to the above provisions, scholarships are also granted on poverty basis under the HEC-USAID and HEC-JAICA need-based scholarships program. These scholarships cover almost the entire expenditure of student including tuition fees, hostel fees, transportation, books, and other expenses. Job Opportunities for the Graduates of the University

The prime motive behind the establishment of the University is to promote rapid transfer of technology to the farming community through a continued output of graduates and postgraduates. The graduates disseminate modern technical know-how to the farmers to boost agricultural productivity.

The main job opportunities are as under: Agricultural graduates and postgraduates may be taken up to work as farm managers in Agricultural Estates. Work as specialists in various disciplines of Agriculture and allied sciences in public and private sector organizations, autonomous and semiautonomous bodies viz, Zarai Tarqiati Bank (ZTBP) of Pakistan, Pakistan Agricultural Research Council (PARC), Pakistan Council for Research on Water Resources (PCRWR), WAPDA, Fruit Preservation and Grading

Industries, Veterinary Pharmaceuticals, Animal Feed Industries, etc. Their services can also be utilized in provincial and federal departments of Agricultural Extension, Research, Teaching, Fisheries, Forestry, Cooperatives, Animal Husbandry Extension Services, Veterinary Research Institutes, Poultry Research Institutes, Agricultural Engineering, Plant Protection, Plant and Animal Quarantine, Pakistan Central Cotton Committee, Public Parks and Gardens, Agricultural Tools and Machines, Seed Corporations, EPA, SCARP, BOM, Drainage Research Centers, PLAC, Sindh Sugar Corporation, Pakistan Atomic Energy Commission, and other departments.

They may be taken up as agriculture teachers/subject specialists to teach agriculture and agro-technical courses in High Schools and other vocational institutes of education departments.

The job-oriented graduates can share the business and management of agro based industries like fertilizers, pesticides, fungicides, herbicides, sugar and jute mills, cotton factories, feed mills (Livestock and Poultry), veterinary pharmaceuticals, and milk and meat processing plants.

They can also find access to the departments of Agricultural Census, Agricultural Marketing, Pakistan Broadcasting, and other corporations and commercial Banks, Agro-Economic Research, and Social Welfare Departments.

Job opportunities may also be availed for the graduates of this University in various special projects sponsored by agencies like the National Planning Commission, USAID, FAO, LEAD, Ford Foundation, National Talent Pool, and agriculture consultancy firms.

Agricultural degree holders may seek employment in foreign countries, especially the less developed countries with ongoing agricultural development activities. In this connection the University is also engaged in the training of students from developing countries.

Besides, the graduates of Sindh Agriculture University Tandojam are eligible to apply for competitive examinations held by the Provincial and Federal Public Service Commissions for administrative, secretariat and other superior services of Pakistan.

BSIT (Hons.) graduates of ITC have adequate opportunities to work in software development, teaching, education and training, offices, banks and other financial organizations, research organizations, management, health care, commerce and industry, military, police, railway, air traffic, communication and transport services, tele-communication corporations, networking, and database management. Graduates of Information Technology can join as software engineer, programmer, lecturer, computer engineer, system analyst, system administrator, network administrator, network engineer, network manager, scientific officer, research officer, administrative officer, database administrator.

CATERING

Any group of students not less than 20 and not more than 60 or the number as may be fixed by the Hostel Provost depending on a particular situation in the hostel, who may wish to run their mess shall obtain prior permission on prescribed form from the Provost through the Warden of the hostel and intimate the name of the manager, who shall be one of the resident students of hostel.

The manager shall produce the list of the residents who will be catered for in his / her mess along with full identification, which will be subject to official scrutiny through appropriate agencies. Provost / Deputy Provost may refuse to allow any person to work on staff or any mess without assigning any reason.

The manager shall on his personal responsibility certify that the cooks and other staff members engaged in the mess are of good character and are not criminals, history convicts, assigned to him/her or acquired or engaged by him on account of any political association or affiliations.

If at any time the certificate given by a manager is found incorrect, the manager shall be liable to disciplinary action as a hostel resident as well as a student at the University.

Students who may not join the mess can have their meals in the hostel canteen only. Any student found cooking meals in the rooms shall be liable for disciplinary action.

CODE OF CONDUCT

The Students of the University Shall

- Devote wholeheartedly in acquiring the knowledge imparted by the teachers with the help of prescribed books, published literature and experimental work in laboratories and fields during their studies at the University.
- Be regular in attending classes and shall maintain at least 75% attendance in the classes.
- Maintain the notes and list of the lectures delivered by the teachers in the class.
- Maintain and preserve in good condition the books and literature received by them from the University Libraries.
- Handle with care and caution the equipment, instruments, tools, and machines available in the laboratories at the research or demonstration farms, livestock and poultry experiment stations, and veterinary clinics of the University.
- Extending cooperation and response to the teachers could be conducive to the attainment of more and more knowledge and learning.
- Show to the teacher's utmost an undivided respect, obedience and recognition as would be considered in terms of morality, obligatory on the part of son or child towards his parents and elders in family.
- Maintain neatness and cleanliness in the classrooms, laboratories, corridors, compounds, and hostel rooms as could be expected of any human being in respect of his own dwelling, home, or abode.
- To participate fully and wholeheartedly in sports, games, and extracurricular activities with the object of developing a healthy body for a healthy mind.

- To encourage activities that may create a sense of brotherhood and affinity among the students.
- Maintain identity as a student at the University and oneness among all students by wearing the gown and identity badges on chest as may be prescribed by the University.
- Contribute actively to the development of national ideology and Islamic mode of life.
- Implicit obedience and follow the rules, instructions, guidelines issued by the University authorities from time to time.
- Show due respect and regard to all leaders of national fame, scholars, and religious leaders without distinction.
- And generally, do all acts and deeds as would be, conducive for elevating the image of the University in the society and raising prestige of the University as proud students thereof.

THE STUDENTS OF THE UNIVERSITY SHALL REFRAIN FORM

- Indulging into activities against the Islamic and Pakistan Ideology or national solidarity.
- Indulging in activities promoting / invoking violence or hatred or contempt.
- Indulging in the rising of slogans or words spoken or written against any group, class, or individuals or against the University authorities.
- Promoting or propagating any regional group, linguistic or sectarian conflicts.
- Using any part of the University Campus for holding political or sectarian gatherings.
- Indulging in fouls or malpractices at the examinations.
- Using pressure tactics or political or personal influence in seeking academic promotions, award of financial benefits, or other matters

concerning academic or administrative functions of the University authorities.

- Resorting to use of coercive / oppressive or bullying tactics. Inviting or allowing entry within the University premises of expelled students, anti-social elements, or other persons whose presence on the university campus may cause conflict among the students or whose presence might create an unhealthy atmosphere.
- Bringing within the University campus, consuming or encouraging consumption of narcotics or indulging in criminal activities or acts involving moral turpitude.
- Bringing within University premises, keeping / using different kinds of weapons.
- Concealing from the University authorities any act or omission of any student or group of students might be against the norms of good conduct.
- Using or occupying any room or part of the building of the University campus unauthorized.
- Taking out procession or holding meeting within university campus without prior permission from the competent authority.
- Damaging university buildings, properties, lawns, orchards, experimental farms / stations, research farms, gardens, etc.
- Generally, from all such acts and deeds as might lead to bring disgrace and bad name to the University.

VIOLATION OF CONDUCT AND DISCIPLINE REGULATIONS

- Any student found to have violated the norms of conduct prescribed above shall be deemed to be guilty of the breach of conduct and discipline regulations of the University and shall be liable to penalty under the student conduct and discipline regulations. On Admission to the Privilege of Being a Hostel Resident, he / she Undertakes to abide by the Following Code of Conduct. That he/she should follow the rules and regulations framed by the University for Administration of University hostels from time to time.
- That he / she shall not allow any guests in the room after sunset.

- He/She shall not knowingly give refuge or protection to any criminal or any other person who has committed any other recognizable offence or is a fugitive from law, shall not aid or abet any person in his/her criminal activities.
- That he/she shall not bring, keep, store, or permit any one to keep, hide or store, any weapon even licensed, in the University Hostels; and that he/she shall sign the hostel register on arriving in the hostel after closing hours; giving name, room number, time of arrival and other particulars required in the register maintained for the purpose in the hostel entry room.

GROUND OF PENALTY

If the competent authority is of the opinion that the defaulting student has committed any of acts herein mentioned shall consider the same as grounds for imposing penalty on the student.

- Misconduct
- Committing acts of violence or use of force, intimidation, arms, or inciting other students for the same purpose.
- Causing destruction of or damage to the University property or inciting students for the same purpose.
- Making undesirable speeches, raising slogans, shouting, and writing, publishing, or circulating material derogatory to Pakistan, Islamic Ideology, and the prestige of the University or maligning the University authorities or the University teachers / officers and impairing the sanctity of the University.
- Use of unfair means and malpractices in the examinations.
- Consumption, use, sale and distribution of alcohol, liquor or other intoxicating drugs within hostels or campus of the University or being addict to any intoxicant.
- Making collections or prompting collection of donations, subscriptions etc. in cash or kind as pecuniary assistance for or on behalf of the University or organizations or a department of the University, except in accordance with the instructions issued by the University authorities.

- Committing any act or omission involving moral turpitude which in the opinion of the authority is disgraceful for a University Student; and
- Any act or omission on the part of a student even though committed outside the University campus, which in the opinion of the competent authority has exposed the University to bad name and defamation.

PENALTIES

The competent authority may impose upon a defaulting student any of the following penalties:

MINOR PENALTIES

- Warning in writing.
- A fine not exceeding Rs.500/-
- Withholding result of examination for a period not exceeding 6 months.
- Withholding of a certificate of good moral character.
- Fine commensurate with nature/extent of misconduct.
- Withdrawal of financial concessions for a period not exceeding three months.
- Expulsion from attending classes for a period not exceeding three months.

MAJOR PENALTIES

- Cancellation of examination result.
- Removal from hostel.
- Deprivation of University privileges i.e., scholarship.
- Rustication or expulsion from the University for a Specific Period.
- Disqualifying for a period not exceeding three years for appearance in any University Examinations.
- Rustication and ban on entry in the premises of the University for a period up to three years or more.

PROCEDURE FOR IMPOSING PENALTY

- Following procedure shall be followed for imposing penalty on a defaulting student:
- Orders of the Vice Chancellor shall be final. The right of review shall also vest in him / her.
- Any orders imposing penalty may be withdrawn and misconduct pardoned with such conditions as may be considered necessary by the Vice Chancellor if at any time, after passing such orders, Vice Chancellor is satisfied that penalized student has exhibited genuine repentance over his past conduct and promises to demonstrate improved conduct in future.
- If it comes to the notice of the Students Advisor that a student has conducted himself in a manner invoking any one or more of the grounds of penalty enumerated in regulations, he / she shall immediately bring the matter to the notice of the competent authority and under his instructions shall hold preliminary inquiry by recording statements of witnesses and if necessary, of the defaulting students.
- In case of urgency requiring immediate preliminary inquiry, the Students Advisor may forth-with record the statement of the witnesses and if necessary, of the defaulting student before reporting the matter to the competent authority. Provided that if the incident has directly come to the notice of competent authority, he / she may direct a preliminary inquiry to be held by the student advisor.
- The Students Advisor shall place the matter together with his / her report before the competent authority.
- The competent authority on scrutiny of the preliminary inquiry and the report of the Students Advisor may direct a show cause notice to be issued to the defaulting student and refer the matter to the Discipline Committee of the University.
- That the Competent Authority shall not be debarred from imposing a minor penalty on the defaulting student without reference to the Discipline Committee after giving a personal hearing to the defaulting student.

- The Discipline Committee shall, on the date fixed after receipt of reply to the show cause notice to the defaulting student hold a meeting at which the witnesses and the defaulting student shall be heard, and the matter considered.
- It shall be discretionary for the Discipline Committee to orally confirm statements recorded at the preliminary inquiry necessary to the witnesses and the defaulting student during hearing.
- The Discipline Committee may, if necessary, grant time till the following meeting to witnesses and defaulting students to produce such evidence as may be unavoidably necessary for the determination of the issue before the Committee.
- On completion of the proceedings the Discipline Committee shall forward the matter to the Competent Authority with its opinion proposing penalty to be imposed upon the defaulting student.
- On receiving the opinion from the Discipline Committee, the Competent Authority may impose any penalty on the defaulting student.

APPEAL

- A defaulting student can file an appeal against the order of the imposition of penalty to the Academic Council within one month of the decision of penalty on him / her.

OTHER PENALTIES

- Without prejudice to the grounds of penalty and penalties enumerated in regulation No: 5.1 (a) and (b) have the authorities mentioned below may impose penalties shown against each for acts or omissions not covered by Regulation.

OFFICERS AUTHORIZED TO IMPOSE PENALTY

- The Teacher Incharge Expulsion from the classroom, laboratories, workshop, or field work for the period concerned (Max: four consecutive classes or one week).
- President Gymkhana / Ex-officio. Expulsion from game for not more than one week.

- The Chairman Library Committee. Expulsion from the library for a period not exceeding one month.
- The Dean of a Faculty. Expulsion from all or any class in the faculty for a period not exceeding one month.
- The Hostel Provost. Expulsion from residence in hostel for a period not more than four months.
- The Students Advisor, Hostel Provost, President Gymkhana, Dean & Librarian fine not exceeding Rs. 500/-
- The President Gymkhana. Suspension or removal from a Position of authority in university sports.
- The Students Advisor, Suspension, or removal from a position of authority in student union.
- The Dean of a Faculty. Withholding or cancellation of Free ship of university.

RULES AND REGULATIONS GOVERNING GRADUATE PROGRAM UNDER SEMESTER SYSTEM

1. TITLE

The rules and regulations will be called SAU Graduate Degree Program regulations 2018-19 and onwards under Semester System.

2. COMMENCEMENT

These rules and regulations were commenced from 2018 and onward. The issue emerging due to implementation of these Regulations will be resolved by the Academic Council.

3. DEFINATION

These rules and regulations, unless otherwise stated:

- i. "University" means Sindh Agriculture University, Tandojam.
- ii. "Academic Year" means the Academic Year of the University corresponding to the Calendar Year.
- iii. "Credit Hour" means the successful completion of a course of one contact hour in Theory or at least two contact hours in Practical per week.
- iv. "Credit Course" means a course of study to be completed as a requirement for a degree.
- v. "Semester" means a period of 22 weeks duration including examination.
- vi. "Semester Examination" means the Mid plus (+) Final Examinations held during each semester.
- vii. "Vice Chancellor" means Vice Chancellor of Sindh Agriculture University, Tandojam.
- viii. "Registrar" means Registrar of Sindh Agriculture University, Tandojam.
- ix. "Teacher" means Teacher of Sindh Agriculture University, Tandojam.
- x. "Controller of Examinations" means Controller of Examinations of Sindh Agriculture University, Tandojam.

- xi. "Examiner" means subject teacher, or any other teacher appointed by the Competent Authority in conformity with the Regulations.
- xii. The medium of instructions and examinations shall be English.

4. DURATION OF THE COURSE

Minimum requirement for various degree programs offered in the University is given in the following table:

Table 1. Credit Hours and Duration of Various Degree Programs

Degrees	Cr. Hr.	Duration
B. Sc. (Agri.) Hons. in <ul style="list-style-type: none"> • Rural Sociology • Statistics • Agricultural Economics • Agricultural Education & Extension • Agronomy • Biotechnology • Crop Physiology • Horticulture • Plant Breeding & Genetics • Soil Science • Entomology • Plant Pathology • Plant Protection 	136 to 140	8 Semesters
B. Sc. (Hons.) in <ul style="list-style-type: none"> • Food Sciences & Technology 	136 to 140	8 Semesters
B.S.I.T (Hons.) in Information Technology	136 to 140	8 Semesters

DVM in Animal Husbandry & Veterinary Sciences	167 to 170	10 Semesters
B.E. (Agri.) in Agricultural Engineering	136 to 140	8 Semesters
BS in Dairy Sciences Fisheries and Aqua Culture Poultry Sciences Software Engineering Computer Science Environmental Sciences Agro-Industrial Engineering Technology BS English (Language & Literature)	136-140	8 Semesters

However, a student who fails to complete degree within the minimum prescribed period may further continue his/ her studies up to four consecutive semesters beyond which he / she shall not be eligible for any enrollment.

5. SEMESTER

Each Academic Year shall start from January in synchronization with the Calendar Year. There shall be two regular Semesters (spring and fall) each of 22 weeks duration (including examination) in an Academic Year. The commencement of the semesters is regulated by the Academic Council.

In addition, an optional 12-week Summer Semester (as part of Academic Year) shall be offered to students to cover failing and / or to improve poor grades and may take courses up to 12 credit hours. Summer Semester shall not count towards residential requirements. Schedule of activities in a semester is given in the following table.

Table 2: Activities in Regular and Summer Semester

Activity	Regular Semester	Summer Semester
Registration	02 weeks	01 week
Teaching Session	14 weeks	8 weeks
Mid Semester Test	During 7 th week	During 4 th week
Exam preparation and Filling of Examination Forms	02 weeks	01 week
Final Semester Examination	04 weeks	02 weeks
Total	22 weeks	12 weeks

Calendar for each academic year showing specific dates for registration, teaching session and examination schedule for both semesters shall be announced before commencement of the academic session. Mid semester test shall be conducted during the 7th week after commencement of the classes. The subject teacher will conduct this mid semester test at the class schedule of the respective subject. Answer copies shall be returned to students, while attendance sheets shall be submitted to the Controller of Examinations.

6. STUDENTS COUNSELING

The coordinators in their respective Faculties/Colleges/Institutes/Centers shall provide adequate counseling and guidance to the students in the selection of their courses and related matters.

7. ADMISSION POLICY

Please see admission policy on page <https://sau.edu.pk/undergraduate>

8. EXAMINATIONS

The regulations related to conduct of Theory and Practical examinations including the appointment, responsibilities, and remuneration of

examiners and examination staff are covered in detail by existing rules and shall remain effective until modified. Examination results shall be compiled and announced by the Controller of Examinations.

8.1. Setting of Question Paper for Theory Final Examination

The following Regulations are framed for the setting of question paper,

1. The Teacher / Examiner shall set the Question paper from full syllabus of the course in the Final Examination.
2. The paper shall contain at least 40% objective and 60% descriptive type questions.
3. The choice shall be limited to 25% from the descriptive type of section in line with the guidelines provided by Higher Education Commission.
4. The student must attempt all questions in the objective type of section.

8.2. Eligibility for Appearing in the Examination

Candidates fulfilling the following minimum requirements are eligible for appearing in semester examinations

- i. He / She must be a student and his / her name must appear on the registration list of the University.
- ii. He / She must have at least 75% average attendance
- iii. He / She must fill in the Examination Form and pay prescribed fees within the due date announced by the University.
- iv. He/ She is not debarred from taking the examination.
- v. The Examination Forms will be signed by the coordinator of the concerned Faculty / College/ Institute / Center forwarded to the Controller of Examinations.

8.3. Examination Fees

Examination fees will be collected with registration. Identity cards of the University will serve as admit card. A list of registered students will be provided to Coordinator / Dean.

8.4. Assessment of Theory Answer Copies

The sealed answer copies of final semester examination will be sent by Controller of Examinations to the concerned Examiner who will assess the answer copies and send the marks lists (in duplicate), within 20 days for every 100 answer copies and 30 days for more than 100 copies or part thereof after the date of examination, to the Controller of Examinations. If he / she fails to submit examination result after above mentioned period of 30 days, he / she

shall not be appointed as Examiner in the next examination. The answer copies of mid semester test will be returned to the students whereas, the answer copies of final examination will be deposited by the examiner under sealed cover in the office of the Controller of Examinations for record and verification at later stage.

8.5. Examination Grading

The performance of a student is to be measured in letter Grade (A, A⁻, B⁺, B, B⁻, C⁺, C, C⁻, D⁺ and D Grade). These letters carry weightage from 1 to 4 points per credit hour of a course. The evaluation system comprises of weightage assigned for assignments, mid semester, and final semester test to be solely conducted and assessed by the concerned teacher who offered the subject.

Table 4. Weightage of Assignments, Mid-semester Test and Final Examination

Activity	Weightage (%)
Attendance	10
Assignments	10
Mid-semester test	20
Final examination	60
Total	100

The grading of candidates for each examination shall be as under.

Table 5. Range of Marks Percent, Grade Points, Grade and Achievements

Range of Marks %	Grade Points	Grade	Achievements
=>80	4.00	A	Excellent
73-79	3.67	A ⁻	Very Good

66-72	3.33	B ⁺	Good
60-65	3.00	B	
56-59	2.67	B ⁻	
53-55	2.33	C ⁺	Satisfactory
50-52	2.00	C	
46-49	1.67	C ⁻	Below average
43-45	1.33	D ⁺	
40-42	1.00	D	Pass
<40	0.00	F	Fail

Explanation of Marks Transcript Remarks

Pass	The candidate passed all subjects offered in a semester or in two consecutive semesters with G. P. A. = 2.00 or higher. He / She is eligible to move to next semester / session, but may repeat any subject where he / she scored grade „C“ or less
Probation	The candidate secured G. P. A \geq but secured less and / or failed in some subjects. He / She will be promoted next semester but will repeat failing subjects or poor grade to improve G.P.A in succeeding semester (s) as Ex-student.
Less G.P.A	The candidate secured G. P. A < 1.75, secured less and / or failed in some subjects. He / She will automatically move from 1,3,5,7 semesters to 2,4,6,8 semesters but will repeat failing subjects or poor grade to improve with (G. P. A) in succeeding semester(s) as Ex-student.
Fail	The candidate secured G. P. A < 1.75, in two consecutive semesters, cannot be promoted to next session. He / She

will be admitted in any of the weak semesters and will repeat courses of the current and previous semesters to G. P. A. \geq 1.75 to be eligible for promotion to next session.

8.6. Grade Point Average (G.P.A)

Grade Point Average (G.P.A) is calculated to assess the performance of the students during each semester. Cumulative Grade Point Average (C.G.P.A) is calculated to assess the performance of the student from first semester to the current semester; Notations Used for the Computation of G.P.A and C. G.P.A

G.P.A = Grade Point Average

Quality Point = Grade Points multiplied by credit hours (Theory / Practical)

\sum Q. P = Sum of all quality points of courses offered in the semester

\sum C. H = Sum of all credit hours of courses offered in the semester

$G. P. A = \frac{\sum Q. P}{\sum C. H}$

\sum C. H

C.G.P.A = Total Q. P of the program/Total Credit Hours of the Program

8.7. Minimum G.P.A requirement for degree and promotion to next academic session.

- G.P.A = 2.00 or above is to be scored for successful completion of the Graduate Degree Program.
- Student securing G.P. A= 1.75 or higher in two consecutive semesters (1 & 2; 3 & 4; 5 & 6; 7 & 8) on the other hand qualifies for promotion to the higher semester although failing or having scored „D“ grade in some courses.
- Students with G.P.A. less than 1.75 in two consecutive semesters does not qualify for promotion to next higher semester. Such students are required to remain in the same year in any of the weak semesters and shall improve the grades of the failing / poor grade to qualify for promotion to next higher semester.

8.8. Tabulation and Checking of Results.

The following Regulations will be adopted for tabulation and checking of the Results.

- i. The Tabulators and Checkers will be appointed by the Vice Chancellor from among the teachers at Sindh Agriculture University.
- ii. The Tabulator will open the sealed envelope (marked Tabulator List), containing the award list for each subject and enter the marks secured by the student on a specified sheet / ledger and sign the sheets / ledgers.
- iii. The Checkers will check each entry made by the Tabulators for each student carefully and make the corrections, if necessary, and sign the sheets / ledgers.
- iv. The Secrecy Officer, Additional Controller of Exams, Deputy Controller of Examinations, Controller of Examinations shall sign the tabulated and checked result sheets and ledgers. After seeking the approval of Competent Authority, the results shall be declared by the Controller of Examinations.

It is mandatory for each signatory of the result sheet / ledger to record the number of overwriting(s) appearing on each page being signed.

8.9. Repeating Courses to Improve G.P. A

A student can improve his / her G.P.A under the following Regulations.

- i. Whenever a candidate fails or gets „C“ grade or less, he / she can reappear or improve his / her G.P.A at the immediate next session in the respective semester (s) when the examination of that course (s) is conducted.
- ii. If a student absents him / herself in a mid-semester / final semester test for any reason, no separate test will be held for him / her during that semester. He / She can appear at the immediate next session in the respective semester when the examination for that course (s) is conducted.
- iii. A student who has passed and obtained the degree will not be allowed to improve any course.

- iv. On improving subject, if one gets the grade less than the previous, the previous grade will be counted towards his/ her passing.
- v. All courses taken by a student, will be shown on his /her transcript including those with “Failure” or “Repeat”

8.10. Rules for Promotion

For degree programs with 8 semesters, the promotion from the first semester to the second, third to fourth, fifth to sixth and seventh to eighth semesters will be automatic. However, for promotion from 2nd to 3rd, 4th to 5th, 6th to 7th semester, the candidate is required to have a G.P.A of 1.75 in two consecutive semesters i.e., 1st & 2nd, 3rd & 4th, 5th & 6th.

For degree programs with 10 semesters, the promotion from the first semester to the second, third to fourth, fifth to sixth, seventh to eighth and ninth to tenth semesters will be automatic. However, for promotion from 2nd to 3rd, 4th to 5th, 6th to 7th, 8th to 9th semester, the candidate is required to have a G.P.A of 1.75 in two consecutive semesters i.e., 1st & 2nd, 3rd & 4th, 5th & 6th, 7th & 8th.

- i. If a student fails to meet the attendance requirement in any semester, he / she will not be allowed to appear in that semester examination and must seek fresh admission in the next semester in the same class as explained here under.
 - a. If a student fails to meet minimum attendance requirement during the first semester, he / she will not be allowed to appear in the first semester examination. He / She must seek fresh admission during the next academic session in the same class for which he / she will be allowed re-admission without competing with other applicants.
 - b. The same procedure will be adopted for the succeeding semesters in case of the shortage of attendance.
- ii. A student who secures less than 1.75 G.P.A. in the preceding two semesters will not be promoted to next semester of the new session, however, the student may re-appear as ex-student at the immediate next session in respective semesters to improve his failing G.P.A. when the examination of that course(s) is conducted in which he / she is failing or has secured less G.P.A. He / She will be required to pay examination fee for all semesters whose courses he / she intends to repeat irrespective of the number of courses.

- iii. For award of degree, the student must have a minimum C.G.P.A. of 2.00 and has passed all the course(s) offered in the entire degree program.
- iv. A student failing in any course of the bachelor's degree program shall not be allowed admission in master's degree program unless he / she clears that course and earns degree with C.G.P.A. of 2.00 or higher.

8.11 Re-totaling of marks

Re-totaling of marks will be allowed on payment of prescribed fees. Accordingly, the concerned student shall apply to the Controller of Examinations through the Coordinator within ten weeks of declaration of the result. Re-totaling / correction shall be made in presence of the following Standing Committee: Controller of

Examinations, Secrecy Officer, Coordinator, and the subject Examiner.

8.12 Anomaly Committee

- i. Each department shall constitute a Committee of the Senior Teachers of the department of which the Chairman shall be the Convener, for hearing appeals of students who may have grievance concerning their grades.
- ii. Such an appeal must be lodged within four weeks of the declaration of result of the concerned course.
- iii. The decision of the Committee shall be final.

1. CANCELLATION OF ADMISSION DUE TO POOR PERFORMANCE

A candidate shall be removed from the University roll if he / she secure C.G.P.A. less than 2.00 in the entire degree program in six years' time and in case of D.V.M program in seven years' time (The maximum time a candidate is allowed to earn bachelor's degree).

2. DECLARATION OF POSITION

Following Regulations will apply for the declaration of positions:

- i. A candidate who passes each course of degree program in single attempt, will be eligible for declaration of position (First, Second and Third) for each Class / Academic Year.

- ii. If a candidate passes a course in two Academic Years i.e., one semester in one academic year and other semester in another academic year, he / she will not be eligible for position in any of the academic years. This shall apply to individual cases but not to the batches admitted on a regular basis.
- iii. Position shall be declared based on the batch in which the student was initially admitted.
- iv. First, Second & Third position / merit certificates will be awarded in each program based on overall merit. If more than one student secures the same C.G.P.A the position will then be determined based on the percentage of marks obtained.
- v. In all cases where the Regulations are silent or where there is difference of opinion about their interpretation, the decision of the Deans Committee; with the Senior Most Dean serving as Convener shall be final, provided they are not inconsistent with or repugnant to these Regulations.

3. AWARD OF DEGREE

Following Regulations will apply for the degrees

- i. In the end of each Academic Year, the Controller of Examinations will submit, before the Academic Council, the list of successful candidates for award of various Degrees and Medals. The Academic Council will in turn send their recommendation to the Syndicate to confer the Degrees / Medals upon successful candidates who are otherwise eligible.
- ii. Degrees and Medals / Pass Certificates will be issued as per format approved by the Academic Council.
- iii. The Academic Council shall approve the nomenclature of various Degrees awarded by the University.
- iv. The color of the degree folder shall be approved by the Competent Authority.
- v. The degree shall be awarded on the performance of all semesters in the degree program.

- vi. Marks percentage will be shown on marks / pass certificates of each year and aggregate marks percentage in the final transcript together with the G.P.A and C.G.P.A.

The degree certificate shall be issued as per University format approved by the Academic Council.

4. AWARD OF MEDALS

For the award of medals, the following Regulations have been framed.

- i. The Medals will be awarded to those who secure First or Second positions as per qualifying criteria on an overall merit basis. Those who secure Third position in these examinations shall be awarded Merit Certificate
- ii. No Medal will be awarded to a candidate who had previously failed in any subject at any examination and passed the same examination in the second attempt.
- iii. The pattern of Award of Chancellor's Gold Medal and other Gold, Silver and Gilt age medals for each Academic Year shall be as per university rules.

5. EXAMINATION FEES

The fee structure pertaining to examinations will be determined and revised from time to time by the Competent Authority subject to the approval of Academic Council. The candidate is required to pay examination fees for the ongoing semester as well as for each semester whose course (s) he / she intends to repeat whether failed or obtained "C" grade or less.

6. CORRECTION/CHANGE IN THE NAME / FATHER'S NAME / SURNAME

Following Regulations will apply to candidates requesting or correction/change in the name, father's name, and surname.

- i. Corrections in the name, father's name and surname will be allowed only on the basis and in conformity with the Matriculation Certificate (SSC / O level Examination) of the concerned Boards and/ or otherwise.
- ii. After ordering any correction / change, the degree already issued to the candidate will neither be cancelled, nor a new degree be issued. Only the fact of having returned of the original degree already issued. Such

endorsement will be signed by both the Controller of Examinations and the Registrar on the reverse of the degree.

- iii. The office will charge a prescribed fee for such corrections from the candidates.
- iv. Duplicate Degree Certificate shall be issued as per University Rules and such certificates are to be signed by the Vice Chancellor. The word "DUPLICATE" shall be mentioned.

7. MODIFICATION OF RULES AND REGULATIONS

These Regulations are subject to modifications by the statutory body as and when felt appropriate / necessary from time to time.

FOR MORE INFORMATION:

Registrar,
Sindh Agriculture University Tandojam, 70060, Sindh, Pakistan
Phone: ~~+92 22 2765387 & +92 22 2765870 (Ext 301)~~
Fax: ~~+92 22 2765300~~ Email: registrar@sau.edu.pk
Website: www.sau.edu.pk

This prospectus is produced for the general guidance of the applicant's seeking admission at Sindh Agriculture University Tandojam. The University bears no liability for errors and omissions, if any. The University reserves the right to withdraw and amend the rules, regulations, policies, fee structure, etc. at any stage.

FACULTY OF CROP PRODUCTION



FACULTY OF CROP PRODUCTION

The Faculty of Crop Production emerged from the bifurcation of the Faculty of Agriculture in 1987. This restructuring was undertaken to streamline academic and research activities and to effectively address sustainable crop productivity. The faculty is committed to academic excellence in graduate and postgraduate education and research across a broad spectrum of agricultural disciplines. It conducts diverse programs in education, research, and services to the nation and the farming community.

This faculty is the largest within the university, comprising six departments (Soil Science, Agronomy, Horticulture, Plant Breeding & Genetics, Biotechnology, Crop Physiology) and one institute (Institute of Food Sciences & Technology). All departments and the institute offer both graduate and postgraduate degree programs. The faculty provides practical training to students and enhances its research efforts through experimental farms (Latif and Malir) and advanced computer labs with internet access. The laboratory facilities are equipped with both basic and highly advanced equipment. An internship program has been included in the new curriculum, adding further value to the faculty's offerings. The teaching staff is highly qualified and trained through local and overseas programs. Over time, the faculty has trained many undergraduate and postgraduate students in various agricultural disciplines.

MISSION STATEMENT

The Faculty of Crop Production is dedicated to preparing students for participation in the global community by providing research and educational programs that support sustainable agricultural systems. These systems promote vibrant communities, a diversified economy, and a healthy living environment.

JOB OPPORTUNITIES

Graduates and postgraduates will have immense opportunities in various disciplines of agriculture and allied sciences within public and private sector organizations, as well as autonomous and semi-autonomous bodies such as Zarai Tarqiati Bank of Pakistan (ZTBL), Pakistan Agricultural Research Council

(PARC), Pakistan Council for Research in Water Resources (PCRWR), WAPDA, and fruit preservation and food industries.

Their expertise can also be utilized in provincial and federal departments of agricultural extension, research, teaching, forestry, cooperatives, Pakistan Central Cotton Committee, Federal Seed Certification and Registration Department (FSCRD), public parks and gardens, seed corporations, EPA, SCARP, Sindh Sugar Corporation, Pakistan Atomic Energy Commission, and other public and private departments.

Additional opportunities exist in organizations such as Pakistan Broadcasting, other corporations and commercial banks, National Planning Commission, USAID, FAO, LEAD, fertilizer industries, National Talent Pool, INGOs and other NGOs, and agricultural consultancy firms, where they can excel with the skills they have developed.

GENERAL COURSES OFFERED FOR B.Sc. (Agri.) Hons.		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
IS/EB-301	Islamic Studies / Ethics (Optional for Non-Muslim)	2 (2+0)
MATH-301	Functional Mathematics	3 (3+0)
SS-301	Introduction to Soil Science	3 (2+1)
ENT-301	Introductory Entomology	3 (2+1)
AGR-301	Basic Agriculture	3 (2+1)
ENG-301	English Text, Grammar & Composition	3 (3+0)
BT-301	Introductory Biotechnology	3 (2+1)
SEMESTER-II		
AGEC-302	Introduction to Economics and Agriculture Economics	3 (3+0)
PBG-302	Introductory Genetics	3 (2+1)
HORT-302	Introductory Horticulture	3 (2+1)
PP-302	Introduction to Plant Pathogens	3 (2+1)
AGR-302	Field Crop Production-I	3 (2+1)
AEE-302	Introduction to Agriculture Extension and Education	2 (2+0)

PS-302	Pakistan Studies	2 (2+0)
SEMESTER-III		
PBG-401	Introductory Plant Breeding	3 (2+1)
CP-401	Introduction to Biochemistry	3 (2+1)
PPT-401	Introduction to Pest Management	3 (2+1)
HORT-401	Horticultural Crop Production	3 (2+1)
FST-401	Introductory Food Science & Technology	3 (2+1)
AHV-401	Introductory Animal Husbandry	2 (1+1)
SEMESTER-IV		
AGR-402	Field Crop Production-I I	3 (2+1)
CP-402	Introductory Crop Physiology	3 (2+1)
SS-402	General Soil Science	3 (2+1)
ENT-402	Applied Entomology	3 (2+1)
BT-402	General Biotechnology	2 (1+1)
FPM-402	Farm Mechanization	2 (1+1)
ITC-402	Computer Applications	3 (2+1)

DEPARTMENT OF AGRONOMY

The Department of Agronomy is dedicated to developing a trained human resource base in crop production, conducting basic and applied research in various aspects of crop production and land management under diverse agro-ecological and socio-economic conditions of the farming community. The department is actively involved in planning, conducting, and publishing quality research in well-reputed journals and periodicals. It has completed several research projects and schemes. Recently, four new projects have been initiated by the department, involving postgraduate students as research fellows.

OBJECTIVES

The department is organized and implemented in a manner that enables learners to acquire and develop competencies in crop production management, crop research, research dissemination, and entrepreneurial skills through learning activities and experiences based on real agricultural problems, with the following specific objectives:

1. Disseminate knowledge and skills to students and those involved in crop production.
2. Identify technical and socio-economic issues constraining farm productivity and find solutions to overcome these problems.
3. Develop strategies through training and demonstrations to promote sound agricultural practices among local farmers, reducing the risk of crop failures and farmer vulnerability.

JOB OPPORTUNITIES

Job opportunities are available in seed, fertilizer, and pesticide companies, CDAs, banks, public and private sectors, NGOs, government departments, agricultural research, agricultural extension, universities, and more.

ACADEMIC STAFF

Aijaz Ahmed Soomro	Professor & Chairman	PhD (China)
Mahmooda Buriro	Associate Professor	PhD (SAU)
M. Nawaz Kandhro	Associate Professor	PhD (SAU)
Qamaruddin Jogi	Associate Professor	PhD (China)
G. Mustafa Leghari	Associate Professor	PhD (SAU)
Pir Ahmed Naqi Shah	Associate Professor	PhD (SAU)
Nighat Seema Soomro	Associate Professor	PhD (SAU)
Muhammad Ali Ansari	Assistant Professor	M.Sc. (Agri.) Hons
Habib-u-Rehman Memon	Assistant Professor	M.Sc. (Agri.) Hons
Bakht-u-Nisa Mangan	Assistant Professor	PhD (China)

GENERAL COURSES OFFERED FOR B.Sc. (Agri.) Hons.

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
AGR-501	Arid and Rain-Fed Agriculture	3 (2+1)
AGR-503	Agro-Technology of Major Crops	3 (2+1)
AGR-505	Field Crop Physiology	3 (2+1)
AGR-507	Introduction to Crop Modeling	3 (2+1)
AGR-509	Seed Production Technology	3 (2+1)
STAT-511	Elementary Statistics	3 (2+1)

SEMESTER-VI		
AGR-502	Farm Record Maintenance	3 (2+1)
AGR-504	Principles of Weed Science	3 (2+1)
AGR-506	Plant Nutrients and Growth Regulators	3 (2+1)
AGR-508	Medicinal and Special Crops	3 (2+1)
CP-510	General Biochemistry	3 (2+1)
SEMESTER-VII		
AGR-601	Research and Scientific Writing	3 (2+1)
AGR-603	Irrigation Agronomy	3 (2+1)
AGR-605	Forage and Fodder Production	3 (2+1)
AGR-607	Production Technology of Condiments and Spices	3 (2+1)
SUPT-611	Environment and Crop Production	3 (2+1)
SEMESTER-VIII		
AGR-602	Agro Ecology	2 (2+0)
AGR-604	Conservation Agronomy	3 (2+1)
AGR-606	Organic Farming	3 (2+1)
AGR-610	Internship and Report Writing	4 (0+4)

DEPARTMENT OF BIOTECHNOLOGY

Biotechnology relies on the application of scientific and engineering principles to process materials using biological agents to produce goods and services for mankind. There are many applications of biotechnology in fields such as industry, agriculture, pharmaceuticals, healthcare, food, energy, and the environment.

The Department of Biotechnology was established in 1992-93 with a vision to make an impact through research, technology-based training, and innovation. The department offers graduate and postgraduate courses in biotechnology and provides two introductory-level courses in biotechnology to undergraduates from other faculties of the university. In addition to academic programs, the department has laboratories for tissue culture and molecular biology/genetic engineering, contributing to national food security.

The research activities in the Department of Biotechnology are wide-ranging, reflecting the diversity of modern biotechnology. Major research areas include plant genomics, alternative energy, industrial biotechnology, and functional genomics. Faculty members are fully committed to training graduates who are absorbed into various research and professional organizations.

OBJECTIVES

To impart quality education, research, innovation, and technology-based training, with the following specific objectives.

1. To promote and strengthen the field of agricultural biotechnology.
2. To develop and apply basic biotechnology knowledge for the efficient management of environmentally sound and sustainable agriculture.
3. To enhance interaction among agriculture, medicine, the environment, fisheries, food processing, renewable energy fuels, and other related fields that share the common denominator of cells and their derived products.

ACADEMIC STAFF

Muharram Ali Qambrani	Associate Professor & Chairman	PhD (China)
G. Sughra Mangrio	Associate Professor	PhD (US)
Shahla Baloch	Associate Professor	PhD (China)
Allah Jurio Khaskheli	Lecturer	PhD (China)

COURSES OFFERED FOR B.Sc. (Agri.) Hons.

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
BT-501	Metabolism-I	3 (2+1)
BT-503	Molecular Biology-I	3 (2+1)
BT-505	Microbiology	3 (2+1)
BT-507	Cell Biology	3 (2+1)

BT-509	Analytical Chemistry & Instrumentation	3 (2+1)
STAT-511	Elementary Statistics	3 (2+1)
SEMESTER-VI		
BT-502	Metabolism-II	3 (2+1)
BT-504	Molecular Biology-II	3 (2+1)
BT-506	Immunology	3 (2+1)
BT-508	Cell & Tissue Culture	3 (2+1)
CP-510	General Biochemistry	3 (2+1)
SEMESTER-VII		
BT-601	Bioinformatics	3 (2+1)
BT-603	Recombinant DNA Technology	3 (2+1)
BT-605	Microbial Biotechnology	3 (2+1)
BT-607	Skills and Research Methodology for Biotechnologists	3 (3+0)
SUPT-611	Plant Biotechnology	3 (2+1)
SEMESTER-VIII		
BT-602	Metabolomics, Proteomics & Genomics	2 (2+0)
BT-604	Principle of Biochemical Engineering	3 (2+1)
BT-606	Environmental Biotechnology	3 (2+1)
BT-610	Internship and Report Writing	4 (0+4)

DEPARTMENT OF HORTICULTURE

Horticulture is one of the most important disciplines of agriculture. The production and returns from horticultural crops are high compared to other crops. Horticultural crops, such as fruits, vegetables, and flowers, possess export potential to earn foreign exchange.

The Department of Horticulture imparts quality education to students from the Sindh and Baluchistan provinces and conducts research on fruits, vegetables, flowers, and ornamental plants. The department has six subject experts, including five PhD professionals skilled in the fields of fruits, vegetables, and floriculture. The Department of Horticulture offers

Bachelor's, Master's, and Doctoral degree programs to meet the trained manpower needs of the province. Additionally, the department provides training in various aspects of horticulture.

A program to provide quality fruits, vegetables, and flowers with true-to-type varieties is ongoing. Seed production programs for flowers and vegetables have been initiated. Post-harvest processing, packaging, and marketing are other steps taken to improve infrastructure and opportunities for farmers. Breeding horticultural crops to develop new high-yielding varieties and in-vitro propagation for vegetative multiplication of plants are also in progress. The department offers advisory services to fruit and vegetable growers and conducts research on problems faced by the farming community, involving both graduate and postgraduate students.

OBJECTIVES

The main objective is to train both undergraduate and postgraduate students in the production, post-harvest techniques, improvement, storage, processing, and marketing of horticultural crops, as well as in landscape and environmental aesthetics, with the following specific objectives:

1. Provide educational opportunities for careers in horticulture.
2. Improve the quality, variety, and availability of horticultural products to achieve global GAP certification for export.
3. Strengthen the competitive position of Sindh's horticulture industry.
4. Popularize the concept of high-density planting to achieve higher quality production of mangoes.
5. Develop technology for the production of certified stock and saplings.

ACADEMIC STAFF

Mujahid Hussain Leghari	Professor & Chairperson	PhD (SAU)
Saba Ambreen Memon	Professor	PhD (China)
Noor-un-Nisa Memon	Professor	PhD (UAF)
Tanveer Fatima Miano	Professor	PhD (Bangladesh)
Niaz Ahmed Wahocho	Associate Professor	PhD (China)

COURSES OFFERED FOR B.Sc. (Agri.) Hons.		
CODE	TITLE OF COURSE	HRS.
SEMESTER-V		
HORT-501	Principles of Fruit Production	(2+1)
HORT-503	Principles of Vegetable Production	(2+1)
HORT-505	Principles of Ornamental Crop Production	(2+1)
HORT-507	Propagation & Nursery Management	(2+1)
HORT-509	In-Vitro Propagation	(2+1)
STAT-511	Elementary Statistics	(2+1)
SEMESTER-VI		
HORT-502	Temperate Fruits	(2+1)
HORT-504	Winter Vegetables	(2+1)
HORT-506	Landscape Horticulture	(2+1)
HORT-508	Post-Harvest Horticulture	(2+1)
CP-510	General Biochemistry	(2+1)
SEMESTER-VII		
HORT-601	Research Methods in Horticulture	(2+1)
HORT-603	Tropical & Subtropical Fruits	(2+1)
HORT-605	Commercial Flower Production	(2+1)
HORT-607	Summer Vegetables	(2+1)
SUPT-611	Solanaceous Crops	(2+1)
SEMESTER-VIII		
HORT-602	Business Management in Horticulture	(2+0)
HORT-604	Protected Horticulture	(2+1)
HORT-606	Vegetable and Flower Seed Production	(2+1)
HORT-610	Internship and Report Writing	(0+4)

DEPARTMENT OF PLANT BREEDING AND GENETICS

Plant breeding focuses on the development of superior crop varieties. Its main goal is the genetic adaptation of crop plants to social, economic, technological, and environmental factors. The Department of Plant Breeding and Genetics was established in 1954. Since then, it has offered courses and research methodologies related to crop improvement, cytology, cytogenetics, biometry, quantitative genetics, molecular genetics, and

genetic engineering, leading to B.Sc. (Hons) and M.Sc. (Hons) degrees. The department also provides advanced courses and research guidance to PhD scholars. Over the past 67 years, it has produced about 1,000 trained graduates who are serving in various organizations at the provincial, national, and international levels. The department boasts highly qualified and experienced faculty, well-equipped laboratories, and an experimental farm for conducting research projects. Recently, the department established a "Seed Production and Development Centre," which aims to improve and strengthen the province's seed supply system and serve as a significant income-generating unit for the university. Currently, the department is running six research projects funded by different agencies. These projects involve research associates and students working alongside teachers, focusing on the genetic improvement of crops such as onion, rice, chickpea, and wheat through conventional plant breeding techniques.

OBJECTIVES

The Department's overall aim is to enhance the quantitative and qualitative traits of cereal, fiber, and oilseed crops, produce model crop ideotypes suitable for various agro-environments in the Sindh province, and ultimately develop technology packages to enhance farmers' capabilities for various crops, with the following specific objectives:

1. Impart academic and research training at undergraduate, graduate, and postgraduate levels in the field of Plant Breeding and Genetics.
2. Plan and undertake basic and applied research on cereals and other major crops.
3. Produce quality seeds of wheat, cotton, and vegetable crops for distribution to farmers in the Sindh province.
4. Establish linkages with provincial, national, and international research and educational organizations to undertake collaborative assignments.
5. Develop and evolve genetically improved cultivars, hybrids, and other breeding materials.
6. Improve quantitative and qualitative traits of crop species.

ACADEMIC STAFF		
Shah Nawaz Mari	Professor & Chairman	PhD (SAU)
Zahoor Ahmed Soomro	Professor	PhD (SAU)
Munaiza Baloch	Professor	PhD (SAU)
Shabana Memon	Associate Professor	PhD (China)
Wajid Ali Jatoi	Associate Professor	PhD (SAU)
Siraj Ahmed Channa	Associate Professor	PhD (China)
Nasreen Fatima	Associate Professor	PhD (SAU)
Abdul Wahid Baloch	Associate Professor	PhD (China)
Saeed Hyder Ghaloo	Assistant Professor	M.Sc. (Agri.) Hons
Asghar Ali Rajper	Assistant Professor	M.Sc. (Agri.) Hons
Tanveer Fatah Abro	Assistant Professor	PhD (Malaysia)
Piar Ali Shar	Assistant Professor	PhD (China)
Naila Gandahi	Lecturer (Adhoc)	PhD (SAU)

COURSES OFFERED FOR B.Sc. (Agri.) Hons.		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
PBG-501	Principles of Genetics	3 (2+1)
PBG-503	Breeding of Field Crops	3 (2+1)
PBG-505	Cytogenetics	3 (2+1)
PBG-507	Fundamentals of Plant Biometry	3 (2+1)
PBG-509	Breeding of Vegetable Crops	3 (2+1)
STAT-511	Elementary Statistics	3 (2+1)
SEMESTER-VI		
PBG-502	Breeding of Maize, Millet and Sorghum	3 (2+1)
PBG-504	Breeding of Oilseed and Tobacco Crops	3 (2+1)
PBG-506	Modern Techniques in Plant Breeding	3 (2+1)
PBG-508	Molecular Genetics	3 (2+1)
CP-510	General Biochemistry	3 (2+1)
SEMESTER-VII		
PBG-601	Breeding of Cereal Crops	3 (2+1)
PBG-603	Breeding of Pulse Crops	3 (2+1)
PBG-605	Breeding of Fodder and Forage Crops	3 (2+1)

PBG-607	Experimentation in Plant Breeding	3 (2+1)
SUPT-611	Principles of Plant Breeding	3 (2+1)
SEMESTER-VIII		
PBG-602	Breeding of Sugar Crops	2 (1+1)
PBG-604	Breeding of Fibre Crops	3 (2+1)
PBG-606	Biodiversity and Plant Genetic Resources	3 (2+1)
PBG-10	Internship and Report Writing	4 (0+4)

DEPARTMENT OF CROP PHYSIOLOGY

Crop physiology encompasses various aspects of plant life and survival, including metabolism, water relations, mineral nutrition, development, movement, irritability, organization, growth, and transport processes. The close connection between physiology and biochemistry has led to the extensive use of physicochemical methods, allowing scientists to conduct research at cellular, subcellular, and molecular levels and acquire fundamentally new insights into the mechanisms regulating the complex life processes and their functioning as integral systems.

Originally established in 1987 as the Department of Plant Physiology & Biochemistry through a Bilateral Link Program between the University of Wales, Bangor, UK, and Sindh Agriculture University, Tandojam, the department has since evolved. Under this project, twelve faculty members obtained Ph.D. degrees and postdoctoral training from the UK. In 2010, the department was renamed the Department of Crop Physiology. It was established to produce skilled professionals and promote sustainable agriculture. The department offers B.Sc. (Agri.) Hons, M.Sc. (Agri.) Hons, and Ph.D. degrees in Crop Physiology.

OBJECTIVES

The department focuses on advancing and documenting the frontiers of plant sciences and related disciplines to enhance the quality and quantity of plants and their products, including food, feed, fuel, and fiber, with the following specific objectives:

1. To provide high-quality education at both the undergraduate and postgraduate levels in crop physiology.

- To discover, formulate, and demonstrate new principles of crop improvement and soil-crop management to ensure that Pakistan's agriculture is socially viable, economically profitable for farmers, and competitive in global markets.
- To identify agriculturally useful genes in wild or underutilized plant species and develop techniques to utilize these genes to improve nutritional quality and stress tolerance.

ACADEMIC STAFF		
Mehar-un-Nisa Narejo	Associate Professor & Chairperson	PhD (Malaysia)
Shanila Yasmeen Chang	Assistant Professor	M.Sc. (Hons)
Javed Ali Umrani	Lecturer	PhD (China)

COURSES OFFERED FOR B.Sc. (Agri.) Hons.		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
CP-501	Basic Physiological Processes of Crop Plants	3 (2+1)
CP-503	Environmental Physiology	3 (2+1)
CP-505	Fundamentals of N-Fixation	3 (2+1)
CP-507	Nucleic Acid & Protein Synthesis	3 (2+1)
CP-509	Plant Cell Structure & Functions	3 (2+1)
STAT-511	Elementary Statistics	3 (2+1)
SEMESTER-VI		
CP-502	Physiology of Cereals	3 (2+1)
CP-504	Seed Physiology	3 (2+1)
CP-506	Plant Growth Substances	3 (2+1)
CP-508	Physiology of Crop Nutrition	3 (2+1)
CP-510	General Biochemistry	3 (2+1)
SEMESTER-VII		
CP-601	Physiology of Legumes and Cash Crops	3 (2+1)
CP-603	Introductory Molecular Biology	3 (2+1)
CP-605	Stress Physiology	3 (2+1)
CP-607	Plant Water Relations	3 (2+1)

SUPT-611	Plant Growth & Development	3 (2+1)
SEMESTER-VIII		
CP-602	Carbon Metabolism in Plants	2 (2+0)
CP-604	Physiological Aspects of Tissue Culture	3 (2+1)
CP-606	Crop Ecology	3 (2+1)
CP-610	Internship and Report Writing	4 (0+4)

DEPARTMENT OF SOIL SCIENCE

Soil provides essential nutrients and physical support for plants used for food, fiber, wood, and fuel, and offers critical ecosystem services. This vital resource is paramount to humanity. The Department of Soil Science addresses many important aspects of soil through its teaching and research programs.

Originally established as the Department of Agricultural Chemistry in the 1920s, the department was renamed the Department of Soil Science in the late 1970s to enhance education and research in soil, water, plant, and environmental sciences. The department is equipped with well-established Soil Fertility, Plant Nutrition, and Bio-saline Agriculture Research laboratories, in addition to four other common-use laboratories and two greenhouses for conducting experiments. The teaching staff comprises 13 subject experts, including 12 PhD holders and one M.Sc. graduate. The department has produced hundreds of graduates and postgraduates, including PhDs. Currently, several graduates and postgraduates are enrolled in the department.

The Department of Soil Science conducts both basic and applied research through its faculty and postgraduate scholars. It plays a significant role in human resource development (HRD) and research and development (R&D) activities in soil and environmental sciences. The department maintains strong links with several national and international bodies actively involved in soil and environmental research.

Hence, understanding the physical, chemical, and biological nature of soil is crucial for the continued existence of life on this planet.

OBJECTIVES

The aim of the department is to develop and apply both basic and applied knowledge of soil and environmental sciences for the efficient management of soil, water, and the environment. The specific objectives are:

1. To prepare individuals with the ability to understand and apply fundamental principles of soil and environmental sciences.
2. To conduct valuable basic and applied research in the field of soil sciences.
3. To study the interactions between soil, water, plants, and chemicals (both organic and inorganic) to enhance crop growth and yield.
4. To improve methods used in soil, plant, water, and fertilizer analyses.

ACADEMIC STAFF		
Inayatullah Rajpar	Professor & Dean	PhD (UK)
Allah Wadhayo Gandahi	Professor & Chairman	PhD (SAU)
Zia-ul-hassan Shah	Professor	PhD (UAF)
Saleem Sarki	Associate Professor	PhD (Malaysia)
Saleem Maseeh Bhatti	Associate Professor	PhD (New Zealand)
Khalid Hussain Talpur	Associate Professor	PhD (China)
Ghulam Murtaza Jamro	Associate Professor	PhD (Canada)
Shoukat Ali Abro	Associate Professor	PhD (China)
Naheed Akhtar Talpur	Associate Professor	PhD (Germany)
Anila Mastoi	Assistant Professor	M.Sc. (Agri.) Hons
Siddique Lashari	Assistant Professor	PhD (China)
Saima Kalsoom Babar	Assistant Professor	PhD (Malaysia)

COURSES OFFERED FOR B.Sc. (Agri.) Hons.		
CODE	TITLE OF COURSE	HRS.
SEMESTER-V		
SS-501	Physical Properties of Soil	(2+1)
SS-503	Chemical Properties of Soil	(2+1)
SS-505	Soil Fertility and Fertilizer Use	(2+1)
SS-507	Instrumentation & Laboratory Techniques	(2+1)
SS-509	Soil Genesis & Morphology	(2+1)

STAT -511	Elementary Statistics	(2+1)
SEMESTER-VI		
SS-502	Salt-affected Soils and Water Quality	(2+1)
SS-504	Soil Survey and Land Evaluation	(2+1)
SS-506	Soil and Water Conservation	(2+1)
SS-508	Soil-Water-Plant Relationship	(2+1)
CP-510	General Biochemistry	(2+1)
SEMESTER-VII		
SS-601	Soil Microbiology	(2+1)
SS-603	Environmental Pollution and Management	(2+1)
SS-605	Trace Elements in Agriculture	(2+1)
SS-607	Carbon Sequestration in Soil	(2+1)
SUPT-611	Integrated Plant Nutrition Management	(2+1)
SEMESTER-VIII		
SS-602	Research Project and Scientific Writing	(2+0)
SS-604	Land Degradation and Management	(2+1)
SS-606	Municipal and Agro Waste Management	(2+1)
SS-610	Internship and Report Writing	(0+4)

INSTITUTE OF FOOD SCIENCE & TECHNOLOGY



INSTITUTE OF FOOD SCIENCES & TECHNOLOGY

The Institute of Food Sciences and Technology was established in April 2007 by upgrading the Department of Food Technology, which had been founded in 1996 and began its academic activities in 1998. The establishment of the Institute brought significant enhancements in the quality of education and research in food science and related fields. Currently, the Institute offers a four-year B.Sc. (Hons.), a two-year M.Sc. (Hons.), and a three-year Ph.D. degree program in Food Sciences and Technology. It follows a uniform curriculum, in line with the policies of the Higher Education Commission, Islamabad, similar to other food technology departments and institutes in the country.

MISSION STATEMENT

The Institute of Food Science & Technology is committed to providing high-quality education and training to individuals for careers in the food industry, academia, and the government sector. Additionally, it aims to pursue and excel in a leadership role in the quest for knowledge through quality research, capacity building, and innovative outreach. This commitment contributes to food productivity and safety, securing livelihoods through sustainable value addition and natural resources management.

OBJECTIVES

1. To impart quality education and train manpower in the field of Food Sciences and Technology to meet the demands of growers and food industries.
2. To conduct research on various aspects of Food Sciences and Technology, including food processing, preservation, value addition, food safety, and quality management.
3. To train rural populations for poverty alleviation.
4. To develop post-harvest technologies to reduce wastage in fruits and vegetables.

FACILITIES

The Institute of Food Sciences & Technology has seven hi-tech laboratories, including Food Analysis, Bakery Technology, Food Microbiology, New Food Product Development, Cereal Technology, and Drying & Dehydration. These laboratories are well-equipped with advanced and commonly used processing and analysis equipment. Additionally, the Institute has a beverage unit, juice treatment plant, and canning unit for teaching, research, and training purposes. Other facilities include a computer laboratory with internet access and a well-established library where students can explore research materials and interact with other researchers in their fields.

The Institute has also established food products display center where fresh bakery products are available daily at much lower prices. The Institute maintains strong linkages with various food industries, such as National Foods Karachi, Wazir Ali Oil Industries, Dawn Bread Hyderabad, Laseefa Foods Hyderabad, Pakistan Beverages Hyderabad, Popular Food Industry Tando Adam, Candyland, and Cadbury Hub. These partnerships facilitate mutually agreed-upon training, research, and the enhancement of practical skills for both students and industry personnel.

Recently, the Institute signed an MoU with the Sindh Food Authority, which also established a Food Testing Laboratory at IFST. The Institute offers postgraduate programs and facilities for research up to the Ph.D. level.

JOB OPPORTUNITIES

In Pakistan, there is vast potential for food technology graduates to be self-reliant by establishing small food units, such as bakery units, beverage production units, juice/squash preparation units, and pickle production. Besides small individual businesses, there is also a need for food sciences and technology graduates in various food industries across the country, including bread baking companies, national food companies, oil and beverage industries, and fruit processor exporters. Graduates are also in demand in government organizations such as the Sindh Food Authority, the Nuclear Institute of Agriculture, universities, private and semi-government companies, banks, and agriculture research institutes.

ISO Certification

The Institute of Food Sciences & Technology have ISO certification (ISO 9001-2015).

ACADEMIC STAFF		
Aijaz Hussain Soomro	Professor & Director	PhD (UAAR)
Tahseen Fatima Miano	Assistant Professor	PhD (Turkey)
Asadullah Mari	Assistant Professor	PhD (SAU)
Shahzor Gul Khaskheli	Assistant Professor	PhD (China)
Aasia Akbar Panhwar	Assistant Professor	PhD (SAU)
Dileep Kumar	Assistant Professor	PhD (China)
Ashfaque Ahmed Khaskheli	Lecturer	PhD (China)

COURSES OFFERED FOR B.Sc. Hons.		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
ENG-301	English I	3 (3+0)
BIO/ MATH303	Biology / Mathematics	3 (3+0)
STAT -305	Statistics	2 (2+0)
AGR-307	Basic Agriculture	3 (2+1)
PS-309	Pakistan Studies	2 (2+0)
IT-311	Introduction to Computer Science and Information Technology	2 (1+1)
FST-313	Introduction to Food Science & Technology	3 (2+1)
SEMESTER-II		
FST-302	Food Chemistry	3 (3+0)
FS-304	Unit Operation in Food Processing	3 (2+1)
STAT-306	Applied Statistics	3 (2+1)
MICRO-308	General Microbiology	3 (2+1)
IS-310	Islamic Studies / Ethics	2 (2+0)
HORT-312	Introduction to Horticulture & Orchard Management	3 (2+1)
SEMESTER-III		
ENG-401	English II	2 (2+0)
ID-403	Fluid Mechanics	3 (2+1)

BCH-405	Essentials of Biochemistry	3 (3+0)
FST-407	Food Processing and Preservation	3 (2+1)
FST-409	Instrumental Techniques in Food Analysis	3 (1+2)
AH -411	Introduction to Animal Husbandry	3 (2+1)
AGEC-413	Agribusiness and Trade / Marketing	3 (3+1)
SEMESTER-IV		
FST-402	Fruit and Vegetable Processing	3 (2+1)
PP-404	Introductory Plant Pathology	3 (2+1)
FST-406	Food Microbiology	3 (2+1)
FST-408	Technology of Oils and Fats	3 (2+1)
FST -410	Principles of Human Nutrition	2 (2+0)
ENT-412	Pest Control Procedures in Food Industry	
FS-414	Food Process Engineering	3 (2+1)
SEMESTER-V		
FST-501	Food Biotechnology	3 (2+1)
FST-503	Sugar Technology	3 (2+1)
FST-505	Postharvest Technology	3 (2+1)
FST-507	Food Additives	3 (2+1)
FST-509	Cereal Technology	3 (2+1)
FST-511	Food Safety	2 (2+0)
FST-513	Poultry & Egg Processing	3 (2+1)
SEMESTER-VI		
FST-502	Confectionary & Snack Foods	3 (2+1)
FST-504	Bakery Products Technology	3 (2+1)
FST-506	Food Packaging	3 (2+1)
FST-508	Food Laws and Regulations	2 (2+0)
FST-510	Sea Food Processing Technology	3 (2+1)
FST-512	Dairy Technology	3 (2+1)
SEMESTER-VII		
FST-601	Community Nutrition	3 (2+1)
FST-603	Meat Technology	3 (2+1)
FST-605	Beverage Technology	3 (2+1)
FST-607	Food Product Development	3 (2+1)
FST-609	Research Projects and Scientific Writing	2 (1+1)

FST-611	Milk and Meat Hygiene and Public Health	3 (2+1)
SEMESTER-VIII		
FST-602	Food Quality and Management	2 (2+0)
FST-604	Extrusion Technology	3 (2+1)
FST-606	Sensory Evaluation of Foods	3 (2+1)
FST-608	Food Plant Layout and Sanitation	2 (2+0)
FST-610	Internship and Report Writing	4 (0+4)

FACULTY OF CROP PROTECTION



FACULTY OF CROP PROTECTION

The need for new approaches in agricultural teachings to reduce yield losses in crops due to insect pests, plant diseases, and weeds was recognized during the upgrading of the former Agriculture College to Sindh Agriculture University, Tandojam in 1977. This need eventually led to the establishment of the Faculty of Crop Protection in July 1987. This faculty coordinates the work of entomology, plant pathology, weed science, and other plant protection components to impart the technical know-how required for producing healthy crops and addressing the day-to-day problems faced by the farming community in crop protection. The faculty accomplishes this through its three departments: Entomology, Plant Pathology, and Plant Protection. It offers coursework leading to graduate and postgraduate degrees, focusing on the identification and management of both newly observed and traditional insect pests, weeds, and crop diseases caused by fungi, bacteria, viruses, and nematodes. Currently, the Faculty of Crop Protection offers a 4-year B.Sc. (Agri.) Hons., M.Sc. (Agri.) Hons., and PhD degree programs in Entomology, Plant Pathology, and Plant Protection.

The faculty is equipped with basic facilities for teaching and research, including the Stored Grain Pests Research Laboratory, Insect Molecular Laboratory, Insect Systematic Laboratory & Insect Museum, Insect Biological Control Laboratory, IPM Laboratory, Plant Diseases Diagnostic and Research Laboratory, Bio-control Laboratory, Fungal Diagnostic and Research Laboratory, Phyto bacteriology and Biopesticide Development Laboratory, and Molecular Plant Pathology and Virology Laboratory.

To promote merit and healthy academic competition, the faculty awards various scholarships to needy and meritorious students at graduate and postgraduate levels. These scholarships are provided by pesticide companies and various government and non-government organizations, including HEC-USAID and HEC-Japanese need-based scholarships.

MISSION STATEMENT

To achieve the highest standards in teaching, learning, and research related to insect pests, weeds, and crop diseases, and to advance and disseminate

knowledge in crop protection to all agricultural stakeholders, especially farmers, with an emphasis on non-chemical management methods including biological, mechanical, and cultural control.

JOB OPPORTUNITIES

Graduates from this faculty can find employment in academic, provincial, and federal government sectors, including Agri. Extension, Research, PARC, PAEC (NIAB, NIBGE, NIFA, NIA), SUPARCO, PCCC, Pakistan Science Foundation (PSF), Federal Seed Certification & Registration Department (FSC&RD), Federal Plant Protection / Plant Quarantine, banks, Rural Support Programs (RSPs), NGOs working in agriculture and rural development, and private pesticide companies. They can also pursue self-employment as plant clinicians, advisers/consultants, pesticide dealers, or by starting mushroom cultivation.

GENERAL COURSES OFFERED FOR B.Sc. (Agri.) Hons.		
CODE	TITLE OF COURSE	C. HRS
SEMESTER-I		
ENT-301	Introductory Entomology	3 (2+1)
PP-301	Introductory Plant Pathology	3 (2+1)
PPT-301	Fundamentals of Plant Protection	3 (2+1)
ENG-301	Functional English	3 (3+0)
MATH/BIOL-301	Natural Science (Functional Mathematics / Biology)	3 (2+1)
FPM-301	Farm Mechanization	3 (2-1)
BT-301	Biotechnology	3 (2-1)
SEMESTER-II		
PBG-302	Introductory Genetics	3(2+1)
SS-302	Introduction to Soil Science	3(2+1)
HORT-302	Introductory Horticulture	3(2+1)
AGR-302	Agronomy	2 (1+1)
EP-302	Entrepreneurship	2 (2-0)
CCE-302	Civic and Community Engagement	2 (2-0)
ENG-302	Expository Writing	3 (3-0)
QR-302	Quantitative Reasoning-I	3 (3-0)
SEMESTER-III		
AHV-401	Animal Husbandry	3(2-1)

CP-401	Crop Physiology	3(2-1)
AGR-401	Agronomy	3(2-1)
STAT-401	Statistics	3(2-1)
ICT-401	Application of Information and Communication Technology	3(2-1)
IS/EB-401	Islamic Studies / Ethics (optional for Non-Muslim Students)	2(2-0)
AE-401	Social Sciences (Agri. Economics)	2(2-0)
RS-401	Arts and Humanities: Anthropology	2(2-0)
SEMESTER-IV		
ENT-402	Applied Entomology	3(2-1)
PP-402	Principles of Plant Diseases Management	3(2-1)
PPT-402	Principles of Plant Protection	3(2-1)
FST-402	Food Sciences & Technology	3(2-1)
AEE-402	Agriculture Extension and Education	2(1-1)
PS-402	Ideology and Constitution of Pakistan	2(2-0)
QR-402	Quantitative Reasoning-II	3(3-0)

DEPARTMENT OF ENTOMOLOGY

The history of the Department of Entomology dates back to the beginning of formal agricultural education and research in Sindh, marked by the establishment of the King George V Institute of Agriculture at Sakrand in 1939. With the upgrading of the Institute to Agriculture College and its subsequent relocation to Tandojam, the department remained a vital component. In 1965, the department began offering a B.Sc. Agri. (Hons) degree in entomology.

Currently, as an important part of the Faculty of Crop Protection, the department offers a 4-year B.Sc. (Hons.) degree in Entomology. Additionally, it has a robust postgraduate program offering M.Sc. and PhD degrees. The department is equipped with basic teaching facilities, including classrooms and four research laboratories: the Stored Grain Pests Research Laboratory, Insect Molecular Laboratory, Insect Systematic Laboratory, Insect Museum, Insect Biological Control Laboratory, as well as an experimental field and library.

The department is actively involved in both basic and applied research, funded by various national and international donors. It provides free

agricultural extension services to the farming community and organizes short courses, training sessions, and workshops for farmers, students, NGOs, and agriculture extension and research workers.

ACADEMIC STAFF

Imran Khatri	Professor & Chairman	PhD (SAU)
Bhai Khan Solangi	Professor	PhD (US)
Aslam Bukero	Associate Professor	PhD (SAU)
Lubna Bashir Rajput	Associate Professor	PhD (China)
Muhammad Ibrahim Kubar	Assistant Professor	PhD (SAU)
Arfan Ahmed Gilal	Assistant Professor	PhD Malaysia
Fahad Nazir Khoso	Assistant Professor	PhD Malaysia
Agha Mushtaque Ahmed	Assistant Professor	PhD Malaysia
Khalid Hussain Dhiloo	Assistant Professor	PhD (China)

COURSES OFFERED FOR B.Sc. (Agri.) Hons.

CODE	TITLE OF COURSE	HRS.
SEMESTER-V		
ENT-501	Insect Morphology	(2+1)
ENT-503	Principles of Insect Taxonomy	(2+1)
ENT-505	Insect Ecology	(2+1)
ENT-507	Integrated Pest Management	(2+1)
ENT-509	Insect Behavior	(2+1)
ENT-511	Beneficial Insects	(2+1)
SEMESTER-VI		
ENT-502	Insect Physiology	(2+1)
ENT-504	Range and Forest Entomology	(2+1)
ENT-506	Insect Classification and Biodiversity	(2+1)
ENT-508	Insect Pests of Household, Men & Animals	(2+1)
ENT-510	Agricultural Pests and their Management	(2+1)
SEMESTER-VII		
ENT-601	Stored Product Pests and their Management	(2+1)
ENT-603	Plant Resistance to Insect Pests	(2+1)
ENT-605	Insecticides and their Application	(2+1)
ENT-607	Agriculture and Environmental Pollution	(2+1)

ENT-609	Scientific writing & Presentation	(2+1)
ENT-611	Capstone Project	(0+3)
SEMESTER-VIII		
ENT-602	Biological Control of Insect Pests	(2+1)
ENT-604	Acarology	(2+1)
ENT-606	Internship / Project	(0+3)

DEPARTMENT OF PLANT PATHOLOGY

The Department of Plant Pathology has a long and distinguished history due to its importance in increasing healthy and high-quality agricultural produce. This discipline covers the causes, symptoms, perpetuation, transmission, and management of plant and crop diseases. The department was initially established as a main component of the King George V Agriculture Institute in Sakrand in 1939. With the upgrading of the Institute to Agriculture College and its relocation to Tandojam, the department retained its vital role, offering a B.Sc. (Agri.) Hons. degree in Plant Pathology.

In addition, the department has a very strong postgraduate program offering M.Sc. (Agri.) Hons. and PhD degrees in Plant Pathology. Major research components include the identification and cultivation of edible mushrooms and the multiplication of antagonistic and other biological control organisms. Consequently, graduates have excelled in various fields and made valuable contributions to society.

The department also offers free advisory services to the farming community, organizes lectures, seminars, workshops, and short courses for farmers, students, NGOs, and agriculture extension and research workers. It is fully equipped with classrooms, laboratories, and an experimental field.

ACADEMIC STAFF		
Manzoor Ali Abro	Professor & Dean	PhD (France)
Muhammad Ibrahim Khaskheli	Associate Professor & Chairman	PhD (China)
Khadim Hussain Wagan	Assistant Professor	PhD (SAU)
Zubair Ahmed Nizamani	Assistant Professor	M.Sc. (Agri.) Hons
Jamal-u-Ddin Hajano	Assistant Professor	PhD (China)
Faheem Uddin Rajer	Assistant Professor	PhD (China)

Ghulam Hussain Jatoi	Assistant Professor	PhD(China)
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COURSES OFFERED FOR B.Sc. (Agri.) Hons.

CODE	TITLE OF COURSE	HRS.
SEMESTER-V		
PP-501	Introduction to Plant Viruses	3(2+1)
PP-503	Introduction to Plant Prokaryotes	3(2+1)
PP-505	Introductory Mycology	3(2+1)
PP-507	Introduction to Plant Parasitic Nematodes	3(2+1)
PP-509	Seed and Post-Harvest Pathology	3(2+1)
PP-511	Biotechnology and its Application in Plant Pathology	3(2+1)
SEMESTER-VI		
PP-502	Diseases of Field Crops	3(2+1)
PP-504	Diseases of Vegetables Crops	3(2+1)
PP-506	Abiotic Diseases of Plants	3(2+1)
PP-508	Plant Quarantine and SPS Measures	3(2+1)
PP-510	Introductory Molecular Plant Pathology	3(2+1)
SEMESTER-VII		
PP-601	Diseases of Fruits and Ornamentals	3(2+1)
PP-603	Beneficial Microorganisms for Sustainable Agriculture	3(2+1)
PP-605	Plant Disease Epidemiology	3(2+1)
PP-607	Seed and Post-harvest Pathology	3(2+1)
PP-609	Biology and cultivation of Edible Fungi	3(2+1)
PP-611	Capstone Project	3(0+3)
SEMESTER-VIII		
PP-602	Pesticides their Action and Application	3(2+1)
PP-604	Methods and Techniques in Plant Pathology	3(2+1)
PP-606	Internship / Research Project	3(0+3)

DEPARTMENT OF PLANT PROTECTION

The Department of Plant Protection was established in 1977 with the advent of Sindh Agriculture University, Tandojam, Pakistan. It is one of the most

important disciplines in agriculture, with a mission to develop and undertake educational and research programs that foster the creation and adoption of agricultural plant protection systems that are profitable, environmentally sound, and sustainable. Through its qualified graduates, it plays a pivotal role in providing technical support to agricultural research and extension systems. The department also imparts training and education in community IPM through the Farmer Field School (FFS) approach.

The department offers a B.Sc. Agri. (Hons.) degree in Plant Protection and has a robust postgraduate program offering M.Sc. Agri. (Hons.) and PhD degrees in Plant Protection. The academic programs are designed to equip students with new techniques and principles of crop protection to improve crop management, translating into socially viable, competitive, and profitable agriculture for farmers.

Faculty members are actively engaged in various research programs funded by national and international organizations. To facilitate postgraduate students, the department has set up three laboratories: the IPM Laboratory, Plant Diseases Diagnostic & Research Laboratory, and Biocontrol Laboratory, which are moderately equipped. The practical training emphasizes the identification of agriculturally useful natural enemies (insects and microorganisms) and the mass production of biological control agents for field application.

The department aims to introduce organic farming to rationalize the use of pesticides, conserve the environment, irrigation, and soil, and minimize health hazards.

ACADEMIC STAFF		
Imtiaz Ahmed Nizamani	Professor & Chairman	PhD (SAU)
Abdul Mubeen Lodhi	Professor	PhD (KU)
Rehana Naz Syed	Professor	PhD (Germany)
Muhammad Ali Khanzada	Associate Professor	PhD (KU)
Khalid Hussain Qureshi	Assistant Professor	M.Sc. (Agri) Hons
Sohail Ahmed Otho	Assistant Professor	PhD (China)
Jam Ghulam Mustafa Sahito	Lecturer	PhD (SAU)
Abdul Waheed Solangi	Lecturer	PhD (SAU)

COURSES OFFERED FOR B.Sc. (Agri.) Hons.		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
PPT-501	Urban and Structural Pest Management	3 (2+1)
PPT-503	Pests of Field Crops	3 (2+1)
PPT-505	Diseases Management of Horticultural Crops	3 (2+1)
PPT-507	Climate Resilient & Eco-Friendly Pest Management	3 (2+1)
PPT-509	Agricultural Acarology	3 (2+1)
PPT-511	Management of Weeds & Parasitic Plant	3 (2+1)
SEMESTER-VI		
PPT-502	Post-Harvest Pest Management	3 (2+1)
PPT-504	Insect Pests of Fruits, Vegetables & Ornamentals	3 (2+1)
PPT-506	Disease Management of Field Crops	3 (2+1)
PPT-508	Pesticides & their Application Techniques	3 (2+1)
PPT-510	Application of Beneficial Insects & Microorganism	3 (2+1)
SEMESTER-VII		
PPT-601	Pest Scouting and Forecasting	3 (2+1)
PPT-603	Biological Control	3 (2+1)
PPT-605	Vertebrate Pest and their Management	3 (2+1)
PPT-607	Precision Plant Protection	3 (2+1)
PPT-609	Molecular Diagnosis in Plant Protection	3 (2+1)
PPT-611	Capstone Project	3 (0+3)
SEMESTER-VIII		
PPT-602	Field IPM	3 (2+1)
PPT-604	Range and Forest Pest Management	3 (2+1)
PPT-606	Internship / Research Project	3 (0+3)

FACULTY OF AGRICULTURAL SOCIAL SCIENCES



FACULTY OF AGRICULTURAL SOCIAL SCIENCES

Faculty of Agricultural Social Sciences emerged as a faculty in 1984 after bifurcation of Faculty of Agriculture into three faculties. Nevertheless, various departments of this faculty have been offering graduate and postgraduate degree programs since 1975, when the university was defunct Sindh Agriculture College. The faculty plays an important role not only in offering degree programs in various disciplines, but it is also supporting the other academic programs of various faculties, offering compulsory courses in English, Pakistan Studies & Islamic Studies. The faculty has following academic departments:

- Agricultural Economics
- Agricultural Education Extension & Short Courses
- Statistics
- Rural Sociology
- English
- Islamic and Pakistan Studies

The first four departments are offering B.Sc. (Agri.) Hons., M.Sc. (Agri.) Hons and PhD respectively, whereas the remaining two departments are offering compulsory courses in their respective fields in the Faculty of Agricultural Social Sciences as well as in all other faculties of the University. Department of Agricultural Economics has recently started B.Sc. (Hons) in Agribusiness Management and M.Sc. (Hons) in Agribusiness Management. Department of English has been offering BS (Hons.) in English (Language & Literature). Moreover, Department of Rural Sociology has recently offered a new master's program (M. Phil) in Rural Development. The faculty has a Computer Laboratory with internet facility for its faculty staff and the students. Besides this, a library has been established to cater the needs of the scholars/scientists and students of the faculty.

JOB OPPORTUNITIES

The successful graduates of this faculty can serve as farm managers in agricultural estates. They also work as specialists in various disciplines of agriculture and allied sciences in public and private sector organizations, autonomous and semi-autonomous bodies viz, Zarai Tarqiati Bank of Pakistan (ZTBP), Pakistan Agricultural Research Council (PARC), Agricultural Census, Agricultural Marketing, Pakistan Broadcasting corporation, all Commercial Banks, Sindh Irrigation and Drainage Authority (SIDA), Agro-Economic Research, Social Welfare Departments, National Planning Commission, USAID, FAO, IFPRI, ILRI, ICARDA, LEAD, Ford Foundation, National Talent Pool, China Pakistan Economic Corridor (CPEC) and agriculture consultancy firms, etc.

GENERAL COURSES OFFERED FOR B.Sc. (Agri.) Hons.

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
SS-301	Introduction to Soil Science-I	3(2-1)
AGR-301	Basic Agriculture	3(2-1)
AEE-301	Introduction to Agriculture Extension and Education	3(2-1)
ENT-301	Introductory Entomology	2(1-1)
EP-301	Entrepreneurship	2(2-0)
IS/ EB-301	Islamic Studies/Ethics (optional for Non-Muslim Students)	2(2-0)
Math/Biol-301	Natural Science: Math/Biology	3(2-1)
ENG-301	Functional English	3(3-0)
SEMESTER-II		
PBG-302	Introductory Plant Genetics	3(2-1)
HORT-302	Introductory Horticulture	3(2-1)
AgEc-302	Introduction to Economics and Agricultural Economics	3(2-1)
PP-302	Introduction to Plant Pathogens	2(1-1)
PS-302	Ideology and Constitution of Pakistan	2(2-0)

RS-302	Civic and Community Engagement: Rural Sociology	2(2-0)
ENG-302	Expository Writing	3(3-0)
MATH-302	Quantitative Reasoning-I	3(3-0)
SEMESTER-III		
ABM-401	Introduction to Agriculture Business Management and WTO	3(2-1)
PBG-401	Introductory Plant Breeding	3(2-1)
STAT-401	Introduction to Probability and Random Variables	3(2-1)
AGR-401	Principles of Agronomy	3(2-1)
FPM-401	Farm Mechanization	2(2-0)
AHV-401	Animal Husbandry	2(2-0)
ICT-401	Application of Information and Communication Technology	3(2-1)
RS-401	Arts and Humanities: Agriculture & Civilization	2(2-0)
SEMESTER-IV		
SS-402	Introduction to Soil Science-II	2(1-1)
AGR-402	Field Crop Production	2(1-1)
AEE-402	Introduction to Extension Teaching Methods	3(2-1)
RS-402	Rural Development	3(3-0)
FST-402	Introduction to Food Sciences and Technology	2(1-1)
PPT-402	Introduction to Plant Protection	2(1-1)
AgEc-402	Social Sciences: Agriculture Economics	2(2-0)
STAT-402	Quantitative Reasoning-II	3(3-0)

After completion of first two years, the students have choice of selecting any one of the following departments for next two years, which will be called as its major discipline.

DEPARTMENT OF AGRICULTURAL ECONOMICS

The Department of Agricultural Economics was established in 1975 with the aim to provide entrepreneurs that create wealth and developing the economy through agribusiness activities. The main objectives of the department are to produce academically competent and professionally efficient graduates who are able to manage and direct the nation's agricultural economy; to conduct research into the recurring problems and needs of the Pakistan's agricultural society in order to find short, medium and long-term solutions; and to develop new patterns of agricultural management through improved agricultural leadership, characterized by ability to innovate and increase reliance on the use of modern business techniques in agricultural production and marketing. The department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons and PhD in the field of Agricultural Economics. Department of Agricultural Economics has announced the new degree program of B.Sc. (Hons) in Agribusiness Management; the department has also started M.Sc. (Hons) in Agribusiness Management (off campus program) recently.

ACADEMIC STAFF

Tehmina Mangan	Professor	PhD (SAU)
Fateh M. Mari	Professor	PhD (SAU)
Habibullah Magsi	Associate Professor & Chairman	PhD (France)
Hakimzadi Wagan	Associate Professor	PhD (France)
Jam G. Murtaza Sahito	Associate Professor	PhD (Germany)
Sanaullah Noonari	Assistant Professor	M.Sc. (Agri.) Hons
Mumtaz Ali Joyo	Assistant Professor	PhD (US)
Irfana Noor Memon	Assistant Professor	M.Sc. (Agri.) Hons
Mehar Ul Nissa Rais	Assistant Professor	PhD (SAU)
Musawir A. Rustamani	Lecturer	M.Sc. (Agri.) Hons
Ghulam Hussain Wagan	Lecturer	M.Sc. (Agri.) Hons

COURSES OFFERED FOR B.Sc. (Agri.) Hons. AGRICULTURAL ECONOMICS		
COURSE CODE	TITLE OF COURSE	Cr. Hrs
B.Sc. (Agri.) Hons. Part-III Semester-V		
AgEc-501	Microeconomics	3(2-1)
AgEc -503	Mathematics for Economists	3(2-1)
AgEc -505	Food and agriculture marketing	3(2-1)
AgEc -507	Farm Planning & Agri-business management	3(2-1)
AgEc -509	Introduction to Natural Resource Economics	3(2-1)
AgEc -511	Statistical Methods for Economists	3(2-1)
Total Cr. Hr.		18 (12-6)
B.Sc. (Agri.) Hons. Part-III Semester-VI		
AgEc -502	Agricultural Production Economics	3(2-1)
AgEc -504	Economics of Climate Change	3(2-1)
AgEc -506	Economic Development	3(2-1)
AgEc -508	Economic Problems of Pakistan	3(2-1)
AgEc -510	Economics of Livestock Production	3(2-1)
Total Cr. Hr.		15 (10-5)
B.Sc. (Agri.) Hons. Part-IV Semester-VII		
AgEc -601	Macroeconomics	3(2-1)
AgEc -603	International Trade	3(2-1)
AgEc -605	Econometrics-I	3(2-1)
AgEc -607	Agricultural Policy & Development	3(2-1)
AgEc -609	Agricultural Finance	3(2-1)
CAP-611	Capstone Project	3(0-3)
Total Cr. Hr.		18 (10-8)
B.Sc. (Agri.) Hons. Part-IV Semester-VIII		
AgEc -602	Econometrics-II	3(2-1)
AgEc -604	Research Methods in Social Sciences	3(2-1)
INT-606	Internship	3(0-3)
Total Cr. Hr.		9(4-5)
Grand Total Cr. Hrs.		60

COURSES OFFERED FOR B.Sc. (Agri.) Hons. AGRIBUSINESS MANAGEMENT		
COURSE CODE	TITLE OF COURSE	Cr. Hrs
B.Sc. (Agri.) Hons. Part-III Semester-V		
ABM-501	Microeconomics	3(2-1)
ABM-503	Agribusiness Management	3(2-1)
ABM-505	Managerial Economics	3(2-1)
ABM-507	Introduction to accounting	3(2-1)
ABM-509	Managing agricultural supply chain	3(2-1)
ABM-511	Computer application to business	3(2-1)
Total Cr. Hr.		18 (12-6)
B.Sc. (Agri.) Hons. Part-III Semester-VI		
ABM-502	Macroeconomics	3(2-1)
ABM-504	Principles of management	3(2-1)
ABM-506	Business Communication & Presentation Skills	3(2-1)
ABM-508	Agribusiness Entrepreneurship	3(2-1)
ABM-510	Social Psychology and consumer behavior	3(2-1)
Total Cr. Hr.		15 (10-5)
B.Sc. (Agri.) Hons. Part-IV Semester-VII		
ABM-601	Food and Agricultural marketing	3(2-1)
ABM-603	Agricultural finance	3(2-1)
ABM-605	Organizational Behavior	3(2-1)
ABM-607	Human resource management in agriculture	3(2-1)
ABM-609	Business mathematics & statistics	3(2-1)
CAP-611	Capstone Project	3(0-3)
Total Cr. Hr.		18 (10-8)
B.Sc. (Agri.) Hons. Part-IV Semester-VIII		
ABM-602	Introduction to Agribusiness laws	3(2-1)
ABM-604	Business research methods	3(2-1)
INT-606	Internship	3(0-3)
Total Cr. Hr.		9 (4-5)
Grand Total Cr. Hrs.		60

DEPARTMENT OF AGRICULTURAL EDUCATION, EXTENSION AND SHORT COURSES

The Department of Agricultural Education, Extension and Short Courses offers course work which enables students to serve as social catalyst / extension educationist / social mobilizers in various farming communities / societies. The students after graduating are expected to work for the development of farmers through a holistic farm education approach and diffusion and adoption of need based latest agricultural technologies and training in various agricultural products. The department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons and PhD in the field of Agricultural Education Extension.

ACADEMIC STAFF

Zaheeruddin Mirani	Professor & Chairman	PhD (USA)
Aijaz Ali Khooharo	Professor	PhD (SAU)
Ismail Kumbhar	Professor	PhD (SAU)
Manzoor Ali Narejo	Assistant Professor	M.Sc. (Agri.) Hons
Jaleel Ahmed Ibupoto	Assistant Professor	M.Sc. (Agri.) Hons
Mukhtiar Ali Mirjat	Lecturer	M.Sc. (Agri.) Hons

COURSES OFFERED FOR B.Sc. (Agri.) Hons. AGRICULTURAL EDUCATION AND EXTENSION

COURSE CODE	TITLE OF COURSE	Cr. Hrs
B.Sc. (Agri.) Hons. Part-III		Semester-V
AEE-501	Communication and leadership Skills in Agricultural Extension	3(2-1)
AEE -503	Introduction to Extension Education Methods	3(2-1)
AEE -505	Philosophy of Agricultural Extension Education	3(2-1)
AEE -507	Rural Development Programs in Pakistan	3(2-1)
AEE -509	Agricultural Technology Transfer	3(2-1)
AEE -511	Rural Development: Concepts and Practices (minor)	3(2-1)

		Total Cr. Hr.	18 (12-6)
B.Sc. (Agri.) Hons. Part-III		Semester-VI	
AEE -502	Agricultural journalism	3(2-1)	
AEE -504	Adult Learning	3(2-1)	
AEE -506	Introduction to Extension Program Development	3(2-1)	
AEE -508	Rural Youth in Agricultural Development	3(2-1)	
AEE -512	Agricultural Technology Transfer (Minor)	3(2-1)	
		Total Cr. Hr.	15 (10-5)
B.Sc. (Agri.) Hons. Part-IV		Semester-VII	
AEE -601	Climate Smart Agriculture through Agricultural extension	3(2-1)	
AEE -603	Research Methods in Social Sciences	3(2-1)	
AEE -605	Agricultural Extension and Gender Studies	3(2-1)	
AEE -607	Principles of supervision and Administration	3(2-1)	
AEE-609	Food Security through Precision Agricultural Technology	3(2-1)	
AEE-611	Capstone Project	3(0-3)	
		Total Cr. Hr.	18 (10-8)
B.Sc. (Agri.) Hons. Part-IV		Semester-VIII	
AEE -602	Introduction to Program Evaluation	3(2-1)	
AEE -604	Interviewing and Data Analysis	3(2-1)	
AEE-606	Scientific Writing in Agricultural Extension	2(2-0)	
INT-608	Internship	3(0-3)	
		Total Cr. Hr.	11(6-5)
			Grand Total Cr. Hrs. 62

DEPARTMENT OF RURAL SOCIOLOGY

Since, the majority of Pakistan consists of rural people and what humans do fits under the category of social structure or social activity; rural sociology has gradually expanded its focus to such far-flung subjects in the creation of scientific knowledge. In addition, no event can happen without cause, therefore, the scope and importance of rural sociology is evident from its subjects-matter. Keeping this in mind, the department proposes following subjects to understand the ever-changing social phenomena,

while ensuring the progress in rural societies. In particular, the department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons and PhD in the field of Rural Sociology. Moreover, Department of Rural Sociology has recently offered a new master's program (M. Phil) in Rural Development.

ACADEMIC STAFF		
Ghulam Mujtaba Khushk	PhD (Malaysia)	Associate Professor & Chairman
Muhammad Javed Shaikh	PhD (Malaysia)	Associate Professor
Mohammad Ali Sheikh	M.Sc. (Agri.) Hons	Assistant Professor
Arshad Ali Narejo	M.Sc. (Agri.) Hons	Lecturer

COURSES OFFERED FOR B.Sc. (Agri.) Hons. RURAL SOCIOLOGY		
COURSE CODE	TITLE OF COURSE	Cr. Hrs
B.Sc. (Agri.) Hons. Part-III		Semester-V
RS-501	Community Development and Social Mobilization	3(2-1)
RS-503	Sociology of Agriculture	3(2-1)
RS-505	Disaster Risk Management	3(2-1)
RS-507	Introduction of Population Studies	3(2-1)
RS-509	Environmental Sociology	3(2-1)
RS-511	Rural Social Institutions	3(2-1)
Total Cr. Hr.		18 (12-6)
B.Sc. (Agri.) Hons. Part-III		Semester-VI
RS-502	Medical Sociology	3(2-1)
RS-504	Social Entrepreneurship	3(2-1)
RS-506	Social Anthropology	3(2-1)
RS-508	Gender Studies	3(2-1)
RS-510	Pakistani Society and Culture	3(2-1)
Total Cr. Hr.		15 (10-5)
B.Sc. (Agri.) Hons. Part-IV		Semester-VII
RS-601	Social Psychology & Organizational Behaviour	3(2-1)
RS-603	Industrial Sociology	3(2-1)

RS-605	NGO & Project Management	3(2-1)
RS-607	Sociology of Education	3(2-1)
RS-609	Research Methods in Social Sciences	3(2-1)
CAP-611	Capstone Project	3(0-3)
Total Cr. Hr.		18 (10-8)
B.Sc. (Agri.) Hons. Part-IV		Semester-VIII
RS-602	Conflict Resolutions	3(2-1)
RS-604	Human Resource Management	3(2-1)
INT-606	Internship	3(0-3)
Total Cr. Hr.		9(4-5)

DEPARTMENT OF STATISTICS

Statistics section was established in the defunct Sindh Agriculture College under the scheme "Intensification of the Graduate, Postgraduate and Advanced Studies" in 1967. Later in 1972-73, its status was raised to a full-fledged department, with aim to increase the awareness of the utility of statistical expertise across the campus, nationally and internationally. Whereas the other mandate is to serve through excellence in research and education in the statistical sciences and through service to the academia, researchers, statistical professionals, and the society at large. In particular, the department offers B.Sc. (Agri) Hons, M.Sc. (Agri) Hons and Ph.D in the field of Statistics.

ACADEMIC STAFF		
Velo Suthar	PhD (Malaysia)	Professor & Chairman
Riaz Ali Buriro	PhD (SU)	Professor
M. Hanif Lakho	PhD (UP)	Professor
Barkatullah Qureshi	PhD (Malaysia)	Professor
Gordhan Das	PhD (Austria)	Professor (study leave)

COURSES OFFERED FOR B.Sc. (Agri.) Hons. STATISTICS		
COURSE CODE	TITLE OF COURSE	Cr. Hrs
B.Sc. (Agri.) Hons. Part-III		Semester- V
STAT-501	Probability Distributions-I	3(2-1)
STAT-503	Linear Algebra	3(2-1)

STAT-505	Statistical inference-I	3(2-1)
STAT-507	Index Number and Time Series Analysis	3(2-1)
STAT-509	Statistical Packages	3(2-1)
STAT-511	Statistical Methods	3(2-1)
Total Cr. Hr.		18 (12-6)
B.Sc. (Agri.) Hons. Part-III Semester-VI		
STAT-502	Regression Analysis	3(2-1)
STAT-504	Probability Distributions-II	3(2-1)
STAT-506	Sampling Techniques-I	3(2-1)
STAT-508	Econometrics	3(2-1)
STAT-510	Statistical Methods for Social Sciences	3(2-1)
Total Cr. Hr.		15 (10-5)
B.Sc. (Agri.) Hons. Part-IV Semester -VII		
STAT-601	Design & Analysis of Experiments-I	3(2-1)
STAT-603	Sampling Techniques-II	3(2-1)
STAT-605	Categorical Data Analysis	3(2-1)
STAT-609	Linear Models	3(2-1)
CAP-611	Capstone Project	3(0-3)
Total Cr. Hr.		18 (10-8)
B.Sc. (Agri.) Hons. Part-IV Semester-VIII		
STAT-602	Design & Analysis of Experiments-II	3(2-1)
STAT-604	Biometry and Medical Statistics	3(2-1)
INT-606	Internship	3(0-3)
Total Cr. Hr.		9(4-5)
Grand Total Cr. Hrs.		60

DEPARTMENT OF ISLAMIC AND PAKISTAN STUDIES

The Department of Islamic and Pakistan Studies is responsible for imparting Islamic and Pakistan Studies related education to the graduate and postgraduate students. The department provides compulsory courses up to degree level. The department assists Sindh Agriculture University, Tandojam to conduct Islamic and Pakistan related activities at the national and provincial level.

ACADEMIC STAFF

Abdul Munaim Brohi	Shahada-tul-Almia	Assistant Professor & Incharge Chairman
Munawaruddin Sahito	M.A.	Assistant Professor
Faqir Muhammad Hub	M.Sc. (QAU)	Assistant Professor

GENERAL COURSES OFFERED FOR (B.Sc. / B.E. / DVM)

CODE	TITLE OF COURSE	HRS.
SEMESTER-I		
IS-301	Islamic Studies OR Ethical Behavior (Optional for Non-Muslim Students) (CPD, CPT, FASS, IT, FAE)	(2+0)
PS-301	Pakistan Study (FAHVS)	(1+0)
PS 313	Pakistan Studies (IFST)	(2+0)
SEMESTER-II		
PS 302	Pakistan Studies	(2+0)
IS 316	Islamic Studies (IFST)	(1+1)
SEMESTER-III		
IS-401	Islamic Studies or Ethics (For Non-Muslims) (FAHVS)	(1+0)
PS 401	Pakistan Study (IT)	(2+0)
SEMESTER-IV		
PS 502	Pakistan Study	(1+0)

DEPARTMENT OF ENGLISH

The department has played a remarkable and vital role since its inception. The department continued its journey as the college attained the status of the University and the journey has been in progress with success. It has proved its worth on several occasions i.e., imparting training to the teachers at this University and offering useful remedial courses to be taught from time to time. This department voluntarily extends services to the teachers for their preparation in IELTS and TOEFL. The department of English is an important component of the university. It offers compulsory courses from 1st year to 3rd year in all faculties, including IFST & ITC of this university.

Department of English has been offering BS (Hons.) in English (Language & Literature).

ACADEMIC STAFF		
Shabana Sartaj Tunio	PhD. (Malaysia)	Associate Professor & Chairperson
Amin M. Soomro	M.A. (US)	Assistant Professor
Saima Larik	M.Phil. (SALU)	Lecturer
Shahzeb S. Memon	B.S (Hons)	Lecturer

COURSES OFFERED FOR (B.Sc. /BE/ DVM)		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
ENG-301	English Text, Grammar and Composition (FASS, FCPD, FCPT)	(2+0)
ENG 301	English Comprehension (ITC)	(3-0)
ENG-301	Functional English (AHVS, IFST)	(2+0)
SEMESTER-II		
ENG-302	Functional English (FASS)	(2+0)
ENG-401	Communicative Skills (ITC)	(3+0)
ENG-102	Communicative English (AHVS)	(2+0)
ENG-101	Functional Grammar	(2+0)
SEMESTER-IV		
ENG-402	Writing skills (FASS)	(2+0)
SEMESTER-V		
ENG-01	Technical Report Writing (FAE)	(2+0)
SEMESTER-VI		
ENG-601	Communicative Skills	(2+0)
SEMESTER-VIII		
ENG-606	Scientific Report Writing (FASS)	(2+0)
ENG-402	Functional English II (IFST)	(2+0)

COURSES OFFERED FOR BS. (Hons) IN ENGLISH (LANGUAGE & LITERATURE)		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
ENG-301	English-I: Reading and Writing Skills	(3+0)
ENG-303	Introduction to Linguistics	(3+0)
ENG-305	Introduction to Literature	(3+0)
ENG-307	Study Skills	(3+0)
PS-301	Pakistan Studies	(2+0)
SEMESTER-II		
ENG-302	English-II Composition Writing	(3+0)
ENG-304	Phonetics & Phonology	(3+0)
ENG-306	Literary Forms & Movements	(3+0)
MATH-302	Functional Mathematics	(3+0)
IS-302	Islamic Studies/Ethics	(2+1)
RS-302	Introduction to Rural Sociology	(3+0)
SEMESTER-III		
ENG-401	English-III Communication & Presentation Skills	(3+0)
ENG-403	Introduction to Morphology	(3+0)
ENG-405	Short Fictional Narratives	(3+0)
ENG-407	Pakistani English	(3+0)
ENG-409	Classical & Renaissance Drama	(3+0)
RS-401	Gender Studies	(3+0)
SEMESTER-IV		
ENG-402	English IV-Academic Reading & Writing	(3+0)
ENG-404	Introduction to Syntax	(3+0)
ENG-406	Introduction to Semantics & Pragmatics	(3+0)
ENG-410	Rise of Novel (18th to 19th century)	(3+0)
ENG-412	Philosophy of Language & Literature	(3+0)

AES-402	Human Resource Management	(3+0)
SEMESTER-V		
ENG-501	Discourse Analysis	(3+0)
ENG-503	Sociolinguistics	(3+0)
ENG-505	American Literature	(3+0)
ENG-507	Female Writers in English Literature	(3+0)
RS-501	Introduction to Environmental Sociology	(2+1)
PS-501	International Relations	(3+0)
SEMESTER-VI		
ENG-502	Romantic and Victorian Poetry	(3+0)
ENG-504	Modern Literature (Drama & novel)	(3+0)
ENG-506	World Englishes	(3+0)
ENG-508	Second Language Acquisition	(3+0)
ENG-510	English Language Teaching & Pedagogy	(3+0)
ENG-512	Global Poetry	(3+0)
SEMESTER-VII		
ENG-601	English for Specific Purposes	(3+0)
ENG-603	Translation Studies	(3+0)
ENG-605	Introduction to Applied Linguistics	(3+0)
ENG-607	Classical Poetry	(3+0)
ENG-609	Literary Criticism and Theory	(3+0)
SEMESTER-VIII		
ENG-602	Language & Education	(3+0)
ENG-604	Postcolonial Literature	(3+0)
ENG-606	Pakistani Literature in English	(3+0)
ENG-608	Research Methods	(3+0)
ENG-610	Final Research Project (Final Thesis)	(3+0)

INFORMATION TECHNOLOGY CENTER



INFORMATION TECHNOLOGY CENTRE

The Information Technology Centre (ITC) was established in 2002 at Sindh Agriculture University Tandojam (SAU), Tandojam under a development project approved by the Government of Pakistan. ITC aims to impart quality education to the youth, preparing and empowering them to face the future frontiers of the new millennium with the potential of rapidly-advancing Information and Communication Technology (ICT). ICT plays an important role in the evolution of innovative solutions in all sectors, including agriculture, health, education, governance, energy, environment, and transport. The center produces experts and highly-skilled manpower, filling the gap of technical human resources in the region and beyond. Skilled manpower is one of the most valuable resources contributing significantly to the socio-economic development of Pakistan's knowledge- and technology-driven economy, aiming for sustainable GDP growth and poverty alleviation.

ICT's potential can be exploited for the digital transformation of both government and private sectors using advanced technologies such as Cloud Platforms, IoT, Artificial Intelligence, Blockchain, and Virtual Reality. To bridge the significant gap in technical skills and technology incubation, the center offers a state-of-the-art technology-based curriculum taught by experts with PhD qualifications from around the world. The skill-development and technology-transfer activities of the center create opportunities for youth through labor market interventions by providing research-oriented training, innovative solution development experience, academic-industry co-supervision, career counseling, internships, and job placement. The teaching methodologies and capacity-building activities are primarily hands-on, project-oriented, and teamwork-based, giving undergraduate and master's students real-world experience under the supervision of academic and industry experts.

MISSION STATEMENT

The mission of ITC is to provide students with the knowledge and skills necessary to excel in the rapidly evolving field of technology. We aim to foster an environment of innovation and collaboration, staying current

with industry trends and advancements. Our goal is to empower students to become leaders in their field and make a meaningful impact through their work. The program offers advanced and updated technology training, promoting independence in learning and equipping students to succeed as professionals in a modern, IT-dominated world. Postgraduate studies enhance research capabilities, enabling students to develop innovative solutions for Smart Agriculture, Smart Healthcare, Smart Education, and e-Governance.

FACILITIES FOR STUDENTS

The Centre has six state-of-the-art computer laboratories dedicated to software engineering, computer networks, data sciences, artificial intelligence, and the Internet of Things, all equipped with cutting-edge hardware, software, audio-visual equipment, and teaching aids. Additionally, there is an electronics and embedded computing lab, fully outfitted with analogue and digital trainers, microprocessor trainers, and other pertinent equipment, where practical sessions are held.

Students are assigned research-based projects of their interest to develop software and undertake studies, aligning with their degree requirements and market orientation. For final-year students, a fully equipped Project Lab with the latest computers and software is available to complete their projects.

In addition to these academic facilities, a digital library is provided to both faculty and students with the assistance of the Higher Education Commission under the Program for Enhancement of Research Information (PERI). This facility offers access to thousands of online research journals and other publications. Faculty members and researchers at Sindh Agriculture University, Tandojam can access over 11,000 research journals and materials through the university network.

The Information Technology Centre is equipped with blanket WiFi coverage at 650 Mbps speed provided by HEC through the Pakistan Education and Research Network (PERN). The Smart University Project offers important services to students and faculty, including student authentication, guest WiFi portals for visitors, and eduroam (a secure,

worldwide roaming access service). Additionally, with the assistance of the Higher Education Commission, the Centre has established a sophisticated and advanced Video Conference Room with a capacity of more than 60 people, enabling students and faculty to communicate locally, nationally, and internationally for educational and informational purposes.

JOB OPPORTUNITIES

The undergraduate programs at ITC equip students with fundamental skills to design and implement software applications and manage complex computer networks. These programs also prepare graduates for various roles in the development sector, including positions such as Office Support Managers, Software Engineers, Database/Network Engineers and Administrators, IT Managers, Programmers, and Software Developers. ITC graduates are also well-prepared to serve in academic institutions as Lecturers and Instructors. There are numerous opportunities for IT graduates today, with many public and private sector organizations offering a wide range of job prospects. The job market for IT professionals is broad and diverse.

ACADEMIC STAFF NAME	QUALIFICATION	DESIGNATION
Prof. Dr. Mir Sajjad Hussain Talpur	PhD (China)	Professor & Director
Prof. Dr. Mubina Pathan	PhD (Malaysia)	Professor
Prof. Dr. Mukhtiar Memon	PhD (Austria)	Professor
Prof. Dr. Pinial Khan Butt	PhD (China)	Professor
Dr. Erum Saba Chang	PhD (MUET)	Assistant Professor
Dr. Kavita Tabassum	PhD (MUET)	Assistant Professor
Ms. Farah Naveen	MSIT (SAU)	Assistant Professor
Egnr. Irfan Ali Shahani	MSIT (MAJU)	Assistant Professor
Egnr. Saima Shaikh	MSIT (SAU)	Assistant Professor
Dr. Suhni Abbasi	PhD (ISRA University)	Assistant Professor
Dr. Zulfikar Ahmed Maher	PhD (Malaysia)	Assistant Professor
Dr. Muhammad Yaqoob Koondhar	PhD (Malaysia)	Assistant Professor

Ms. Saima Tunio	MSIT (ISRA University)	Assistant Professor
Dr. Ghulam Ali Rahu	PhD (China)	Assistant Professor
Mr. Suhrah Thaheem	MSIT (SAU)	Assistant Professor
Mr. Zeeshan Nizamani	MS (China)	Lecturer
Mr. Toufique Ahmed Nizamani	MSIT (SAU)	Teaching Assistant
Mr. Noor Nabi Dahri	MSIT (SAU)	Teaching Assistant

UNDERGRADUATE PROGRAMS OFFERED BY INFORMATION TECHNOLOGY CENTRE (ITC)

Information Technology Centre (ITC) is currently offering three (3) undergraduate programs namely as:

- **Bachelors of Science in Information Technology (BSIT)**
- **Bachelors of Science in Computer Science (BSCS)**
- **Bachelors of Science in Software Engineering (BSSE)**

COURSES OFFERED FOR BS INFORMATION TECHNOLOGY (BSIT)

Semester - I		
Code	Course Title	Credit Hours
ITC-301	Fundamentals of Information and Communication Technologies (ICT)	3 (2+1)
ITC-303	Basic Electronics	3 (2+1)
ITC-305	Programming Fundamentals	4 (3+1)
BE-301	Calculus and Analytical Geometry	3 (3+0)
ENG-301	Functional English	3 (3+0)
IS-301	Islamic Studies / Ethics	2 (2+0)
Semester - II		
Code	Course Title	Credit Hours
ITC-302	Object Oriented Programming	3 (2+1)
ITC-304	Digital Logic Design	3 (2+1)
ITC-306	Discrete Structure	3 (3+0)

ITC-308	Principal of Management	3 (3+0)
ENG-302	Communication Skills	3 (3+0)
STAT-302	Probability and Statistics	3 (3+0)
Semester - III		
Code	Course Title	Credit Hours
ITC-401	Data Structure and Algorithms	4 (3+1)
ITC-403	Computer Communication and Networks	3 (3+0)
ITC-405	Principles of Accounting	3 (3+0)
ITC-407	Telecommunication System	3 (2+1)
ENG-401	Technical Report Writing	3 (3+0)
BE-401	Linear Algebra	3 (3+0)
Semester - IV		
Code	Course Title	Credit Hours
ITC-402	Organizational Behavior	3 (3+0)
ITC-404	Internet Architecture	3 (3+0)
ITC-406	Software Engineering	3 (3+0)
ITC-408	Database Systems	4 (3+1)
ITC-410	Multimedia System and Design	3 (2+1)
PS-402	Pakistan Studies	2 (2+0)
Semester - V		
Code	Course Title	Credit Hours
ITC-501	Bioinformatics	3 (3+0)
ITC-503	Operating Systems	3 (3+0)
ITC-505	Object Oriented Analysis and Design	3 (2+1)
ITC-507	Database Administration and Management	3 (2+1)
ITC-509	Web Systems & Technologies	3 (2+1)
ITC-511	Technology Management	3 (3+0)
Semester - VI		
Code	Course Title	Credit Hours
ITC-502	Human Computer Interaction	3 (2+1)
ITC-504	Systems and Network Administration	2+1
ITC-506	Web Engineering	2+1

ITC-508	Mobile Application Development	2+1
ITC-510	System Integration and Architecture	3+0
ITC-512	IT Project Management	3+0
Semester - VII		
Code	Course Title	Credit Hours
ITC-601	Data and Network Security	3+0
ITC-603	Routing and Switching	3 (2+1)
ITC-605	Service Oriented Architecture	3 (3+0)
ITC-607	Cloud Computing	3 (2+1)
Semester - VIII		
Code	Course Title	Credit Hours
ITC-602	Software Quality Assurance	3 (3+0)
ITC-604	Professional Practices	3 (2+1)
ITC-606	Artificial Intelligence	3 (2+1)
ITC-608	Capstone Project	6 (0+6)

COURSES OFFERED FOR BS COMPUTER SCIENCE (BSCS)

Semester - I		
Code	Course Title	Credit Hours
CS-301	Introduction to ICT	2-1
CS-303	Programming Fundamentals	3-1
ENG-301	English Composition & Comprehension	3-0
BE-301	Calculus & Analytical Geometry	3-0
BE-303	Applied Physics	3-0
IS-301	Islamic Studies / Ethics	2-0
Semester - II		
Code	Course Title	Credit Hours
CS-302	Digital Logic Design	3-1
CS-304	Object Oriented Programming	3-1
ENG-302	Communication & Presentation Skills	3-0
STAT-302	Probability & Statistics	3-0
CS-306	Organizational Behavior	3-0
PS-302	Pakistan Study	2-0
Semester - III		

Code	Course Title	Credit Hours
CS-401	Comp Organization & Assembly Lang.	3-1
CS-403	Data Structures & Algorithms	3-1
CS-405	Discrete Structures	3-0
CS-407	Professional Practices	3-0
CS-409	Theory of Programming Languages	3-0
Semester - IV		
Code	Course Title	Credit Hours
CS- 402	Design & Analysis of Algorithms	3-0
CS- 404	Theory of Automata	3-0
CS- 406	Database Systems	3-1
BE-402	Linear Algebra	3-0
CS-408	Bioinformatics	3-0
Semester - V		
Code	Course Title	Credit Hours
CS- 501	Compiler Construction	3-0
CS-503	Graph Theory	3-0
CS-505	Operating Systems	3-1
CS-507	Software Engineering	3-0
ENG-501	Numerical Computing	3-0
Semester - VI		
Code	Course Title	Credit Hours
CS-502	Artificial Intelligence	3-1
CS-504	Computer Networks	3-1
CS-506	Mobile Application Development	3-0
CS-508	Network Security	3-0
ENG-502	Technical & Business Writing	3-0
Semester - VII		
Code	Course Title	Credit Hours
CS-601	Machine learning	3-0
CS-603	Software Quality Assurance	3-0
CS-605	Final Year Project – 1	0-3
CS-607	Financial Accounting/ Principles of Accounting	3-0

CS-609	Parallel & Distributed Computing	3-0
Semester - VIII		
Code	Course Title	Credit Hours
CS-602	Software Project Management	3-0
CS-604	Geographic Information System (GIS)	3-0
CS-606	Final Year Project – II	0-3
CS-608	Information Security	3-0

COURSES OFFERED FOR BS SOFTWARE ENGINEERING (BSSE)		
Semester - I		
Course Code	Course Title	Credit hours
ITC-301	Introduction to Information & Communication Technologies	2-1
ITC-305	Programming Fundamentals	3-1
ENG-301	English Composition & Comprehension	3-0
BE-301	Calculus & Analytical Geometry	3-0
IS-301	Islamic Studies	2-0
BE-302	Applied Physics	3-0
Semester - II		
Course Code	Course Title	Credit hours
ITC-302	Object Oriented Programming	3-1
ENG-302	Communication & Presentation Skills	3-0
ITC-304	Discrete Structures	3-0
ITC-306	Software Engineering	3-0
PS-402	Pakistan Studies	2-0
ITC-308	Financial Accounting	3-0
Semester - III		
Course Code	Course Title	Credit hours
ITC-401	Data Structures & Algorithms	3-1
ITC-403	Software Requirement Engineering	3-0
ITC-405	Human Computer Interaction	3-0
BE-401	Linear Algebra	3-0
ITC-407	Organizational Behavior	2-0
Semester - IV		
Course Code	Course Title	Credit hours

ITC-402	Operating Systems	3-1
ITC-404	Database Systems	3-1
ITC-406	Software Design & Architecture	2-1
STAT-402	Probability and Statistics	3-0
ITC-408	Bioinformatics	3-0
Semester - V		
Course Code	Course Title	Credit hours
ITC-501	Software Construction and Development	2-1
ITC-503	Computer Networks	3-1
ENG-501	Technical and Business Writing	3-0
ITC-505	Business Process Engineering	3-0
ITC-507	Simulation and Modelling	3-0
Semester - VI		
Course Code	Course Title	Credit hours
ITC-502	Software Quality Engineering	3-0
ITC-506	Information Security	3-0
ITC-504	Professional Practice	3-0
ITC-508	Web Engineering	3-0
ITC-510	Formal Methods in Software Engineering	3-0
ITC-512	Computer Graphics	2-1
Semester - VII		
Course Code	Course Title	Credit hours
ITC-601	Software Project Management	3-0
ITC-603	Big Data Analytics	2-1
ITC-607	Cloud Computing	2-1
ITC-605	Mobile Application Development	2-1
ITC-609	Geographic Information System (GIS)	2-1
Semester - VIII		
Course Code	Course Title	Credit hours
ITC-602	Artificial Intelligence and Machine Learning	2-1
ITC-604	Virtual and Augmented Reality	2-1
ITC-608	Final Year Project	0-6

FACULTY OF AGRICULTURAL ENGINEERING



FACULTY OF AGRICULTURAL ENGINEERING

The faculty of Agricultural Engineering is one of the five faculties of Sindh Agriculture University Tandojam. It started as a department of Agricultural Engineering of the defunct Sindh Agriculture College Tandojam in 1955. The department was then upgraded into a full-fledged Faculty of Agricultural Engineering in 1977. Faculty has played a leading role in providing engineering solutions to agricultural problems. It imparts quality education in Agricultural Engineering to provide cutting-edge solutions to issues related to the agriculture of Pakistan and the world. Its primary goal is to take a leading role in the promotion of technological changes and their management for sustainable agricultural development through innovative quality education, research, and outreach activities by integrating technology, planning, and management. The dissemination of quality education, research, and training with special emphasis on the interdisciplinary interface among the technological and educational expertise is the focus of the faculty.

At present, the faculty offers a four-year Bachelor of Engineering in Agriculture [B.E. (AGR)], Bachelor of Science in Environmental Sciences [BS (ENVSC)], and Bachelor of Science in Agro-Industrial Engineering Technology [BS (AIET)] degree programs.

BACHELOR OF AGRICULTURAL ENGINEERING [B.E. (AGR)]

The program provides a fundamental understanding of the natural, basic, and engineering sciences and their application to design devices and processes in agriculture-related areas. A permutation of courses caters to the design and engineering aspects of agriculture. The focus span starts with basic principles of engineering themes like irrigation systems, soil and water management, farm machinery, farm structures, environment, energy, and resource management to ultramodern geographic information systems (GIS), remote sensing (RS), electronics, and instrumentation applications related to the agriculture. M.E., and Ph.D. degree programs are also offered in various disciplines, including Irrigation and Drainage, Land and Water Management, Farm Machinery, Energy and Environment, and Farm Structures. Besides teaching, the faculty is actively

engaged in extension and leading-edge research. The B.E. (AGR) degree is jointly by the following six integral departments:

- Irrigation and Drainage
- Farm Power and Machinery
- Land and Water Management
- Farm Structures & Postharvest Engineering
- Energy and Environment
- Basic Engineering

The Faculty of Agricultural Engineering strives to attain excellence in teaching and research, where students are urged to excel in qualification and competency with basic and applied research as well as technology transfer and outreach activities, including consultancy. The faculty has highly qualified teaching staff with well-equipped laboratories, workshop facilities, field experimental area, library, computer lab, auditorium, and seminar hall. Graduates of the faculty are registered with Pakistan Engineering Council as Registered / Professional Engineers. The B.E. (AGR) degree holders are eligible to be appointed as Professional Engineers in engineering-related fields. They are capable of undertaking any professional engineering task in the field of Agricultural Engineering.

MISSION STATEMENTS

- The mission of the faculty is to strive for excellence in education, research, and outreach in the agricultural sector for sustainable development.
- The mission of the program is to train and equip the students with engineering skills, tools, and techniques so that they be capable of resolving agriculture-related issues for food security and strive for excellence in education and research in the agricultural sector for local and global sustainable development

The faculty enhances students' knowledge and skills in Agricultural Engineering by providing professional and academic training in Irrigation & Drainage Engineering, Land & Water Management, Mechanization &

Farm Machinery, Post-Harvest Technology, Farm Structures, and Environmental Engineering.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The PEOs of B.E. (AGR) Program are as under

PEO1: The graduates are expected to exhibit an in-depth knowledge of engineering principles, the application of modern tools, and the latest technologies with appropriate skills and attitudes to investigate and resolve agricultural engineering-related issues.

PEO2: The graduates are expected to develop skills to work independently as well as in diverse teams to provide novel solutions to agriculture-related problems and effectively communicate the results to the stakeholders.

PEO3: The graduates are expected to undertake professional practice considering social, ethical, and environmental boundaries within which engineering is practiced both locally and globally.

PEO4: The graduates are expected to execute and manage teamwork, interpersonal skills, perpetual learning, and professional growth.

The twelve graduate attributes provided by the PEC in the manual of Accreditation 2019 have been adopted by the Agricultural Engineering program as the Program Learning Outcomes (PLOs) for its Bachelor of Engineering (B.E.) Program. It is ensured that these PLOs are achieved by respective CLOs of the curriculum as assessed through both direct and indirect methods. The curriculum has also been updated and CLOs for each course is designed along with its difficulty level as per Blooms taxonomy i.e., cognitive, affective and psychomotor.

JOB OPPORTUNITIES

Graduate Engineers holding B.E. (AGR) degree are eligible for registration as Professional Engineers with Pakistan Engineering Council (PEC). They are entitled to perform as Professional Engineers in public or private organizations on a post requiring the expertise of an agricultural engineer.

Our graduate engineers are employed on key positions in federal and provincial organizations including Universities, Research organizations like Environmental Protection Agency (EPA), Agriculture Research, Agriculture Extension, Agricultural Engineering, Sindh On Farm Water Management (SOFWM), Pakistan Agriculture and Storage Corporation (PASCO), Pakistan Agriculture Research Council (PARC), Pakistan Council of Research in Water Resources (PCRWR), Water and Power Development Authority (WAPDA), Sindh Irrigation and Drainage Authority (SIDA), International Water-logging and Salinity Research Institute (IWASRI), Drainage and Reclamation Institute of Pakistan (DRIP), Lower Indus Water Management and Reclamation Research (LIM) Project, Zarai Taraqiati Bank (ZTBL), International Water Management Institute (IWMI), Rural Development Department, various Semi Government and Autonomous Bodies, and NGO's like SAFWCO, WWF, NRSP, SPO, RDF and other departments of Agriculture, consulting companies and related sectors.

DEPARTMENT OF IRRIGATION AND DRAINAGE

The reliable water supplies for irrigated agriculture are instrumental in feeding the growing population in developing countries, including Pakistan. However, they are declining with each passing day; hence their efficient utilization and management is crucial for sustainable agriculture. The water resource, irrigation, and drainage engineers are educated and trained to recognize the complex problems related to planning, designing, and utilizing the available water resources. This is only possible through better water application methods, conservation techniques, and water management practices. The government of Pakistan has been putting efforts into ensuring water supplies for irrigated agriculture, industry, and domestic purposes. During the past 65 years, several mega projects were launched in the fields of irrigation, drainage, and water resources engineering. Keeping in view the complexity of the water related problems, the Department of Irrigation and Drainage was established in 1977 under the umbrella of the Faculty of Agricultural Engineering to produce young engineers and scientists in this field. Since then, it has remained as one of the foremost departments of the faculty. The department is actively involved in teaching and research activities at the

undergraduate level. It contributes more than 30% of the courses in a composite graduate degree program. This department offers postgraduate degree programs of M.E and Ph.D. in irrigation and drainage.

The department works for the refinement of the vision and skills of graduate and postgraduate professionals with distinction in the field of irrigation, drainage, soil, and water resources engineering. We aim to produce young, generous, highly motivated, and talented professional engineers who uphold and advance their profession's integrity, honor, dignity, and development. They should understand the future water demands and offer better solutions using their skills and knowledge.

The department of irrigation and drainage is enriched with a well-qualified faculty who always strive to provide cutting-edge research opportunities that will place graduates at the forefront of new developments in engineering. The adequate classrooms, established computer lab, well-equipped soil, water, and hydraulic engineering labs, and departmental library provide a conducive environment for learning. There is an experimental station to demonstrate and conduct field experiments located at the Latif Farm. A weather station is also installed at the station.

ACADEMIC STAFF		
Engr. Irfan Ahmed Shaikh	Ph.D. (Malaysia)	Associate Professor, Chairman & PG Coordinator
Engr. Rajesh Kumar Soothar	Ph.D. (China)	Assistant Professor & PG Coordinator
Engr. Muhammad Uris Mirjat	Ph.D. (SAU)	Assistant Professor

COURSES OFFERED FOR B.E. (AGR)		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-II		
ID-108	Soil Mechanics	3 (2+1)
SEMESTER-III		
ID-205	Engineering Hydrology	3 (2+1)

SEMESTER-IV		
ID-206	Fluid Mechanics	3 (2+1)
SEMESTER -V		
ID-305	Open Channel Hydraulics	3 (2+1)
SEMESTER-VI		
ID-306	Pumps and Tube wells	2 (1+1)
SEMESTER-VII		
ID-403	Irrigation Engineering	3 (2+1)
AE-411	Final Year Design Project (FYDP)-I	3(0 - 3)
SEMESTER-VIII		
ID-402	Drainage Engineering	3 (2+1)
AE-412	Final Year Design Project (FYDP)-II	3(0 - 3)

DEPARTMENT OF FARM POWER AND MACHINERY

The Department of Farm Power and Machinery was established in 1977 as one of the major departments in the faculty to cater the manpower needs of Sindh and Baluchistan. It offers graduate and postgraduate degree programs since its inception. Initially, it offered M.Sc. (Hons.) in Farm Mechanization. Later, it started offering M.E. and Ph.D. degree programs to graduates having B.E. (AGR) and B.E. (Mech.) degrees. The department has highly qualified faculty members. It has modern and well-equipped laboratories and a workshop. Besides teaching and research, the department provides advisory services to farmers and offers short trainings on various aspects of farm mechanization and machinery to increase crop production.

The mission of the department is to provide leadership and excellence in teaching, research, and outreach in farm power and machinery at the graduate and postgraduate levels. The department has a well-equipped Agricultural Engineering Workshop, Machinery Hall, Power Units Garage, Mechanical and Electronics Laboratories, Drawing & Design Laboratory, Machine Shop, Welding, and smithy Shops.

ACADEMIC STAFF		
Engr. Farman Ali Chandio	Ph.D. (China)	Associate Professor & Chairman
Engr. Ameet Kumar	M.E. (SAU)	Assistant Professor
Engr. Abdul Sattar Mashori	M.E. (SAU)	Assistant Professor
Engr. Muhammad Sohail Memon	Ph.D. (China)	Assistant Professor

COURSES OFFERED FOR B.E. (AGR)		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
FPM-105	Metallurgy and Workshop Practices	3 (2+1)
SEMESTER-II		
FPM-106	Engineering Drawing and Graphics	2 (1+1)
SEMESTER-III		
FPM-203	Applied Thermodynamics	2 (1+1)
SEMESTER-IV		
FPM-204	IC Engines and Tractors	3 (2+1)
SEMESTER-V		
FPM-303	Machine Design	3 (2+1)
SEMESTER-VI		
FPM-302	Farm Machinery and Automation	3 (2+1)
FPM-304	Instrumentation and Control	2 (1+1)
SEMESTER-VII		
FPM-401	Earth Moving Machinery	3 (2+1)
AE-411	Final Year Design Project (FYDP)-I	3(0 - 3)
SEMESTER-VIII		
AE-412	Final Year Design Project (FYDP)-II	3(0 - 3)

DEPARTMENT OF LAND AND WATER MANAGEMENT

Soil and water are the key natural resources for the sustainability of flora and fauna and environmental system. But unfortunately, they are being used unwisely, resulting in a threat to the sustainability of agriculture and the environment. So far, in Pakistan, enormous sums of money have been spent on the planning, design, construction, and maintenance of farm irrigation systems, but many have failed to meet the planned agricultural and social objectives. It has now been recognized that one of the main reasons for this is the lack of human resources with the proper technical and managerial skills needed to install, operate, and manage the schemes successfully. Keeping in view the importance of technical education in Land and Water Resources Management, the Department of Land and Water Management was established in December 1985 in the Faculty of Agricultural Engineering in order to produce graduates with technical expertise in the management of land and water resources. This department offers postgraduate degree programs of M.E. and Ph.D. in Land and Water Management.

The department imparts quality education to the students through a wide range of subjects and research to enhance the productivity of land and water resources to meet future demands of food and fiber. In addition, the department also provides trainings and advisory services to the farming community of the country. The department plays a leading role in imparting quality education in the field of soil and water conservation and management. The mission of the department is to produce highly motivated and talented professional engineers with expertise in the field of soil and water resources conservation and management. The department has a well-equipped Lab with the latest equipment used for land surveying and leveling, soil and water testing, and watercourse design and construction.

ACADEMIC STAFF		
Engr. Munir Ahmed Mangrio	Ph.D. (SAU)	Professor & Chairman
Engr. Altaf Ali Siyal	Ph.D. (UK)	Professor & Dean

Engr. Mashooque Ali Talpur	Ph.D. (China)	Professor
Engr. Faisal Mahmood	Ph.D. (China)	Assistant Professor
Engr. Shaukat Ali Soomro	Ph.D. (SAU)	Assistant Professor
Engr. Abdul Saboor Soomro	M.E. (SAU)	Assistant Professor

COURSES OFFERED FOR B.E. (AGR)

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
LWM-107	Soil Science	3 (2+1)
SEMESTER-II		
LWM-110	Surveying and Levelling	3 (1+2)
SEMESTER-IV		
LWM-208	GIS & Remote Sensing	2(1 – 1)
SEMESTER-V		
LWM-307	Farm irrigation systems	2(1 - 1)
SEMESTER-VII		
LWM-405	Engg. Elective-II (Soil and Water Conservation Engineering)	3(2 – 1)
AE-411	Final Year Design Project (FYDP)-I	3(0 - 3)
SEMESTER-VIII		
LWM-404	Engg. Elective-III (Farm Water Management)	3(2 – 1)
AE-412	Final Year Design Project (FYDP)-II	3(0 - 3)

DEPARTMENT OF FARM STRUCTURE AND POSTHARVEST ENGINEERING

The department of Farm Structures & Postharvest Engineering was established in 1977 to provide technical knowledge in three main areas, i.e., Farm Structures, Post-Harvest Technology, and Process Engineering in Agriculture, along with Rural Electrification. The department offers graduate (B.E.) and postgraduate (M.E. & Ph.D.) courses. There are well-qualified staff members capable of serving the purpose of enhancing the

technological knowledge of youth in Post Harvest Technology, Farm Structures, Food processes & preservation, and Electrification. This department offers postgraduate degree programs of M.E. and Ph.D. in Farm structures and Process engineering.

This department also provides advisory services to progressive farmers in the field of Post-Harvest and Food Process Engineering to improve the quality and quantity of farm produce.

The mission of the department is to produce technical and skilled persons for society in general and to benefit the individual end users.

ACADEMIC STAFF

Engr. Bakhtawar Wagan	Ph.D. (China)	Professor & Chairperson
Engr. Shakeel Hussain Chattha	Ph.D. (Malaysia)	Associate Professor
Engr. Shakeel Ahmed Soomro	Ph.D. (China)	Assistant Professor
Engr. Zaheer Ahmed Khan	M.E. (SAU)	Assistant Professor
Engr. Noor Hussain Walhari	Ph.D. (China)	Lecturer

COURSES OFFERED FOR B.E. (AGRI)

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-II		
FS-112	Engineering Materials	2(1 - 1)
SEMESTER-III		
FS-209	Strength of Materials	3(2 – 1)
SEMESTER-V		
FS-309	Rural Electrification	2(1 – 1)
SEMESTER-VI		
FS-310	Engg. Elective-I (Landscape Engineering)	2(1 - 1)

SEMESTER-VII		
FS-409	Farm Structures and Control Sheds	3(2 – 1)
AE-411	Final Year Design Project (FYDP)-I	3(0 - 3)
SEMESTER-VIII		
FS-406	Agricultural Process Engineering	3(2 – 1)
AE-412	Final Year Design Project (FYDP)-II	3(0 - 3)

DEPARTMENT OF ENERGY AND ENVIRONMENT

The Department of Energy and Environment was established in the year 1995 in the Faculty of Agricultural Engineering. The department offers courses in environment & energy-related areas with the main emphasis on the efficient use of available energy resources and developing renewable energy resources to minimize reliance on fossil fuels. The management and disposal of agricultural and industrial wastes are the major areas of its concern. The department also offers courses on environmental engineering, agro-industrial management, and waste utilization. This department offers postgraduate degree programs of M.E. and Ph.D. in Energy and Environment.

It also deals with the changes that occur in the ecosystem through man-made interventions to protect and preserve the environment from external influences. It focuses on agro-industrial development and its management strategies. Apart from academic activities, the department is involved in project research and consultancy. The department has contributed to the design of various machines for the use of farmers and remained involved in projects sponsored by national and international organizations.

The focused areas of the department for sustainable development are the effective use of water, sustainable energy alternatives, sustainable land management to combat desertification and land degradation, conservation of biodiversity, and planning to reduce land, water, and air pollution on a local, regional and global perspective.

ACADEMIC STAFF		
Engr. Mahmood Leghari	Ph.D. (China)	Associate Professor & Chairman
Engr. Sheeraz Aleem Brohi	M.E. (SAU)	Lecturer

COURSES OFFERED FOR B.E. (AGRI)

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
EE-109	Industrial Chemistry	2(1 - 1)
SEMESTER-III		
EE-207	Climate Change & Water	2(1 - 1)
SEMESTER-IV		
EE-210	Environmental Engineering	3(2 - 1)
SEMESTER-VI		
EE-308	MDE Elective-I (Wastewater Engineering)	3 (2 – 1)
SEMESTER-VII		
EE- 407	Solid Waste Management	3(2 - 1)
AE-411	Final Year Design Project (FYDP)-I	3(0 - 3)
SEMESTER-VIII		
EE-408	MDE Elective-II (Alternate and Renewable Energy)	3(2 – 1)
AE-412	Final Year Design Project (FYDP)-II	3(0 - 3)

DEPARTMENT OF BASIC ENGINEERING

The Department of Basic Engineering was established in 1977 as one of the departments of the Faculty of Agricultural Engineering. The department deals with various supporting courses like Applied Mathematics, Applied Physics, Computer Science, and Engineering Mechanics with particular applications in Agricultural Engineering. The supporting course of Functional Mathematics is offered to the faculties of Crop Production,

Crop Protection, Agriculture Social Sciences and Animal Husbandry, and Veterinary Sciences.

The mission of the department is to provide leadership and excellence in teaching, research, and outreach in Engineering Mechanics and Computer Science with Applied Mathematics at the graduate and postgraduate levels. Engineering Mechanics and Applied Physics laboratory and Computer Lab are available for teaching to graduate and postgraduate students.

ACADEMIC STAFF		
Ghulam Shabbir Bughio	M.Sc. (US)	Assistant Professor & Incharge Chairman
Amanullah Tunio	M.Phil. (MUET)	Assistant Professor & UGP Coordinator
Saleem Ahmed Naich	M.Phil. (MUET)	Assistant Professor
Veeromal Bheel	M.Phil. (MUET)	Lecturer

COURSES OFFERED FOR B.E (AGR)		
CODE	TITLE OF COURSE	HRS.
SEMESTER-I		
BE-103	Calculus and Analytical Geometry	3(3 - 0)
SEMESTER-II		
BE-102	Applied Physics	3(2 - 1)
BE-104	Linear Algebra	3(3 - 0)
SEMESTER-III		
BE-201	Engineering Mechanics	3(2 - 1)
SEMESTER-IV		
BE-202	Differential Equations	3(3 - 0)
SEMESTER-V		
BE-301	Numerical Analysis	2(2 - 0)

REMOTE SENSING AND GIS LABORATORY

Accurate estimation and forecasting of agriculture statistics are essential to a country's economy, food security, and agricultural market development. Pakistan needs quality agricultural monitoring and real-time statistics because so much of its economy as well as food security, depends on a thriving agricultural sector. Thus, the Remote sensing (RS) and Geo-Information Systems (GIS) laboratory was established in the faculty in 2014 in collaboration with the Food and Agriculture Organization (FAO) of the United Nations and the United States Department of Agriculture (USDA), under the FAO project, "Building Provincial Capacity in Pakistan for Crop Forecasting and Estimation. The Lab is being strengthened by adding more workstations with support from Agriculture, Supply, and Prices Department

The RS / GIS Laboratory provides an environment where faculty, staff, and students work together to advance knowledge in the application of geospatial technologies in agriculture, environment, ecosystem, and natural resources Management. The mission of the laboratory is to:

- Integrate state-of-the-art remote sensing (RS), geographic information system (GIS), and global positioning (GPS) technologies with Agriculture Monitoring and Management to address relevant issues.
- Transfer knowledge and skills to the undergraduate and postgraduate students, teaching faculty, and farming community through education, outreach, and training.
- Conduct scientific research focused on agriculture monitoring, environmental issues, and water management.
- Make digital geospatial data of Sindh readily available for use in a variety of related issues in agriculture.

BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCES [BS (ENVSC)]

The BS Environmental Sciences (ENVSC), an interdisciplinary degree, is offered by the Faculty of Agricultural Engineering through the Department of Environmental Sciences.

and Environment. The rest of the departments of faculty, as well as other concerned departments of the university, are supporting the program.

Mission of the Program

The mission of the program is to proceed perception of the environment through integrative education, scientific research, and service.

Vision of the Program

To provide quality education and research to produce effective environmental leaders who can address local, national, and international environmental challenges for greater societal benefits

Program Educational Objectives (PEOs)

The overarching aim of this program is to develop human resources in the field of environment to achieve sustainable development through appropriate education and training. After completing this degree, the graduates will be able to:

1. Analyze and assess environmental problems and their interrelationships with other systems of society
2. Apply skills for the management of environmental problems, abatement of pollution, and conservation of the environment
3. **Assess** and articulate the scientific evidence surrounding key environmental issues and evaluate ongoing efforts to mitigate the environmental problem.

Program Learning Objectives (PLOs)

The degree program is expected to equip the graduates with an ability to understand the linkages between various bio-physical and socio-economic components of the environment and with the expertise of:

1. Demonstration of capabilities to understand the natural and socio-economic processes driving environmental systems;
2. Learning scientific and technical expertise to solve environmental problems by introducing interventions; and

3. Development of interactions with stakeholders, managers, and policymakers in addressing environmental issues.

COURSES OFFERED		
First Year: 1 st Semester		
CODE	TITLE OF COURSE	HRS.
ENV-101	Introduction to Environmental Science	3(3-0)
BIO-103	Biology	3(2-1)
CHEM-105	Basic Chemistry	3(2-1)
MATH-107	Mathematics	3(3-0)
ENG-109	English-I (Functional English)	3(3-0)
PS-111	Pakistan Studies	2(2-0)
First Year: 2 nd Semester		
CODE	TITLE OF COURSE	HRS.
ENV-102	Introduction to Earth Sciences	3(3-0)
PHYS-104	Physics	3(2-1)
ENV-106	Environmental Monitoring	3(2-1)
SOC-108	Environmental Sociology	3(3-0)
ENG-110	English-II (Communication Skills)	3(3-0)
IS-112	Islamic Studies/Ethics	2(2-0)
Second Year: 3 rd Semester		
CODE	TITLE OF COURSE	HRS.
ENV-201	Wastewater Treatment and Management	3(2-1)
CHEM-203	Environmental Chemistry	3(3-0)
EC-205	Introductory Economics	3(3-0)
COM-207	Introduction to Computer	3(2-1)
ENG-209	English-III (Technical Writing & Presentation Skills)	3(3-0)
Second Year: 4 th Semester		
CODE	TITLE OF COURSE	HRS.
ENV-202	Fundamentals of Ecology	3(3-0)
ENV-204	Environmental Pollution	3(2-1)
ENV-206	Climatology	3(3-0)

BIO-208	Environmental Microbiology	3(2-1)
PE-210	Professional Ethic	3(3-0)
Third Year: 5th Semester		
CODE	TITLE OF COURSE	HRS.
ENV-301	Agroecology	3(3-0)
ENV-303	Environmental Toxicology	3(3-0)
ENV-305	Environmental Profile of Pakistan	3(3-0)
ENV-307	Analytical Techniques in Environmental Science	3(2-1)
ENV-309	Occupational Safety, Health, and Environment (Elective)	3(3-0)
EC-311	Environmental Economics	3(3-0)
Third Year: 6th Semester		
CODE	TITLE OF COURSE	HRS.
ENV-302	Environmental Management Systems	3(3-0)
ENV-304	Biodiversity and Conservation	3(3-0)
ENV-306	Environmental Monitoring	3(2-1)
ENV-308	Energy and Environment (Elective)	3(3-0)
GIS-310	GIS and Remote Sensing	3(1-2)
STAT-312	Applied Statistics	3(2-1)
Final Year: 7th Semester		
CODE	TITLE OF COURSE	HRS.
ENV-401	Climate Change	3(3-0)
ENV-403	Environmental Impact Assessment	3(3-0)
ENV-405	Natural Resources Management	3(3-0)
ENV-407	Research Methodology	3(3-0)
ENV-409	Air and Noise Pollution	3(2-1)
ENV-411	Disaster Risk Management	3(3-0)
Final Year: 8th Semester		
CODE	TITLE OF COURSE	HRS.
ENV-402	Solid Waste Management (Elective)	3(3-0)
ENV-404	Environmental Governance	3(3-0)
ENV-406	Public Health and Environment	3(3-0)
ENV-408	Pollution Control Technologies	3(3-0)

FYP-412	Final Year Project	6(0-6)
Total Degree Credit Hours		136(116-20)

BACHELOR OF SCIENCE IN AGRO-INDUSTRIAL ENGINEERING TECHNOLOGY [BS (AIET)]

Agro-Industrial Engineering Technology is an applied engineering degree program in agricultural processes and industrial technologies. It focuses on designing, understanding, planning, developing, and evaluating an integrated agricultural industry system to optimize sustainable growth.

The curriculum for the BS Agro-Industrial Engineering Technology degree program has been developed in consultation with experts in agro-industries. The program offers strong industrial-oriented education augmented with formal industrial training. It is believed that trained technologists would help decrease the cost of agricultural production and increase the quality of the product. High-quality products would increase export, resultantly adding great value to the national economy.

Vision

To produce Agro-Industrial Engineering Technologists for a continuous transformative impact on society by overcoming industrial technical and social challenges.

Mission

To produce skilled human resources for the agro-industry through imparting professional learning and entrepreneurship.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO 1** Demonstrate knowledge of Agro-based industries appropriate for career pursuits, workplace needs, and entrepreneurship.
- PEO 2** Identify and address technical and societal problems.

PEO 3 Demonstrate the intellectual curiosity to actively pursue acquiring new knowledge and skills necessary to refine and improve abilities to contribute to the technology domain.

PEO 4 Work effectively as a team member or lead multidisciplinary teams while demonstrating interpersonal, management skills, social, and ethical responsibilities.

COURSES OFFERED		
First Year: 1 st Semester		
CODE	TITLE OF COURSE	HRS.
AIET-101	Computer Aided Design and Graphics	3 (2-1)
AIET-103	Workshop Technology	3(2-1)
AIET-105	Introduction to Agro-Based Industry	2 (1-1)
AIES-107	Applied Mathematics	3(3-0)
AIET-109	Information and Communication Technology (ICT)	3(2-1)
AIET-111	Islamic Studies/Ethics	2 (2-0)
AIET-113	Pakistan Studies	2(2-0)
First Year: 2 nd Semester		
CODE	TITLE OF COURSE	HRS.
AIET-102	Technology for Soil Salinity Control	3(2-1)
AIET-104	Fluid Mechanics	3(2-1)
AIET-106	Industrial Material Handling and Processes	2(1-1)
AIET-108	Water Quality Assessment Analytical techniques	2 (1-1)
AIET-110	GIS and Remote Sensing Technology	3(1-2)
AIET-112	Tunnel and Vertical farming	2(1-1)
AIET-114	Composition and Communication Skills	2(2-0)
Second Year: 3 rd Semester		
CODE	TITLE OF COURSE	HRS.
AIET-201	Applied Thermodynamics	3(2-1)
AIET-203	Farm Mechanization	3(2-1)
AIET-205	Post-Harvest Processes	3(2-1)
AIET-2011	Hydroponics & Soilless Culture	3(2-1)

AIET-207	Occupational, Health, and Safety	2(1-1)
AIET-209	Industrial Chemistry	3(2-1)
Second Year: 4 th Semester		
CODE	TITLE OF COURSE	HRS.
AIET-202	Engine operation and maintenance	3(2-1)
AIET-204	Manufacturing Processes	3(2-1)
AIET-206	Precision Agriculture	3(2-1)
AIET-208	Grain Processing & Storage Techniques	3(2-1)
AIET-210	Food Processing Technology	2(1-1)
AIET-212	Professional Ethics	2(2-0)
AIET-214	Entrepreneurship	2(2-0)
Third Year: 5 th Semester		
CODE	TITLE OF COURSE	HRS.
AIET-301	Estimation and Costing	3(2-1)
AIET-303	Instrumentation and Control	2(1-1)
AIET-305	Industrial Processes and Management	3(2-1)
AIET-307	Cotton Ginning and Fiber Technology	2(1-1)
AIET-309	Applied Statistics	3(2-1)
AIET-311	Technical Report writing	2(2-0)
Third Year: 6 th Semester		
CODE	TITLE OF COURSE	HRS.
AIET-302	Automation and Robotics	2 (1-1)
AIET-304	Boiler operation and maintenance	3(2-1)
AIET-306	Pressurized Irrigation Systems	3(2-1)
AIET-308	Food Preservation	2(1-1)
AIET-310	Sugar Technology	3(2-1)
AIET-312	Environmental Impact Assessment	3(2-1)
Final Year: 7 th Semester		
CODE	TITLE OF COURSE	HRS.
AIET-401	Supervised Industrial Training	16(0-16)
Final Year: 8 th Semester		
CODE	TITLE OF COURSE	HRS.
AIET-401	Supervised Industrial Training	14(0-14)
AIET-403	Project Report	3(0-3)

Total Degree Credit Hours **134 (68-66)**

*T = Technology/ Engineering/Major-based subjects

S = Natural science-based subjects

H = Humanities-based subjects

M = Management-based subjects

I = IT

FACULTY OF ANIMAL HUSBANDRY & VETERINARY SCIENCES



FACULTY OF ANIMAL HUSBANDRY & VETERINARY SCIENCES

The Faculty of Animal Husbandry and Veterinary Sciences is one of the five faculties at Sindh Agriculture University, Tandojam. Located at the eastern end of the main campus on the Hyderabad-Mirpurkhas Highway, about 15 km south of Hyderabad city, it was established in 1971. The faculty offers a five-year Doctor of Veterinary Medicine (DVM) program, four-year BS degree programs in Dairy Technology, Fisheries and Aquaculture, and Poultry Sciences, as well as M.Phil and PhD programs. These programs operate under a semester system across 14 teaching departments, covering various disciplines related to animal and veterinary sciences. The faculty provides innovative teaching programs and fosters academic developments in areas such as small and large animal surgery, medicine, reproduction, nutrition, and management. Courses on domestic and wild animal diseases, fisheries and aquaculture, and animal product technologies are also offered. The faculty boasts spacious classrooms equipped with state-of-the-art teaching infrastructure, an air-conditioned library stocked with the latest textbooks and research journals, three veterinary clinics (Teaching Hospitals), and livestock and poultry farms to provide hands-on experience.

MISSION STATEMENT

To provide efficient veterinary and para-veterinary manpower and expertise aimed at promoting the welfare of Pakistan's socio-economic spectrum, particularly in the province of Sindh, by improving animal health, welfare, production, performance, veterinary public health, and the conservation of animal genetic resources.

JOB OPPORTUNITIES

Graduates have job opportunities in the poultry and livestock sectors, Livestock and Dairy Development Departments, biological product units, Poultry and Livestock Extension Departments, and disease diagnostic laboratories. They can also find employment in public and private universities, the Animal Quarantine Department, the Agricultural Development Bank of Pakistan, and other scheduled banks as

Agriculture/Livestock/Poultry Credit Officers. Additionally, they can pursue various government jobs through competitive examinations, as well as self-employment opportunities as professional veterinarians.

ALLIED COURSES FOR DVM DEGREE PROGRAM

Course No.	Title	Credit hour
ENG-101	English-I (Functional English)	2 (2-0)
ENG-102	English-II (Communication English)	2 (2-0)
ENG-502	English-III (Technical Report Writing and Presentation)	2 (2-0)
PS-102	Pakistan Studies	1 (1-0)
MATH-101	Mathematics	2 (2-0)
IS-102	Holy Quran Translation-I/ Ethics-I	1 (1-0)
IS-202	Holy Quran Translation-II/ Ethics-II	1 (1-0)
IS-301	Islamic Studies/Ethics	1 (1-0)
IS-401	Holy Quran Translation- III / Ethics- III	1 (1-0)
IS-501	Holy Quran Translation- IV / Ethics- IV	1 (1-0)
SOSC-201	Anthropology	1 (1-0)
STAT-401	Bio-Statistics	3 (2-1)
ENTR-501	Entrepreneurship	1 (0-1)

DEPARTMENT OF ANATOMY & HISTOLOGY

Department of Anatomy and Histology is a part of Faculty of Animal Husbandry & Veterinary Sciences, it was established in 1987, provides scientific knowledge to the undergraduates and post-graduates related to Veterinary Anatomy, Histology and Embryology of domesticated animals and birds. The collaboration of the department with other disciplines, both in research and teaching gives an excellent opportunity for conducting advance research.

ACADEMIC STAFF

M. Ghasuddin Shah	PhD (UAF)	Professor & Dean
Jameel A. Gandahi	PhD (China)	Associate Professor & Chairman

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
ANAT-101	Veterinary Anatomy I	3 (1-2)
AN AT-102	Veterinary Anatomy II	3 (1-2)
ANAT-103	General Veterinary Histology	2 (1-1)
ANAT-104	Systemic Veterinary Histology and Embryology	3 (2-1)

DEPARTMENT OF VETERINARY PHYSIOLOGY AND BIOCHEMISTRY

This department is located on the ground floor of the Prof. M. Amin Bhatti Memorial Hall building, at the center of the faculty. It offers courses in Veterinary Physiology and Biochemistry to undergraduate and postgraduate students. The department boasts excellent facilities for teaching and research, including state-of-the-art laboratories equipped with advanced tools and computational resources for hematological, biochemical, proteomic, and physiological studies.

ACADEMIC STAFF		
Allah Bux Kachiwal	PhD (SAU)	Professor & Chairman
Mool Chand Malhi	PhD (China)	Associate Professor
Saeed Ahmed Soomro	PhD (SAU)	Associate Professor
Jamila Soomro	PhD (China)	Associate Professor

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
PHYS-101	Veterinary Physiology-I	3 (2-1)
PHYS-102	Veterinary Physiology-II	4 (3-1)
PHYS-103	Biochemistry	4 (3-1)

DEPARTMENT OF ANIMAL BREEDING AND GENETICS

The department focuses on teaching breeding strategies to improve farm animal production and enhance the availability of higher-quality milk, meat, mutton, and wool. It conducts research on breeding problems under local conditions and develops future strategies for the genetic improvement of

existing germplasm. This ensures greater production to meet the growing demands of the human population and for export.

ACADEMIC STAFF		
Aqeel Ahmed Memon	PhD (Malaysia)	Professor & Chairman
Hubdar Ali Kaleri	PhD (China)	Associate Professor
Shahar Bano	PhD (China)	Lecturer
Chander Kumar	PhD (China)	Lecturer

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
ABG-202	Animal Breeding and Genetics-I	2 (1-1)
ABG-301	Animal Breeding and Genetics-II	3 (2-1)

DEPARTMENT OF ANIMAL NUTRITION

This is one of the important departments of the Faculty of Animal Husbandry and Veterinary Sciences. It contributes to the DVM degree program by offering numerous courses with strong practical teachings and training. The department has well-equipped laboratories with state-of-the-art equipment. It also provides services to the farming community and other stakeholders in the feed industry, offering quantitative and qualitative testing of various feedstuffs used in the preparation of cost-effective rations and assisting in the efficient utilization of conventional and non-conventional feed resources.

ACADEMIC STAFF		
Gulfam Ali Mughal	PhD (China)	Professor & Chairman
Rani Abro	PhD (Sweden)	Associate Professor
Shoaib Ahmed Pirzado	Ph.D (China)	Assistant Professor
Farman Ali Siyal	PhD (China)	Assistant Professor
Zulqurnain Talpur	PhD (China)	Lecturer

COURSES OFFERED

CODE	TITLE OF COURSE	C. HRS.
AN-201	Principles of Animal Nutrition	3 (2-1)
AN-202	Livestock Feed Resources & Forage Conservation	3 (2-1)
AN-301	Poultry Nutrition and Feed Technology	2 (1-1)

DEPARTMENT OF LIVESTOCK MANAGEMENT

The Department of Livestock Management is one of the key departments in the Faculty of Animal Husbandry and Veterinary Sciences. It maintains an experimental herd of Kundhi buffalo, Red Sindhi, Tharparkar, and crossbred cattle, as well as a flock of sheep and goats. The department fulfills teaching, research, and outreach functions. Postgraduate research focuses on sustainable livestock production systems, small- and large-scale dairy farming, livestock business management, and farm profitability analysis.

ACADEMIC STAFF

Huma Rizwana	PhD (SAU)	Associate Professor & Chairperson
M. Naeem Rajput	PhD (China)	Assistant Professor
Atique Ahmed Behan	PhD (Malaysia)	Assistant Professor
Shakeel Ahmed Tunio	PhD (SAU)	Lecturer

COURSES OFFERED

CODE	TITLE OF COURSE	C. HRS.
LM-101	Fundamentals of Livestock Production	3 (2-1)
LM-201	Livestock Extension Education	2 (2-0)
LM-302	Principles of Dairy Production	3 (2-1)
LM-401	Beef and Mutton production	2 (1-1)
LM-501	Animal Welfare and Ethics	2 (2-0)
LM-502	Livestock Economics and Business Management	2 (2-0)

DEPARTMENT OF POULTRY HUSBANDRY

The Department of Poultry Husbandry offers a four-year BS degree program in Poultry Sciences and basic and advanced courses in Poultry Science for DVM, M.Phil, and PhD students. The department features a well-established Avian clinic with laboratory, hatchery, and Poultry Experimental Station, including a modern controlled environment shed, which provide hands-on learning opportunities for both undergraduate and postgraduate students. Practical teachings involve farm visits and laboratory demonstrations.

The department also supports the local poultry industry by offering periodic training sessions, seminars, conferences, and workshops. It has significantly contributed to the improvement of bird production, health, and welfare through its research. The department offers internship opportunities in poultry farming and provides short training courses in poultry farming for rural communities, particularly women.

ACADEMIC STAFF

Nasir Rajput	PhD (China)	Professor & Chairman
Imdad Hussain Leghari	PhD (China)	Professor
Ahmed Ali Moryani	PhD (SAU)	Assistant Professor

COURSES OFFERED

CODE	TITLE OF COURSE	C. HRS.
POUL-102	Introduction to Poultry Production	1 (1-0)
POUL-401	Commercial Poultry Production	2 (1-1)
POUL-402	Breeder and Hatchery Management	3 (2-1)

DEPARTMENT OF VETERINARY MICROBIOLOGY

The Department of Veterinary Microbiology is one of the most important departments within the Faculty of Animal Husbandry and Veterinary Sciences. Established in 1971, it aims to equip DVM graduates with fundamental knowledge in bacteriology, virology, immunology, and related areas, enhancing their understanding of disease mechanisms and the body's inherent defenses against veterinary diseases. The departmental academic staff and postgraduate scholars conduct basic and applied research focused on the isolation, identification, characterization, bio typing, and molecular

biology of various pathogens. The Department of Veterinary Microbiology has developed bilateral linkages, particularly in research, with different laboratories and institutes across the country where postgraduate scholars conduct their research for their degree programs.

ACADEMIC STAFF		
Shahid Hussain Abro	PhD (Sweden)	Professor & Chairman
Asghar Ali Kamboh	PhD (China)	Associate Professor
Dildar H. Kalhoro	PhD (China)	Associate Professor
Haseena Baloch	PhD (SAU)	Assistant Professor

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
MICR-102	General Veterinary Microbiology	3 (2-1)
M ICR-201	Veterinary Immunology	2 (1-1)
M ICR-202	Veterinary Bacteriology and Mycology	3 (2-1)
MICR-301	Veterinary Virology	3 (2-1)
MICR-402	Biorisk Management (BRM)	2 (1-1)
BIOL-201	Molecular Biology	2 (1-1)

DEPARTMENT OF VETERINARY PARASITOLOGY

The Department of Veterinary Parasitology strives for excellence in both teaching and research within the field of parasitology. Our goal is to discover and implement novel strategies to control parasitic diseases that affect the health of millions of animals worldwide. We utilize cutting-edge research in genomics, cell biology, immunology, epidemiology, entomology, and biochemistry to find new ways to combat these diseases. Through our teaching and training programs, we aim to educate and mentor the next generation of parasitologists. The Department of Veterinary Parasitology is staffed by an outstanding team of faculty scientists dedicated to advancing veterinary health through teaching and research. With a distinguished history in parasitic disease research, particularly on tick-transmitted diseases, the Department has been a national leader in both research and training for veterinary parasitologists from Pakistan and abroad. The

Department offers a four-year BS degree program in Fisheries & Aquaculture and contributes to awarding DVM, M.Phil., and PhD degrees. Additionally, it provides short training courses in the diagnostics of parasitic diseases. The Department has recently been renovated to include a state-of-the-art Molecular Parasitology Laboratory, equipped with modern equipment for cutting-edge research. Future plans include the development of infrastructure such as a computer lab for epidemiologic research and bioinformatics, as well as genomics laboratories.

ACADEMIC STAFF		
M. Bachal Bhutto	PhD (SAU)	Professor & Chairman
Javaid Ali Gadahi	PhD (China)	Associate Professor
Feroza Soomro	PhD (SAU)	Assistant Professor
Zubair Ahmed Laghari	PhD (China)	Assistant Professor (On study leave)

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
PARA-201	General Veterinary Parasitology and Protozoology	3 (2-1)
PARA-202	Veterinary Helminthology	4 (3-1)
PARA-301	Veterinary Entomology and Acarology	3 (2-1)
AQUA-402	Fisheries and Aquaculture	1 (0-1)
ZOOL-501	Lab. and Zoo Animal Management	1 (0-1)

DEPARTMENT OF VETERINARY PATHOLOGY

Pathology as a discipline primarily involves understanding disease processes at both macro and micro levels. It provides deeper insight into the functional and morphological changes in tissues and fluids during disease. The goal of a veterinary curriculum is to produce clinicians whose main responsibility is the diagnosis and treatment of diseases. Consequently, the Department of Veterinary Pathology offers courses designed to broaden students' understanding of disease processes and to prepare them for a thorough grasp of clinical sciences.

The department is equipped with well-maintained general and clinical pathology laboratories for practical demonstrations and student training. It also boasts a strong postgraduate program, offering advanced degrees such as M.Phil. and PhD.

ACADEMIC STAFF		
Zaheer Ahmed Nizamani	PhD (France)	Professor & Chairman
Fahmida Parveen Samo	PhD (China)	Associate Professor
Mansoor Tarique Samo	PhD (China)	Associate Professor
Shah Nawaz Kumbhar	PhD (China)	Associate Professor

COURSES OFFERED		
COCODE	TITLE OF COURSE	C. HRS.
PATH-201	General Veterinary Pathology	3 (2-1)
PATH-202	Systemic Veterinary Pathology	3 (2-1)
PATH-302	Veterinary Clinical Pathology	1 (0-1)
PATH-501	Poultry Pathology	3 (2-1)
PATH/APT-501	Meat Inspection and Necropsy Practice	3 (2-1)

DEPARTMENT OF VETERINARY PHARMACOLOGY

Pharmacology is a scholarly discipline with a distinct focus on the in-depth understanding of the effects of chemical agents whether therapeutic or toxic on biological systems. The department plays a crucial role in the DVM degree program by offering courses that enhance knowledge of the therapeutic applications of drugs, thereby aiding graduates in the implementation of disease prevention and control strategies. The department also boasts a strong postgraduate program, offering M.Phil. and PhD degrees in Veterinary Pharmacology.

ACADEMIC STAFF		
Shamsuddin Bughio	PhD (China)	Professor & Chairman

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
PHAR-201	General and Systemic Pharmacology	4 (3-1)

PHAR-202	Veterinary Chemotherapy & Toxicology	4 (3-1)
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DEPARTMENT OF ANIMAL PRODUCTS TECHNOLOGY

The department, known as "Animal Products Technology" since 2010 (formerly "Dairy Technology"), encompasses several key facilities: the Milk Processing Lab, Dairy/Meat Chemistry Lab, Dairy/Meat Microbiology Lab, and a modern Slaughterhouse (Demonstration Unit). The primary research focus is on the quality and safety of milk, meat, and their products. Research outcomes are used to enhance the curriculum, inform industry through scientific literature, and raise public awareness through seminars. Additionally, trainees are encouraged to start their own dairy businesses, contributing to improved livelihoods and poverty alleviation.

The department offers a four-year BS degree program in Dairy Technology and various undergraduate and postgraduate courses that meet the standards of the Higher Education Commission and the Pakistan Veterinary Medical Council.

ACADEMIC STAFF			
Sayed Atta H. Shah	PhD (Malaysia)	Associate Professor & Chairman	
Gul Bahar Khaskheli	PhD (China)	Assistant Professor	
Muneer Ahmed Jamali	PhD (China)	Assistant Professor	
Ghulam Shabir Barham	PhD (SAU)	Assistant Professor	

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
APT-202	Dairy Technology	2 (1-1)
EPID-302	Zoonoses and Food Safety	3 (2-1)
PATH/APT-501	Meat Inspection and Necropsy Practice	3 (2-1)

DEPARTMENT OF ANIMAL REPRODUCTION

The Department of Animal Reproduction was established in 1984 under the project "Establishment of Department of Animal Reproduction" within the

Faculty of Animal Husbandry & Veterinary Sciences. The project was institutionalized by the University in 1988. Our fully accredited department emphasizes teaching, research, and clinical resource management. Our academic vision focuses on preparing both graduate and postgraduate students to become specialists in obstetrics, gynecology, reproductive endocrinology, infertility, artificial insemination, pregnancy diagnosis, and reproductive biotechnology. The department offers valuable internship opportunities for DVM students and has consistently provided short training programs and refresher courses for field veterinarians and para-vet staff since its inception.

ACADEMIC STAF		
Pershotam Khatri	PhD (Germany)	Professor & Chairman
Nazar Ali Korejo	PhD (China)	Associate Professor
Asmatullah Kaka	PhD (Malaysia)	Assistant Professor
Hira Sajjad Talpur	PhD (China)	Lecturer

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
A.REP-301	Veterinary Reproductive Physiology	3 (2-1)
A.REP-302	Reproductive Biotechnology	2 (2-0)
A.REP-304	Clinic-I	1 (0-1)
A.REP-401	Obstetrics and Genital Diseases	3 (2-1)
A.REP-403	Clinic-II	1 (0-1)
A.REP-404	Clinic-III	2 (0-2)
A.REP-501	Clinic-IV	2 (0-2)

DEPARTMENT OF SURGERY AND OBSTETRICS

This clinical department focuses on teaching and research in veterinary surgery, anesthesiology, and diagnostic imaging to produce well-trained veterinary graduates who can enhance the health and production of farm animals, as well as the welfare of pets and wild animals. The department excels in providing a continuum of education and training programs, regularly organized in collaboration with both international and national

organizations, benefiting students, veterinarians, researchers, teachers, and farmers. It boasts a highly qualified staff and is equipped with a large and small animal surgery hall, undergraduate and postgraduate laboratories, a library, and a teaching hospital with indoor facilities for both small and large animals.

ACADEMIC STAFF		
Ahmed Nawaz Tunio	PhD (Malaysia)	Professor & Chairman
Abdul Salam Khoso	MPhil (SAU)	Lecturer (Adhoc)

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
SURG-302	Diagnostic Imaging	2 (1-1)
SURG-304	Surgery Clinic I	1 (0-1)
SURG-401	Anaesthesiology and Intensive Care	1 (0-1)
SURG-403	Surgery Clinic II	1 (0-1)
SURG-402	Small Animal Surgery	3 (2-1)
SURG-404	Surgery Clinic III	2 (0-2)
SURG-501	Large Animal Surgery and Shoeing	4 (3-1)
SURG-503	Surgery Clinic IV	2 (0-2)

DEPARTMENT OF VETERINARY MEDICINE

The Department of Veterinary Medicine is a fundamental part of the Faculty of Animal Husbandry and Veterinary Sciences. Its primary focus is to produce highly motivated veterinary professionals through exemplary clinical practice and educational programs. In practical terms, 90 percent of a veterinarian's professional recognition depends on knowledge and skills related to veterinary medicine. The department offers essential undergraduate and postgraduate courses in the veterinary field and provides high-quality veterinary care and treatment facilities to nearby farmers through its clinic. The Department of Veterinary Medicine also provides a roadmap for successful careers in veterinary practice, the biomedical industry, public service, and academic teaching or research.

ACADEMIC STAFF		
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Amjad Hussain Mirani	PhD (SAU)	Professor & Chairman
Abdul Latif Bhutto	PhD (UK)	Professor
Jam Kashif Zaman Sahito	PhD (China)	Associate Professor
Riaz Ahmed Leghari	PhD (China)	Associate Professor
Parvez Ahmed Khoso	PhD (China)	Assistant Professor

COURSES OFFERED		
CODE	TITLE OF COURSE	C. HRS.
MED-301	General and Systemic Veterinary Medicine	3 (3-0)
MED-302	Veterinary Preventive Medicine-I	3 (3-0)
MED-304	Medicine Clinic-I	1 (0-1)
MED-401	Veterinary Preventive Medicine-II	3 (3-0)
MED-403	Medicine Clinic-II	1 (0-1)
EPID-402	Veterinary Epidemiology and Public Health	3 (2-1)
MED-404	Medicine Clinic-III	2 (0-2)
MED-501	Medicine Clinic-IV	2 (0-2)

B.S. (HONS.) DAIRY TECHNOLOGY

The Department of Animal Products Technology, formerly recognized as the Department of Dairy Technology, is well-equipped with modern equipment and instruments for basic and applied research and demonstrations in all its laboratories, especially Dairy Processing (a mini milk plant), Dairy Chemistry, and Dairy Microbiology. The BS Dairy Technology program focuses on the study of milk, dairy products, and their by-products, emphasizing their utilization and safety through biological, chemical, and physical sciences. Research in this discipline includes cost-effective analysis and standardization of value-added dairy products.

This program aims to produce highly qualified graduates with advanced knowledge and the ability to develop appropriate technologies, effectively disseminate knowledge and innovations to end users, and actively advocate for policies that promote dairy food security and safety. Additionally, students gain expertise in the production, evaluation, and marketing of value-added milk products, meeting international standards. The BS Dairy Technology degree program equips proficient manpower to cater to the

technical requirements of the dairy industry, from raw milk processing to consumption.

Furthermore, the highly experienced faculty members are actively engaged in national and international forums and possess expertise in the dairy technology discipline. They conduct research on the processing, quality, and safety of dairy products, applying the resulting knowledge to the education and training of students. They also provide technical information and assistance to dairy producers, processors, and consumers.

Course No.	Title	Cr. Hrs
Semester-I		
ITC-101	Application of Information and Communication Technology	3 (2-1)
ENG-101	Functional English	3 (3-0)
MATH-101	Functional Mathematics	3 (3-0)
IS-101	Islamic Studies/Ethics	2 (2-0)
RS-101	Civic and community engagement	2 (2-0)
DT-101	Introduction to Dairy Technology	3 (2-1)
FST-101	Introduction to Food and Nutrition	2 (1-1)
Total		18
Semester-II		
PS-102	Ideology & constitution of Pakistan	2 (2-0)
MATH-102	Quantitative Reasoning-I	3 (3-0)
ENG-102	Expository Writing	3 (3-0)
BCH-102	Principles of Biochemistry	3 (2-1)
LM-102	Introduction to Lactation Biology	2 (1-1)
DT-102	Food Safety and Public Health	3 (2-1)
Total		16
Semester-III		
DT-201	Dairy Plant Machinery and Layout	3(2-1)
DT-203	Chemistry of Dairy Products	3(2-1)
DT-205	Fluid Mechanics	3(2-1)
DT-207	Milk Processing Technology	3(2-1)
MICR-201	Introduction to Microbiology	3(2-1)
LM-201	Introduction to Livestock Production	2(1-1)

STAT-201	Statistics	2(2-0)
Total		19
Semester-IV		
MICR-202	Food and Industrial Microbiology	3(2-1)
DT-202	Thermodynamics	3(2-1)
DT-204	Traditional Dairy Products	3(2-1)
DT-206	Marketing Management and International Trade	2(2-0)
STAT-202	Quantitative Reasoning-II	3(3-0)
ABM-202	Entrepreneurship	2(2-0)
RS-202	Anthropology	2(2-0)
Total		18
Semester-V		
DT-301	Dairy Microbiology	3(2-1)
DT-303	Heat Transfer and Refrigeration	4(3-1)
DT-305	Fermented Dairy Products	4(3-1)
DT-307	Fat Rich Dairy Products	3(2-1)
DT-311	Dairy Biotechnology	3(2-1)
Total		17
Semester-VI		
DT-302	Dairy Plant Management and Sanitation	3(2-1)
DT-304	Microbiology of Starter Culture	3(2-1)
DT-306	Food Packaging	3(2-1)
DT-308	Dairy By-Products Technology	3(2-1)
DT-310	Food Engineering	3(2-1)
FST-302	Food Laws and Food Safety Management Systems	2(2-0)
Total		17
Semester-VII		
DT-401	Ice Cream and Frozen Desserts	3(2-1)
DT-403	Condensed and Dried Milk Products	3(2-1)
DT-405	Sensory Evaluation of Food Products	3(2-1)
DT-409	Quality Assurance in Food Industry	3(2-1)
FST-401	Food Processing and Preservation	3(2-1)
CP-401	Capstone Project	3(0-3)
Total		18

Semester-VIII		
DT-402	Dairy Products Research and Development	3(2-1)
DT-404	Dairy Supply Chain Management	2(2-0)
INT-402	Internship	3(0-3)
Total		08
Grand Total		131

B.S. (HONS.) POULTRY SCIENCES

Poultry Science is a specialized field within animal and agricultural sciences that focuses on the biology, management, and production of poultry species such as chickens, turkeys, quails, parrots, ducks, and ostriches. This degree program provides students with comprehensive knowledge and skills related to poultry breeding, nutrition, health, behavior, and management practices. Courses cover disease prevention, care, and overall well-being of poultry. Students learn about dietary needs and feed formulations to optimize production and focus on improving poultry breeds for better productivity and resilience. The program also covers post-harvest processing, food safety, and marketing strategies for poultry products and provides opportunities for conducting research to innovate and improve poultry production practices. By pursuing a degree in Poultry Science, students are equipped to contribute to a critical sector that impacts food production, economic development, and environmental sustainability.

Course No.	Title	Cr. Hrs
Semester-I		
PS-101	Introduction to Poultry Science	3 (2-1)
PS-103	Poultry Housing and Equipment	3 (2-1)
ENG-101	Functional English	3 (2-0)
RS-101	Civic and Community Engagement (Rural Sociology)	2 (2-0)
MATH-101	Natural Science (Functional Mathematics)	3 (3-0)
IS/EB-101	Islamic Studies/Ethics (optional for Non-Muslim Student)	2 (2-0)
ICT-101	Application of Information and communication Technology	3 (2-1)
Total		19

Semester-II		
PS-102	Fowl Biology	3 (2-1)
PS-104	Broiler Production and Management	4 (2-2)
BCH-102	Introductory Biochemistry	3 (2-1)
SS-102	Ideology and Constitution of Pakistan	2 (2-0)
ENG-102	Expository Writing	3 (3-0)
MATH-102	Quantitative Reasoning -I	3 (3-0)
Total		18
Semester-III		
PS-201	Layer Production & Management	4 (2-2)
PS-203	Principles of Incubation & Hatchery Management	3 (2-1)
PS-205	Fancy Birds Production	3 (2-1)
ANAT-201	Avian Anatomy & Histology	3 (2-1)
STAT-201	Social Sciences (Statistics)	2 (2-0)
MICR-201	General Microbiology	3 (2-1)
Total		18
Semester-IV		
PS-202	Poultry Feeding Practices	3 (2-1)
PS-204	Avian Physiology	3 (2-1)
PS-206	Environmental control Housing system	3 (2-1)
MICR-202	Avian Immunology	3 (2-1)
ABM-202	Entrepreneurship	2 (2-0)
STAT-202	Quantitative Reasoning-II	3 (3-0)
RS-202	Art and Humanities: Anthropology	2 (2-0)
Total		19
Semester-V		
PS-301	Breeder Production & Management	4 (2-2)
PS-303	Game Birds Farming	3 (2-1)
PS-305	Avian Reproduction & Embryology	3 (2-1)
AN-301	Poultry Feed Formulation & Processing Technology	3 (2-1)
ABG-301	Applied Poultry Breeding	3 (2-1)
Total		16
Semester-VI		
PS-302	Poultry Farm Practices	3 (0-3)

PS-304	Poultry Products Technology	3 (2-1)
PS-306	Poultry Marketing and Economics	3 (2-1)
PS-308	Poultry Hygiene and Bio security	3 (2-1)
PHAR-302	General Pharmacology	3 (2-1)
AN-302	Poultry Feed Industry	3 (2-1)
Total		18
Semester-VII		
PS-401	Avian Medicine	3 (2-1)
PS-403	Poultry Records Keeping	3 (2-1)
PS-405	Rural Poultry Production	3 (2-1)
CP-401	Capstone Project	3 (0-3)
BIOT-401	Introduction of Biotechnology in Poultry	2 (2-0)
ABM-401	Agri-Business Management	3 (3-0)
Total		17
Semester-VIII		
PS-402	Poultry Pathology	3 (2-1)
PS-404	Poultry Behavior and Welfare	3 (2-1)
INT-402	Internship	3 (0-3)
Total		09
Grand Total		134

B.S. (HONS.) FISHERIES AND AQUA CULTURE

The establishment of the Fisheries and Aquaculture section at Sindh Agriculture University Tandojam aims to provide world-class education and knowledge in the field of Fisheries and Aquaculture. This section will focus on practical, innovative research programs to address the problems faced by fish farmers, hatchery managers, industrialists, and other stakeholders in the country. The undergraduate degree program specializing in Fisheries and Aquaculture offers diverse courses that provide students with practical knowledge regarding the farming and management of local fish and shellfish species in different climatic conditions.

Additionally, the facilities available will enable students to conduct problem-oriented research to address local issues encountered by farmers when raising aquatic organisms. Graduates of this program will have job

opportunities in various organizations, including provincial fisheries departments, fisheries development boards, fish feed companies, research and educational institutions, and as fish farm managers.

The core objectives of the program are to achieve rural economic development by incorporating Fisheries and Aquaculture practices into overall rural development plans as a key economic activity.

Course Code	Title	Cr. Hrs
Semester-I		
AQFS-101	introduction to Aquaculture	3(2-1)
AQFS-103	ichthyology	3(2-1)
CCE-101	Civic and Community Engagement (Rural Sociology)	2(2-0)
IS/ EB-101	Islamic Studies/Ethics (optional for Non-Muslim Students)	2(2-0)
ICT-101	Application of Information and Communication Technology	3(2-1)
MATH-101	Natural Science (Functional Mathematics)	3(3-0)
ENG-101	Functional English	3(3-0)
Total Credit Hours		19
Semester-II		
BCH-102	Introductory biochemistry	2(2-0)
AQFS-102	Marine Biology	3(2-1)
AQFS-104	Pond Construction & Designing	3(2-1)
AQFS-106	Fish & Fisheries Biology	3(2-1)
AQFS-108	Fish Physiology	2(1-1)
PS-102	Ideology and Constitution of Pakistan	2(2-0)
ENG-102	Expository Writing	3(3-0)
MATH-102	Quantitative Reasoning-I	3(3-0)
Total Credit Hours		21
Semester-III		
HYDRO-201	Water Quality Management	3(2-1)
AQFS-201	Taxonomy of Fishes	3(2-1)
FN-201	Fish Nutrition	3(2-1)

AQFS-203	Fish Behavior	2(1-1)
MICR-201	Aquatic Microbiology	3(2-1)
AQFS-205	Aquatic Ecology	3(2-1)
STAT—201	Social Sciences (Statistics)	2(2-0)
Total Credit Hours		19
Semester-IV		
RS-202	Arts and Humanities: Anthropology	2 (2-0)
AQFS-202	Aquatic Toxicology	3(2-1)
AQFS-204	Fish Breeding	3(2-1)
HYDRO-202	Limnology	3(2-1)
MICR-202	Fish Immunology	2 (1-1)
ABM-202	Entrepreneurship	2(2-0)
STAT—202	Quantitative Reasoning-II	3(3-0)
Total Credit Hours		18
Semester-V		
AQFS-301	Integrated Fish Farming	3(2-1)
BIOT-301	Biotechnology in Aquaculture	3(2-1)
AQFS-303	Advance Aquaculture	3(2-1)
AQFS-305	Ornamental Fish Production & Aquaria Management	3(2-1)
PARA-301	Fish Parasitology	2(1-1)
AQFS-307	Fish Technology	3(2-1)
Total Cr. Hr.		17
Semester-VI		
AQFS-302	Fish Processing and Quality Assurance	3(2-1)
BOT-302	Aquatic Macrophytes and Management	3(2-1)
PATH-302	Fish Hygiene and Health Management	3(2-1)
AQFS-304	Inland Fisheries Management	3(2-1)
AQFS-306	Fisheries Management and Regulation	3(2-1)
Total Cr. Hr.		15
Semester-VII		
AQFS-401	Fish Post-Harvest Technology	3(2-1)
AQFS-403	Fisheries Extension and Feasibility	2(2-0)
AQFS-405	Human Resource Management & Project	2(2-0)

	Management	
AQFS-407	Biodiversity and Conservation	2(1-1)
AQFS-409	Principle of Animal Life	3(2-1)
CP-401	Capstone Project	3 (0-3)
Total Cr. Hr.		15
Semester-VIII		
AQFS-402	Fisheries Economics and Marketing	3(2-1)
AQFS-404	Fish Farming Techniques and Hatchery Management	3(2-1)
INT-402	Internship	3(0-3)
Total Cr. Hr.		09
Grand Total		133



KHAIRPUR COLLEGE OF AGRICULTURAL ENGINEERING & TECHNOLOGY



KHAIRPUR COLLEGE OF AGRICULTURAL ENGINEERING & TECHNOLOGY

Agriculture is the world's largest and most important industry, responsible for feeding and clothing an ever-growing global population. Today, agriculture worldwide is increasingly adopting new technologies such as micro-irrigation methods, Global Positioning Systems (GPS) supported by water regulation and farm mechanization, laser leveling, Geographic Information Systems (GIS), and Remote Sensing (satellite technology). These innovations are used for estimating soil salinity, monitoring water availability in channels, canals, rivers, and dams, assessing food intensity, determining crop water requirements, managing pests, evaluating cropped areas, and improving crop health and yield. Such advancements are crucial for meeting the growing demand for food and fiber and can be effectively managed by Agricultural Engineers.

Agricultural Engineering has immense potential to enhance the quality of life by increasing the viability and profitability of production, post-production, and other rural and urban enterprises. It can also boost labor productivity, reduce drudgery, improve welfare, and design appropriate health and safety interventions. Additionally, Agricultural Engineering can contribute to increased output by minimizing pre- and post-production losses through improved harvesting, handling, and processing. Effective management of soil and water resources can also be achieved through better engineering applications.

To address the needs of the community, an Agricultural Engineering College can serve the people of upper Sindh and the entire province. The college will provide Agricultural Engineering and technological knowledge to the rural masses of Sindh and produce highly trained professionals for the successful implementation of agro-based developmental programs.

The Khairpur College of Agricultural Engineering and Technology, a constituent college of Sindh Agriculture University Tandojam, is the first of its kind in Sindh, catering to the needs of the region in Agricultural Engineering. It is established on 23 acres of previously abandoned land

along the old National Highway near IBA Community College, Khairpur Mir's.

The college aims to lead in addressing technological challenges and managing them for sustainable agricultural development in Sindh and the country at large. It will provide high-quality education, engage in productive research, and conduct outreach activities. The college is committed to refining the vision and skills of graduates in the fields of agricultural engineering, software engineering, food sciences, and biotechnology.

Currently, the college offers a four-year Bachelor of Engineering in Agriculture (B.E. (AGR)), Bachelor of Science (Hons) in Food Science & Technology (BS (FST)), Bachelor of Science in Software Engineering (BS (SE)), and Bachelor of Science (Agri.) Hons in Biotechnology (B.Sc (Agri. Hons.) (BT)) degree programs.

LOCATION

The college is located at a longitude of 68.771° E and a latitude of 27.565° N in Khairpur Mir's, Sindh province. It is situated on the left bank of the Rohri Canal, near the Institute of Business Administration (IBA) Community College, along the Old National Highway. Khairpur Railway Station is approximately 6 km away, while Sukkur Airport is about 25 km from the college.

MISSION

The mission of the college is to produce young, energetic, and highly motivated professionals in agricultural engineering, software engineering, food technology, and biotechnology. These graduates will uphold and advance the integrity, honor, dignity, and development of their respective fields.

VISION

The college focuses on developing students' knowledge and skills in agricultural engineering, software engineering, food technology, and biotechnology by providing professional and academic training in key areas such as Soil and Water Resources Engineering, Mechanization, Farm

Machinery, Postharvest Technology and Food Processing Engineering, Agri-business Management, computer software, food sciences, and biosciences.

OBJECTIVES

- Produce high-quality engineering graduates as needed for the agricultural and agro-industrial development of the country. Advance the frontiers of engineering knowledge and generate technologies to support the country's agri-enterprise development goals.
- Promote the effective use of useful technologies by ensuring that clients practice engineering and technology effectively in areas such as farm power and machine systems, soil and water management, natural resources management, software engineering, food technology, and biotechnology.
- Demonstrate proficiency in fundamental engineering skills, technical knowledge, and professional and personal skills appropriate to their profession.
- Prepare students for future challenges and opportunities in agricultural engineering through the application and discovery of knowledge.
- Organize short courses and training programs on topics such as the design and testing of agricultural machinery, manufacturing technology for agricultural machinery, tractor operation, and maintenance of agricultural implements. Conduct on-the-job training and refresher courses on land and water management strategies, tube well operation and maintenance, computer-aided design, low-cost farm housing, food and fruit processing, utilization, marketing, and postharvest technology.
- Offer consultancy services to national and international organizations on projects of national importance.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs) OF B.E.

The Program Educational Objectives (PEOs) of the B.E. (AGRI) program are as follows:

- PEO 1:** Graduates are expected to exhibit an in-depth knowledge of engineering principles, apply modern tools and the latest technologies, and possess the appropriate skills and attitudes to investigate and resolve agricultural engineering-related issues.
- PEO 2:** Graduates are expected to develop skills to work independently as well as in diverse teams, provide innovative solutions to

agriculture-related problems, and effectively communicate the results to stakeholders.

- PEO 3:** Graduates are expected to undertake professional practice while considering social, ethical, and environmental boundaries within which engineering is practiced, both locally and globally.
- PEO 4:** Graduates are expected to demonstrate teamwork, interpersonal skills, a commitment to perpetual learning, and ongoing professional growth.

The twelve graduate attributes outlined by the Pakistan Engineering Council (PEC) in the Accreditation Manual 2019 have been adopted by the Agricultural Engineering program as the Program Learning Outcomes (PLOs) for its Bachelor of Engineering (B.E.) program. It is ensured that these PLOs are achieved through the respective Course Learning Outcomes (CLOs) of the curriculum, assessed using both direct and indirect methods. The curriculum has also been updated, and CLOs for each course are designed with difficulty levels aligned with Bloom's Taxonomy, including cognitive, affective, and psychomotor domains.

JOB OPPORTUNITIES

Graduate Engineers holding a B.E. (AGRI) degree are eligible for registration as Professional Engineers with the Pakistan Engineering Council (PEC). They are qualified to work as Professional Engineers in both public and private organizations in positions that require the expertise of an agricultural engineer.

Our graduate engineers hold key positions in federal and provincial organizations, including universities and research institutions such as the Environmental Protection Agency (EPA), Agriculture Research, Agriculture Extension, Agricultural Engineering, Sindh On-Farm Water Management (SOFWM), Pakistan Agriculture Storage Corporation (PASCO), Pakistan Agricultural Research Council (PARC), Pakistan Council of Research in Water Resources (PCRWR), Water and Power Development Authority (WAPDA), Sindh Irrigation and Drainage Authority (SIDA), International Waterlogging and Salinity Research Institute (IWASRI), Drainage and Reclamation Institute of Pakistan (DRIP), Lower Indus Water

Management and Reclamation Research (LIM) Project, Zarai Taraqati Bank (ZTBL), International Water Management Institute (IWMI), Rural Development Department, various semi-government and autonomous bodies, and NGOs such as SAFWCO, WWF, NRSP, SPO, RDF, as well as other agricultural departments, consulting companies, and related sectors.

ACADEMIC STAFF		
Engr. Prof. Dr. Ali Raza Shah	PhD (SAU)	Professor & Principal
Engr. Prof. Dr. Hafeez-u-Rehman Mangio	PhD (SAU)	Professor & Chairman
Engr. Dr. Irshad Ali Mari	PhD (China)	Associate Professor (Work at SAU)
Engr. Waqar Ahmed Bhayo	M.E. (Agri.)	Assistant Professor
Engr. Saeed Ahmed Dahri	M.E. (Agri.)	Assistant Professor
Engr. Abid Ali Abro	M.E. (Agri.)	Assistant Professor
Engr. Imtiaz Ali Dahri	M.E. (Agri.)	Assistant Professor
Dr. Liaquat Ali Lund	PhD (Malaysia)	Assistant Professor (Adhoc)
Engr. Dr. Mazhar H. Tunio	PhD (China)	Lecturer
Engr. Sheeraz Aleem Brohi	M.E. (Agri.)	Lecturer (Work at SAU)
Mr. Munawar Ali Seelro	M.Phil. (IBA)	Lecturer (Study Leave)
Mr. Abid Ali Randhawa	M.Sc. (Agri.) Hons.	Lab. Lecturer (Work at UK-Campus)
Engr. Ajeet Kumar Kaka	M.E. (Agri.)	Lecturer
Engr. Zaheer Ahmad Aqlani	M.E. (Agri.)	Lab. Lecturer
Engr. Azhar Mustafa Soomro	M.E. (Env.) MUET	Lab. Lecturer
Ms. Paras Pathan	M.A (English), SALU	Teaching Assistant
Dr. Aftab Ali Kubar	PhD (China)	Visiting Faculty

Dr. Sajjad Ali Khuhro	PhD (China)	Visiting Faculty
Dr. Abdul Razaque Rajpar	PhD (China)	Visiting Faculty
Dr. Kamran Ali Soomro	M.Phil. (SAU)	Visiting Faculty
Mr. Saeed Ahmed Mahar	M.Sc (China)	Visiting Faculty
Mr. Shakir Hussain Talpur	MSIT (SAU)	Visiting Faculty
Mr. Aafaque Ahmed Keerio	M.Sc (SAU)	Visiting Faculty
Mr. Makan Khan Kubar	M.A (SALU)	Visiting Faculty

SCHEME OF STUDIES FOR B.E (AGRI.) UNDER OBE (LEVEL-11)		
Course Code	Title of Course First to Final Prof. B.E (Agri.)	C. Hrs.
SEMESTER-I		
AG-101	Basic Agriculture	2(1 + 1)
BE-103	Calculus and Analytical Geometry	3(3 + 0)
FPM-105	Metallurgy & Workshop Practices	3(2 + 1)
LWM-107	Soil Science	3(2 + 1)
EE-109	Industrial Chemistry	2(1+1)
PS-111	Pak Studies and Global Perspective	2(2 + 0)
IT-113	Information & Communication Technologies	3(2 + 1)
SEMESTER-II		
BE-102	Applied Physics	3(2 + 1)
BE-104	Linear Algebra	3(3 + 0)
FPM-106	Engineering Drawing & Graphics	2(1 + 1)
ID-108	Soil Mechanics	3(2 + 1)
LWM-110	Surveying and Levelling	3(1 + 2)
FS-112	Engineering Materials	2(1 + 1)
ENG-114	Functional English	2(2 + 0)
SEMESTER-III		
BE-201	Engineering Mechanics	3(2 + 1)
FPM-203	Applied Thermodynamics	2(1 + 1)
ID-205	Engineering Hydrology	3(2 + 1)
EE-207	Climate Change & Water	2(1 + 1)

FS-209	Strength of Materials	3(2 + 1)
ENG-211	Communication Skills	2(2 + 0)
IS-213	Islamic Studies and Ethics	2(2 + 0)
SEMESTER-VI		
BE-202	Differential Equations	3(3 + 0)
FPM-204	IC Engines and Tractors	3(2 + 1)
ID-206	Fluid Mechanics	3(2 + 1)
LWM-208	GIS & Remote Sensing	2(1 + 1)
EE-210	Environmental Engineering	3(2+1)
SE-212	Social Sci Elective-I (Sociology for Engineers)	2(2 + 0)
IT-214	Artificial Intelligence (AI)	2(1 + 1)
SEMESTER-V		
BE-301	Numerical Analysis	2(2 + 0)
FPM-303	Machine Design	3(2 + 1)
ID-305	Open Channel Hydraulics	3(2 + 1)
LWM-307	Farm irrigation systems	2(1 + 1)
FS-309	Rural Electrification	2(1 + 1)
EC-311	Management Elective-I (Entrepreneurship)	2(2 + 0)
STAT-313	Probability and Statistics	3(3 + 0)
SEMESTER-VI		
FPM-302	Farm Machinery and Automation	3(2 + 1)
FPM-304	Instrumentation and Control	2(1 + 1)
ID-306	Pumps and Tubewells	2(1 + 1)
EE-308	MDE Elective-I (Wastewater Engineering)	3 (2 + 1)
FS-310	Engg. Elective-I (Landscape Engineering)	2(1 + 1)
EC-312	Social Sci. Elective-I (Economics for Engineers)	2(2 + 0)
ENG-314	Technical Writing and Presentation Skills	2(2 + 0)
SEMESTER-VII		
FPM-401	Earth Moving Machinery	2 (1 + 1)
ID-403	Irrigation Engineering	3(2 + 1)
LWM-405	Engg. Elective-II (Soil and Water Conservation Engineering)	3(2 + 1)
EE- 407	Solid Waste Management	3(2 + 1)
FS-409	Farm Structures and Control Sheds	3(2 + 1)

AE-411	Final Year Design Project (FYDP)-I	3(0 + 3)
AE-413	Internship (6 to 8 weeks)	0(0 + 0)
SEMESTER-VIII		
ID-402	Drainage Engineering	3(2 + 1)
LWM-404	Engg. Elective-III (Farm Water Management)	3(2 + 1)
FS-406	Agricultural Process Engineering	3(2 + 1)
EE-408	MDE Elective-II (Alternate and Renewable Energy)	3(2 + 1)
AE-612	Final Year Design Project (FYDP)-II	3 (0+3)
Grand Total		136 (91+45)

DEPARTMENT OF SOIL AND WATER RESOURCES ENGINEERING

The relationship between crops, soil, water, and climate is quite complex, and understanding this relationship is crucial for enhancing crop yield and ensuring food security. Reliable water supplies for irrigated agriculture are essential to feeding the growing population in developing countries, including Pakistan. However, these resources are declining daily, making their efficient utilization and management crucial for sustainable agriculture. Conversely, poor irrigation water management can lead to problems such as waterlogging and secondary salinization, which can damage fertile agricultural lands.

Water resource, irrigation, and drainage engineers are educated and trained to address the complex issues related to planning, designing, and utilizing available soil and water resources. Effective management is possible only through improved water application methods, conservation techniques, and water management practices. The government of Pakistan has made significant efforts to ensure water supplies for agriculture, industry, and domestic purposes. Over the past 65 years, several major projects have been launched in the fields of irrigation, drainage, and water resources engineering.

Given the complexity of soil and water-related issues, the Department of Soil and Water Resources Engineering has been established at the Khairpur

College of Agricultural Engineering and Technology to produce skilled engineers and scientists in this field.

DEPARTMENT OF POST HARVEST TECHNOLOGY & PROCESS ENGINEERING

With growing concerns about food insecurity, especially in densely populated and underdeveloped regions, the importance of postharvest and agro-food process engineering has increased significantly. In Pakistan, the lack of knowledge about postharvest losses and inadequate storage facilities at the farm level underscores the need to establish a Department of Postharvest Technology and Process Engineering. This department provides knowledge on Farm Structures and Agricultural Process Engineering. Our graduates must be equipped to address challenges related to food quality, nutrients, and preservation, offering viable solutions to serve both societies at large and the farming community.

DEPARTMENT OF FARM POWER AND MACHINERY

The Department of Farm Power and Machinery (FPM) has been established with the aim of applying modern engineering knowledge to increase agricultural productivity, improve product quality, and minimize losses through the use of machinery, tools, and power sources. The mission of the department is to provide leadership and excellence in teaching, research, and outreach in farm power and machinery at the undergraduate level, with plans to expand to the postgraduate level in the future. The department will be well-equipped with facilities including an Agricultural Engineering Workshop, Machinery Hall, Power Units Garage, Mechanical and Electronics Laboratories, Drawing and Design Laboratory, Machine Shop, Welding Shop, and Smithy Shop.

DEPARTMENT OF BASIC AND AGRIBUSINESS MANAGEMENT

The Department of Basic and Agribusiness Management has been established to offer a range of supporting courses, including Applied Mathematics, Applied Physics, Computer Science, and Engineering Mechanics, with a special focus on applications in Agricultural Engineering. Additionally, this department provides courses in social sciences and agribusiness management. The mission of the department is to deliver

leadership and excellence in teaching, research, and outreach in Agribusiness Management, Engineering Mechanics, Computer Science, and Applied Mathematics at the graduate level.

DEPARTMENT OF FOOD SCIENCES & TECHNOLOGY

The Department of Food Sciences and Technology (DFST) was established in 2020 at KCAET, Khairpur Mir's, with the aim of enhancing the quality of education and research in food-related fields. This is particularly relevant given the large quantities of dates, mangoes, and strawberries grown in the Khairpur Mir's district. Currently, the DFST offers a four-year B.Sc. (Hons.) degree in Food Sciences and Technology, providing an educational program that aligns with the curriculum of food technology departments and institutes across the country, in accordance with Higher Education Commission policy.

OBJECTIVES

- To provide high-quality education in the field of food sciences and technology to meet the needs of growers and food industries.
- To conduct research on various aspects of food science and technology.
- To educate rural communities to help alleviate poverty.
- To develop post-harvest technologies aimed at reducing fruit and vegetable waste.

FACILITIES

Several state-of-the-art laboratories have been established as part of the initial setup of the DFST. These laboratories are fully equipped for Food Analysis, Postharvest Technology, Food Microbiology, New Food Product Development, Cereal/Bakery Technology, and Freezing, Drying, and Dehydration. Each laboratory is outfitted with advanced instrumentation such as GC-MS, HPLC, and AAS, as well as commonly used equipment. Additionally, the DFST features cold storage units for dates and other food-related materials, including vegetables and fruits. Other facilities include a computer lab with fiber internet access and a well-established library where students can study relevant materials and engage with peers in their

fields.

JOB OPPORTUNITIES

In Pakistan, food technology graduates have significant opportunities to become self-sufficient by establishing small-scale food businesses, such as bakeries, beverage production units, juice/squash preparation units, and pickles, among others. In addition to individual entrepreneurial ventures, there is a strong demand for food science and technology graduates in various sectors, including bread baking companies, national food companies, oil and beverage industries, fruit processing exporters, and government organizations such as the Sindh Horticulture Research Institute Mirpurkhas and the Nuclear Institute of Agriculture. Graduates are also sought after by universities, private and semi-government companies, banks, and agricultural research institutes.

SCHEME OF STUDIES OF B.Sc. (HONS.) IN FOOD SCIENCE & TECHNOLOGY

Course Code	Title of Course	Cr. Hrs
B.Sc (Hons.) Part-I 1st Semester		
SS-301	Introduction to Soil Science-I	3(2-1)
AGR-301	Basic Agriculture	3(2-1)
BT-301	Introductory Biotechnology	3(2-1)
ENT-301	Introductory Entomology	2(1-1)
PPT-301	Introduction to Plant Protection	2(1-1)
IS/ EB-301	Islamic Studies/	2(2-0)
	Ethics (optional for Non-Muslim Students)	
NS-301	Natural Science: Math/Biology	3(3-0)
ENG-301	Functional English	3(3-0)
B.Sc (Hons.) Part-I 2nd Semester		
PBG-302	Introductory Plant Genetics	3(2-1)
HORT-302	Introductory Horticulture	3(2-1)
AGR-302	Field Crop Production-I	3(2-1)
PP-302	Introduction to Plant Pathogens	2(1-1)
EP-302	Entrepreneurship	2(2-0)

RS-302	Civic and Community Engagement: Rural Sociology	2(2-0)
ENG-302	Expository Writing	3(3-0)
MATH-302	Quantitative Reasoning-I	3(3-0)
B.Sc (Hons.) Part-II 1st Semester		
PBG-401	Introductory Plant Breeding	3(2-1)
CP-401	Introduction to Biochemistry	3(2-1)
HORT-401	Principles of Orchard and Garden Establishment	3(2-1)
FOR-401	Introduction to Forestry	3 (2-1)
AEE-401	Introduction to Agriculture Extension and Education	2 (2-0)
AHV-401	Animal Husbandry	2 (2-0)
ICT-401	Application of Information and Communication Technology	3(2-1)
ArH-401	Arts and Humanities: Agriculture & Civilization/anthropology	2 (2-0)
B.Sc (Hons.) Part-II 2nd Semester		
SS-402	Introduction to Soil Science-II	3(2-1)
CP-402	Introductory Crop Physiology	3(2-1)
BT-402	General Biotechnology	2(1-1)
FST-402	Introductory Food Sciences & Technology	2(1-1)
FPM-402	Farm Mechanization	2(1-1)
PS-402	Ideology and Constitution of Pakistan	2(2-0)
AGEC-402	Social Sciences: Agriculture Economics	2(2-0)
STAT-402	Quantitative Reasoning-II	3(3-0)

Course Code	Title of Course	Cr. Hrs
B.Sc. (Hons.) Part-III 1st Semester		
FST-501	Food Biotechnology	3(2+1)
FST-503	Sugar Technology	3(2+1)
FST-505	Postharvest Technology	3(2+1)
FST-507	Food Additives	3(2+1)

FST-509	Cereal Technology	3(2+1)
FST-511	Food Safety	2(2-0)
FST-513	Poultry and Egg Processing	3(2+1)
B.Sc. (Hons.) Part-III 2nd Semester		
FST-502	Confectionary and Snack Foods	3(2+1)
FST-504	Bakery Products Technology	3(2+1)
FST-506	Food Packaging	3(2+1)
FST-508	Food Laws and Regulations	2(2-0)
FST-510	Sea Food Processing Technology	3(2+1)
FST-512	Dairy Technology	3(2+1)
B.Sc. (Hons.) Part-IV 1st Semester		
FST-601	Community Nutrition	3(2+1)
FST-603	Meat Technology	3(2+1)
FST-605	Beverage Technology	3(2+1)
FST-607	Food Product Development	3(2+1)
FST-609	Research Projects and Scientific Writing	2(1-1)
FST-611	Milk and Meat Hygiene and Public Health	3(2+1)
B.Sc. (Hons.) Part-IV 2nd Semester		
FST-602	Food Quality Management	2(2-0)
FST-604	Extrusion Technology	3(2+1)
FST-606	Sensory Evaluation of Foods	3(2+1)
FST-608	Food Plant Layout and Sanitation	2(2-0)
FST-610	Internship & Report Writing	4(0-4)
Grand Total		143 (102+41)

DEPARTMENT OF BIOTECHNOLOGY

Biotechnology is the “application of scientific and engineering principles to the processing of materials by biological agents to provide goods and services; new biotechnology involves the use of cellular and molecular

processes to solve problems or make products. Biotechnology has numerous applications in the industrial sector, agriculture, pharmaceuticals, healthcare, food, energy, the environment, and so on.

The Department of Biotechnology was established at KCAET, Khairpur Mir, in 2020 with the goal of making an impact through research, technology-based training, and innovation. The department initially offers a four-year B.Sc. (Hons.) degree in Biotechnology. Several laboratories have been established to provide high-quality education in biotechnology. In addition to academic programs, the department includes tissue culture and molecular biology/genetic engineering laboratories to support national food security.

OBJECTIVES

- To provide high-quality education, research, innovation, and technological training.
- To advance and strengthen agricultural biotechnology.
- To develop and apply fundamental biotechnology knowledge for the efficient management of environmentally sustainable and progressive agriculture.
- To increase interaction between agriculture, medicine, the environment, fisheries, food processing, renewable energy, and other fields that share the common denominator of cells and their derived products.

Course Code	Title of Courses	Cr. Hrs
B. Sc. (Agri.) Hons. P-I (1st Semester)		
SS-301	Introduction to Soil Science-I	3(2-1)
AGR-301	Basic Agriculture	3(2-1)
BT-301	Introductory Biotechnology	3(2-1)
ENT-301	Introductory Entomology	2(1-1)
PPT-301	Introduction to Plant Protection	2(1-1)
IS/ EB-301	Islamic Studies/	2(2-0)
	Ethics (optional for Non-Muslim Students)	
NS-301	Natural Science: Math/Biology	3(3-0)

ENG-301	Functional English	3(3-0)
B. Sc. (Agri.) Hons. P-I (2nd Semester)		
PBG-302	Introductory Plant Genetics	3(2-1)
HORT-302	Introductory Horticulture	3(2-1)
AGR-302	Field Crop Production-I	3(2-1)
PP-302	Introduction to Plant Pathogens	2(1-1)
EP-302	Entrepreneurship	2(2-0)
RS-302	Civic and Community Engagement: Rural Sociology	2(2-0)
ENG-302	Expository Writing	3(3-0)
MATH-302	Quantitative Reasoning-I	3(3-0)
B. Sc. (Agri.) Hons. P-II (1st Semester)		
PBG-401	Introductory Plant Breeding	3(2-1)
CP-401	Introduction to Biochemistry	3(2-1)
HORT-401	Principles of Orchard and Garden Establishment	3(2-1)
FOR-401	Introduction to Forestry	3 (2-1)
AEE-401	Introduction to Agriculture Extension and Education	2 (2-0)
AHV-401	Animal Husbandry	2 (2-0)
ICT-401	Application of Information and Communication Technology	3(2-1)
ArH-401	Arts and Humanities: Agriculture & Civilization/anthropology	2 (2-0)
B. Sc. (Agri.) Hons. P-II (2nd Semester)		
SS-402	Introduction to Soil Science-II	3(2-1)
CP-402	Introductory Crop Physiology	3(2-1)
BT-402	General Biotechnology	2(1-1)
FST-402	Introductory Food Sciences & Technology	2(1-1)
FPM-402	Farm Mechanization	2(1-1)
PS-402	Ideology and Constitution of Pakistan	2(2-0)
AGEC-402	Social Sciences: Agriculture Economics	2(2-0)
STAT-402	Quantitative Reasoning-II	3(3-0)

Course Code	Title of Course	Cr. Hrs.
B.Sc (Agri) Hons. P-III (1st Semester)		
BT-501	Metabolism-I	3(2+1)
BT -503	Molecular Biology I	3(2+1)
BT -505	Microbiology	3(2+1)
BT -507	Cell Biology	3(2+1)
BT -509	Analytical Chemistry and Instrumentation	3(2+1)
STAT-511	Elementary Statistics	3(2+1)
B.Sc (Agri) Hons. P-III (2nd Semester)		
BT -502	Metabolism-II	3(2+1)
BT -504	Molecular Biology II	3(2+1)
BT -506	Immunology	3(2+1)
BT -508	Cell and Tissue Culture	3(2+1)
CP-510	General Biochemistry	3(2+1)
B.Sc (Agri) Hons. P-IV (1st Semester)		
BT -601	Bioinformatics	3(2+1)
BT -603	Recombinant DNA Technology	3(2+1)
BT -605	Microbial Biotechnology	3(2+1)
BT-607	Skills and Research Methodology for Biotechnologists	3(2+1)
BT-611	Plant Biotechnology	3(2+1)
B.Sc (Agri) Hons. P-IV (2nd Semester)		
BT -602	Metabolomics, Proteomics and Genomics	2(2-0)
BT -604	Principles of Biochemical Engineering	3(2+1)
BT -606	Environmental Biotechnology	3(2+1)
BT -610	Internship and Report writing	4(0-4)
Grand Total		136 (93+43)

DEPARTMENT OF SOFTWARE ENGINEERING

The software engineering program offers a project-rich learning experience to educate software engineers for success in a rapidly evolving computing field. Software plays a central role in nearly every aspect of daily life, including communications, government, manufacturing, banking, finance, education, transportation, entertainment, medicine, agriculture, and law.

Software engineering derives its essence from computer science, similar to how other engineering disciplines derive from natural or life sciences. It emphasizes issues of process, design, measurement, analysis, and verification, providing a strong foundation in engineering principles and practices as applied to software development.

Software engineering involves the application of a systematic, disciplined, and quantifiable approach to the design, development, operation, and maintenance of software systems. The program aims to train students in all aspects of the software life cycle, from specification and analysis to design, testing, maintenance, and the evolution of software products.

Course Code	Title of Courses BS (Software Engineering)	Cr. Hrs
Semester-I		
SE-301	Introduction to Information & Communication Technologies	3(2+1)
SE-303	Programing Fundamentals	4(3+1)
BE-305	Calculus and Analytical Geometry	3(3+0)
BE-307	Applied Physics	3(3+0)
ENG-309	English Composition & Comprehension	2(2+0)
IS/EHS-311	Islamic Studies/Ethics	2(2+0)
Semester-II		
SE-302	Object Oriented Programming	4(3+1)
SE-304	Discrete Structure	3(3+0)
SE-306	Software Engineering	3(3+0)
SE-308	Functional Accounting	3(3+0)
ENG-310	Communication and Presentation skills	3(3+0)
PS-312	Pakistan Studies	2(2+0)
Semester-III		
SE-401	Data Structure and Algorithm	4(3+1)
SE-403	Software Requirement Engineering	3(3+0)
SE-405	Human Computer Inter Interaction	3(3+0)

SE-407	Organizational Behavior	3(3+0)
BE-409	Linear Algebra	3(3+0)
Semester-IV		
SE-402	Operating Systems	4(3+1)
SE-404	Database Systems	4(3+1)
SE-406	Software Design & Architecture	3(2+1)
SE-408	Bioinformatics	3(3+0)
Stat-410	Probability and Statistics	3(3+0)
Semester-V		
SE-501	Software Construction and Development	3(2+1)
SE-503	Computer Networks	4(3+1)
SE-505	Business Process Engineering	3(3+0)
SE-507	Simulation and Modeling	3(3+0)
ENG-509	Technical & Business Writing	3(3+0)
Semester-VI		
SE-502	Software Quality Engineering	3(3+0)
SE-504	Professional Practice	3(3+0)
SE-506	Information Security	3(3+0)
SE-508	Web Engineering	3(3+0)
SE-510	Formal Methods in Software Engineering	3(3+0)
SE-512	Computer Graphics	3(2+1)
Semester-VII		
SE-601	Software Project Management	3(3+0)
SE-603	Big Data Analytics	3(2+1)
SE-605	Mobile Application Development	3(2+1)
SE-607	Cloud Computing	3(2+1)
SE-609	Geographic Information Systems	3(2+1)
Semester-VIII		
SE-602	Artificial Intelligence & Machine Learning	3(2+1)
SE-604	Virtual & Augmented Reality	3(2+1)

SE-606	Final Year Project	6(0+6)
	Grand Total	136 (91+45)



جینئی شاہ محمود قریشی
پاکستان کا ایک اہم مقام
تمام اساتذہ کرام کو مبارکبادیں

جینئی عمران
خان

SAU CAMPUS, UMERKOT

SINDH AGRICULTURE UNIVERSITY SUB-CAMPUS, UMERKOT

Sindh Agriculture University Sub-Campus, Umerkot, is the first constituent sub-campus of Sindh Agriculture University, Tandojam. The campus is located in Umerkot city and began its primary operations in the building of the Vocational Training Centre (B) Umerkot.

Bachelor's degree programs are offered in various disciplines, including (i) BSc (Agri) Hons, (ii) BS Information Technology, (iii) BS Software Engineering, and (iv) BS English (Language & Literature). These programs aim to educate students from all over Sindh. Umerkot, Tharparkar, Mirpurkhas, and Sanghar are major beneficiaries, with a larger number of seats reserved for students from these districts.

Graduates of Sindh Agriculture University Sub-Campus, Umerkot, will serve in various fields related to agriculture and information technology in public and private sectors worldwide.

VISION

Transforming the lives of the communities of the region through agriculture and computer learning.

MISSION

The fundamental mission of Sindh Agriculture University Sub-campus at Umerkot is to meet the needs of its students by providing educational experiences in the field of agriculture and computer which is necessary to develop their potential for premier leadership, personal growth, and career success. Based upon student needs, the Campus mission focuses on offering a broad undergraduate curriculum consisting of tracks and concentrations in agricultural science and Information Technology.

OBJECTIVES

1. To emphasize a primary commitment to students through quality teaching from well prepared, technologically proficient, professionally competent faculty.
2. To provide "hands-on" computer skills and agricultural experience through classroom, experiential and farm laboratory instruction.
3. To perform practical research and/or remain technologically proficient through involvement in research-oriented activities.

ACADEMIC STAFF

Department of Agronomy

Mr. Muhammad Saleem Chang	M.Sc. (SAU)	Lecturer
Dr. Abdul Hafeez Laghari	PhD (China)	Lecturer (Contract)
Dr. Shoaib Ahmed Hakro	PhD (China)	Lecturer (Contract)

Department of Plant Protection

Mr. Naveed Ahmed Abbasi	M.Sc. (SAU) Study Leave	Lecturer
Dr. Muhammad Azeem Khaskheli	PhD (China)	Lecturer (Contract)

Department of Soil Science

Dr. Vishan Das Suthar	PhD (SAU)	Assistant Professor
Mr. Zulfiqar Ali Mari	M.Sc. (SAU)	Lecturer (Contract)

Department of Information Technology

Ms. Lubna Khoso	MSIT (SAU)	Lecturer (Adhoc)
Mr. Naeem Ali Kubar	MSIT (SAU)	Lecturer (Adhoc)
Ms. Saima Bhutto	BSIT (SAU)	Lab. Lecturer (Contract)
Mr. Yasir Ali Mari	BSIT (SAU)	Lab. Lecturer (Contract)
Ms. Sahrish Sahito	BSIT (SAU)	Lab. Lecturer (Contract)

Department of English (Language & Literature)

Mr. Abdul Majeed Mangrio	MS (Linguistics)	Visiting Faculty
Mr. Mahadev Manghwar	BS English	Visiting Faculty

Allied Sciences

Dr. Ayaz Ali Soomro	PhD (China)	Assistant Professor
Muhammad Nawaz	M.Phil. (MUET)	Lecturer

COURSES TO BE STUDIED IN FIRST TWO YEARS (FOUR SEMESTER) IN ALL DISCIPLINES OF BSC (AGRI.) HONS

B. Sc. (Agri.) Hons. P-I Semester-I

Course Code	Title of Courses	Cr. Hrs
SS-301	Introduction to Soil Science-I	3(2-1)
AGR-301	Basic Agriculture	3(2-1)
BT-301	Introductory Biotechnology	3(2-1)
ENT-301	Introductory Entomology	2(1-1)
PPT-301	Introduction to Plant Protection	2(1-1)
IS/ EB-301	Islamic Studies/Ethics (optional for Non-Muslim Students)	2(2-0)
NS-301	Natural Science: Math/Biology	3(3-0)
ENG-301	Functional English	3(3-0)

B. Sc. (Agri.) Hons. P-I Semester-II

PBG-302	Introductory Plant Genetics	3(2-1)
HORT-302	Introductory Horticulture	3(2-1)
AGR-302	Field Crop Production-I	3(2-1)
PP-302	Introduction to Plant Pathogens	2(1-1)
EP-302	Entrepreneurship	2(2-0)
RS-302	Civic and Community Engagement: Rural Sociology	2(2-0)
ENG-302	Expository Writing	3(3-0)
MATH-302	Quantitative Reasoning-I	3(3-0)

B. Sc. (Agri.) Hons. P-II Semester-III

PBG-401	Introductory Plant Breeding	3(2-1)
CP-401	Introduction to Biochemistry	3(2-1)
HORT-401	Principles of Orchard and Garden Establishment	3(2-1)
FOR-401	Introduction to Forestry	3 (2-1)

AEE-401	Introduction to Agriculture Extension and Education	2 (2-0)
AHV-401	Animal Husbandry	2 (2-0)
ICT-401	Application of Information and Communication Technology	3(2-1)
ArH-401	Arts and Humanities: Agriculture & Civilization/anthropology	2 (2-0)

B. Sc. (Agri.) Hons. P-II Semester-IV

SS-402	Introduction to Soil Science-II	3(2-1)
CP-402	Introductory Crop Physiology	3(2-1)
BT-402	General Biotechnology	2(1-1)
FST-402	Introductory Food Sciences & Technology	2(1-1)
FPM-402	Farm Mechanization	2(1-1)
PS-402	Ideology and Constitution of Pakistan	2(2-0)
AGEC-402	Social Sciences: Agriculture Economics	2(2-0)
STAT-402	Quantitative Reasoning-II	3(3-0)

DEPARTMENTS

Four departments including Agronomy, Soil Science, Plant Protection, and Information Technology offer graduate degree programs. These departments are liable to offer course work and internship leading to bachelor's degree. The Graduate Degree Program of all four departments offer a four-year plan based on 8 semesters with specialization any one of the four major disciplines through following departments:

- Agronomy
- Soil Science
- Plant Protection
- Information Technology
- English (Language & Literature)
- Software Engineering

DEPARTMENT OF AGRONOMY

Agronomy is concerned with the production management of various crops. The national economy is based on the agriculture and agronomy is the one of the most vital fields of agricultural sciences. This department is organized and implemented in a manner which enables learners to acquire and develop competencies in crop production, management, crop research and research dissemination and entrepreneurial skills through learning activities and experiences that are based on real agricultural problems.

COURSES OFFERED FOR DEPARTMENT OF AGRONOMY

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
AGR-501	Arid & Rain-fed Agriculture	3 (2+1)
AGR-503	Agro-Technology of Major Crops	3 (2+1)
AGR-505	Field Crop Physiology	3 (2+1)
AGR-507	Introduction to Crop Modelling	3 (2+1)
AGR-509	Seed Production Technology	3 (2+1)
STAT-511	Elementary Statistics	3 (2+1)
SEMESTER-VI		
AGR-502	Farm Record Maintenance	3 (2+1)
AGR-504	Principles of Weed Science	3 (2+1)
AGR-506	Plant Nutrients and Growth Regulators	3 (2+1)
AGR-508	Medicinal and Special Crops	3 (2+1)
CP-510	General Biochemistry	3 (2+1)
SEMESTER-VII		
AGR-601	Research and Scientific Writing	3 (2+1)
AGR-603	Irrigation Agronomy	3 (2+1)
AGR-605	Forage and Fodder Production	3 (2+1)
AGR-607	Production Technology of Condiments & Spices	3 (2+1)
SUPT-611	Environment and Crop Production	3 (2+1)
SEMESTER-VIII		
AGR-602	Agro Ecology	2 (2+0)

AGR-604	Conservation Agronomy	3 (2+1)
AGR-606	Organic Farming	3 (2+1)
AGR-610	Internship and Report Writing	4 (0+4)

DEPARTMENT OF SOIL SCIENCE

The Department of Soil Science is promoting education and research activities related to the soil and environmental sciences, through conducting basic and applied research in the field of soil fertility, soil salinity, quality assessment of irrigation water and soil. The faculty members are fully involved in teaching of modules and provide guidelines to the students for their academic research and report writing.

COURSES OFFERED FOR DEPARTMENT OF SOIL SCIENCE

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
SS-501	Physical Properties of Soil	3 (2+1)
SS-503	Chemical Properties of Soil	3 (2+1)
SS-505	Soil Fertility and Fertilizer Use	3 (2+1)
SS-507	Instrumentation & Laboratory Techniques	3 (2+1)
SS-509	Soil Genesis & Morphology	3 (2+1)
STAT-511	Elementary Statistics	3 (2+1)
SEMESTER-VI		
SS-502	Salt-Affected Soils and Water Quality	3 (2+1)
SS-504	Soil Survey and Land Evaluation	3 (2+1)
SS-506	Soil and Water Conservation	3 (2+1)
SS-508	Soil-Water-Plant Relationship	3 (2+1)
CP-510	General Biochemistry	3 (2+1)
SEMESTER-VII		
SS-601	Soil Microbiology	3 (2+1)
SS-603	Environmental Pollution and Management	3 (2+1)
SS-605	Trace Elements in Agriculture	3 (2+1)
SS-607	Carbon Sequestration in Soil	3 (2+1)
SUPT-611	Integrated Plant Nutrition Management	3 (2+1)
SEMESTER-VIII		

SS-602	Research Project and Scientific Writing	2 (2+0)
SS-604	Land Degradation and Management	3 (2+1)
SS-606	Municipal and Agro Waste Management	3 (2+1)
SS-610	Internship and Report Writing	4 (0+4)

DEPARTMENT OF PLANT PROTECTION

It is one of the important disciplines of agriculture and combines various aspects of Entomology, Plant Pathology and weed sciences. The major intentions of the section are to discover new techniques and demonstrate new principal of Crop Protection and improve the crop management so that local agriculture become socially viable, profitable for the farmers, and competitive on all markets.

Identifying agricultural useful natural enemies (insects, micro-organisms) or biological control of pests to conserve the environment, soil, and health hazards. In addition to practical training in plant protection, each student is expected to develop a working knowledge of ecology and expertise in the production of a particular crop or group of crops.

COURSES OFFERED FOR DEPARTMENT OF PLANT PROTECTION

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-V		
PPT-501	Introduction to Pest Management	3 (2-1)
PPT-503	Pests of Field Crops	3 (2-1)
PPT-505	Plant Nematology	3 (2-1)
PPT-507	Pest Ecology	3 (2-1)
PPT-509	Introductory Acarology	3 (2-1)
STAT- 511	Elementary Statistics	3 (2+1)
SEMESTER-VI		
PPT-502	Post-Harvest Pest Management	3 (2-1)
PPT-504	Pests of Fruits, Vegetables &Ornamentals	3 (2-1)
PPT-506	Principles of Plant Disease Management	3 (2-1)
PPT-508	Pesticides & their Application Techniques	3 (2-1)
CP-510	General Biochemistry	3 (2+1)

SEMESTER-VII		
PPT-601	Pest Scouting and Forecasting	3 (2-1)
PPT-603	Biological Control	3 (2-1)
PPT-605	Vertebrate Pest and their Management	3 (2-1)
PPT-607	Pollinators and Plant Protection	3 (2-1)
PPT-611	Field IPM (For Non-Major)	3 (2-1)

SEMESTER-VIII

PPT-602	Urban Pest Management	3 (2-1)
PPT-604	Range and Forest Pest Management	3 (2-1)
PPT-606	Plant Biosecurity and Biosafety	2 (2-0)
PPT-610	Internship / Research Project	4 (0-4)

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSES OFFERED FOR BS (IT) HONS.

CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
ITC-301	Fundamental of ICT	3 (2+1)
ITC-303	Basic Electronics	3 (2+1)
ITC-305	Programing Fundamentals	4 (3+1)
BE-301	Calculus and Analytical Geometry	3 (3+0)
ENG-301	Functional English	3 (3+0)
IS-301	Islamic Studies/ Ethics	2 (2+0)
SEMESTER-II		
ITC-302	Object Oriented Programming	3 (2+1)
ITC-304	Digital Logic Design	3 (2+1)
ITC-306	Discrete Structure	3 (3+0)
ITC-308	Principles of Management	3 (3+0)
ENG-302	Communication Skills	3 (3+0)
STAT-302	Probability and Statistics	3 (3+0)
SEMESTER-III		
ITC-401	Data Structures and Algorithms	4 (3+1)
ITC-403	Computer Communication and Networks	3 (3+0)
ITC-405	Principles of Accounting	3 (3+0)

ITC-407	Telecommunication System	3 (2+1)
ENG-401	Technical and Report Writing	3 (3+0)
BE-401	Linear Algebra	3(3+0)
SEMESTER-IV		
ITC-402	Organizational Behavior Linear Algebra	3 (3+0)
ITC-404	Internet Architecture	3 (3+0)
ITC-406	Software Engineering	3 (3+0)
ITC-408	Database Systems	4 (3+1)
ITC-410	Multimedia Systems and Design	3 (2+1)
PS-402	Pakistan Studies	2 (2+0)
SEMESTER-V		
ITC-501	Bioinformatics	3 (3+0)
ITC-503	Operating Systems	3 (3+0)
ITC-505	Object Oriented Analysis & Design	3 (2+1)
ITC-507	Database Administration and Management	3 (2+1)
ITC-509	Web Systems and Technologies	3 (2+1)
ITC-511	Technology Management	3 (3+0)
SEMESTER-VI		
ITC-502	Human Computer Interaction	3 (2+1)
ITC-504	Systems and Network Administration	3 (2+1)
ITC-506	Web Engineering	3 (2+1)
ITC-508	Mobile Application Development	3 (2+1)
ITC-510	System Integration and Architecture	3 (3+0)
ITC-512	IT Project Management	3 (3+0)
SEMESTER-VII		
ITC-601	Data and Network Security	3 (3+0)
ITC-603	Routing and switching	3 (2+1)
ITC-605	Service Oriented Architecture	3 (3+0)
ITC-607	Cloud Computing	3 (2+1)
SEMESTER-VIII		
ITC-602	Software Quality Assurance	3 (3+0)
ITC-604	Professional Practices Assurance	3 (3+0)
ITC-606	Artificial Intelligence	3 (2+1)

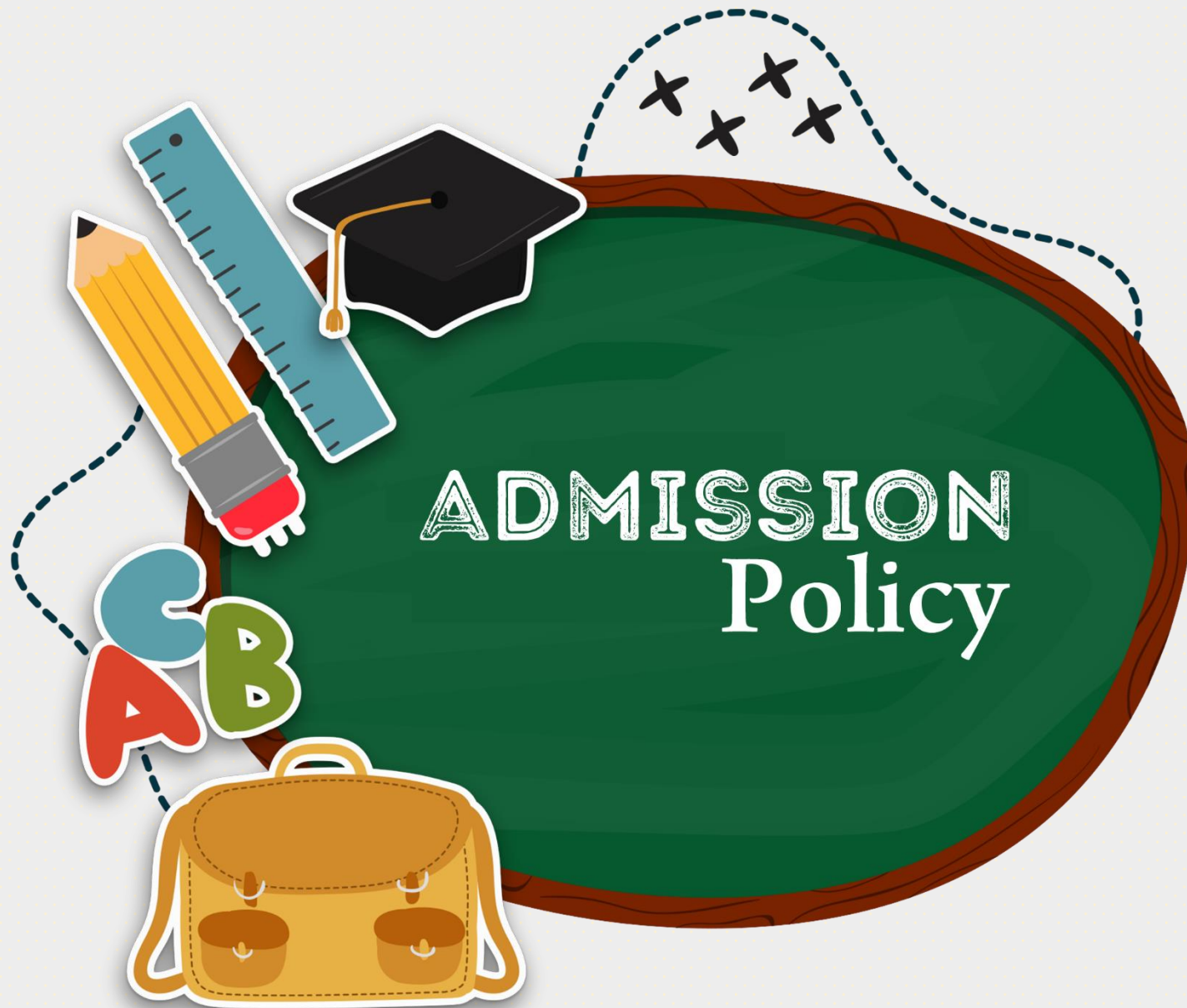
ITC-608	Capstone Project	6 (0+6)
DEPARTMENT OF BS ENGLISH (LANGUAGE & LITERATURE)		
COURSES OFFERED FOR BS English (Language & Literature)		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
ENG-301	English-I: Reading and Writing Skills	(3+0)
ENG-303	Introduction to Linguistics	(3+0)
ENG-305	Introduction to Literature	(3+0)
ENG-307	Study Skills	(3+0)
PS-301	Pakistan Studies	(2+0)
SEMESTER-II		
ENG-302	English-II Composition Writing	(3+0)
ENG-304	Phonetics & Phonology	(3+0)
ENG-306	Literary Forms & Movements	(3+0)
Math-302	Functional Mathematics	(3+0)
IS -302	Islamic Studies/Ethics	(3+0)
RS-302	Introduction to Rural Sociology	(3+0)
SEMESTER-III		
ENG-401	English-III Communication & Presentation Skills	(3+0)
ENG-403	Introduction to Morphology	(3+0)
ENG-405	Short Fictional Narratives	(3+0)
ENG-407	Pakistani English	(3+0)
ENG-409	Classical & Renaissance Drama	(3+0)
RS-401	Gender Studies	(3+0)
SEMESTER-IV		
ENG-501	Discourse Analysis	(3+0)
ENG-503	Sociolinguistics	(3+0)
ENG-505	American Literature	(3+0)
ENG-507	Female Writers in English Literature	(3+0)
RS-501	Introduction to Environmental Sociology	(2+1)
PS -501	International Relations	(3+0)
SEMESTER-V		

ENG-502	Romantic and Victorian Poetry	(3+0)
ENG-504	Modern Literature (Drama & novel)	(3+0)
ENG-506	World English	(3+0)
ENG-508	Second Language Acquisition	(3+0)
ENG-510	English Language Teaching & Pedagogy	(3+0)
ENG-512	Global Poetry	(3+0)
SEMESTER-VI		
ENG-601	English for Specific Purposes	(3+0)
ENG-603	Translation Studies	(3+0)
ENG-605	Introduction to Applied Linguistics	(3+0)
ENG-607	Classical Poetry	(3+0)
ENG-609	Literary Criticism and Theory	(3+0)
ENG-601	English for Specific Purposes	(3+0)
SEMESTER-VII		
ENG-601	English for Specific Purposes	(3+0)
ENG-603	Translation Studies	(3+0)
ENG-605	Introduction to Applied Linguistics	(3+0)
ENG-607	Classical Poetry	(3+0)
SEMESTER-VIII		
ENG-602	Language & Education	(3+0)
ENG-604	Postcolonial Literature	(3+0)
ENG-606	Pakistani Literature in English	(3+0)
ENG-608	Research Methods	(3+0)

DEPARTMENT OF BS SOFTWARE ENGINEERING		
COURSES OFFERED FOR BS Software Engineering		
CODE	TITLE OF COURSE	C. HRS.
SEMESTER-I		
SE--301	Introduction to Information & Communication Technologies	3(2+1)
SE--303	Programming Fundamentals	4(3+1)
BE—305	Calculus and Analytical Geometry	3(3+0)
BE--307	Applied Physics	3(3+0)

ENG-309	English Composition & Comprehension	2(2+0)
IS/EHS-302	Islamic Studies/Ethics	2(2+0)
SEMESTER-II		
SE-302	Object Oriented Programming	4(3+1)
SE-304	Discrete Structure	3(3+0)
SE-306	Software Engineering	3(3+0)
SE-308	Functional Accounting	3(3+0)
ENG-410	Communication and Presentation skills	3(3+0)
PS-312	Pakistan Studies	2(2+0)
SEMESTER-III		
SE-401	Data Structures & Algorithms	4(3+1)
SE-403	Software Requirement Engineering	3(3+0)
SE-405	Human Computer Interaction	3(3+0)
SE-407	Organizational Behavior	3(3+0)
BE-409	Linear Algebra	3(3+0)
SEMESTER-IV		
SE-402	Operating Systems	4(3+1)
SE-404	Database Systems	4(3+1)
SE-406	Software Design & Architecture	3(2+1)
SE -408	Bioinformatics	3(3+0)
STAT-410	Probability and Statistics	3(3+0)
SEMESTER-V		
SE-501	Software Construction and Development	3(2+1)
SE-503	Computer Networks	4(3+1)
SE-505	Business Process Engineering	3(3+0)
SE--507	Simulation and Modeling	3(3+0)
ENG-509	Technical & Business Writing	3(3+0)
SEMESTER-VI		
SE-502	Software Quality Engineering	3(3+0)
SE-504	Professional Practice	3(3+0)
SE-506	Information Security	3(3+0)
SE-508	Web Engineering	3(3+0)

SE-510	Formal Methods in Software Engineering	3(3+0)
SE-512	Computer Graphics	3(2+1)
SEMESTER-VII		
SE-601	Software Project Management	3(3+0)
SE-603	Big Data Analytics	3(2+1)
SE-605	Mobile Application Development	3(2+1)
SE-607	Cloud Computing	3(2+1)
SE-609	Geographic Information Systems	3(2+1)
SEMESTER-VIII		
SE-602	Artificial Intelligence & Machine Learning	3(2+1)
SE-604	Virtual & Augmented Reality	3(2+1)
SE-606	Final Year Project	6(0+6)
SE-602	Artificial Intelligence & Machine Learning	3(2+1)



ADMISSION
Policy

ADMISSION POLICY (UNDERGRADUATE PROGRAMS 2024-25)

ADMISSION POLICY COMMITTEE

1	Vice-Chancellor, SAU, Tando Jam	Chairman
2	Dr. A.Q. Mughal, Professor Emeritus, SAU, Tando Jam.	Member
3	Prof. Dr. Bhai Khan Shar, Ex- Vice Chancellor, SABS University of Arts, Design Heritage Jamshoro.	Member
4	Dr. Bakhshal Khan Lashari, Professor Emeritus, UPSCAS-W, MUET, Jamshoro	Member
5	Pro-Vice-Chancellor, SAU Campus @ Umerkot.	Member
6	All Deans of Faculties, SAU, Tando Jam.	Members
7	The Advisor to Vice-Chancellor SAU, Tando Jam.	Member
8	The Principal, KCAET, Khairpur (Mir's).	Member
9	Prof. Dr Muhammad Ibrahim Keerio Ex-Principal, KCAET, Khairpur, (Mir's).	Member
1	The Director, Advanced Studies, SAU, Tando Jam.	Member
1	Registrar, SAU, Tando Jam.	Member
1	Controller of Examinations, SAU, Tando Jam	Member
1	Deputy Registrar Admissions (Undergraduate Programs) SAU, Tando Jam.	Member/Secretary

I. APPLICATION PROCESS

- Admissions shall be advertised in the prominent newspapers of national and regional repute as well as on the University website sau.edu.pk and social media.
- The candidates who intend to apply for admission to bachelor's degree programs for the academic year 2024-25 may fill online

registration / admission form at <https://sau.edu.pk/undergraduate> by following given guidelines at SAU website.

- A valid email address, mobile number and WhatsApp Number is mandatory to complete the registration process.
- The candidates are required to deposit registration/admission processing fee through mobile banking app: in relevant Habib Bank Limited (HBL) account No. (00427991859203) or by generating the online challan of Rs. 3000/- (non-refundable) as registration/processing fee for merit/self-finance quota seats and Rs. 3000/- (non-refundable) for Sports Quota seats (generate separate challan) and pay at any nearest branch of HBL. Single payment of Rs. 3000/- for competition against Sports Quota seats shall be considered for District Merit seats only.
- Candidate should opt/select one of his/her choice centers for Pre-Admission Entry Test carefully. No one shall be allowed to appear other than his/her selected center.
- The candidate must upload a passport size picture with a white background, original color scanned copies (100dpi) of all the required documents, paid bank challan or receipt of mobile banking application as indicated above.
- Candidates applying against seats reserved under self-finance scheme shall simply need to tick (v) the self-finance option (☐) given in online registration form.
- The eligibility of the candidate for admission shall be decided by the University after scrutinizing the documents provided by the candidates.
- Pre-Admission Entry Test slip will be available at their student account portal and also sent to all eligible candidates on their given email addresses for entrance in test center. The candidates

must print the admit slip and bring the same on the day of pre-admission entry test along with original CNIC/B-Form.

- Appearance/passing in the pre-admission test does not mean that the candidate is eligible for admission.
- The eligibility criteria for admission are given below in Clause-III, titled "Eligibility".
- Since the registration/admission form is legal document, any wrong information provided therein or tempering it in any other way is illegal and may result in rejection of the form out rightly.

II. RULES & REGULATIONS FOR ADMISSION TO UNDERGRADUATE DEGREE PROGRAMS

The following rules shall apply to candidates seeking admissions to the First Year for all degree programs, at Sindh Agriculture University, Tando Jam (Main Campus), Khairpur College of Agricultural Engineering & Technology, Khairpur Mirs and Sindh Agriculture University Campus, Umerkot. The number of seats has been fixed as shown in the Tables (IX to XV).

1. D.V.M.	2. BS Dairy Technology.
3. BS Fisheries & Aquaculture.	4. BS Poultry Sciences
5. B.Sc. (Agri.) Hons.	6. BS English (Language & Literature).
7. B.Sc. (Hons.) Food Sciences and Technology.	8. BE. (Agri.).
9. BS Environmental Sciences.	10. BS Agro-Industrial Engineering Technology)
11. BSIT	12. BS Computer Sciences
13. BS Software Engineering	

1. Admissions are made according to the policies and rules framed by the authorities of the University from time to time and the university reserves the right to revise as and when deemed necessary without any notice.
2. It has zero tolerance for submission of fraudulent or forged documents or for misrepresentation of any kind by applicants. In

case of provision of wrong or false information, the applicant shall be held responsible, and the University reserves the right to cancel the degree of such a candidate, at any stage, who succeeds in getting admission by submitting forged / false document(s) or making false entries or take any other action as deemed appropriate. Additionally, they may also be debarred for a period of three years for future admission and all payments made to the University shall be forfeited in favor of the University.

Note: Applicants should be aware that the presentation of incorrect/false/forged/fraudulent information or document(s) is a criminal offence. The University reserves the right to initiate legal action at any stage declaring them blacklisted for admission in future.

3. An applicant registered with any other University / Institution / College, if selected at Sindh Agriculture University, Tando Jam, KCAET and SAU Campus Umerkot shall be admitted only after his / her cancellation of registration / admission in other academic institution. Any proof of dual admission shall result in cancellation of admission at Sindh Agriculture University Tando Jam, KCAET and SAU Campus @ Umerkot.
4. Those candidates, who are admitted at any other institute/university before applying for admission at Sindh Agriculture University, KCAET, Khairpur Mirs or SAU Campus, Umerkot or were rusticated, debarred or their admissions were cancelled, shall not be considered for admission in the University. Additionally, if the candidates withholds/hides information regarding such a disciplinary action and they were granted provisional admission; their admission will be cancelled immediately after ascertaining such facts.
5. An applicant convicted of moral turpitude shall not be considered for admission.

Note: The hostel accommodation is not the liability of the University and shall only be provided subject to the availability of space

III. ELIGIBILITY

1. Minimum requirements of admission shall be Intermediate (Pre-Medical, Pre-Engineering, Pre-Computer/General Science, Commerce and FA/F.Sc.) in Annual Examination 2024 or earlier up to 2022 or an equivalent qualification with at least 50% marks. This condition applies to all merit, self-finance as well as reserved seats and specified quotas. However, the eligibility for B.E. (Agri.) degree program shall be 60% marks in Intermediate (Pre-Engineering) & Diploma of Associate Engineer (DAE) from any recognized Board of Technical Education with at least 60% marks in examination 2024 or earlier up to 2022. Rural/Urban quota shall however strictly be observed for reserved seats of various districts of Sindh Province.
2. Candidates appearing/passing Intermediate (Pre-Medical, Pre-Engineering, Pre-Computer/General Science, Humanities, Commerce, Arts & FA/F. Sc) in the supplementary Examination 2024 shall not be eligible; however, candidates passed their Intermediate in supplementary examinations during the years 2022, and 2023 will be considered for admissions. The candidate applying for BS Agro-Industrial Technology shall be considered if they have passed Intermediate or Diploma in 2018 onwards.

At Sindh Agriculture University, Tando Jam-Main Campus	
Degree Program	Eligibility
Faculty of Animal Husbandry & Veterinary Sciences	
1. DVM	Intermediate Pre-Medical with at least 50% marks in annual examination 2024 or earlier up to 2022.
2. BS in Poultry Science	
3. BS in Fisheries & Aquaculture	

4. BS in Dairy Technology	
Faculty of Agricultural Engineering	
1. B.E. (Agri.)	Intermediate Pre-Engineering with at least 60% marks in annual examinations 2024 or earlier up to 2022. Diploma of Associate Engineer (DAE) from any recognized Board of Technical Education with at least 60% marks in examination.
2. BS in Environmental Science	Intermediate Pre-Medical, Pre-Engineering & Pre-Computer/General Science Groups with at least 50% in annual examination 2024 or earlier up to 2022 marks shall be eligible at the ratio of 50:40:10 (50% Pre-Medical, 40% Pre-Engineering & 10% Pre-Computer / General Science)
3. BS in Agro-Industrial Engineering Technology	Intermediate Pre-Engineering 2024 or earlier up to 2018. Diploma of Associate Engineer (DAE) from any recognized Board of Technical Education with at least 50% marks in annual examination (Applicant age not more than 45 years) at the ratio of 50:50 (50% for Pre-Engineering & 50% for DAE).
Faculty of Agricultural Social Sciences	
1. B.Sc. (Agri.) Hons	Intermediate Pre-Medical & Pre-Engineering Groups with at least 50% marks in annual examination 2024 or earlier up to 2022 at the ratio of 80:20 (80% Pre-Engineering & 20% Pre-Medical).
2. BS in English (Language & Literature)	Intermediate Pre-Medical, Pre-Engineering, Humanities, Arts, Commerce, FA/F.Sc. with at least 50% marks in annual examinations

	2024 or earlier up to 2022 at the ratio of 50:50 (50% for Humanities, Commerce, Arts & FA/F. Sc and 50% for Pre-Medical, Pre-Engineering / Pre/Computer/General Science Groups).
Faculty of Crop Production	
1. B.Sc. (Agri.) Hons	Intermediate Pre-Medical & Pre-Engineering Groups with at least 50% marks in annual examination 2024 or earlier up to 2022 at the ratio of 80:20 (80% Pre-Medical & 20% Pre-Engineering).
Faculty of Crop Protection	
1. B.Sc. (Agri.) Hons	Intermediate Pre-Medical & Pre-Engineering Groups with at least 50% marks in annual examination 2024 or earlier up to 2022 at the ratio of 80:20 (80% pre-medical & 20% Pre-Engineering).
Information Technology Center	
1. BSIT	Intermediate Pre-Computer/General Science Groups with at least 50% marks in annual examinations 2024 or earlier up to 2022 will be given priority. However, for vacant seat(s), Pre-Engineering/Pre-Medical groups shall be eligible at the ratio of 80:20 (80% Pre-Engineering, 20% Pre-Medical).
2. BS in Computer Science	
3. BS in Software Engineering	
Institute of Food Sciences & Technology	
1. B.Sc. (Hons) in Food Sciences & Technology	Intermediate Pre-Medical, Pre-Engineering & Pre-Computer / General Science groups with at least 50% marks in annual examinations 2024 or earlier up to 2022 at the ratio of 65:30:05 (65% Pre-Medical, 30% Pre-

	Engineering & 05% Pre-Computer / General Science).
At Khairpur College of Agricultural Engineering & Technology (KCAET)	
1. B.E. (Agri.)	Intermediate Pre-Engineering with at least 60% marks in annual examinations 2024 or earlier up to 2022. Diploma of Associate Engineer (DAE) from any recognized Board of Technical Education with at least 60% marks in examination 2024 or earlier up to 2022.
2. B.Sc. (Hons) in Food Science & Technology	Intermediate Pre-Medical, Pre-Engineering & Pre-Computer / General Science groups with at least 50% marks in annual examinations 2024 or earlier up to 2022 at the ratio of 65:30:05 (65% Pre-Medical, 30% Pre-Engineering & 05% Pre-Computer / General Science)
3. B.Sc. (Agri.) Hons in Biotechnology	Intermediate Pre-Medical & Pre-Engineering Groups with at least 50% marks in annual examination 2024 or earlier up to 2022 at the ratio of 80:20 (80% Pre-Medical & 20% Pre-Engineering).
4. BS in Software Engineering	Intermediate Pre-Computer/General Science Groups with at least 50% marks in annual examinations 2024 or earlier up to 2022 will be given priority. However, for vacant seat(s), Pre-Engineering/Pre-Medical groups shall be eligible at the ratio of 80:20 (80% Pre-Engineering, 20% Pre-Medical).
At Sindh Agriculture University Campus, Umerkot	
1. B.Sc. (Agri.) Hons	Intermediate Pre-Medical & Pre-Engineering Groups with at least 50% marks in annual examination 2024 or earlier up to 2022 at the

	ratio of 80:20 (80% Pre-Medical & 20% Pre-Engineering).
2. BSIT	Intermediate Pre-Computer/General Science Groups with at least 50% marks in annual examinations 2024 or earlier up to 2022 will be given priority. However, for vacant seat(s), Pre-Engineering/Pre-Medical groups shall be eligible at the ratio of 80:20 (80% Pre-Engineering, 20% Pre-Medical).
3. BS in Software Engineering	Intermediate Pre-Medical, Pre-Engineering, Humanities, Arts, Commerce, FA/F.Sc. with at least 50% marks in annual examinations 2024 or earlier up to 2022 at the ratio of 50:50 (50% for Humanities, Commerce, Arts & FA/F. Sc and 50% for Pre-Medical, Pre-Engineering / Pre-Computer/General Science Groups).
4. BS in English (Language & Literature)	

5. Admission of Sindh-domiciled candidates in various undergraduate degree programs including BS degree programs shall be made according to district Population ratio published by the PBS. The selection of candidates from district quota shall be on actual rural urban population basis as per census 2023 report, excluding six districts i.e. Jamshoro, Karachi, Khairpur (Mir's), Larkana, Shaheed Benazirabad & Sukkur shall be 70% rural and 30% from Urban areas. Urban areas in each district/division will be confined to Municipalities / Corporations as determined by the revenue department and the rest of the areas will be considered rural. However, seats falling vacant either from rural or urban quota shall be filled within district/division.
6. Vacant seats from the quota of any one or more districts of a division shall be filled in from amongst the remaining candidates of the other districts of that division in order of their merit. However, the seats still falling vacant (either urban or rural) shall be filled within division. Even after observing the above formulations, any

seat falling vacant shall be filled on an overall merit basis at provincial level.

7. In the case of marks being equal between two or more candidates, selection will be made based on marks obtained in Pre-Admission Test.
8. Admission of candidates from Baluchistan, Khyber Pakhtunkhwa, Gilgit-Baltistan, and AJK shall be made on the recommendations of their respective Governments / Authorities in accordance with the rules as laid down in the Admission Policy. The admission of such candidates shall be limited to the number of seats allocated for that province. The direct application of candidates from FATA only shall be entertained. The final merit of nominated candidates shall be determined by Sindh Agriculture University Tando Jam after adjusting Pre-Admission Entry Test marks/score.
9. Candidates from Baluchistan province shall be nominated by the Government of Baluchistan:
 - a. Candidates belonging to Baluchistan province and nominated by the Department of Livestock, Government of Baluchistan shall be considered for admission against reserved seats in the Faculty of Animal Husbandry & Veterinary Sciences. It is advisable that the nominating department/agency should nominate at least five candidates for each reserved seat (i.e., 30 candidates may be nominated against 6 six reserved seats). The final merit of nominated candidates shall be determined by Sindh Agriculture University Tando Jam after adjusting Pre-Admission Entry Test marks/score.
 - b. Candidates belonging to Baluchistan province and nominated by the Department of Agriculture Extension, Government of Baluchistan, shall be considered for admission against reserved seats in the faculties of Crop Protection, Crop Production, Agricultural Social Sciences, Agricultural Engineering, Information Technology Center, and Institute of Food Sciences

& Technology. It is advised that the nominating department should nominate at least five candidates for each reserved seat (i.e.200 candidates may be nominated against 40 reserved seats). The final merit of nominated candidates shall be determined by Sindh Agriculture University Tando Jam after adjusting Pre-Admission Entry Test marks/score.

10. Nomination /replacement of candidates for admission against reserved seats made by the concerned nominating department/agencies should be sent before commencement of Pre-Admission Entry Test, otherwise the same shall not be entertained / accepted.
11. In case of reserved quota for Defense Personnel, the selection of nominees of GHQ, Rawalpindi and Naval Headquarter, Islamabad shall be made at the ratio of 70:30 (70% for army/GHQ & 30% for Naval Headquarter).
12. The candidates from Province of Punjab shall apply directly for their admission against reserved seats.
13. Real sons / daughters / brothers / sisters & Spouses of regular employees of Sindh Agriculture University Tando Jam/ Constituent college(s) / Campuses, shall be eligible to compete for the reserved seats, provided that their parents should have 2 years of continuous regular service in the University (in-service, retired or expired). However, preference shall be given to sons / daughters.
 - a) The 50% exemption from payment of fees shall only be allowed for Real Sons / Daughters / Brothers / Sisters & Spouses of regular employees of Sindh Agriculture University, Tando Jam / Constituent College(s) / Campuses, who will compete and select on District/other merit quota seats.
 - b) However, Real Sons / Daughters / Brothers / Sisters & Spouses of regular employees of Sindh Agriculture University, Tando Jam / Constituent College(s) / Campuses, who will compete and

select on reserved seats for Real Sons / Daughters / Brothers / Sisters & Spouses SAU Main Campus/Constituent College/SAU Campus, Umerkot Employees shall not be entitled to avail 50% exemption from payment of fees.

14. Real Sons / Daughters / Brothers / Sisters of Graduate/Post Graduate Degree holders (**Alumni**) of defunct King George-V institute of Agri. College and Sindh Agriculture University, Tando Jam who are not presently employees of SAU, Tando Jam, shall be eligible to compete against reserved seats of SAU Alumni. However, they must be registered members of SAU Alumni Association.
15. The selection of candidates on the sports quota shall be recommended for admission by the Selection Committee to be constituted by the Vice Chancellor. However, these seats are reserved only for candidates domiciled of various districts of Sindh Province. The candidates who have applied for admission and admitted under the self-finance scheme shall not be considered to compete for admission against sports quota seats.
16. In case the selection of candidates is made in the faculty other than the first choice of candidate(s) as per earlier selection list, they shall have to seek registration by paying prescribed amount of fee, if they want to be considered against waiting list and if they are interested to seek admission in discipline higher up in preference order, failing which they shall lose their right of admission and they shall not be considered for admission for the next selection list(s) even though they possess higher score of marks.
17. Candidate(s) desire to retain the discipline/faculty where he/she has been selected earlier, he/she may do so by submitting handwritten application with fees of Rs. 200/- to be deposited in the university account through bank challan within 07 (seven) days from the date of announcement of list positively to the Director, Admissions (Undergraduate). If he/she failed to submit discipline/faculty retention application along with paid challan of

Rs. 200/- within stipulated time period in the office of the Director Admissions (Undergraduate) and later he wants to retain his/her earlier selection, he/she shall pay penalty of Rs. 5000/- through bank challan for retention of his/her earlier selection subject to availability of seat(s).

18. Candidate who is selected earlier on district/relevant quota/merit seat(s) in his/her lower choice, but he/she gets admission in field of his/her upper/first choice under self-finance scheme by paying all required fees of self-finance scheme, his/her merit status stands valid for selection/admission in upper choices on district merit/other relevant quota seats in next selection list(s).
19. Any candidate who fails to give option of choices for his/ her selection as prescribed in the Application form, the selection of candidate will be made / determined by Admission Committee in the faculty as deemed appropriate as per merit which shall be treated as final.
20. The candidate(s) who got admission by paying prescribed amount of fee against district/other relevant merit quota seats and wants to get his/her provisional admission cancelled; he / she shall be entitled to get refund of fee as per HEC Fee refund policy-2024.

IV. PRE-ADMISSION TEST

1. In accordance with the policies adopted by the Federal as well as Provincial Governments, all the eligible candidates applying under all categories except nominees of Armed Forces / Overseas / Foreigners, shall compulsorily have to appear in a University Pre-admission Test. Candidates having secured less than 20% marks in pre-admission test, shall not be eligible for admission at the University/Constituent College/Campus.
2. Test shall be conducted in four subjects, with subject-wise weightage, number of questions and marks as shown below:

Subject	No. of Questions	Marks	Time
Physics	25	25	100 minutes
Chemistry / Computer	25	25	
Biology / Math's	25	25	
English & General Knowledge (80:20%)	25	25	
Total	100	100	

3. The Final merit list of the candidates for each district/category shall be prepared by calculating their overall merit, based on the marks obtained in each of the following examinations, multiplying them with the respective weightage and adding the result to calculate the "Composite Percentage Number" as described below. (The merit of the candidates appeared in HSC-II in the calendar year 2024 shall be considered on the basis 1st Year HSC-I subject to the conditions that, if he/she failed to get less than 50% marks in Intermediate (HSC-II) will disqualify).
4. Whereas the merit of the candidates appeared in the HSC-II (Intermediate or equivalent Certificate) passed in year 2022 & 2023 before calendar year 2024 shall be considered on HSC-II (Intermediate or equivalent certificate) basis.

Examination	Multiplying Weightage
a) Matriculation	0.10
b) Intermediate/HSC -I	0.30
c) Pre-Admission Test	0.60

5. One percent (**01%**) of the aggregate marks for each year shall be deducted from the total marks of Intermediate Science/ equivalent examination if the examination was passed before **2024**.
6. Twenty (**20**) Marks for Agriculture subject as Third Component in Matriculation examination shall be added to the total marks

obtained in matriculation and the percentage shall be calculated for such candidates.

7. Twenty (20) Marks for Hafiz-e- Qur'an shall be added to the total marks obtained in the Intermediate Science examination subject to clear/pass Test to be conducted through committee and then the percentage shall be calculated for such candidate(s).

V. IDENTITY CARD

1. The students, after being allowed admission at the University / College / SAU Campus, will be issued identity cards. It is necessary for the students to keep their valid identity cards with them while attending the classes, traveling in the point buses and/or staying at the campus.

VI. RE-ADMISSION POLICY

1. Those students who remained absent from their classes or examinations for any reasons, will be considered for re-admission in the appropriate semester where they left their study program, with the appropriate batch subject to application of other relevant rules, provided the application for re-admission shall be routed through the Dean/ Coordinator/ Principal/ Director of the Faculty/ College/ Campus concerned giving the cogent reasons.

VII. REGISTRATION FORM

1. The students seeking admission in each subsequent semester shall pay fees through bank challan in the relevant University / College(s) / Campus account(s) and shall submit their registration forms duly completed in all respects in the relevant University / College / SAU Sub-Campus Branch within stipulated time. In case any student who pays registration, fees but fails to submit registration form in the relevant University /College / SAU Campus Branch, he / she shall be charged 50% of the late fees chargeable at the time when he/she

submits the registration form in the relevant University/ College / SAU Campus Branch.

VIII. MIGRATION RULES AND REGULATIONS

1. a. Regulations governing the admission of students to the Sindh Agriculture University, Tando Jam by migration from other Universities or Institutions.

Subject to the provisions of Regulations, the Vice Chancellor may admit a student to the University by migration from other Universities or Institutions according to the regulations.

- i. No student shall be admitted to first year class by such Migration.
- ii. Admission by migration to classes other than first year shall not be allowed ordinarily after the expiry 3 weeks from the commencement of the year.
- iii. No student shall be admitted by migration from a University or HEIs in Pakistan unless he produces a **“No Objection Certificate” (NOC)** and good moral character certificate to the effect that the student has not been debarred from taking University Examination and suspended or not expelled or rusticated from the University or institution from which he/she intends to migrate and that no disciplinary action is pending against him/her.
- iv. An application for admission by migration shall be accompanied by detailed marks certificates showing the examinations passed by a student including Intermediate (Pre-Engineering, Pre-Computer & Pre-Medical Groups) B.Sc. /B. E & DVM exam: based on which he/she secured original admission in the parent University or Institution.
- v. The migration of the students belonging to HEC recognized Universities/Institutes of Sindh Province including

constituent College/Campus of SAU shall be allowed on the payment of Rs. 750,000/- for AH&VS, Rs. 300,000/- for FAE & Rs. 200,000/- for CPD, CPT, FASS & Rs.250,000/ for ITC, IFST respectively to the Sindh Agriculture University Tando Jam, while students belonging to HEC recognized Universities/Institute of other than Sindh Province would be required to pay Rs. 1,500,000/- for AH&VS, Rs. 700,000/- for FAE & Rs. 500,000/- for CPD, CPT, FASS respectively as migration fee and submit the “**No Objection Certificate**” (**NOC**) of the parent University/Institutes.

- vi. The student seeking admission by migration shall have to pay fee for registration and examination for each semester of the pertinent degree program as applicable to other students at SAU.
- vii. That in addition to fee for admission by migration, the interested student shall have to pay Rs.5,000/- (Rupees five thousand) only as case processing fees (non-refundable) with application for admission by migration.

viii. That case for admission by migration shall be scrutinized through SAU Equivalence Committee and Credit hours Committee for determining its eligibility.

- b. No student admitted to any University or Institution against seats reserved for special categories shall be eligible for admission by migration.
- c. Only those students who possess academic record comparable College/Campus with admission requirements of this University shall be considered for admission.

Note: -No student seeking admission to second year who is required to carry more than four papers of 1st year (50% theory and 50% practical) of this university shall be considered for admission by migration.

- d. The grounds for migration shall constitute changes in circumstances which render it practically impossible for the student to continue his/her studies in his/her parent University or Institution.

TABLE-I

**PROVISIONAL BREAKUP OF VARIOUS FEES (Rupees)
TO BE CHARGED AT THE TIME OF FIRST ADMISSION FROM THE STUDENTS REGISTERING IN ALL THE FACULTIES SAU MAIN
CAMPUS, KCAET & SAU CAMPUS UMERKOT (ACADEMIC YEAR 2024-25)**

S.#	FEES STRUCTURE	MAIN CAMPUS				CONSTITUENT COLLEGE/CAMPUS	
		At the time of 1st Admission				At the time of 1st Admission	
		Merit		Self-Finance		Merit	Self-Finance
		B.Sc./B.E./ BSIT.	DVM	B.Sc./B.E./ BSIT/.	DVM	B.Sc./B.E./ BSIT	B.Sc./B.E./ BSIT
1	Admission Fee (Once)	9900.00	11,000.00	9,900.00	11,000.00	9,010.00	8,800.00
2	Registration Fee (Per Semester)	4,400.00	5,500.00	4,400.00	5,500.00	3,520.00	3,300.00
3	Tuition Fee (Per Semester)	14,910.00	16,335.00	20,960.00	23,600.00	11,150.00	16,780.00
4	Enrolment Card Fee (Once)	1,100.00	1,100.00	1,100.00	1,100.00	770.00	770.00
5	Identity Card Fee (Per Semester)	550.00	550.00	550.00	550.00	330.00	330.00
6	Certificate verification Fee (Once)	1,870.00	1,870.00	1,870.00	1,870.00	1,870.00	1,870.00
7	Examination Fee (Per Semester)	1,650.00	1,650.00	1,650.00	1,650.00	1,430.00	1,430.00
8	Transport Fee (Per Semester)	2,750.00	2,750.00	2,750.00	2,750.00	2,420.00	2,420.00
9	Pakistan Education & Research Network Charges (Per Semester)	2,200.00	2,200.00	2,200.00	2,200.00	0.00	0.00
Total		39,330.00	42,955.00	45,380.00	50,220.00	30,500.00	35,700.00
Students with disabilities entitled to a full concession in Admission fees, Tuition fees and Examination fees							
Capitation Charges once from the candidates other than Sindh Province to be admitted either against reserved seat or against self-finance scheme:							150,000
PVMC Registration Fee chargeable once only from students registering in DVM program							1,000

TABLE-II

**PROVISIONAL BREAKUP OF VARIOUS FEES (Rupees)
TO BE CHARGED AT THE TIME OF SUSEQUENT SEMESTERS THE STUDENTS REGISTERING IN ALL THE FACULTIES AT SAU
MAIN CAMPUS, KCAET & SAU CAMPUS (ACADEMIC YEAR 2024-25).**

S. No	SEMESTER	MAIN CAMPUS				CONSTITUENT COLLEGE/CAMPUS	
		Merit		Self-Finance		Merit	Self-Finance
		B.Sc./B.E./ BSIT.	DVM	B.Sc./B.E./ BSIT.	DVM	B.Sc./B.E./ BSIT	B.Sc./B.E./ BSIT
1	2nd Semester	18,830.00	20,560.00	24,600.00	26,330.00	13,920.00	18,890.00
2	3rd Semester	19,780.00	21,600.00	25,830.00	27,650.00	14,620.00	19,835.00
3	4th Semester	20,770.00	22,680.00	27,120.00	29,030.00	15,350.00	20,830.00
4	5th Semester	21,810.00	23,820.00	28,480.00	30,480.00	16,120.00	21,870.00
5	6th Semester	22,900.00	25,010.00	29,900.00	32,000.00	16,930.00	22,960.00
6	7th Semester	24,050.00	26,260.00	31,400.00	33,600.00	17,780.00	24,110.00
7	8th Semester	25,250.00	27,570.00	32,970.00	35,280.00	18,670.00	25,320.00
8	9th Semester	0.00	28,950.00	0.00	37,050.00	0.00	0.00
9	10 Semester	0.00	30,400.00	0.00	38,900.00	0.00	0.00

TABLE-III

**PROVISIONAL BREAKUP OF VARIOUS FEES (Rupees)
TO BE CHARGED AT THE TIME OF FIRST ADMISSION AND SUBSEQUENT SEMESTERS FROM THE STUDENTS REGISTERING IN
ALL BS DEGREE PROGRAMS AT SAU MAIN CAMPUS, KCAET & SAU CAMPUS UMERKOT
(ACADEMIC YEAR 2024-25)**

S.#	Fees Structure	MAIN CAMPUS, KCAET & SAU CAMPUS UMERKOT			
		At the time of 1st Admission		Subsequent Semesters	
		Merit	Self-Finance	Merit	Self-Finance
1	Admission/Registration Fee (Per Semester)	11,000.00	11,000.00	11,000.00	11,000.00
2	Tuition Fee (Per Semester)	12,100.00	18,150.00	12,100.00	18,150.00
3	Identity Card Fee (Per Semester)	550.00	550.00	550.00	550.00
4	Examination Fee (Per Semester)	1,650.00	1,650.00	1,650.00	1,650.00
5	Transport Fee (Per Semester)	2,750.00	2,750.00	2,750.00	2,750.00
6	Pakistan Education & Research Network Charges (Per Semester)	2,200.00	2,200.00	2,200.00	2,200.00
	Total	30,250.00	36,300.00	30,250.00	36,300.00

TABLE-IV

PROVISIONAL BREAKUP OF VARIOUS FEES STRUCTURE TO BE CHARGED FROM GIRLS CANDIDATES SEEKING REGISTRATION/ADMISSION AT SAU CAMPUS, UMERKOT AND KCAET, KHAIRPUR MIRS DURING ACADEMIC YEAR 2024-25

S.#	FEES STRUCTURE	SAU CAMPUS, UMERKOT		KCAET, KHAIRPUR MIRS	
		At the time of 1st Admission		At the time of 1st Admission	
		Merit	Self-Finance	Merit	Self-Finance
		B.Sc./B.E./ BSIT	B.Sc./B.S./ BSIT	B.Sc./B.E./ BSIT	B.Sc./B.S./ BSIT
1	Admission Fee	4,510.00	0.00	0.00	0.00
2	Registration Fee	1,760.00	0.00	0.00	0.00
3	Tuition Fee	5,300.00	0.00	0.00	0.00
4	Enrolment Card Fee (Once)	385.00	0.00	770.00	0.00
5	Identity Card Fee (Per Semester)	165.00	0.00	330.00	0.00
6	Certificate verification Fee (Once)	930.00	0.00	1870.00	0.00
7	Examination Fee (Per Semester)	1430.00	0.00	1,430.00	0.00
8	Transport Fee	2,420.00	0.00	2420	0.00
9	Endowment Fund	0.00	0.00	0.00	0.00
10	Pakistan Education & Research Network Charges	0.00	0.00	0.00	0.00
	Total:	16,900.00	0.00	6,820.00	0.00

TABLE-V**PROVISIONAL BREAKUP OF VARIOUS FEES (Rupees)****TO BE CHARGED AT THE TIME OF SUSEQUENT SEMESTERS THE GIRLS STUDENTS REGISTERING IN AT KCAET & SAU CAMPUS UMARKOT (ACADEMIC YEAR 2024-25).**

SUBSEQUENT SEMESTER	SAU Campus. Umerkot (Merit)	KCAET, Khairpur Mir's
	B.Sc./B.S./ BSIT	B.Sc./B.S./ BSIT
2 nd Semester	6,960.00	1,680.00
3 rd Semester	7,308.00	1,764.00
4 th semester	7,673.00	1,852.00
5 th Semester	8,057.00	1,945.00
6 th Semester	8,460.00	2,042.00
7 th Semester	8,883.00	2,144.00
8 th Semester	9,327.00	2,251.00

TABLE-VI

PROVISIONAL SELF-FINANCING CHARGES ((Rupees)

S#	Program	Sindh Province		Other Provinces	
		Lump Sum	Installments	Lump Sum	Two (02) equal installments (to be charged in first 02 semesters)
1	DVM	750,000	*(450,000 x 2) = 900, 000	1,500,000.00	(Rs. 800,000 x 2) = 1,600,000
2	BE (Agri.)	250,000	** (37,500 x 8) = 300,000	700,000.00	(Rs. 400,000 x 2) = 800,000
3	BSIT	200,000	** (31,250 x 8) = 250, 000	600,000 .00	(Rs. 350,000 x 2) = 700,000
4	B.Sc. (Hons) FST	200,000	** (31,250 x 8) = 250, 000	600,000.00	(Rs. 350,000 x 2) = 700,000
6	All BS Programs (Sindh Province)	200,000	** (31,250 x 8) = 250,000	-----	-----
5	B.Sc. (Agri.) Hons.	150,000	** (25000 x 8) = 200, 000	500,000.00	(Rs. 300,000 x 2) = 600,000

* Candidates seeking admission to the DVM program on a self-finance basis with installments are required to pay in two equal parts. The first installment, along with the admission fee (one-time), is due at the time of admission. The second installment, along with the subsequent semester registration fees, is due at the start of the second semester.

** Candidates seeking admission on a self-finance basis with installments for programs other than DVM, including BE (Agri), BSIT, all BS programs, B.Sc. (Agri), or B.Sc. (Hons) FST, must pay the first installment along with the admission fee (one-time) at the time of admission. Additionally, candidates will pay the remaining installments along with the subsequent semester registration fees for each semester according to the described schedule.

Government taxes will be applicable at prevailing rates. For the fiscal year 2024-25, a 5% income tax will be charged if the total fees (including the cost of the self-finance seat, registration fees, and capitation charges) exceed Rs. 200,000 in any of the aforementioned programs.

TABLE-VII

PROVISIONAL CHANGE OF FACULTY/DEPARTMENT CHARGES (Rs.)

S#	Program / Faculties	Lump Sum	2 equal installments (to be charged in first 2 semesters)
1	DVM	450,000	$(250,000 \times 2) = 500,000$
2	All BS Programs	150,000	$(100,000 \times 2) = 200,000$
3	BE (Agri.)	125,000	$(75,000 \times 2) = 150,000$
4	BSIT. (Hons.)	125,000	$(75,000 \times 2) = 150,000$
5	B.Sc. (Agri.) Hons.	100,000	$(60,000 \times 2) = 120,000$
6	B.Sc. (Hons) FST	125,000	$(75,000 \times 2) = 150,000$

Note:

- Change of faculty is only allowed to candidates of Sindh Province, subject to the existing rules and the following conditions:
- Change will only be allowed against the vacant seat in a faculty from amongst self-finance quota.
- Application/request for change of faculty will only be entertained if submitted to the Director Admissions (Undergraduate Programs) within stipulated time.
- Request of candidates belonging to other Provinces for change of faculty shall not be considered.
- Charges/amount for Change of Faculty cannot be claimed / refunded after registration.
- Installments of the cost of self-finance seat(s) shall be paid in relevant program as specified above.
- No student shall be allowed to change his / her discipline / course after the specified period as mentioned in relevant clause of Admission Policy.

TABLE-VIII**PROVISIONALHOSTEL ACCOMODATION FEES CHARGEABLE FROM ALL STUDENTS RESIDING IN SAU HOSTELS**

S.#	Name of Fees/Charges	Amount in Rs.
1.	Hostel Form	1,000.00
2.	Hostel Allotment	1,000.00
3.	Hostel Card	500.00
4.	Room Rent	8,500.00
TOTAL		11,000.00
Students have to Pay Rs.5,500/- per semester.		

TABLE-IX

FACULTY WISE BREAKUP OF SEATS FOR VARIOUS CATEGORIES AT MAIN CAMPUS

Categories	B. Sc (Agri.) Hons.			B.E. (Agri)	DVM	BSIT. (Hons.)	B.Sc. (Hons.) IFST	Grand Total	
	Faculty of Crop Production	Faculty of Crop Protection	Faculty of Agricultural Social Sciences	Faculty of Agricultural Engineering	Faculty of Animal Husbandry & Veterinary Sciences	Information Technology Centre	Institute of Food Science & Technology		
A	Hyderabad Division	132	80	59	49	40	78	25	463
	Mirpurkhas Division	39	21	16	14	14	26	8	138
	Shaheed Benazir Abad Division	53	30	20	19	19	30	8	179
	Sukkur Division	56	29	21	20	19	29	7	181
	Larkana Division	65	33	26	23	23	39	11	220
	Karachi Division	8	3	3	3	3	3	2	25
	Sub-Total (A)	353	196	145	128	118	205	61	1206
B	Girls (Sindh Province)	15	12	13	8	16	12	7	83
	Special persons (Sindh Province)	1	1	1	1	1	1	1	7
	Real Sons / Daughters / Brothers / Sisters & Spouses of SAU / Constituent College(s) / SAU Campus regular employees	12	10	9	7	9	9	5	61
	Candidates Possessing Diploma of Associate Engineer (Sindh Province)	0	0	0	7	0	0	0	7
	Armed Services	3	3	3	2	3	2	2	18
	Baluchistan	17	10	10	8	6	1	1	53
	Khyber Pakhtunkhwa	0	0	0	0	6	0	0	6
	Gilgit Baltistan	1	1	1	0	4	0	1	8
	Azad Jammu & Kashmir	0	0	0	0	7	0	0	7
	FATA	1	1	1	0	0	1	1	5
	Punjab	2	2	2	2	0	2	2	12
	Foreigners	5	5	5	1	3	4	4	27
	Afghan Nationals	2	2	2	0	2	2	2	12
	Overseas Pakistanis	3	3	3	1	2	3	1	16
	Organization of Islamic Countries (OIC)	0	0	0	2	0	0	0	2
	SAU Alumni	1	1	1	1	1	1	1	7
Religious Minorities	6	6	3	2	2	4	2	25	
Sub-Total (B)	69	57	54	42	62	42	30	356	
C	Self-Finance Seats	36	32	23	9	56	30	7	193
Sub-Total (C)	36	32	23	9	56	30	7	193	
D	Sports Seats (Sindh Province)	5	5	5	4	0	5	2	26
Sub-Total (D)	5	5	5	4	0	5	2	26	
E	Sports seats reserved for girls (Sindh Province)	1	0	1	1	0	1	0	4
Sub-Total (E)	1	0	1	1	0	1	0	4	
Total (A+B+C+D+E)	464	290	228	184	236	283	100	1785	

Note:

1. The vacant seats on different quotas shall be distributed as per policy within the districts of Sindh province.
2. The remaining seats (falling vacant at initial stage) of foreigners, Azad Jammu & Kashmir, Armed Services etc. shall be shifted/transfer/ filled-up under self-finance scheme.
3. 50% of the self-finance seats are reserved for Sindh province and 50% for other Provinces.

TABLE-X

SAU MAIN CAMPUS FACULTY WISE DISTRIBUTION OF MERIT SEATS FOR VARIOUS DISTRICTS OF SINDH. R = RURAL U= URBAN

Division /District	B.Sc. (Agri.) Hons.						B.E (Agri)			DVM			BSIT. (Hons.)			B.Sc. (Hons.)			Grand Total			
	Faculty of Crop Production			Faculty of Crop Protection			Faculty of Agricultural Social Sciences			Faculty of Agricultural Engineering			Faculty of Animal Husbandry & Veterinary Sciences			Information Technology Centre				Institute of Food Science &Technology		
	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T		R	U	T
HYDERABAD DIVISION																						
Hyderabad	-	38	38	-	20	20	-	15	15	-	13	13	-	9	9	-	21	21	-	5	5	121
Tando Allahyar	8	4	12	6	2	8	3	2	5	3	2	5	2	1	3	5	2	7	2	1	3	43
Tando Muhammad Khan	9	2	11	6	2	8	5	2	7	2	1	3	2	1	3	5	2	7	2	1	3	42
Matiari	10	3	13	6	2	8	5	2	7	3	2	5	2	1	3	5	2	7	2	1	3	46
Badin	12	4	16	8	2	10	5	2	7	5	1	6	4	2	6	7	2	9	2	1	3	57
Thatta	7	2	9	4	1	5	4	1	5	3	1	4	3	1	4	6	1	7	1	0	1	35
Sujawal	6	1	7	4	1	5	2	1	3	2	1	3	2	0	2	3	1	4	2	0	2	26
Dadu	13	4	17	8	3	11	4	2	6	5	1	6	4	2	6	8	2	10	2	0	2	58
Jamshoro	5	4	9	3	2	5	3	1	4	3	1	4	3	1	4	4	2	6	2	1	3	35
Sub-Total	70	62	132	45	35	80	31	28	59	26	23	49	22	18	40	43	35	78	15	10	25	463
MIRPURKHAS DIVISION																						
Mirpurkhas	11	4	15	6	3	9	4	2	6	4	1	5	3	2	5	8	2	10	2	1	3	53
Umerkot	8	2	10	4	1	5	3	1	4	3	1	4	3	1	4	6	1	7	2	0	2	36
Tharparkar	13	1	14	6	1	7	5	1	6	4	1	5	4	1	5	7	2	9	2	1	3	49
Sub-Total	32	7	39	16	5	21	12	4	16	11	3	14	10	4	14	21	5	26	6	2	8	138
SHAHEEDBENAZIRABAD DIVISION																						
Shaheed Benazir Abad	10	7	17	6	3	9	5	2	7	4	2	6	4	2	6	6	3	9	1	1	2	56
Noushehro Feroze	11	5	16	7	3	10	4	2	6	5	1	6	4	2	6	8	2	10	2	0	2	56
Sanghar	15	5	20	8	3	11	5	2	7	6	1	7	5	2	7	9	2	11	3	1	4	67
Sub-Total	36	17	53	21	9	30	14	6	20	15	4	19	13	6	19	23	7	30	6	2	8	179
SUKKUR DIVISION																						
Sukkur	9	6	15	5	2	7	4	2	6	3	2	5	3	2	5	6	2	8	1	1	2	48
Ghotki	13	3	16	7	2	9	4	1	5	5	1	6	4	1	5	6	2	8	2	0	2	51
Khairpur	15	10	25	9	4	13	6	4	10	6	3	9	6	3	9	9	4	13	2	1	3	82
Sub-Total	37	19	56	21	8	29	14	7	21	14	6	20	13	6	19	21	8	29	5	2	7	181
LARKANA DIVISION																						
Larkana	9	6	15	5	3	8	3	2	5	4	1	5	3	2	5	7	3	10	2	1	3	51
Qambar/Shahdad Kot	10	4	14	5	2	7	4	2	6	4	1	5	4	1	5	7	2	9	2	0	2	48
Shikarpur	11	3	14	5	2	7	5	1	6	4	1	5	4	1	5	6	2	8	2	1	3	48
Jacobabad	8	3	11	4	2	6	3	1	4	3	1	4	3	1	4	5	1	6	2	0	2	37
Kashmore	9	2	11	4	1	5	4	1	5	3	1	4	3	1	4	5	1	6	1	0	1	36
Sub-Total	47	18	65	23	10	33	19	7	26	18	5	23	17	6	23	30	9	39	9	2	11	220
Karachi Division	2	6	8	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	1	2	25
Grand Total	224	129	353	127	69	196	91	54	145	85	43	128	76	42	118	136	69	205	42	19	61	1206

TABLE-XI

FACULTY/DISTRICT/AREA/GROUPWISE DISTRIBUTION OF MERIT SEATS OF SINDH PROVINCE. R = RURAL U= URBAN (PRE-ENGINEERING, PRE-MEDICAL & PRE-COMPUTER) AS PER PRESCRIBED RATIO

Division / District	B.Sc. (Agri.) Hons.															B.E. (Agri.) Faculty of Engineering			DVM Faculty of A.H & Veterinary Sciences			BSIT. HONS. Information Technology Centre					B.Sc. (Hons) Institute of Food Science & Technology							GRAND TOTAL	
	Faculty of Crop Production					Faculty of Crop Protection					Faculty of Agricultural Social Sciences					R	U	T	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T		
	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T																				R
HYDERABAD DIVISION																																			
Hyderabad	-	-	30	8	38	-	-	16	4	20	-	-	12	3	15	-	13	13	-	9	9	-	-	17	4	21	-	-	0	3	2	0	5	121	
Tando Allahyar	6	2	3	1	12	5	1	2	0	8	2	1	2	0	5	3	2	5	2	1	3	4	1	2	0	7	1	1	0	1	0	0	3	43	
Tando Muhammad Khan	7	2	2	0	11	5	1	2	0	8	4	1	2	0	7	2	1	3	2	1	3	4	1	2	0	7	1	1	0	1	0	0	3	42	
Matiari	8	2	2	1	13	5	1	2	0	8	4	1	2	0	7	3	2	5	2	1	3	4	1	2	0	7	1	1	0	1	0	0	3	46	
Badin	10	2	3	1	16	6	2	2	0	10	4	1	2	0	7	5	1	6	4	2	6	6	1	2	0	9	1	1	0	1	0	0	3	57	
Thatta	6	1	2	0	9	3	1	1	0	5	3	1	1	0	5	3	1	4	3	1	4	5	1	1	0	7	1	0	0	0	0	0	1	35	
Sujawal	5	1	1	0	7	3	1	1	0	5	2	0	1	0	3	2	1	3	2	0	2	2	1	1	0	4	1	1	0	0	0	0	2	26	
Dadu	10	3	3	1	17	6	2	2	1	11	3	1	2	0	6	5	1	6	4	2	6	6	2	2	0	10	1	1	0	0	0	0	2	58	
Jamshoro	4	1	3	1	9	2	1	2	0	5	2	1	1	0	4	3	1	4	3	1	4	3	1	2	0	4	1	1	0	1	0	0	3	35	
Sub-Total	56	14	49	13	132	35	10	30	5	80	24	7	25	3	59	26	23	49	22	18	40	34	9	31	4	78	8	7	0	8	2	0	25	463	
MIRPURKHAS DIVISION																																			
Mirpur khas	9	2	3	1	15	5	1	2	1	9	3	1	2	0	6	4	1	5	3	2	5	6	2	2	0	10	1	1	0	1	0	0	3	53	
Umerkot	6	2	2	0	10	3	1	1	0	5	2	1	1	0	4	3	1	4	3	1	4	5	1	1	0	7	1	1	0	0	0	0	2	36	
Tharparkar	10	3	1	0	14	5	1	1	0	7	4	1	1	0	6	4	1	5	4	1	5	6	1	2	0	9	1	1	0	1	0	0	3	49	
Sub-Total	25	7	6	1	39	13	3	4	1	21	9	3	4	0	16	11	3	14	10	4	14	17	4	5	0	26	3	3	0	2	0	0	8	138	
SHAHEED BENAZIRABAD DIVISION																																			
Shaheed Benazir Abad	8	2	6	1	17	5	1	2	1	9	4	1	2	0	7	5	2	7	4	2	6	5	1	2	1	9	1	0	0	1	0	0	2	56	
Nousheero Feroz	9	2	4	1	16	6	1	2	1	10	3	1	2	0	6	5	1	6	4	2	6	6	2	2	0	10	1	1	0	0	0	0	2	56	
Sanghar	12	3	4	1	20	6	2	2	1	11	4	1	2	0	7	6	1	7	5	2	7	7	2	2	0	11	2	1	0	1	0	0	4	67	
Sub-Total	29	7	14	3	53	17	4	6	3	30	11	3	6	0	20	16	4	20	13	6	19	18	5	6	1	30	4	2	0	2	0	0	8	179	
SUKKUR DIVISION																																			
Sukkur	7	2	5	1	15	4	1	2	0	7	3	1	2	0	6	3	2	5	3	2	5	5	1	2	0	8	1	1	0	1	0	0	2	48	
Ghotki	10	3	2	1	16	6	1	2	0	9	3	1	1	0	5	5	1	6	4	1	5	5	1	2	0	8	1	1	0	0	0	0	2	51	
Khairpur	12	3	8	2	25	7	2	3	1	13	5	1	3	1	10	6	3	9	6	3	9	7	2	3	1	13	1	1	0	1	0	0	3	82	
Sub-Total	29	8	15	4	56	17	4	7	1	29	11	3	6	1	21	14	6	20	13	6	19	17	4	7	1	29	3	3	0	2	0	0	7	181	
LARKANA DIVISION																																			
Larkana	7	2	5	1	15	4	1	2	1	8	2	1	2	0	5	4	1	5	3	2	5	6	1	2	1	10	1	1	0	1	0	0	3	51	
Qambar/ Shahdad. Kot	8	2	3	1	14	4	1	2	0	7	3	1	2	0	6	4	1	5	4	1	5	6	1	2	0	9	1	1	0	0	0	0	2	48	
Shikarpur	9	2	2	1	14	4	1	2	0	7	4	1	1	0	6	4	1	5	4	1	5	5	1	2	0	8	1	1	0	1	0	0	3	48	
Jacobabad	6	2	2	1	11	3	1	2	0	6	2	1	1	0	4	3	1	4	3	1	4	4	1	1	0	6	1	1	0	0	0	0	2	37	
Kashmore	7	2	2	0	11	3	1	1	0	5	3	1	1	0	5	3	1	4	3	1	4	4	1	1	0	6	1	1	0	0	0	0	1	36	
Sub-Total	37	10	14	4	65	18	5	9	1	33	14	5	7	0	26	18	5	23	17	6	23	25	5	8	1	39	5	5	0	2	0	0	12	220	
Karachi Division	2	0	5	1	8	1	0	2	0	3	1	0	2	0	3	1	2	3	1	2	3	1	0	2	0	3	1	0	0	1	0	0	2	25	
Grand Total	178	46	103	26	353	101	26	58	11	196	70	50	21	4	145	85	43	128	76	42	118	112	27	59	7	205	24	18	0	17	2	0	61	1206	

**TABLE-XII
DISTRIBUTION OF MERIT AND SELF-FINANCE SEATS FOR VARIOUS DISTRICTS OF SINDH. R = RURAL U= URBAN OF ALL BS PROGRAMS IN DIFFERENT DISCIPLINE AT MAIN CAMPUS, KCAET, KHAIRPUR MIRS & SAU CAMPUS, UMERKOT**

Division /District	FAHVS						FASS						FAE						ITC						Grand Total	
	BS-Dairy			BS-Fish			BS-Poul			BS-Eng			BS-Envi			BS-Agro			BS-Comp			BS-Soft				
	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T		
HYDERABAD DIVISION																										
Hyderabad	-	6	6	-	6	6	-	6	6	-	6	6	-	6	6	-	6	6	-	6	6	-	6	6	48	
Tando Allahyar	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	40	
Tando Muhammad Khan	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	8	
Matiari	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Badin	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Thatta	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	8	
Sujawal	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	8	
Dadu	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Jamshoro	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	8	
Sub-Total	13	11	24	13	11	24	13	11	24	13	11	24	13	11	24	13	11	24	13	11	24	13	11	24	192	
MIRPURKHAS DIVISION																										
Mirpurkhas	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Umerkot	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Tharparkar	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Sub-Total	6	3	9	6	3	9	6	3	9	6	3	9	6	3	9	6	3	9	6	3	9	6	3	9	72	
SHAHEEDBENAZIRABAD DIVISION																										
Shaheed Benazirabad	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Noushehro Feroze	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	32	
Sanghar	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	32	
Sub-Total	8	3	11	8	3	11	8	3	11	8	3	11	8	3	11	8	3	11	8	3	11	8	3	11	88	
SUKKUR DIVISION																										
Sukkur	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Ghotki	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Khairpur	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	3	2	5	40	
Sub-Total	7	4	11	7	4	11	7	4	11	7	4	11	7	4	11	7	4	11	7	4	11	7	4	11	88	
LARKANA DIVISION																										
Larkana	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Qambar/ShahdadKot	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	3	1	4	32	
Shikarpur	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	24	
Jacobabad	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	2	0	2	16	
Kashmore	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	8	
Sub-Total	10	3	13	10	3	13	10	3	13	10	3	13	10	3	13	10	3	13	10	3	13	10	3	13	104	
Karachi Division	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	16	
Self-Finance	-	-	10	-	-	10	-	-	10	-	-	10	-	-	10	-	-	10	-	-	10	-	-	10	80	
Total	45	25	80	45	25	80	45	25	80	45	25	80	45	25	80	45	25	80	45	25	80	45	25	80	640	

TABLE-XIII

FACULTY/DISTRICT/AREA/GROUPWISE DISTRIBUTION OF MERIT SEATS OF SINDH PROVINCE FOR ALL BS DEGREE PROGRAMS.
 R = RURAL U= URBAN (PRE-ENGINEERING, PRE-MEDICAL, PRE-COMPUTER, GENERAL SCIENCE, COMMERCE, ART &
 HUMANITIES AND DIPLOMA OF ASSOCIATE ENGINEERING AS PER PRESCRIBED RATIO

Division /District	FAHVS												FASS						FAE						ITC						Grand Total															
	BS-Dairy				BS-Fish				BS-Poul				BS-Eng						BS-Envi				BS-Agro				BS-Comp					BS-Soft														
	R		U		T	R		U		T	R		U		T	R		U		T	R		U		T	R		U		T		R		U		T										
	PM	PE	PM	PE		PM	PE	PM	PE		PM	PE	PM	PE		PM	PE	H/C	PM		PE	H/C	PM	PE		PC	PM	PE	PC			PM	PE	PC	PM		PE	DAE	PM	PE	PM	PE				
HYDERABAD DIVISION																																														
Hyderabad	0	0	6	0	6	0	0	6	0	6	0	6	0	6	0	0	0	1	2	3	6	0	0	0	3	2	1	6	0	0	3	3	6	0	0	1	5	6	0	0	1	5	6	48		
Tando Allahyar	3	0	2	0	5	3	0	2	0	5	3	0	2	0	5	1	1	1	1	0	1	5	2	1	0	1	1	0	5	2	1	1	1	5	1	2	0	2	5	1	2	0	2	5	40	
Tando Muhammad Khan	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	8		
Matiari	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	1	0	0	1	3	0	2	0	1	3	0	2	0	1	3	0	2	0	1	24
Badin	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Thatta	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	8		
Sujawal	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	8		
Dadu	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	1	0	0	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Jamshoro	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	8		
Sub-Total	13	0	11	0	24	13	0	11	0	24	13	0	11	0	24	4	1	8	3	2	6	24	9	4	0	7	3	1	24	9	4	4	7	24	1	12	1	10	24	1	12	1	10	24	192	
MIRPURKHAS DIVISION																																														
Mirpurkhas	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Umerkot	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Tharparkar	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Sub-Total	6	0	3	0	9	6	0	3	0	9	6	0	3	0	9	3	0	3	0	0	3	9	3	3	0	3	0	0	9	3	3	0	3	9	0	6	0	3	9	0	6	0	3	9	72	
SHAHEEDBENAZIRABAD DIVISION																																														
Shaheed Benazirabad	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Noushehro Feroze	3	0	1	0	4	3	0	1	0	4	3	0	1	0	4	1	0	2	0	0	1	4	2	1	0	1	0	0	4	1	2	0	1	4	1	2	0	1	4	1	2	0	1	32		
Sanghar	3	0	1	0	4	3	0	1	0	4	3	0	1	0	4	1	0	2	0	0	1	4	2	1	0	1	0	0	4	1	2	0	1	4	1	2	0	1	4	1	2	0	1	32		
Sub-Total	8	0	3	0	11	8	0	3	0	11	8	0	3	0	11	3	0	5	0	0	3	11	5	3	0	3	0	0	11	3	5	0	3	11	2	6	0	3	11	2	6	0	3	11	88	
SUKKUR DIVISION																																														
Sukkur	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24			
Ghotki	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24			
Khairpur	3	0	2	0	5	3	0	2	0	5	3	0	2	0	5	1	0	2	1	0	1	5	2	1	0	1	1	0	5	1	2	1	1	5	1	2	0	2	5	1	2	0	2	40		
Sub-Total	7	0	4	0	11	7	0	4	0	11	7	0	4	0	11	3	0	4	3	0	1	11	4	3	0	3	1	0	11	3	4	1	3	11	1	6	0	4	11	1	6	0	4	11	88	
LARKANA DIVISION																																														
Larkana	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Qambar/ShahdadKot	3	0	1	0	4	3	0	1	0	4	3	0	1	0	4	2	0	1	0	0	1	4	2	1	0	1	0	0	4	1	2	0	1	4	1	2	0	1	4	1	2	0	1	32		
Shikarpur	2	0	1	0	3	2	0	1	0	3	2	0	1	0	3	1	0	1	0	0	1	3	1	1	0	1	0	0	3	1	1	0	1	3	0	2	0	1	3	0	2	0	1	24		
Jacobabad	2	0	0	0	2	2	0	0	0	2	2	0	0	0	2	1	0	1	0	0	0	2	1	1	0	0	0	0	2	1	1	0	0	2	0	2	0	0	2	0	2	0	0	16		
Kashmore	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	8		
Sub-Total	10	0	3	0	13	10	0	3	0	13	10	0	3	0	13	5	0	5	0	0	3	13	6	4	0	3	0	0	13	4	6	0	3	13	1	9	0	3	13	1	9	0	3	13	104	
Karachi Division	1	0	1	0	2	1	0	1	0	2	1	0	1	0	2	0	0	1	0	0	1	2	1	0	0	1	0	0	2	0	1	0	1	2	0	1	0	1	2	0	1	0	1	16		
Self-Finance	0	0	0	0	10	0	0	0	0	10	0	0	0	0	10	0	0	0	0	0	0	10	0	0	0	0	0	0	10	0	0	0	0	10	0	0	0	0	10	0	0	0	0	80		
Total	45	0	25	0	80	45	0	25	0	80	45	0	25	0	80	18	1	26	6	2	17	80	28	17	0	20	4	1	80	22	23	5	20	80	5	40	1	24	80	5	40	1	24	80	640	

TABLE-XIV

DISTRICT/DIVISION/OTHER RELEVANT CATEGORYWISE ALLOCATION/DISTRIBUTION OF SEATS FORVARIOUS DEGREE PROGRAMS AT KHAIRPUR COLLEGE OF AGRICULTURAL ENGINEERING & TECHNOLOGY(KCAET)

S #	District	B.E. (Agri.)			B.Sc. (Agri.) Hons. (Biotechnology)			B.Sc. (Hons.) (IFST)			BS in Software Engineering			Grand Total
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	
1	Sukkur	6	2	8	4	2	6	4	2	6	3	2	5	25
2	Ghotki	1	1	2	1	1	2	1	1	2	3	2	5	11
3	Khairpur	8	4	12	4	2	6	4	2	6	6	2	8	32
Sub Total		15	7	22	9	5	14	9	5	14	12	6	18	68
SHAHEED BENAZIRABAD DIVISION														
4	Shaheed Benazir Abad (Nawab shah)	2	2	4	2	0	2	2	0	2	6	2	8	16
5	Noushehro Feroze	4	2	6	2	2	4	2	2	4	4	2	6	20
6	Sanghar	1	-	1	1	-	1	1	-	1	4	2	6	9
Sub Total		7	4	11	5	2	7	5	2	7	14	6	20	45
LARKANA DIVISION														
7	Larkana	4	2	6	2	2	4	2	2	4	2	2	4	18
8	Qambar/Shahdad Kot	1	1	2	1	1	2	1	1	2	2	1	3	9
9	Shikarpur	2	1	3	1	1	2	1	1	2	2	0	2	9
10	Jacobabad	1	1	2	1	1	2	1	1	2	2	0	2	8
11	Kashmore	1	-	1	1	-	1	1	-	1	1	0	1	4
Sub Total		9	5	14	6	5	11	6	5	11	9	3	12	48
MIRPURKHAS DIVISION														
12	Mirpurkhas (Division)	-	-	2	-	-	2	0	0	2	-	0	3	9
Sub Total		-	-	2	-	-	2	0	0	2	-	0	3	9
HYDERABAD DIVISION														
13	Hyderabad (Division)	-	-	5	-	-	3	-	-	3	0	-	17	28
Sub Total		-	-	5	-	-	3	-	-	3	0	-	17	28
KARACHI DIVISION														
14	Karachi	-	-	1	-	-	1	-	-	1	0	2	2	5
Sub Total		-	-	1	-	-	1	-	-	1	0	2	2	5
VARIOUS QUOTA/CATEGORIES														
15	Girls Quota			2	-	-	1	-	-	1	-	-	1	5
16	Employees Quota			2	-	-	1	-	-	1	-	-	1	5
17	Special Persons			1	-	-	1	-	-	1	-	-	1	4
18	Minority Quota			1			1			1			1	4
Sub Total		0	0	7	0	0	4	0	0	4	0	0	0	18
Grand Total		31	16	60	20	12	42	20	13	42	55	25	76	220

TABLE-XV

DISTRICT/DIVISION/OTHER RELEVANT CATEGORYWISE ALLOCATION/DISTRIBUTION OF SEATS FOR VARIOUS DEGREE PROGRAMS AT SINDH AGRICULTURE UNIVERSITY CAMPUS, UMERKOT

S #	District	B.Sc. (Agri.) Hons.			BSIT. (Hons.)			BS in English (Language & Literature)			BS in Software Engineering			Grand Total
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	
SUKKUR DIVISION														
1	Sukkur	1	0	1	1	1	2	2	1	3	2	1	3	9
2	Ghotki	1	0	1	1	1	2	2	1	3	2	1	3	9
3	Khairpur	1	0	1	1	1	2	4	1	5	4	1	5	13
	Sub Total	3	0	3	3	3	6	8	3	11	8	3	11	31
SHAHEED BENAZIRABAD DIVISION														
4	S. B. Abad	1	0	1	1	1	2	2	1	3	2	1	3	9
5	Noushehro Feroze	1	0	1	1	1	2	3	1	4	3	1	4	11
6	Sanghar	3	1	4	3	1	4	3	1	4	3	1	4	16
	Sub Total	5	1	6	5	3	8	8	3	11	8	3	11	36
LARKANA DIVISION														
7	Larkana	1	0	1	1	1	2	2	1	3	2	1	3	9
8	Qambar/ Shahdad Kot	1	0	1	1	1	2	3	1	4	3	1	4	11
9	Shikarpur	1	0	1	1	1	2	2	1	3	2	1	3	9
10	Jacobabad	1	0	1	1	1	2	1	1	2	1	1	2	7
11	Kashmore	1	0	1	1	1	2	1	0	1	1	0	1	5
	Sub Total	5	0	5	5	5	10	9	4	13	9	4	13	41
MIRPURKHAS DIVISION														
12	Mirpurkhas	6	2	8	7	3	10	2	1	3	2	1	3	24
13	Umerkot	9	3	12	13	4	17	2	1	3	2	1	3	35
14	Tharparkar	7	1	8	10	1	11	2	1	3	2	1	3	25
	Sub Total	22	6	28	30	8	38	6	3	9	6	3	9	84
HYDERABAD DIVISION														
15	Hyderabad		2	2		2	2		6	6		6	6	16
16	T. Allahyar	1	0	1	2	1	3	3	2	5	3	2	5	14
17	T. M. Khan	1	0	1	2	1	3	1	0	1	1	0	1	6
18	Matiari	1	0	1	1	1	2	2	1	3	2	1	3	9
19	Badin	1	0	1	2	1	3	2	1	3	2	1	3	10
20	Thatta	1	0	1	1	1	2	1	0	1	1	0	1	5
21	Sujawal	1	0	1	2	1	3	1	0	1	1	0	1	6
22	Dadu	1	0	1	1	1	2	2	1	3	2	1	3	9
23	Jamshoro	1	0	1	1	1	2	1	0	1	1	0	1	5
	Sub Total	8	2	10	12	10	22	13	11	24	13	11	24	80
KARACHI DIVISION														
24	Karachi	0	1	1	1	1	2	1	1	2	1	1	2	7
	Sub Total	0	1	1	1	1	2	2	0	2	2	0	2	7
VARIOUS QUOTA/CATEGORIES														
	Girls Quota	-	-	3	-	-	2	-	-	0	-	-	0	5
	Employees Quota	-	-	1	-	-	2	-	-	0	-	-	0	3
	Self-Finance	-	-	5	-	-	15	-	-	0	-	-	0	20
	Sports	-	-	2	-	-	1	-	-	0	-	-	0	3
	Special Person			1			1			0			0	2
	Religious Minorities			3			3			0			0	6
	Sub Total	0	0	11	0	0	20	0	0	0	0	0	0	39
	Grand Total	43	10	64	58	28	106	52	18	70	52	18	70	318

