

Admission Autumn 2022

AIOU

BS Programmes

(Face to Face)

- Environmental Sciences
- Botany
- Chemistry
- Computer Science
- Mathematics
- Physics
- Statistics

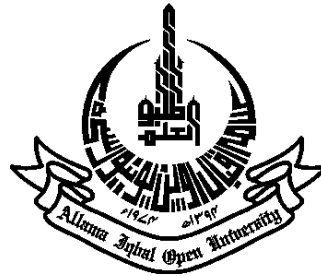


Allama Iqbal Open University, Islamabad

www.aiou.edu.pk

Help Line: (051) 111-112-468

PROSPECTUS
OF
BS (Face to Face) Programmes
For
SEMESTER: AUTUMN, 2022



Allama Iqbal Open University, Islamabad

(All Rights are Reserved with the Publisher)

Semester:.....	Autumn, 2022
Year of Printing.....	2022
Printing Incharge.....	Dr. Sarmad Iqbal
Composed by:	Asrar ul Haque Malik
Printer:.....	AIOU Printing Press
Publisher:	Allama Iqbal Open University

Vice-Chancellor's Message

Dear Student,

السلام عليكم

Allama Iqbal Open University (AIOU) is one of the mega universities of the world and it occupies a unique position in the education sector of Pakistan. Because of its affordability and high quality distance and online academic programs. AIOU has now turned into the most favorite university of the country with high international of repute. The university made a landmark progress by ensuring access to quality education rural areas under-privileged students for the people of all ages particularly the females can now select and join the programs of their choice while sitting at their residence and along with continuing their jobs. After assessing the success of many degree programs in Pakistan, AIOU is now going to offer a ranges programs for the students in UAE, Saudi Arabia, Kuwait, Qatar, Bahrain, Oman, USA and many other countries currently. More than 1.3 million students are getting benefits from the high quality educational services of AIOU in all regions of the country through more than fifty regional offices of the university. It offers-suggests many undergraduate and Post Graduate programs at rural and remote areas providing an unparalleled opportunity to all the poor and deprived sections of the society at an affordable cost. The university has recently digitalized all its student-support services for facilitating its students on priority basis. This digitization of the system, it is hoped, will enable AIOU students to get all kinds of educational using their Learning Management system (LMS) portal support online.



Committed for your bright future

Prof. Dr. Zia-Ul-Qayyum
Vice Chancellor, AIOU

Semester Schedule for BS/MA/MSc (Face to Face Mode) and MPhil/Phd Programmes

AUTUMN SEMESTER		SPRING SEMESTER	
Admission	16th July to 19th August (04 Weeks)	Admission	16th January to 14th February (04 Weeks)
Test/Interview	20th August to 25th August (01 Week)	Test/ Interview	17th February to 24th February (01 Week)
Enrollment Finalization	1st Merit list: 28th August (Morning) Dues/Fee: 2nd September 2nd merit list: 3rd September Dues/Fee: 6th September 3rd merit list: 9th September Dues/Fee: 11th September	Enrollment Finalization	1st Merit list 24th February 2nd Merit list 27th February 3rd Merit list 2nd March
Study Period/ Workshop	16th September to 3rd January (16 Weeks)	Study Period/ Workshop	03rd March to 23rd June (16 Weeks)
Examination	6th January to 18th January (02 Weeks)	Examination	24th June to 06th July (02 Weeks)
Result Declaration	25th January	Result Declaration	15th July

Note: Contact concerned Regional office for exact schedule of activities. Continuing students are sent information for all activities by LMS/SMS. Simultaneously information is placed on website (www.aiou.edu.pk), students can download if not received by post.

**MINIMUM AND MAXIMUM DURATION/SEMESTERS
FOR FACE TO FACE PROGRAMMES**

Sr. No.	Degree Level	Minimum Duration	Maximum Duration
1	Ph.D	3 years / 5 semesters	8 years *
2	MS/M.Phil/M.Sc (Hons)/MBA/COL MBA	2 years / 4 Semesters	4 Years **
3	M.A/M.Sc (2-years)	2 Years / 4 Semesters	4 Years
4	BS (4-years)	4 years / 8 Semesters	6 Years
5	Associate Degree (2-Years)	2 Years / 4 Semesters	4 Years
6	Postgraduate Diploma (1-year)	1 Year / 2 Semesters	2 Years
7	Certificate (6-months)	6 Months / 1 Semester	1 Years

***...** As per AIOU rules**

Revised Policy: Reappear and again Reappear

The policy of Re-appear and again Re-appear is being discontinued and the concerned students will have to re-register/enroll or re-admit in the failed course(s).

COMPLETE PROCEDURE TO ENROLL IN AIOU PROGRAMME AND SUBMISSION OF FORM IN AIOU ISLAMABAD

All fresh and continue students can submit their admission using online system.

Follow these instructions to apply:

APPLY ONLINE (FRESH STUDENTS)

1. Visit website: <https://online.aiou.edu.pk>
2. Press link “**OAS For Fresh Admission**”
3. Get register by entering your email or mobile phone number
4. Login into your registered account
5. Fill all the requisite fields of admission form
6. After filling the admission form, print out your “Challan Form”.
7. Using printed challan form and submit your fee in any branch of FWBL, ABL, MCB or UBL.
8. **You can also deposit fee through Upaisa, Jazzcash & Easypaisa.**

APPLY ONLINE (CONTINUE STUDENTS):

1. Visit website: <https://online.aiou.edu.pk>
2. Press link “**CMS for Continuing Students**”;
3. Enter your “User ID & Password
4. Select courses and print challan form.
5. Using printed challan form submit your fee in any branch of FWBL, UBL, MCB or ABL. Keep save copy of your challan form after submission of fee. **You need not to send challan to the University** but University can ask for copy of challan form any time if required.
6. You can also deposit fee through Upaisa, Jazzcash & Easypaisa.

CONTENTS

	Page
ALLAMA IQBAL OPEN UNIVERSITY	1
FACULTY OF SCIENCES	1
Department of Biology and Environmental Sciences	3
BS in Environmental Sciences (4 years).....	3
BS in Botany (4 years).....	7
Department of Chemistry	11
BS Chemistry Programmes.....	12
Department of Computer Sciences	17
BS Computer Science (4 years)	18
Department of Mathematics	25
BS Mathematics (4 years).....	25
Department of Physics	29
BS Physics (4 years)	31
Department of Statistics	36
BS Statistics (4 years).....	36
GENERAL INFORMATION	41
Procedure for Depositing Fee	42
Important Telephone Numbers	48

ALLAMA IQBAL OPEN UNIVERSITY

Allama Iqbal Open University, a mega university was established in 1974 under an Act of Parliament. The main campus of the university is situated in sector H-8, Islamabad. It was the second open university of the world and the first of its kind in Asia and Africa. The aim of establishing AIOU was to provide affordable and accessible education through distance learning at the doorsteps to those people who could not continue their education journey through formal system of education. The University (AIOU) operates on semester system and admits students in Autumn and Spring semesters. Undergraduate admissions are offered in both the semesters where-as postgraduates are offered once a year. The enrolled students are given course books specially prepared by the university on self instructional principles. However, at post graduate level reprints of foreign books alongwith allied material and university prepared study guides help students to polish their skills.

At present, the AIOU is offering programmes from Matric to PhD level in diverse disciplines comprised of four faculties. The university has established study centres across the country where distance education students are provided necessary guidance by their respective tutors. Moreover, the university has established full-time study centres wherein the students of MBA (IT), MBA (Banking and Finance), BS (CS), MSc/BS Chemistry, MSc/BS Microbiology etc. are being provided instruction, guidance and counselling through face-to-face education. AIOU is also offering four years under-graduate degrees.

Apart from curricular and extra-curricular activities during the academic year, the AIOU and its regional centres actively participate in the co-curricular activities by arranging educational and literary seminars, workshops and conferences, attended not only by the students and faculties of the university but also by the renowned dignitaries and scholars. For the science students and the research scholars, a science complex has been built where they use the latest equipment of international standard for experiments and research. To meet the present-day challenges, internet facility is also available in the student hostel and the Central Library where computers have been provided to enable students to access latest information available through open source databases.

FACULTY OF SCIENCE

Faculty of Sciences forms an important and integral part of the university. Since its establishment in 1982 with five teaching departments, it has undergone major development changes. It now comprises nine teaching and research departments which are offering courses at the undergraduate and postgraduate levels to more than ten thousand students. The Faculty operates under the basic guidelines of the University Act and on “Education for All as Convenient” basis so that maximum students get benefit from its academic programmes and educational facilities. This principle has necessitated some structural changes in the non- formal mode, particularly at the postgraduate level, in the offering of theory courses and practical lab work. This conceptual adjustment has been quite successful and many of its in-service students are benefiting

from the postgraduate study programmes. Improvement in qualifications for a better life is a right of everyone and the Faculty's programmes meet this challenge by offering opportunities to all. In particular a significant number of beneficiaries are those who cannot afford education in formal institutions due to a variety of reasons.

Realizing the importance of science education and growing needs of the Faculty of Sciences, the University has completed a building, the Research Complex, at a cost of Rs 35 million. The Research Complex now accommodates departments of Agricultural Sciences, Biology, Chemistry, Environmental Sciences, Home & Health Sciences, Mathematics, Statistics and Physics. These departments are running a variety of postgraduate technical, scientific and professional programmes successfully. The Research Complex also has a Computer Lab with Internet and On-line Library Facility for literature survey, Seminar Room, Lecture Hall and Library. In addition, there are many labs for practical work, teaching and research, and instrumentation labs for analysis. The University is developing these labs through its own resources. The Faculty of Sciences is fortunate to have Prof. Dr. Zia-Ul-Qayyum as the University's Vice-chancellor, who has given personal attention to the development of the Faculty of Sciences by providing generous amount of funds and valuable guidance.

Two Model labs have been developed in the Research Complex with the assistance of the Higher Education Commission to meet the training needs of science teachers.

This development is significant for training of teachers since under the new educational policy four-year BS programme has started in undergraduate educational institutions.

More than fifty highly qualified full-time faculty members are on the roll of the Faculty of Sciences. Their role in the planning, designing and development of courses to meet student's needs is vital. Faculty members also engage in imparting and supervising of instructions so that high standards are maintained. In addition, highly qualified and experienced professors are also engaged on contractual basis or as part time instructors for postgraduate study programmes. The Faculty is also offering academic positions under the tenure-track system to attract the best minds in scientific and technological fields.

Research is an integral part of the postgraduate study programmes leading to MSc, MPhil and PhD degrees in Agricultural Sciences, Chemistry, Computer Sciences, Home and Health Sciences, Physics, Mathematics and Statistics. Rules and regulations governing the postgraduate study programmes are those approved by the Higher Education Commission (HEC).

The Faculty has launched BS programme in Chemistry and Microbiology from semester Spring 2009. The four-year BS programme is structured according to the recent policies of the Higher Education Commission for the improvement of the standard of education so as to bring it at par with the international standards.

BS IN ENVIRONMENTAL SCIENCE (4 YEARS)

The 4 years' degree program will enable the students to apply interdisciplinary skills, systems approaches and perspectives to understand and analyze environmental issues and policies of global and local concerns. It aims at producing dynamic young environmentalists by developing academic foundation, technical skills, communication abilities and professionalism enabling them to compete in both the governmental and non-governmental sectors.

On accomplishing the course, the students will be able to:

1. Deal with local and global environmental challenges, both academically and practically
2. Contribute in informed decision making, strategic planning and leadership in the society through interdisciplinary understanding and problem-solving abilities

CRITERIA FOR ADMISSION

Criteria for admission in first semester of the 4-year program

- A. F. Sc (premedical or pre-engineering) / DAE or equivalent qualification with minimum second division (at least 45% marks) is the pre-requisite for admission in BS Environmental Science.
- B. Foreign certificate/ degree holders will need to produce equivalence certificate from IBCC to seek admission in semester 1 and from HEC for admission in semester V.
- C. Only the prescribed printed admission forms duly filled along with the attested copies of academic documents,

certificates and DMCs are required to be sent to the Chairperson, Department of Environmental Science, AIOU, H-8, Islamabad.

GUIDELINES FOR ONLINE APPLICATION

1. The online application form can be accessed from AIOU official website www.aiou.edu.pk.
2. Applicants are required to fill all the desired fields on online application form
3. Applicants are desired to deposit application fee on the prescribed challan form in specified banks
4. The Challan number after fee submission should be entered in online application form for successful submission.
5. Incomplete forms shall not be entertained.

Note: Only selected candidates will be asked to deposit semester after verification of original documents. The fee should not be submitted before the confirmation of admission. The deposited fee will not be refundable or adjustable for future admission. The Fee deposit slip should be submitted to:

**The Head of Department
Department of Environmental Science
Allama Iqbal Open University, H-8, Islamabad**

In case a selected candidate fails to submit fee in time, the department may reserve the right to invite a candidate in waiting list for admission against vacant seat.

MERIT DETERMINATION

Merit will be determined as per following weightage

Matriculation	20%
F. Sc.	60%
Marks in Science Subjects	20%

MEDIUM OF INSTRUCTION

The Medium of Instructions for BS Environmental Science is English for all the courses except Islamic Studies/Ethics and Pakistan Studies which will be offered in Urdu for this program.

STUDY SYSTEM

In 4-year BS Environmental Science Program regular classes for all courses and practical work will be conducted at AIOU Main Campus.

Minimum 70 % attendance is required in science subjects as per AIOU rules.

- **Teaching Material:** class lectures and other reading materials will be provided by the course instructor. In addition, the student will be advised to consult other reference books for further reading.
- **Class Work:** Three-hour class work/lectures per week for a (3+0) credit hour course will be compulsory for sixteen weeks. The credit hours are specified against each course in the Layout of Program.
- **Lab Work:** Three-hour lab work per week for a (3+1) CH course will be compulsory for 16 weeks. The practical work will consist of lab oriented practicals, field visits or any other activity as required.

THE ASSESSMENT SYSTEM

As per AIOU practice the assessment system comprises of two components

- **Continuous assessment:** continuous assessment will be based on class test and lab work. The pass percentage in the lab assignments/field visit/class test will be 50% and its weightage in final result will be 30%.
- **Final Examination:** Final examination of 100 marks for each theory course will be conducted at the end of semester. The pass percentage in final examination will be 50% and its weightage in the final result will be 70%. Student will have to successfully complete each component independently to pass a course.

Note: If a student fails to pass in any of assessment component of a particular course, he / she will have to re-enroll in that course

The Grading System

In BS Environmental Science program student have to secure at least 50% marks in Lab and field assignment or class test and final examination each individually and 50% marks in aggregate to pass the program.

Degree Requirement and Duration

In order to maintain the equivalence of duration of study at international level, the BS program will comprise of 4-year (8 Semester). For award of degree of BS in ES, the candidate will have to successfully pass all the courses (127 Credit hours including 6 Credit Hour Research Project) within a minimum period of 4 years (8 semesters). Failing which, a student can be given an extension of 3 Years in maximum, after completion of initial period.

SEMESTER WISE DISTRIBUTION OF COURSE 127

Semester 1			
#	Course	CH	Code
1	Cell Biology, Genetics and Evolution	4(3+1)	4401
2	Inorganic Chemistry	4(3+1)	4421
3	Introduction to Environmental Science	4(3+1)	4441
4	Pre-Calculus	3	9467
5	English I: Composition and Comprehension	3	5451
		18	

Semester 2			
#.	Course	CH	Code
1	Diversity of Plants	4(3+1)	4402
2	Organic Chemistry	4(3+1)	4422
3	Environmental Pollution	4(3+1)	4442
4	Calculus I	3	4432
5	English II: Technical and Business Writing	3	5454
		18	

Semester 3			
#	Course	CH	Code
1	Diversity of Animals	4(3+1)	4469
2	Fundamentals of Microbiology	4(3+1)	4403
3	Pakistan Studies	2	5465
4	English III: Communication Skills	3	5458
		13	

Semester 4			
#	Course	CH	Code
1	Biotechnology	4(3+1)	4412
2	Environmental Microbiology	4(3+1)	4445
3	Introduction to Computer	3(3+0)	5468
4	Public Relations	3	9468
5	Islamic Studies / Ethics*	2	5466/5467
		16	

*** For Non-Muslims Only**

Semester 5			
#	Course	CH	Code
1	Physics of the Environment	4(3+1)	4467
2	Environmental Chemistry	4(3+1)	4443
3	Biostatistics	3	4482
4	Environmental Policies and Regulations	3	4458
		14	

Semester 6			
#	Course	CH	Code
1	Environmental Biology	4(3+1)	4446
2	Energy and Environment	3	4448
3	Intro of Environmental Economics	3	4444
4	Natural Resource Management	3	4438
5	Scientific Research	4(3+ 1)	7413
		17	

Semester 7			
#	Course	CH	Code
1	Biodiversity and Conservation	4(3+1)	4452
2	Health, Safety & Environmental Management Systems	4(3+1)	4455
3	Environmental Impact Assessment	4(3+1)	4450
4	Sustainable Development	3	4453
5	Environmental Toxicology	3	4456
		18	
Semester 8			
#	Course	CH	Code
1	Research Project	6	4418
2	Project Management	3	4460
3	GIS and Remote Sensing	4(3+1)	4483
		13	

Total Credit = 18+18+13+16+14+17+18+13 = 127

FEE TARIFF FOR 1st SEMESTER

#	Item	Rates
1.	Registration Fee (Once at time of admission)	Rs.500/-
2.	Admission Fee (Once at time of 1 st admission)	Rs.1000/-
3	Technology Fee	Rs.500/-
3.	Per 4 credit hours course fee: Rs. 8000 Rs. 8000 × 3 = Rs. 24000/-	Rs.24000/-
4.	Per 3 credit hours course fee: Rs. 6000	Rs.12000/-

5.	Lab Charges	Rs.2500/-
	Total	Rs. 40,500/-

All students are required to pay full fee in advance as prescribed at the beginning of each semester. The university reserves the right to revise the fee structure or add any fee considered appropriate at any time during the study period. All such changes will be applicable to all students

FACULTY MEMBERS

1. Dr. Sofia Khalid, Associate Professor/Chairperson
Department of Environmental Science
Ph: 051 9057185
2. Dr. Zahid Ullah
Assistant Professor
Ph: 051 905 7735
3. Dr. Hina Fatimah
Assistant Professor
Ph: 051 905 7279
4. Dr. Samia Qadeer
Assistant Professor
Ph: 051 905 7735

BS in Botany (4 years)

Introduction

The study of plants is vital because they underpin almost all life forms on Earth by generating a large proportion of oxygen and food that allow humans and other organisms to subsist. Plants are one of the major groups of organisms that carry out photosynthesis, a process that absorbs carbon dioxide, a greenhouse gas that is a small but important variable that influences global climate. As a by-product of photosynthesis, they release oxygen into the atmosphere, a gas that is required by nearly all living things to carry out cellular respiration. Additionally, they are influential in the global carbon and water cycles and plant roots bind and stabilize soils, preventing soil erosion. Plants are crucial to the future of human society as they provide food, oxygen, medicine, and products for people, as well as creating and preserving soil.

Scope of the Program

This program has an interdisciplinary and multidisciplinary scope enabling students to understand the significance and concepts of Botany. It aims at producing dynamic young graduates in the field of Botany by developing strong skill, academic foundation, and professionalism enabling them to compete in governmental and non-governmental sectors. Botany covers a wide range of scientific disciplines including the study of plant structure, growth, reproduction, metabolism, development, diseases, chemical properties, evolutionary relationships and plant taxonomy.

Graduates within Botany can progress to a wide range of careers. They can work in national and international organization in either public or private sectors as Biodiversity Researchers, Environmental Scientists, Nature Reserve Managers, Research Scientists, Wildlife Management Advisors, Project Officers, Ecological Consultants and Conservation Officers, Quality Control Officers, Salesperson etc.

Objectives

On accomplishing the course, the students will be able to:

1. Demonstrate comprehensive understanding of Botany as an interdisciplinary and multidisciplinary subject.
2. Achieve awareness about the evolutionary trends and plants systematics in pursuit of nature conservation.
3. Understand the relationship between economic growth and importance of indigenous plant resources.
4. Acquire skills, knowledge and competencies to take up research projects for nature conservation and exploration.

Guidelines for Online Application

1. The online application form can be accessed from AIOU official website www.aiou.edu.pk.
2. Applicants are required to fill all the desired fields on online application form
3. Applicants are desired to deposit application fee on the prescribed challan form in specified banks
4. The Challan number after fee submission should be entered in online application form for successful submission.
5. Incomplete forms shall not be entertained.

Note: Only selected candidates will be asked to deposit semester after verification of original documents. The fee should not be submitted before the confirmation of admission. The deposited fee will not be refundable or adjustable for future admission. The Fee deposit slip should be submitted to:

**The Head of Department
Department of Biology
Allama Iqbal Open University, H-8, Islamabad**

In case a selected candidate fails to submit fee in time, the department may reserve the right to invite a candidate in waiting list for admission against vacant seat.

Eligibility/ Selection criterion

F.Sc (Pre-medical) OR Equivalent A Level qualification with Biology as major subject.

Medium of Instruction

The Medium of Instructions for BS Botany will be English.

Mode of Teaching

- University will provide face to face teaching to the students.
- The schedule of classes and dates of submission of assignments will be handed over along with study material.

Assessment and Evaluation

For each course the student progress will be assessed on the

basis of the followings:

- a. Continuous Assessment through written assignments/tests or Workshop or practical activities.**
 - i. For each discipline specific face to face course the marks obtained by each student in the two written assignments will constitute 2/3 part of the continuous assessment. A student has to obtain a minimum of 50% marks in the two assignments collectively in order to pass this component.
 - ii. For each discipline specific face to face course the marks obtained by each student in the practical workshop will constitute 1/3 part of the continuous assessment. A student has to obtain a minimum of 50% marks in the practical workshop individually in order to pass this component.
- b. Final Examinations:** three hours written examination for each course with 50% passing marks. Weightage in final exam – continuous assessment 30% and final exam 70%.

Note: If a student fails to pass in any of assessment component of a particular course, he / she will have to re-enroll in that course. Minimum 70% attendance is necessary in all subjects.

Degree Requirement and Duration

In order to be eligible for the award of BS in Botany, the student will have to earn a total of 125 credit hours including six credit hours for research within a minimum period of 4 years (8 semesters). Failing which, a student can be given an extension of 3 Years in maximum, after completion of initial period.

Scheme of Studies**Semester-1**

Sr. No	Course Title	Course Code	Credit Hours
1.	Cell Biology, Genetics and Evolution	4401	4(3+1)
2.	Inorganic Chemistry	4421	4(3+1)
3.	Fundamentals of Microbiology	4403	4(3+1)
4.	Pre-Calculus	4431	3
5.	English I: Composition and Comprehension	5451	3
	Total Credits		18

Semester-2

Sr. No	Course Title	Course Code	Credit Hours
1.	Diversity of Plants	4402	4(3+1)
2.	Organic Chemistry	4422	4(3+1)
3.	Calculus-I	4432	3
4.	Technical and Business Writing	5454	3
	Total Credits	14	

Semester-3

Sr. No	Course Title	Course Code	Credit Hours
1.	Diversity of Animals	4469	4(3+1)
2.	Introduction to Environmental Science	4441	4(3+1)
3.	Pakistan Studies	5465	2

4.	English III: Communication Skills	5458	3
	Total Credits	13	

Semester-4

Sr. No	Course Title	Course Code	Credit Hours
1.	Biotechnology	4412	4(3+1)
2.	Introduction to Computer	5468	3(3+0)
3.	Islamic Studies / Ethics	5466/ 5467	2
4.	Public Relations	9468	3
	Total Credits		12

Semester-5

Sr. No	Course Title	Course Code	Credit Hours
1.	Diversity of Vascular Plants	7401	3(2+1)
2.	Plant Anatomy	7402	3(2+1)
3.	Introductory Biochemistry	4481	4(3+1)
4.	Phycology and Bryology	7403	3(3+0)
5.	Biodiversity and Conservation	4452	4(3+1)
	Total Credits		17

Semester-6

Sr. No	Course Title	Course Code	Credit Hours
1.	Plant Ecology -I	7405	3(2+1)
2.	Plant Physiology - I	7406	3(2+1)
3.	Plant Systematics	7410	3(2+1)
4.	Plant Biochemistry	7407	3(3+0)
5.	Mycology and Plant Pathology	7408	3(2+1)
	Total Credits		15

Semester-7

Sr. No	Course Title	Course Code	Credit Hours
1.	Plant Ecology -II	7409	3(2+1)
2.	Molecular Biology	4419	4(3+1)
3.	Plant Physiology - II	7411	3(2+1)
4.	Genetics - I	7412	3(3+0)
5.	Scientific Research	7413	4(3+1)
6.	Biostatistics	4482	3(3+0)
	Total Credits		20

Semester-8

Sr. No	Course Title	Course Code	Credit Hours
1.	Research Project	4418	6
2.	Genetics - II	7414	3(3+0)
3.	Ethnobotany	4439	3
4.	Environmental Biology	4446	4(3+1)
	Total Credits		16

Total Credits= 18+14+13+12+17+15+20+16=125

FEE TARIFF FOR 1st SEMESTER

#	Item	Rates
1.	Registration Fee (Once at time of admission)	Rs.500/-
2.	Admission Fee (Once at time of 1 st admission)	Rs.1000/-
3.	Technology Fee	Rs.500/-
3.	Per 4 Credit hours course fee: Rs. 8000 × 3 = Rs. 24000/-	Rs. 24000
4.	Per 3 Credit hours course fee: Rs. 6000 × 2 = Rs. 12000/-	Rs.12000/-
5.	LAB CHARGES	Rs.3000/-
	Total	Rs. 41000/-

The fee structure for remaining semesters will be provided in due course of time.

- Dr. Hina Fatimah**, In Charge, Department of Biology, Research Complex, Allama Iqbal Open University, Sector H-8, Islamabad Ph. 051-9057279
- Dr. Muhammad Waseem**, Assistant Professor, Department of Biology, Allama Iqbal Open University, Islamabad Ph. 051-9057267
- Dr. Rizwana Kousar**, Assistant Professor, Department of Biology, Allama Iqbal Open University, Islamabad Ph. 051-9057293

4. **Dr. Sobia Kanwal**, Assistant Professor, Department of Biology, Allama Iqbal Open University, Islamabad Ph. 051-9057721
5. **Dr. Saba Farooq**, Lecturer, Department of Biology, Allama Iqbal Open University, Islamabad Ph. 051-9057730
6. **Ms. Samar Naseer** Lecturer, Department of Biology, Allama Iqbal Open University, Islamabad Ph. 051-9057185
7. **Ms. Zainab Syed**, Lecturer, Department of Biology, Allama Iqbal Open University, Islamabad Ph. 051-9057726
8. **Dr. Sadia Latif**, Research Associate, Department of Biology, Allama Iqbal Open University, Islamabad Ph. 051-9057185

DEPARTMENT OF CHEMISTRY

Introduction:

Department of Chemistry is a major department of the Faculty of Science. It was established in 1998 to offer postgraduate programmes in Chemistry. In the beginning only MSc programme was started, which was later extended to include MPhil and PhD programmes. These programmes have attracted teachers, employees of research organizations, industry and fresh graduates who found an opportunity to improve their qualifications. The faculty of the department comprises of one Professor, four Associate Professors, one Assistant Professor and four Lecturers. In addition, the

department also uses services of experienced professors as visiting faculty.

The department is situated in Research Complex on the main campus where it occupies the ground floor and a portion of the lower floor. With the expansion of lab facilities, the department has extended its academic activities by launching the BS programme from Spring, 2009. BS programme is visualized in the new scheme of higher education as a fundamental step in improving the standard of graduate and postgraduate studies.

The study programmes in chemistry have been developed by the Faculty according to the guidelines provided by the Higher Education Commission (HEC). Necessary changes have been effected to suit our students, but without deviating fundamentally from the principles set by the HEC. The Committee of Courses of the department comprising distinguished professors and scientists of the country thoroughly screened the proposed syllabi.

Chemistry is an experimental science. Students learn basic techniques in the labs. Therefore, it is essential to provide best lab facilities to students of various levels. The chemistry department takes pride in offering the most modern lab facilities in the country to its students in all branches of chemistry. Its research labs are equipped with CHNS Analyzer, Thermal Analyzer, UV-Visible, Fluorescence and FTIR Spectrophotometer, GC-MS, Flash Column Chromatography and HPLC units, Atomic Absorption Spectrometer, and Electrochemical System. Teaching labs are well equipped with routine apparatus and basic instruments. These lab facilities

make us one of the leading teaching and research departments of the country.

The department believes in the “Opportunity of Education to All”. Therefore, it has modeled its academic programmes to suit in-service teachers, employees of research organizations, industry and students who could not afford formal education for some reason. The department firmly believes in the promotion of chemistry as a science and in maintaining the highest standards.

Objectives:

- To promote chemistry as a science and to provide opportunity to those who could not educate themselves in formal system of education for one reason or another.
- To provide opportunities of professional growth to all those chemistry graduates who are working as technical staff in research organizations.
- To update the knowledge of in-service chemistry teachers.

BS Chemistry Programmes

a) Introduction:

There has been a continuous effort at the national level to upgrade the standard of college education. It is realized that our existing BSc programme does not meet international standards. The Higher Education Commission has recommended a four-year BS programme to be followed by a two-year MS programme. The BS degree is considered equivalent to MSc Chemistry. However, BS degree holders are given preference for the relevant job over MSc graduates as their knowledge is

more focused on chemistry. It is a major structural change in our existing educational system. The country will enormously benefit from the fruits of this change in terms of improved and balanced knowledge and skill.

The department of chemistry offers the best facilities for this programme in the country. Its new labs and modern equipment together with qualified faculty makes it place to which students would like to be a part of it.

a) Objectives:

The main objectives of this programme are

- i. To offer training facilities of international standard.
- ii. To inculcate spirit of research to solve problems.
- iii. To unveil interesting finer points of chemistry and provide training facilities to all who desire to be educated.

b) Eligibility:

1. FSc (at least 2nd division with 45% marks) with Chemistry as one of the major subjects.
2. DAE (Diploma Holders) in Chemical Engineering/ Chemical Technology from a Polytechnic Institute.
3. A-Level with Chemistry or Equivalent.

For further detail about admission please visit the University Website at:

www.aiou.edu.pk

OR

Department of Chemistry, University Research Complex
Allama Iqbal Open University, H-8, Islamabad.
Contact Ph: 051-9057262

(Please do not send any fee with the application form)

c) Scheme of Studies:

Currently this programme is being offered in Islamabad region only. Later on it will be opened for the entire country wherever the appropriate tutorial support and laboratories will be available.

The BS programme is minimum of four years duration, split into eight semesters. In the first four semesters, the main emphasis will be on basic chemistry, general and compulsory subjects. In the 5th and 6th semesters, Physical, Organic and Analytical inorganic chemistry will be offered as core course. The specialized courses will be dealt in the seventh and eighth semester. Now, the Department is offering specialization in Organic, Inorganic/Analytical and Physical Chemistry.

The maximum duration to complete BS Chemistry Programme is **Six Years (12 Semesters)**.

**REVISED SCHEME OF STUDIES
SEMESTER WISE COURSE OFFERING**

Semester-1

Sr. No	Course Title	Course Code	Credit Hours
1.	Inorganic Chemistry	4421	4(3+1)
2.	Cell biology Genetic & Evolution	4401	4(3+1)
3.	Pre-Calculus	9467	3(3+0)
4.	Pakistan Studies	5465	2(2+0)

5.	English I: Composition & comprehension	5451	3(3+0)
----	--	------	--------

Semester 2

Sr. No	Course Title	Course Code	Credit Hours
1.	Organic Chemistry	4422	4(3+1)
2.	Diversity of Plants	4402	4(3+1)
3.	Calculus-I	4432	3(3+0)
4.	Introduction to Computer	5468	3(3+0)
5.	English II: Technical & Business Writing	5454	3(3+0)
6.	Islamic Studies / Ethics	5466/ 5467	2(2+0)

Semester 3

Sr. No	Course Title	Course Code	Credit Hours
1.	Physical Chemistry	4423	4(3+1)
2.	Basic Biochemistry	4425	4(3+1)
3.	Environmental Chemistry	4443	4(3+1)
4.	English III: Communication & Skill	5458	3(3+0)

Semester 4

Sr. No	Course Title	Course Code	Credit Hours
1.	General Chemistry	4424	4(3+1)
2.	Statistics for Chemists	4426	4(3+1)
3.	Environmental Pollution	4442	4(3+1)
4.	Public Relations	9480	3(3+0)

Semester 5

Sr. No	Course Title	Course Code	Credit Hours
1.	Analytical Chemistry-I	2573	3(3+0)
2.	Physical Chemistry-I	2575	3(3+0)
3.	Organic Chemistry-I	2576	3(3+0)
4.	Inorganic Chemistry-I	2577	3(3+0)
5.	Mathematics for Chemists	2594	2(2+0)
6.	Chemistry Lab-I	2595	4(0+4)

Semester 6

Sr. No	Course Title	Course Code	Credit Hours
1.	Analytical Chemistry-II	2574	3(3+0)
2.	Physical Chemistry-II	2580	3(3+0)
3.	Organic Chemistry-II	2581	3(3+0)
4.	Inorganic Chemistry-II	2582	3(3+0)
5.	Chemistry Lab-II	2596	4(0+4)

SPECIALIZATION IN ORGANIC CHEMISTRY**Semester 7**

Sr. No	Course Title	Course Code	Credit Hours
1.	Heterocyclic Chemistry	2585	3(3+0)
2.	Stereochemistry of Organic Compounds	2586	3(3+0)
3.	Spectroscopic Methods in Organic Chemistry	2589	3(3+0)
4.	Advanced Organic Chemistry Lab-I	2597	3(3+0)

5.	Advanced Organic Chemistry Lab-II	2598	3(3+0)
----	-----------------------------------	------	--------

SPECIALIAZATION IN INORGANIC CHEMISTRY**Semester-8**

Sr. No	Course Title	Course Code	Credit Hours
1.	Chemistry of Natural Products	2587	3(3+0)
2.	Special Organic Reactions	2590	3(3+0)
3.	Organic Synthesis	2591	3(3+0)
4.	Advance Organic Chemistry Lab-III	2537	3(3+0)
5.	Advance Organic Chemistry Lab-IV	2538	3(3+0)

SPECIALIAZATION IN INORGANIC/ANALYTICAL CHEMISTRY**Semester-7**

Sr. No	Course Title	Course Code	Credit Hours
1.	Coordination Chemistry	2539	3(3+0)
2.	Non-Spectroscopic Instrumental Methods of Analysis	2540	3(3+0)
3.	Basic Instrumental Methods of Analysis	2541	3(3+0)
4.	Advance Inorganic Chemistry Lab-1	2542	3(3+0)
5.	Advance Inorganic Chemistry Lab-II	2543	3(3+0)

SPECIALIAZATION IN INORGANIC CHEMISTRY**Semester-8**

Sr. No	Course Title	Course Code	Credit Hours
1.	Organometallic Chemistry	2544	3(3+0)
2.	Group Theory for Chemist & its Applications	2545	3(3+0)
3.	Advanced Environmental Chemistry	2547	3(3+0)
4.	Advance Inorganic Chemistry Lab- III	3561	3(3+0)
5.	Advance Inorganic Chemistry Lab-IV	3562	3(3+0)

SPECIALIAZATION IN PHYSICAL CHEMISTRY**Semester-7**

Sr. No	Course Title	Course Code	Credit Hours
1.	Chemical Kinetics	2548	3(3+0)
2.	Quantum Chemistry	2549	3(3+0)
3.	Electrochemistry	2550	3(3+0)
4.	Advance Physical Chemistry Lab-1	2568	3(3+0)
5.	Advance Physical Chemistry Lab-II	2569	3(3+0)

Semester-8

Sr. No	Course Title	Course Code	Credit Hours
1.	Molecular Spectroscopy	2570	3(3+0)

2.	Chemical Thermodynamics	2571	3(3+0)
3.	Surface Chemistry	2599	3(3+0)
4.	Advanced Physical Chemistry Lab-III	3563	3(0+3)
5.	Advanced Physical Chemistry Lab-IV	3564	3(0+3)

Total Credit Hours: 129**d) Fee Structure**

Registration Fee:	Rs.500/-
Admission Fee:	Rs.1000/-
Technology Fee (per semester)	Rs.500/-
Course Code (Lab)	Fee
4401	Rs.8000/-
4421	Rs.8000/-
9467	Rs.6000/-
5451	Rs.6000/-
5465	Rs.4000/-
Lab fee (per semester)	Rs.6000/-
First Semester Fee	Rs.40,000/-

f) Instructional Methodology**Study Material:**

Prescribed books/ study material/ reprinted or compiled course books will be provided by the University. However, the students are advised to consult other books from the list of recommended books for further reading.

Mode of Teaching:

In this programme, regular classes for all science courses/ practical work and all compulsory courses will be conducted at

AIOU Main Campus in Face to Face mode. Minimum 70% attendance is required in science subjects as per AIOU rules.

Assessment System

Method of Assessment for Theory and Laboratory Courses AIOU has adopted GPA/CGPA system from Spring Semester 2009 in all its four years Bachelor Degree programmes.

Continuous Assessment:

Continuous assessment will be based on assignments and class tests. The pass percentage in assignment(s)/test(s) will be 50%. Assessment for all laboratory courses will be totally based on continuous assessment. A specific number of experiments will be conducted in each lab. Each experiment will be assessed separately. Minimum pass marks for each laboratory course will be 50%. The weightage of assignment/test & practical workshop in the final result will be 30%.

Final Examination:

Final examination of 100 marks for theory course will be conducted at the end of semester. The pass percentage in final examination will be 50% and its weightage in the final result will be 70%. Student will have to successfully complete each component independently to pass a course.

Method of Assessment for Laboratory Courses:

Assessment for all laboratory courses will be totally based on continuous assessment. As already mentioned, the laboratory

courses will be offered in the form of workshops. A specific number of experiments will be conducted in each workshop. Each experiment will be assessed separately, and attendance in these workshops will be compulsory for every student. Minimum required marks to pass each laboratory course will be 50%.

Degree Requirements:

In order to become eligible for the award of degree of BS Chemistry, the student will have to successfully complete all the courses within a minimum period of four years (8 semesters).

FACULTY MEMBERS

- 1. Dr. Uzma Yunus**
Associate Professor/Chairperson
Ph: 051-9057818
- 2. Dr. Moazzam H. Bhatti**
Associate Professor
Ph: 051-9057262
- 3. Dr. Muhammad Sher**
Associate Professor
Ph: 051-9057755
- 4. Dr. Nasima Arshad**
Associate Professor
Ph: 051-9057756
- 5. Dr. Muhammad Zaman Ashraf**
Assistant Professor
Ph: 051-9057182

6. **Dr. Iqbal Ahmed**
Assistant Professor
Ph: 051-9057874
7. **Dr. Muhammad Naeem Khan**
Assistant Professor
Ph: 051-9057257
8. **Dr. Muhammad Saleem**
Assistant Professor
Ph: 051-9057257
9. **Dr. Mehwash Zia**
Lecturer
Ph: 051-9057225
10. **Dr. Farzana Shaheen**
Lecturer
Ph: 051-9057198
11. **Dr. Erum Jabeen**
Lecturer
Ph: 051-9057414

DEPARTMENT OF COMPUTER SCIENCE

1. Introduction

The Department of Computer Science was established in the year 2000. The Department has received recognition nation-wide due to its quality education. The department had developed curricula of the academic programs at various levels to meet the national and international standards as defined by Higher Education Commission. The curricula include Ph. D (computer Science),

MS (Computer Science), BS (Computer Science) and Postgraduate Diploma (PGD) in Computer Science. The department is equipped with computing facilities and services including a digital classroom and multimedia courseware development lab. The department has its own library in addition to central library of the university. The Department of Computer Science practices the multi-method teaching methodology i.e. face-to-face regular classes for BS (Computer Science) and MS (Computer Science). The online methodology is practiced for PGD (Computer Science) and Foreign Language (French). The facilities of Video/Teleconferencing are also in use for lectures/consultations in research-oriented degree of MS/PhD (Computer Science).

In addition, the department also has a flavor of distance teaching in selected courses of BS (Computer Science) program like English, Pakistan Studies, and Islamic Studies etc. Besides graduate and undergraduate teaching, the department is actively involved in research and development. For this purpose, Multimedia Centre and Open Learning Institute of Virtual Education (OLIVE) have been established under the umbrella of the department. The Multimedia center is equipped with technology related to Audio/Video production. It has successfully developed multimedia courseware for more than 20 courses, whereas OLIVE provided a framework for electronic delivery of these courses in online mode. In addition to research activities in the area of software engineering communication, networking, and multimedia, the department focuses on the eLearning research in instruction design, communication, course management, e-assessment, mobile learning and web technologies integration. The University has

also developed linkages with San Jose' State University (SJSU) USA and Kent State University, USA. KSU is located in the heart of Silicon Valley and Kent State has strong education college with Technology Research Centers.

2. Aims and Objectives:

The principal aim of the Department of Computer Science is to produce graduates with a professional education and to undertake quality research in Computer Science and Related Information Technology areas. The specific objectives are to:

1. Maintain an excellent reputation and professional accreditation for its taught degree programs
2. Disseminate an appreciation of the current state and future directions of technological advances in the areas of Computer Science, Information Technology and e-learning.
3. Equip students with computer science knowledge and skills so as to cope with the social, economic, scientific, and technological challenges of the world outside.
4. Develop platform and systems for e-learning/mechanism for electronic delivery of courses to increase outreach to rural and remote areas.
5. Conduct research in areas of e-learning, multimedia instructional design; web-based education, mobile learning and related areas in software engineering, information technology, and computer science.
6. Assist other departments and individuals to implement modern ICT in educational delivery.
7. Provide a leadership support in ICT based education in Pakistan.

BS (Computer Science) Program

a) Introduction:

The BS (CS) program is offered by the Department of Computer Science, AIOU. It is a four- years degree program, covering the recent trends in hardware, software and communication technologies. The program provides an understanding of the field through concepts, theory and techniques. The curriculum of the program has been developed and regularly updated to meet the national, international, social and economic needs. The curriculum revision is normally based on need of fast changing disciplines, emerging technologies and international standards. The structure and other details of the program are confined to HEC with focus on ACM and IEEE-CS recent development.

b) Objectives:

The objectives of the program are to:

- 1) Develop professionals in the field of computer science
- 2) Provide high quality education at low cost
- 3) Provide knowledge to individuals seeking computer skills to increase their job opportunities in their current careers or to pursue new careers
- 4) Learn in-depth knowledge of computer languages, software engineering, computer architecture, large-scale system software and multimedia in the design
- 5) Provide sufficient conceptual and skill based know how so that successful graduates could initiate IT career in industry and academia

c) Program Features:

- 1) The BS (CS) is 133 credit hours' program and may be completed in minimum four years (eight semesters)
- 2) Two semesters are offered in a year as Spring and Autumn

- 3) Duration of each semester is 18 weeks
- 4) In-line with HEC, ACM and IEEE-CS
- e) **Offering of BS (CS) Face to Face Program**
 - i. The Department of Computer Science is offering BS (CS) Program at **Main Campus, Islamabad.**
 - ii. **The BS (CS) Program is also offered at selected Regional Centers of AIOU i.e. Lahore, Multan and Rahim Yar Khan by using modern technologies.** Under this program, the course work will be conducted through video-conferencing /internet (Agaahi LMS). Distance Education will be delivered by faculty members from Department of Computer Science, Main Campus. A local faculty member/staff will be provided to assist in administrative and lab assignments. All assessments will be performed as per rules of the University.

Eligibility:

The minimum requirements for admission in a Bachelor degree program in Computer Science is at least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics certified by IBCC.

f) Applying/Admission Procedure

- Visit AIOU Website <https://online.aiou.edu.pk>
 - Click on "Merit Based Admissions (BS/Masters/MS/MPhil/PhD)"
 - Click 'Register' & fill details
 - Upon successful registration please click on login
 - Fill login details and login to the portal
 - After login click on Step-1 and complete your profile.
- Note: All tabs should be filled before applying for admissions.

- After completion of Step-1, click on Step-2 then click on "Download Challan" against program (s) you wish to apply.
- Pay the *admission form fee* as per AIOU prescribed criteria through selected bank branches or online payment methods.
- After admission fee confirmation, you will be called on through SMS to visit the department for the verification of your credentials.
- After the verification, you will be informed whether you are eligible for the admission in BS (CS) or not.

g) Assessment

Course Work: The following assessment criteria are applied to **BS (Computer Science) programme:**

ASSESSMENT TYPE		Face to Face		French Online		Project	
		Qty	Wt (%)	Qty	Wt (%)	Qty	Wt (%)
Continuous	Assignments	2	10	2	10	-	-
	Midterm Test or Lab	1	20	1	20	-	-
	Presentation	-	-	-	-	4	30
Final	Written Paper	1	70	1	70	-	-
	Viva Voce	-	-	-	-	1	70
Total Marks (%)		100		100		100	

The passing of a course requires aggregate scoring in continuous assessment and final examination as per AIOU rules. There is laboratory test for laboratory oriented courses and written midterm test for courses without laboratory work.

h) Fee Structure

Also keeping in line with the tradition of low-cost educational services, the fees of BS (CS) programme courses is affordable. The details of the fee payable are given below:

First Semester Fee for BS (CS) Programme (Revised)

Item	Total
Registration Fee: (at the time of 1 st admission)	Rs.500/-
Admission Fee: (at the time of 1 st admission)	Rs.1000/-
Technology Fee (each semester)	Rs.500/-
Fee for 18 Credit Hour Courses 18×2000=36000	Rs.36000/-
Lab Fee	Rs.5000/-
Total Fee for First Semester	Rs.43000/-

All students are required to pay full fees as prescribed at the beginning of each semester. The university reserves the right to revise the fee structure as deemed or to add any fee considered appropriate at any time during the study period. All such changes will be applicable to all students.

i) Programme Coordinator:

For further information, please feel free to contact:

**Chaudhary Muhammad Shahbaz Anjum,
Lecturer, Department of Computer Science**

Email: dcs@aiou.edu.pk
Phone No: 051-9057183, 051-9057809

Selection Criteria:

- Once your eligibility is confirmed by the Computer Science Department, you can select your first semester courses form the online portal.
- After selection of first semester courses, a fee challan will be generated by the system.
- You will pay the requisite fee as per AIOU prescribed criteria through selected bank branches or online payment methods.
- After fee verification by the concerned AIOU department, your admission will be confirmed.
- You can check the status of your application at any stage through your account from AIOU portal, i.e. <https://online.aiou.edu.pk>

REVISED SCHEME OF STUDY: BS (CS) PROGRAM

Semester 1

Sr. No	Course Title	Course Code	Credit Hours
1.	English-I: Composition and Comprehension	5451	3(3+0)
2.	Pakistan Studies	5465	2(2+0)
3.	Introduction to Computers	5468	3(3 + 0)
4.	Computer Programming	New Course Code	4(3+1)
5.	Applied Physics	New Course Code	3(3+0)
6.	Calculus-I	4432	3(3+0)
Total Credit Hours (1st Semester)			18

Semester 2

Sr. No	Course Title	Course Code	Credit Hours
1.	Islamic Studies / Ethics	5466/ 5467	2(2+0)
2.	English-II: Technical and Business Writing	5454	3(3+0)
3.	Object-Oriented Programming	New Course Code	4(3+1)
4.	Digital Logic Design	3409	4(3+1)
5.	Statistics and Probability	3447	3(3+0)
Total Credit Hours (2nd Semester)			16

Semester 3

Sr. No	Course Title	Course Code	Credit Hours
1.	English-III: Communication Skills	5458	3(3+0)
2.	Discrete Mathematics	New Course Code	3(3+0)
3.	Data Structures and Algorithms	New Course Code	4(3+1)
4.	Comp. Organization & Assembly Language	New Course Code	4(3+1)
5.	Software Engineering	New Course Code	3(3+0)
Total Credit Hours (3rd Semester)			17

Semester 4

Sr. No	Course Title	Course Code	Credit Hours
1.	Foreign Language (Arabic)/(French)	9473/9474	3(3+0)
2.	Linear Algebra	1522	3(3+0)
3.	Computer Communications & Networks	3438	4(3+1)
4.	Database Systems	New Course Code	4(3+1)
5.	E-Commerce	New Course Code	3(3+0)
Total Credit Hours (4th Semester)			17

Semester 5

Sr. No	Course Title	Course Code	Credit Hours
1.	Artificial Intelligence	New Course Code	4(3+1)
2.	Operating System	New Course Code	4(3+1)
3.	Analysis & Design of Algorithms	3466	3(3+0)
4.	CS Elective 1	-	3
5.	Ordinary Differential Equations	1525	3(3+0)
Total Credit Hours (5th Semester)			17

Semester 6

Sr. No	Title	Course Code	Credit Hours
1.	Theory of Automata	3452	3(3+0)
2.	CS Elective 2	-	3
3.	CS Elective 3	-	3
4.	Parallel and Distributed Computing	New Course Code	3(3+0)
5.	IT Services Management	3472	3(3+0)
6.	Calculus-II	4433	3(3+0)
Total Credit Hours (6th Semester)			18

Semester 7

Sr. No	Course Title	Course Code	Credit Hours
1.	Compiler Construction	3468	3(3+0)
2.	CS Elective 4	-	3
3.	CS Elective 5	-	3
4.	Professional Practices	New Course Code	3(3+0)
5.	Project-I	New Course Code	3(0+3)
Total Credit Hours (7th Semester)			15

Semester 8

Sr. No	Course Title	Course Code	Credit Hours
1.	Information Security	3497	3(3+0)
2.	CS Elective 6	-	3
3.	IT Marketing Concepts	3442	3(3+0)
4.	Numerical Computing	New Course Code	3(2+1)
5.	Project-II	New Course Code	3(0+3)
Total Credit Hours (8th Semester)			15

Note:

3 (3 + 0) means 3 hours lecture per week,
 3 (2 + 1) means 2 hours lecture and 3 hours lab per week,
 4 (3 + 1) means 3 hours lecture and 3 hours lab per week,
 4 (4 + 0) means 4 hours lecture per week.

The student can select six courses from the list of elective courses.

Major Areas of Specialization (BS (CS) Elective Courses):**General Computing**

Sr.No	Course Title	Course Code	Credit Hours
1.	Visual Programming	New Course Code	3(2+1)
2.	Web Technologies	New Course Code	3(2+1)
3.	Computer Vision	New Course Code	3(2+1)
4.	Mobile Application Development	3499	3(2+1)
5.	Data Analytics	NEW	3(2+1)
6.	Human-Computer Interaction	3449	3(3+0)

Software Engineering

Sr.No	Course Title	Course Code	Credit Hours
1.	Software Engineering–II	3465	3(3+0)
2.	Database-II	3467	3(3+0)
3.	Object-Oriented Analysis & Design	3464	3(3+0)
4.	Design Patterns	3481	3(3+0)
5.	Software Architecture	New Course Code	3(3+0)
6.	Software Quality & Testing	New Course Code	3(3+0)

Artificial Intelligence

Sr.No	Course Title	Course Code	Credit Hours
1.	Machine Learning	New Course Code	3(3+0)
2.	Deep Learning	New Course Code	3(3+0)
3.	Artificial Neural Networks	New Course Code	3(3+0)
4.	Natural Language Processing	New Course Code	3(3+0)
5.	Computer Vision	New Course Code	3(2+1)
6.	Data Analytics	New Course Code	3(2+1)

Cyber Security

Sr.	Course Title	Course Code	Credit Hours
1.	Data & Network Security	3484	3(3+0)
2.	Cryptography	New Course Code	3(2+1)
3.	Digital Forensics	New Course Code	3(2+1)
4.	Vulnerability Assessment & Reverse Engineering	New Course Code	3(2+1)
5.	Secure Software Design/Database Security	New Course Code	3(2+1)
6.	Cloud Architecture Security	New Course Code	3(3+0)

The maximum time limit to complete the BS (CS) Program is Six Years from the date of first registration of the student in this program.

The Department of Computer Science reserves the right to offer or may not offer listed specialization area or a particular course depending upon the available faculty/laboratory resources and viable student's enrollment. The department may add other specialized areas or may add elective courses to any specialized defined area.

Faculty of Department of Computer Science (DCS):

1. Prof. Dr. Irshad Ahmad Arshad
Dean (Faculty of Sciences)
Contact # 051-9057729

2. Dr. Saleem Iqbal
Chairman (Department of Computer Science)
Contact # 051-9057809
Email Address: saleem.iqbal@aiou.edu.pk
3. Dr. Aftab Khan
Associate Professor
Email Address: aftab.khan@aiou.edu.pk
4. Dr. Moiz Uddin Ahmed
Assistant Professor
Email Address: moiz.ahmed@aiou.edu.pk
5. Dr. Muhammad Arshad Awan
Assistant Professor
Email Address: arshad.awan@aiou.edu.pk
6. Dr. Muhammad Babar
Assistant Professor
Email Address: muhammad.babar@aiou.edu.pk
7. Mr. Mohammad Qasim Khan,
Assistant Professor
Email Address: qasim@aiou.edu.pk
8. Chaudhary Muhammad Shahbaz Anjum
Lecturer
Email Address: shahbaz.anjum@aiou.edu.pk
9. Mr. Tahir Javed,
Lecturer
Email Address: tahir@aiou.edu.pk
10. Ms. Sana Naseem Karam,
Lecturer (on leave)
Email Address: sana.naseem@aiou.edu.pk
11. Mr. Muhammad Basit Ismail
Lecturer.
basit.ismail@aiou.edu.pk

DEPARTMENT OF MATHEMATICS

Introduction:

The Department of Mathematics has been established in June 2014. In June 2014, the Department of Mathematics & Statistics has been bifurcated as two independent departments. Presently the Department is offering courses of Mathematics at Secondary School Certificate (SSC), Higher Secondary School Certificate (HSSC) and Bachelor levels. The Department is offering the following programmes:

- MSc Mathematics
- MPhil Mathematics
- BS Mathematics

In future the Department intends to start PhD Mathematics programme. BS Mathematics has been designed after consulting syllabi of national and international universities. BS Mathematics programme will strengthen the mathematical concepts of the candidate and will enhance their logical thinking. This programme cater the needs of information Technology and other sciences disciplines.

BS Mathematics Programme

a) Introduction:

To meet the challenging requirements of today's fast-growing world, the Department of Mathematics has planned to launch BS Mathematics Programme. The BS degree is

deemed equivalent to MSc Mathematics. BS degree holders are being preferred throughout the world as their knowledge is more focused on Mathematics. Our BS Mathematics programme will produce well trained, highly numerate and computer literate graduates.

b) Objectives:

- To enhance the qualification of those who could not continue their education after FSc through formal universities.
- To provide an opportunity to in service persons to improve their qualification and get promotion in their respective departments.
- To provide in-depth understanding of Mathematics and apply them in real life projects.
- To produce quality teacher/researchers of Mathematics at all levels.

Summary of the Programme:

Duration:	8 semesters (4 years)
Total Credit Hours:	133

c) Eligibility:

Candidates having HSSC (Math as major subject) or equivalent with minimum 2nd division.

Merit Criteria:

After scrutiny of the eligible candidates, the department will call the eligible applicants for interview and admission committee will recommend the suitable candidates for BS Mathematics on merit basis.

Payment of Fee:

Only selected candidates should deposit the fee after receiving the admission letter from the Department of Math, AIOU, Islamabad.

Hostel Facility:

The hostel facility is available for both male and female students of AIOU. Separate fee has to be paid for attaining the hostel facility and this facility is subject to availability.

d) Scheme of Studies:**BS Mathematics Program (From Spring 2022)****Semester I**

Sr. No	Course Title	Course Code	Credit Hours
1.	English-I: Composition and Comprehension	5451	3(3+0)
2.	Calculus-I	4432	3(3+0)
3.	Pakistan Studies	5465	2(2+0)
4.	Introduction to Computers	5468	3(2+1)
5.	Introductory Statistics	4434	3(3+0)
6.	Set Theory and Logic	4471	3(3+0)
			17

Semester II

Sr. No	Course Title	Course Code	Credit Hours
1.	English-II: Technical and Business	5454	3(3+0)
2.	Writing Calculus-II	4433	3(3+0)

3.	Pakistan Adab-I	9466	3(3+0)
4.	Islamic Studies/Ethics	5466/5467	2(2+0)
5.	Discrete Mathematics-I	1549	3(3+0)
6.	Introduction to Environmental Sciences	5474	3(3+0)
7.	Introduction to Sociology	5469	3(3+0)
			20

Semester III

Sr. No	Course Title	Course Code	Credit Hours
1.	English-III: Communication Skills	5458	3(3+0)
2.	Waves and Oscillations	5459	3(3+0)
3.	Algebra-I	4472	3(3+0)
4.	Analytical Geometry	4473	3(3+0)
5.	Vector and Tensor Analysis	4474	3(3+0)
			15

Semester IV

Sr. No	Course Title	Course Code	Credit Hours
1.	Probability Theory and Statistics	4489	3(3+0)
2.	Heat and Thermodynamics	5461	3(3+0)
3.	Mathematical Methods	4476	3(3+0)
4.	Language Arabic/French Level -I	9473/ 9474	3(3+0)
5.	Computing Tools	4477	3(2+1)
6.	Algebra-II	4475	3(3+0)
			18

Semester V

Sr. No	Course Title	Course Code	Credit Hours
1.	Computer and Scientific Applications C++	1520	3(2+1)
2.	Topology	1521	3(3+0)
3.	Linear Algebra	1522	3(3+0)
4.	Real Analysis-I	1523	3(3+0)
5.	Ordinary Differential Equations	1525	3(3+0)
			15

Semester VI

Sr. No	Course Title	Course Code	Credit Hours
1.	Differential Geometry	1524	3(3+0)
2.	Complex Analysis	1527	3(3+0)
3.	Group Theory	1528	3(3+0)
4.	Analytical Mechanics	1529	3(3+0)
5.	Real Analysis-II	1530	3(3+0)
			18

Semester VII

Sr. No	Course Title	Course Code	Credit Hours
1.	Numerical Methods	1531	3(2+1)
2.	Partial Differential Equations	1532	3(3+0)
3.	Functional Analysis	1533	3(3+0)
4.	Theory of Rings	1534	3(3+0)
5.	Mathematical Statistics-I	1538	3(3+0)
			15

Semester VIII

Sr. No	Course Title	Course Code	Credit Hours
1.	Operational Research	1537	3(3+0)
2.	Combinatorics	1539	3(3+0)
3.	Mathematical Modeling	1546	3(3+0)
4.	Optimization	1544	3(3+0)
5.	Mathematical Finance-I	4478	3(3+0)
			15

Total Credit Hours: = 133**Optional Courses:**

Sr. No.	Title of the Course	Course Code	Credit Hours
1.	Fluid Mechanics	1535	3(3+0)
2.	Relativistic Mechanics	1536	3(3+0)
3.	Operation Research	1537	3(3+0)
4.	Combinatorics	1539	3(3+0)
5.	Applied Number Theory	1540	3(3+0)
6.	Galois Theory	1541	3(3+0)
7.	Mathematical Statistics-II	1542	3(3+0)
8.	Optimization	1544	3(3+0)
9.	Analytical Dynamics	1545	3(3+0)
10	Mathematical Modeling	1546	3(3+0)
11.	Graph Theory	1547	3(3+0)
12.	Algebraic Topology	1548	3(3+0)
13.	Research Report	1550	3(3+0)
14.	Mathematical Finance-I	4478	3(3+0)

15.	Theory of Racks and Quandles	4479	3(3+0)
16.	Research Project	4480	3(0+3)
17.	History of Mathematics	9415	3(3+0)

e) Fee Structure:

Registration Fee:	Rs.500/-
Admission Fee:	Rs.1000/-
Technology Fee (per semester)	Rs.500/-
Course Code (Lab)	Fee
5468	Rs.6000/-
4432	Rs.6000/-
4434	Rs.6000/-
4471	Rs.6000/-
5465	Rs.4000/-
5451	Rs.6000/-
Lab fee (per semester)	Rs.750/-
First Semester Fee	Rs.36,750/-

f) Applying for Admission Procedure:

Please apply online through university website by creating your login ID and password. Completely fill all your previous degrees/certificate details, then apply in BS Math Program. Submit Rs. 500 fees through bank on the generated challan and upload that chalan from your portal. Also send a copy of paid chalan form to:

Department of Mathematics
Block # 07, Allama Iqbal Open University
Sector H-8, Islamabad

Instructional Methodology:

Study material:

Books (soft copies) will be provided to the students, along with the list of recommended books for further readings. Two assignments for each course will be given.

Mode of Teaching:

For each course, 45 hours face to face teaching at main campus Islamabad will be required. In this regard, classes will be arranged by the Department at AIOU main campus Islamabad. The schedule of the lectures will be distributed to students at the start of classes during each semester at AIOU, Islamabad. Minimum 70% attendance is necessary in all subjects as per AIOU rules.

Assignment/Test:

Two assignments for each course will be given in a semester for practice only, having no weightage. 30% weightage of the aggregate marks will be given to the sessional tests.

Final Examination:

Final Examination will be held at Main Campus, AIOU, Islamabad at the end of each semester. 70% weightage of the aggregate marks will be given to the final exam.

Minimum Passing Marks:

Assignments/sessionals	50%
Final Examination	50%
Aggregate	50%

Note: The student has to qualify each component of a course separately.

FACULTY MEMBERS

1. **Dr. Nasir Rehman**
Associate Professor/Chairman
Ph: 051-9057191, 9250056, 9575700
2. **Dr. Zahid Iqbal**
Associate Professor
Ph: 051-9057734
3. **Mr. M. Faisal Iqbal** (M.Sc Math Coordinator)
Lecturer
Ph: 051-9057380
4. **Dr. Irfan Mustafa**
Assistant Professor, (M.Phil Math Coordinator)
Ph: 051-9057155
5. **Dr. M. Nazam**
Lecturer
Ph: 051-9057734
6. **Dr. Bismah Jamil**
Lecturer, (BS Math coordinator)
Ph: 051-9057829
7. **Ms. Fouzia Rehman**
Research Associate
Ph: 051-9057393
8. **Dr. Irfan Younas**
Research Associate
Ph: 051-9057197
9. **Staff:**
Department of Mathematics
Ph: 051-9575700

DEPARTMENT OF PHYSICS

Introduction:

Realizing the need of technology and scientific education in Pakistan Department of Physics at AIOU began in 1998 with technological needs in areas like Energy, Energy Efficiency, Climate, Energy for Sustainable Development, Renewable Energy, Hydrogen Energy, Environment, Astronomy, Nanotechnology, Materials Science, Plasma Physics, Medical Physics, Cosmology, Geo Physics, Density Functional Theory (DFT), and Nuclear fields. A major emphasis of current research activities is on promotion in renewable energy and related areas in which the Department has led to innovations.

The Department is presently running BS, MSc, MPhil and PhD degree programme with specialization in various disciplines. New fields of specialization and programme of studies are approved and be operational from the next academic year. Apart from capacity development, activities Department of Physics has been involved in several international, national and regional research projects. Physics Department has developed research linkage with other National and International Universities and research organizations of repute to ensure two-way flow of knowledge.

Vision:

The Department of Physics carries out wide range of teaching and research programmes that will contribute significantly to the development of human capacity, science and technology in

Pakistan. Our vision is to see our graduates and postgraduates to be equipped with the fundamental knowledge of Physics, problem solving and communication skills. This will be achieved by reviewing and developing relevant academic programmes and research projects to address Pakistan technological needs in areas like Energy, Renewable Energy, Hydrogen Energy, Environment, Astronomy, Nanotechnology, Materials Science, Plasma, Medical Physics, Cosmology, Geo Physics, Density Functional Theory (DFT), and Nuclear Physics. Our vision is to be a locally and internationally recognized Physics Department that exposes its successes in public awareness campaign and through established knowledge dissemination channels.

Mission:

The Department of Physics at AIOU becomes a nationally and internationally recognized research and educational unit. Our faculty strives to push the boundaries of our understanding in a wide variety of fundamental and applied Physics areas while providing the best research opportunities for our majors. The blending of classroom learning with training in XXI Century front-edge research facilities allows our graduates and postgraduates to become successful researchers, teachers and applied scientists in nowadays-competitive marketplace. At the same time, we are fully committed, as the physics department of the major research university in our border region, to contribute to the general public appreciation and respect for the scientific work and knowledge.

Core Values:

To perform to the highest levels of competence and professionalism in research and training, acting with utmost honesty and integrity while instituting measures that meet the need of all stake holders advance knowledge and technologies, Generate, preserve and disseminate knowledge and be involved in the development of innovative products, Cherish academic freedom, nurture and reward talent. The Department aspires to be an effective agent of change and a model for the other Department in the field of research so as to meet the grooming demands of the new millennium.

Excellence in Research Undergraduate, Postgraduate Education Training

The department of Physics was established in March 1998. We are proud to be one of the largest and most prestigious physics departments in the Pakistan with an outstanding reputation for excellence in research, undergraduate and post graduate education. The department offers undergraduate degree programmes, Master level programmes and Doctoral programmes. We have a vibrant research programmes that a broad-based coverage of fundamental and applied Physics. The department of Physics is offering these programmes in collaborations with other institutions actively foster development of new research fields. We have recently established the training programmes for engineers, researchers, scientists and faculty members of public and private universities of industrial partners. We are committed to providing a positive environment that encourages everyone to explore this potential.

Due to the flexibility and advantage of the distance learning system, AIOU has retained the best of the professionals already teaching at post graduate level in different teaching institutions in the country. There is a minimum of 45 hours of face-to-face teaching for each three-credit hour course. The students spend 70 to 75 hours in the laboratories for each two-credit hour laboratory course.

The courses are designed and developed by well-known experts in the field of physics. The latest available teaching material is written/ compiled in the form of textbooks/ CDs to facilitate the students. Every effort has been made to make these programmes skill oriented and thus job oriented. The degree awarded by AIOU in this discipline is accredited and at par with the other universities.

Aims and Objectives:

1. To promote Physics and to provide opportunity to those who could not educate themselves in formal system of education for one reason or another.
2. To meet the acute shortage of highly qualified manpower in the field of physics by producing skilled teachers and research scientists.
3. To introduce new research areas in Physics.

BS Physics (4 Years)

Objectives of the Programme:

The main educational objectives of BS (4-year) degree programme are:

1. To impart students with a conceptual understanding of the fundamental principles of Physics, natural laws and

their interpretation, as well as mathematical formulation of the physical phenomena in nature.

2. To develop critical skills necessary for solving unknown problems from our physical surroundings.
3. To develop the capability of analyzing, addressing and posing solutions to problems of natural importance and to instill a deep appreciation of the need for optimum utilization of natural resources and environment.
4. To instill in students the habit of independent thinking, deep inquiry, and motivation for self-education.
5. To sharpen our students' mathematical prowess making them capable of modeling, analyzing and predicting the behaviour of physical processes.
6. To enhance our student's skills in scientific communication and the ability to clearly present physics and science in simple and clear language.
7. To introduce to students the spirit of working in interactive groups with the necessary requirements of scientific and professional ethics.
8. To develop hands-on experience in different laboratory techniques, modern instrumentation.
9. To enhance student competence in the design and conduct of experiments and analysis and presentation of experimental data and results.
10. To provide an in-depth understanding of some specialized area of Physics through the option of elective courses.
11. To equip students with the necessary skill set for pursuing careers in Physics education, research and industry in government or private organizations.

Eligibility Requirements:

- i) FSc (Pre-Engineering/Pre-Medical) ICS (Physics, Mathematics combination) / DAE with 45% marks or 2nd division.

Admissions will be merit based and on number of seats available.

Interview will be conducted in the Department for selection of students.

Note: The admission and eligibility criteria will be changed accordingly (as per AIOU rules) but the final assessment will be as same as for BS Physics Program.

Fee Structure:

Per credit hour course fee will be Rs. 2000/-

Remaining charges will be applied as per AIOU rules.

SCHEME OF STUDIES: (BS Physics)**Semester Wise Course Offering****Semester-1**

S. No.	Course Title	Code	Credit Hours
1.	English-I: Composition & Comprehension	5451	3(3+0)
2.	Pakistan Studies	5465	2(2+0)
3.	Basic Calculus -I	5475	3(3+0)
4.	Introduction to Computers	5468	3(3+0)
5.	Mechanics	5452	4(3+1)
6.	Laboratory for Mechanics & Fluids	5453	1(1+0)
7.	Introduction to Sociology	5469	3(3+0)

Semester-2

S. No.	Course Title	Code	Credit Hours
1.	English-II: Technical & Business Writing	5454	3(3+0)
2.	Islamic Studies or Ethics (for non-Muslim students only)	5466 5467	2(2+0)
3.	Basic Calculus-II	5476	3(3+0)
4.	Electricity & Magnetism	5455	4(3+1)
5.	Laboratory for Electricity & Magnetism	5456	1(1+0)
6.	Waves & Oscillations	5459	3(3+0)
7.	Laboratory Techniques and Error Propagation	754	3(3+0)

Semester-3

S. No.	Course Title	Code	Credit Hours
1.	English-III: Communication Skills	5458	3(3+0)
2.	Algebra in Physics	5477	3(3+0)
3.	Heat & Thermodynamics	5461	3(3+0)
4.	Laboratory for Thermodynamics	5460	1(1+0)
5.	Fundamentals of Statistics	5470	3(3+0)
6.	Mass Communication	5471	3(3+0)

Semester-4

S. No.	Course Title	Code	Credit Hours
1.	Modern Physics	5457	3(3+0)
2.	Differential Equations	5472	3(3+0)
3.	Probability & Statistics	5473	3(3+0)
4.	Optics	5462	3(3+0)

5.	Laboratory for Optics & Spectroscopy	5463	1(1+0)
6.	Fundamentals of Environmental Sciences	5474	3(3+0)

Semester-5

S. No.	Course Title	Code	Credit Hours
1.	Mathematical Methods in Physics-1	751	3(3+0)
2.	Classical Mechanics & Relativity	752	3(3+0)
3.	Electronics	2564	3(3+0)
4.	Atomic & Molecular Physics	2551	3(3+0)
5.	Laboratory for General & Nuclear Physics	766	2(2+0)

Semester-6

S. No.	Course Title	Code	Credit Hours
1.	Mathematical Methods in Physics-II	755	3(3+0)
2.	Quantum Mechanics-I	756	3(3+0)
3.	Electromagnetic Theory – I	765	3(3+0)
4.	Thermal & Statistical Physics	2566	3(3+0)
5.	Computational Physics	769	3(3+0)
6.	Laboratory for Electronics	762	2(2+0)

Semester-7

S. No.	Course Title	Code	Credit Hours
1.	Electromagnetic Theory – II	2565	3(3+0)
2.	Quantum Mechanics-II	759	3(3+0)
3.	Solid State Physics-I	761	3(3+0)
4.	Lasers & Optics	758	3(3+0)
5.	Digital & Compute Hardware Electronic	2553	3(3+0)

6.	Laboratory for Digital & Computer Hardware Electronics	2556	3(3+0)
----	--	------	--------

Semester-8

S. No.	Course Title	Code	Credit Hours
1.	Research Techniques	5464	3(3+0)
2.	Nuclear Physics	760	3(3+0)
3.	Advanced Digital & Computer Hardware Electronics	2560	3(3+0)
4.	Laboratory for Advanced Digital & Computer Hardware Electronics	2561	4(4+0)
5.	Electronic Communication System	2559	3(3+0)

Total Credit Hours: 135

Degree Requirement:

For the award of BS (Physics) degree, the students will have to complete the courses offered equivalent to 135 credit hours within a minimum period of eight semesters.

Fee Structure

Registration fee:	Rs. 500/-
Admission fee:	Rs.1000/-
Technology fee: (per semester)	Rs.500/-
Course Code (Lab)	Fee
5451	Rs.6000/-
5452	Rs.8000/-
5453	Rs.2000/-
5465	Rs.4000/-
5468	Rs.6000/-
5469	Rs.6000/-
5475	Rs.6000/-
First Semester Fee	Rs.40,000

Note: Only selected candidates will be informed individually to deposit the prescribed fee in the AIOU main campus branches on same date.

Instructional Methodology:

Allama Iqbal Open University employs media mix as methodology of instruction in which printed material, audiovisual support, and face-to-face tutorial support are mixed in accordance with the requirement of the discipline and the level of course. In view of special requirements of post-graduate studies in physics the following methodology of instruction will be followed:

i) Study Material:

The University will provide soft copy of study material.

ii) Tutorial Support and Workshops:

Face to Face lectures will be a support for this programme by resource persons in the lecture sessions. A minimum, 48 hours of face to face teaching for each 03 credit hour course, will be provided in these sessions. Attendance in these sessions is compulsory. Students failing to attain 70% attendance in theory courses will not be eligible to appear in the final examination. Laboratory course and its practical work will be supervised and assessed by the laboratory course supervisors. 80% attendance is compulsory for all the students in the laboratory course. AIOU will not bear any cost regarding TA/DA or boarding/lodging facilities during the classes.

iii) Schedule of classes:

The schedule of the classes will be communicated to the students through mail and message. During any workshop AIOU reserves the right to change/alter the schedule at any time.

iv) Assessment:

Student performance is evaluated / assessed as under:

Class assignment through quiz/sessional test/assignment weightage = 20%

Theory Course with 70% compulsory attendance & Laboratory course with 80% compulsory attendance = 10%

Final Paper = 70%

Aggregate = 50%

If a student fails to pass in any of the assessment component, he/she has to re-enroll in that course.

At the end of each semester, the university will arrange final examination. The Roll number slips and other relevant information related to examination centers will be provided to the students before the examination. The students who fail in the final examination will be allowed two more chances to reappear in immediate subsequent semester examinations on payment of examination fee.

Admission Procedure:

Only the prescribed admission forms will be entertained. Admission forms (duly filled in) along with the required documents/testimonials/marks sheets should be sent to:

BS Physics Programme Coordinator

Department of Physics,

(New Building) Research Complex / Science Block,

Ground floor, Allama Iqbal Open University,

Sector H-8, Islamabad.

Admission will be finalized after interview.

FACULTY MEMBERS:**Department of Physics**

1. **Prof. Dr. Syed Zafar Ilyas,**
Chairman
Department of Physics,
Phone: 051-9057728
2. **Dr. Syed Raza Ali Raza**
Associate Professor
Phone: 051-9057728
3. **Mr. Ather Hassan**
Assistant Professor
Phone: 051-9057214
4. **Dr. Surayya Mukhtar**
Assistant Professor
Phone: 051-9057184
5. **Dr. M. Tariq Jan**
Assistant Professor,
Phone: 051-9057214
6. **Mr. Abdul Jalil**
Assistant Professor
Phone: 051-9057214
7. **Ms. Hareem Mufti**
Lecturer,
Phone: 051-9057727
8. **Ms. Uzma Nosheen**
Lecturer
Phone: 051-9057727
9. **Dr. Tayyba Aftab**
Lecturer
Phone: 051-9057728

Staff Members:

1. **Mr. Hussain Ahmed**
Research Associate,
Phone: 051-9057214
2. **Muhammad Aman**
Laboratory Assistant
Phone: 051-9057728
3. **Mr. Saeed Murtaza**
Lab. Assistant
Phone: 051-9057728
4. **Mr. Muhammad Usman**
Assistant
Phone: 051-905772
5. **Mr. Zohaib Ahmed**
LDC
Phone: 051-905728

DEPARTMENT OF STATISTICS

Introduction:

The Department of Statistics was established in 1988 in the faculty of Sciences, Allama Iqbal Open University. Since then, the faculty and students have shared a common goal of maturing the Department with sheer hard work and constant struggle. Statistical sciences have significant impact on our lives and are a key to discoveries and innovation. Over the time, with concerted efforts, the Department has grown to its full potential and is vigorously involved in participating towards global efforts of driving a new era of growth, development and productivity. Since, our world is becoming more quantitative and data-focused, job opportunities in statistics are plentiful and projected to increase worldwide. Therefore, the alumni of the department of statistics have been working in various government departments and private sector.

The vision of Department is to impart quality education that focuses on collaborative learning through innovative teaching and research methodologies. It aims to create an environment that enables students to effectively engage in making lasting contributions in diverse fields according to rapidly changing demands of not only the home country but the entire globe. The Department is determined to further develop a state of the art model of learning and research, which will benefit the masses across the board.

Academic Programmes

The following degree programmes are being offered in the Department of Statistics. All these programmes are approved by Higher Education Commission, Islamabad.

1. PhD Statistics
2. MPhil Statistics
3. MSc Statistics
4. BS (4 years) Statistics

All the courses and contents of these programmes are designed to meet the challenging statistical needs in life sciences, information technology, social sciences and other allied disciplines. The course outlines of all level courses have been designed and updated recently after consulting syllabi of national and international universities. It helps to strengthen the statistical concepts and logical thinking among our students.

Presently, these degree programmes are offered at main campus only. However, in near future, the Department also intends to offer these degree programmes at main regional headquarters.

BS Statistics (4 Years)

a) Introduction:

With the passage of time in the new era of globalization, significant changes have been made in almost all walks of life to keep in pace with the growing world. Among many other fields, improvement in existing education system has become the top most priority of many nations across the globe. Therefore, it is the need of time to modify our current education system in order to meet the international standards. Having a vision of brighter future with compatible

educated youth, the Department of Statistics is launching BS Statistics programme from Spring 2017. The BS Statistics would be sixteen years education equivalent to MSc Statistics and fulfilling the international standards of graduate degree.

b) Aims and Objectives:

1. To enhance and upgradation of qualification of those potential candidates who do not have sufficient resources to continue their studies after intermediate.
2. To enable the students to get a better insight into in depth knowledge of Statistics.
3. To produce quality teacher/researchers of Statistics at all levels.
4. To prepare well trained and skilled graduates to cater the needs of future in the field of Statistics.
5. To produce young and energetic minds in the field of Statistics in order to promote innovative research and critical thinking.

c) Eligibility:

Candidate must have at least 2nd division or 45% marks in HSSC or equivalent exams approved/verified by Inter Board Committee of Chairmen (IBCC).

Merit Criteria:

After scrutiny of the eligible candidates, the department will call the eligible applicants for interview and admission committee will recommend the suitable candidates for BS Statistics on merit basis.

Degree Requirements:

For the award of BS Statistics degree, the student will have to qualify the 130 credit hours consisting 44 courses within a minimum period of eight semesters (4 years) and maximum period of 14 semesters (7 years).

Payment of fee:

Only the selected candidates will be asked through SMS/email to deposit the required fee after download challan from AIOU website.

Hostel and Cafeteria Facilities:

The said facilities are available for the students of AIOU only. Separate fee has to be paid subject to the availability of food and space in Hostels.

Library and Internet Facilities:

The Library and internet facilities are also available at main Campus, AIOU. The Central Library is enriched with latest text & recommended books, e-books & free internet facilities.

The library also has an accessible centre for blind students. The Department of Statistics also has its own computer laboratory equipped with latest statistical software.

d) Scheme of Studies:

The full programme of BS Statistics comprises eight semesters. The all courses are compulsory to qualify for the award of BS Statistics degree. The semester wise course offering is as under.

Revised Scheme of Studies BS Statistics, Autumn 2022

Semester-1

Sr.#	Code	Course Title	Credit Hours
1.	5468	Introduction to Computer	3(3+0)
2.	4432	Calculus-I	3(3+0)
3.	4434	Introductory Statistics	3(3+0)
4.	5465	Pakistan Studies	2(2+0)
5.	5451	English-I	3(3+0)
6.	9472	Business Communications	3(3+0)
Sub Total			17

Semester-2

1.	4433	Calculus-II	3(3+0)
2.	5474	Fundamental of Environment Sciences	3(3+0)
3.	4486	Introduction to Regression Analysis and Experimental Designs	3(3+0)
4.	9466	Pakistani Adab-I	3(3+0)
5.	5454	English-II	3(3+0)
6.	5469	Introduction to Sociology	3(3+0)
Sub Total			18

Semester-3

1.	4472	Algebra-I	3(3+0)
2.	4488	Introduction to Probability and Probability Distributions	3(3+0)
3.	5466/ 5467	Islamiat/ Ethics (For Non-Muslim Students only)	2(2+0)
4.	9405	Principles of Marketing	3(3+0)
5.	5458	English-III	3(3+0)
6.	9411	Population Studies	3(3+0)
Sub Total			17

Semester-4

Sr. #	Code	Course Title	Credit Hours
1.	4477	Computing Tools	3(2+1)
2.	4489	Probability Theory and Statistics	3(3+0)
3.	4491	Basic Statistical Inference	3(3+0)
4.	4492	Official Statistics	3(3+0)
5.	9406	Human Resource Management	3(3+0)
6.	9473	Arabic Language	3(3+0)
Sub Total			18

Semester-5

1	1551	Statistical Methods	3(3+0)
2	1552	Sampling Techniques-I	3(3+0)
3	1553	Design & Analysis of Experiments-I	3(3+0)
4	1554	Probability & Probability Distributions-I	3(3+0)
5	1555	Advanced Calculus	3(3+0)
Sub Total			15

Semester-6

1	1513	Non Parametric Statistics	3(3+0)
2	1556	Probability & Probability Distributions-II	3(3+0)
3	1557	Regression Analysis	3(3+0)
4	1558	Sampling Techniques-II	3(3+0)
5	1559	Design & Analysis of Experiments-II	3(3+0)
Sub Total			15

Semester-7

1	1514	Mathematical Methods for Statistics	3(3+0)
2	1561	Statistical Inference-Estimation	3(3+0)
3	1562	Econometrics	3(3+0)
4	1563	Total Quality Management	3(3+0)
5	1564	Computer Programming (C & C++)	3(3+0)
Sub Total			15

Semester-8

1	1566	Statistical Inference-Testing of Hypotheses	3(3+0)
2	1567	Applied Multivariate Analysis	3(3+0)
3	1569	Data Analysis and Statistical Packages	3(3+0)
4	1568	Operations Research	3(3+0)
5	1570	Research Report	3(3+0)
Sub Total			15

Total BS Statistics Programme Credit Hours = 130

e) Fee Structure

Registration Fee:	Rs.500/-
Admission Fee:	Rs.1000/-
Technology Fee (per semester)	Rs.500/-
Course Code	Fee
5468	Rs.6000/-
4432	Rs.6000/-
4434	Rs.6000/-
5465	Rs.4000/-
5451	Rs.6000/-
9472	Rs.6000/-

Lab fee (per semester)	Rs.750/-
Total Semester Fee	Rs.36,750/-

The following Revised BS Statistics Program which is designed according to the guidelines of HEC curriculum of BS Statistics 2017-18. The Summary of the program is given as following:

i. Summary of the Program:

- Total Credit Hours: 130 Credit Hours
- Minimum Duration: 8 Semesters (4-Years)

ii. Eligibility Criteria:

- Candidates having HSSC with 45% or equivalent with minimum 2nd division.

iii. Admission Procedure:

- Selection of the candidates will be made strictly on merit basis criteria laid down by the Department and University.
- There will be a departmental admission committee to conduct admission test and interview to finalize the admissions.

iv. Evaluation:

- **Students have to obtain minimum 50% marks in continuous assessment and 50% marks in final exam for passing each subject.**
- Following is the list of elective courses for BS/M.Sc. Statistics Program:

Sr. No	Course Title	Course Code	Credit Hours
1.	Reliability Analysis	1571	3(3+0)
2.	Data Mining	1572	3(3+0)
3.	Bayesian Statistics	1573	3(3+0)
4.	Biostatistics	1574	3(3+0)
5.	Operations Research	1568	3(3+0)
6.	Research Report	1570	3(3+0)

Instructional Methodology:

Face to Face teaching (Tutorials):

For each course, there would be 48 hours face to face teaching support to the students. Three-hour class/week for (3+0) credit hour for a semester of sixteen weeks. The distribution of the lectures will be provided to the students in classes/workshop after consultation with the teachers/resource persons. The classes will be supplemented by the computers where required. Over all 70%, attendance would be compulsory to appear in sessional tests.

Classes/Workshops Schedule:

The classes/workshops will be arranged at Main Campus, AIOU, Islamabad only. However, the schedule is prepared according to the availabilities of qualified faculties and convenience of the students.

Continuous Assessment:

- Two home-assignments for each course will be given to the students.
- Two sessional exams assignments (as a continuous

assignment component) for each course will be conducted and 50% marks in sessional exams assignment is mandatory to appear in final examination.

- A student having less than 50% marks in continuous assessment component would not be eligible to appear in final exam.
- However, he/she has to re-enroll himself/herself in the same course in the next offering as per AIOU rule.
- 30% weightage of continuous assignment component marks will be added in the final exam marks for final grading given to the assignments/sessional tests.

Final Examination:

Final Examination will be held at the end of each semester. 70% weightage will be given to the final examination.

Passing Percentage:

Assignments/Sessional tests	50%
Final Examination	50%
Aggregate	50%

Note:

- The student will have to pass each component separately to pass a course. However, sessional tests must pass before to appear in the final examination.
- Please do not deposit/hand over any fee to any person along with admission form.

Applying Procedure for admission in BS Statistics

- ❖ **Step-1:** First of all register yourself on AIOU website and remember user name and password for future contact to AIOU.

- ❖ **Sep–2:** Select your programme & semester and generate a dully filled admission form and challan form for fee deposit in and mentioned banks.
- ❖ **Step–3:** Post/Submit by hand the stamped Bank fee receipt and admission form on the following address.

Chairman
Department of Statistics,
Lower Ground Floor, Science Block, Sector H-8, AIOU
Islamabad Ph. No. 051-9057266, 9250062
Email: statistics@aiou.edu.pk

FACULTY MEMBERS

- 1. Prof. Dr. Irshad Ahmad Arshad**
Chairman
Ph: 051-9057163, 9250062
Email: irshad.ahmad@aiou.edu.pk
- 2. Dr. Muhammad Zakria**
Associate Professor
Ph: 051-9057372
Email: zakria@aiou.edu.pk
- 3. Dr. Zahid Iqbal**
Associate Professor
Ph: 051-9057446
Email: zahid.iqbal@aiou.edu.pk
- 4. Dr. Tauqir Ahmed Mughal**
Assistant Professor
Ph: 051-9057266
Email: tauqirahmed1@outlook.com

- 5. Dr. Muhammad Yameen Danish**
Lecturer
Ph: 051-9057266
Email: yameen.danish@aiou.edu.pk
- 6. Mr. Sajid Hassan Shah**
Research Associate
Ph: 051-9057209
Email: sajid.shah@aiou.edu.pk
- 7. Ms. Lubna Naz**
Research Assistant
Ph: 051-9057287
Email: lubna.naz@aiou.edu.pk
- **Staff Phone:**
Ph: 051-9057266

GENERAL INFORMATION

- i. The certificates/degrees of AIOU are equivalent to any other recognized Board/University.
- ii. A candidate is required to submit complete admission form and upload scan documents through online system before or on the closing date.
- iii. If an applicant of post-graduate/research level programme does not receive any information regarding admission within three months from submission of application, he/she should presume non-selected.
- iv. A course taken by any student cannot be changed during the semester.
- v. The address of a student will not be changed during the semester.

- vi. **Admission to courses for both the Spring and Autumn semesters are generally offered in the months of January and July, respectively, whereas, examinations commenced in November and May respectively. The continuing students will enroll online on AIOU website and deposit fee within due date.**
- vii. Fee cannot be refunded once paid for admission nor can it be adjusted for any other programme
- viii. On payment of the registration fee, each student will be issued a student ID. This number must be quoted in all the future correspondence along with the roll number, course(s), code numbers and semester.
- ix. Study material shall be available on university website. University will not provide hard copy of books.
- x. Rules and regulations framed, enhanced and changed from time to time by the authorities, bodies of the university will be effective as deemed necessary. The student will have to abide by all such rules and regulations from the date of their implementation.
- xi. A student who fails in continuous assessment component is not eligible to reappear but will be allowed to re-register for the same course at its next offering semester by the university.
- xii. It is the responsibility of the student to remain in touch with the department regarding the selected programme.
- xiii. A student already admitted to a programme or a specialization of a programme shall not be allowed to transfer or to get admission to another programme

unless he/she formally postpones it till the completion of the new programme or withdraws from the previous programme.

- xiv. After completion of a programme successfully, a student has to apply to Controller of Examinations for issuance of certificate/degree.
- xv. The university reserves the right to change contents of this prospectus without any prior notice as per university policy.
- xvi. In case of discrepancies in the name of student/ Father's name of the student or difference in name mentioned in his/her other educational certificates, the name on the Matric certificate of the student will be considered as correct name. The Examination Department shall also issue certificate/ degree on the said name.
- xvii. In case provision of forged documents for admission, not only the admission will be refused to the applicant but the fee deposited by him/her will also be forfeited. The university may proceed further in the matter.

PROCEDURE FOR DEPOSITING FEE

- Applicants will deposit admission processing fee (Rs.500) in designated banks or through Telcos.
- Eligible candidates for (**Merit Based Programmes**) are required to deposit admission fee in any branch of the following banks:
 1. First Women Bank Limited (FWBL)
 2. Allied Bank Limited (ABL)
 3. Muslim Commercial Bank (MCB)

4. United Bank Limited (UBL)
- Fee can also be Deposited through Jazz Cash, Easy Paisa and Upaisa Mobile App/USSD String *786#, Retailer Agent, Franchise and Branches of Mobilink, Telenor and Ubank. For more detail please visit university website.
- The Banks/Mobile App/Retailer Agents/Franchise/Branches will provide Transaction ID of deposited fee.

Note: Beware that University has not authorized any person or private institute to collect payment/forms. All the students are instructed to deposit fee by themselves in designated bank branches. In case of any discrepancy in admission fee/admission form the University will not be responsible and the student will have to face the consequences.

PROCEDURE OF FEE DEPOSIT THROUGH TELECOS

Easypaisa Through Easypaisa App

The account may be created after downloading the Easypaisa Mobile App from Playstore. For using this mode, student must have balance equal to his/her payable fee in Easypaisa mobile account. There are **no transactions charges**, if student use this mode to pay his/her fee. Following is the procedure of fee payment through Easypaisa App.

1. Login to Easypaisa App
2. Press “View All”
3. In “Payment” Section, select “Fee Collection”

4. Select “AIOU”
5. Enter “Challan Number”
6. Easypaisa App will show the payable amount & due date
7. Press “Pay Now”
8. Fee will be Paid and student will receive confirmation SMS from 3737
9. Student will write **Transaction ID** and **“Paid via Easypaisa App”** on the challan and admission form. Students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Through USSD String *786#

The Easypaisa mobile wallet account may be created by dialing *786#. For using this mode, student must have balance equal to his/her payable fee in Easypaisa mobile account. There are **no transactions charges**, if student use this mode to pay his/her fee. Following is the procedure of fee payment through USSD string *786#

1. Dial *786#
2. Select “4” (Payments)
3. Select “7” (Fee Collections)
4. Select “99” (Next)
5. Select “AIOU”
6. Enter Challan No.
7. Screen will show the payable amount & due date
8. Enter Mobile Account PIN
9. Fee will be Paid and student will receive confirmation SMS from 3737

10. Student will write **Transaction ID** and “**Paid via Easypaisa786 String**” on the challan and admission form. Further, students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Through Easypaisa Retailer (Agent) Shop/Telenor Franchise / Telenor Bank Branches

Fee can also be paid by visiting any Easypaisa Agent shop, Telenor franchise and Telenor Microfinance Bank branch. For using this mode, student has to pay **Rs.15 per transaction** in addition to the payable fee. Following is the fee payment procedure through this mode:

1. Student may visit any nearest Easypaisa Retailer (Agent) Shop, Telenor franchise or Telenor Microfinance Bank branch
2. Student will inform the retailer/franchisee/teller that he/she wish to pay fee of AIOU
3. Retailer/Franchisee/Teller will ask the student to share CNIC number, Mobile Number & Challan Number
4. Retailer/Franchisee/Teller will enter the Challan Number in his Easypaisa Tab/system
5. Tab/System will show the payable amount & due date
6. Student will hand-over the fee amount to retailer/franchisee/teller
7. Once the fee amount is handed over, the retailer/franchisee/teller will process the fee transaction
8. Fee will be paid and student will receive confirmation SMS from 3737 on mobile number. Transaction charges will be mentioned in the confirmation SMS

9. Student will write **Transaction ID** and “**Paid via Easypaisa Agent/Franchisee/Teller**” on the challan and admission form. Bank stamp will be embossed only in case the fee is paid through Telenor Microfinance Bank branches. Further students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Upaisa

Through Upaisa App

The account may be created after downloading the Upaisa Mobile App from Playstore. For using this mode, student must have balance equal to his/her payable fee in Upaisa mobile account. There are **no transactions charges**, if student use this mode to pay his/her fee. Following is the procedure of fee payment through Upaisa App.

1. Login to Upaisa App
2. Please click on “Payments”
3. Click on “AIOU”
4. Enter “Challan Number”
5. Upaisa App will show the payable amount
6. Press “Pay Now”
7. Fee will be Paid and student will receive confirmation SMS
8. Student will write **Transaction ID** and “**Paid via Upaisa App**” on the challan and admission form. Students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Through USSD String *786#

The Upaisa mobile wallet account may be created by dialing *786#. For using this mode, student must have balance equal to his/her payable fee in Upaisa mobile account. There are **no transactions charges**, if student use this mode to pay his/her fee. Following is the procedure of fee payment through USSD string *786#

1. Dial *786#
2. Select “Payments”
3. Select “AIOU”
4. Enter Challan No.
5. Screen will show the payable amount
6. Student will enter his/her Mobile Number and PIN
7. Fee will be Paid & student will receive confirmation SMS
8. Student will write **Transaction ID** and **“Paid via Upaisa786 String”** on the challan and admission form. Students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU

Through Upaisa Agent Shop/Ufone Franchise /PTCS OSS/U Microfinance Bank Branches

Fee can also be paid by visiting any Upaisa Agent shop, Ufone franchise, PTCL One stop shop (OSS) and U Microfinance Bank branch. For using this mode, student has to pay **Rs.15 per transaction** in addition to the payable fee. Following is the fee payment procedure through this mode.

1. Student may visit any nearest Upaisa Retailer (Agent) Shop, Ufone Franchise, PTCL OSS or U Microfinance Bank branch
2. Student will inform the retailer/franchisee/teller that he/she wish to pay fee of AIOU
3. Retailer/Franchisee/Teller will ask the student to share CNIC number, Mobile Number & Challan Number
4. Retailer/Franchisee/Teller will enter the Challan Number in his Upaisa Tab/system
5. Tab/System will show the payable amount & due date
6. Student will hand-over the fee amount to retailer/franchisee/ teller
7. Once the fee amount is handed over, the retailer/franchisee/teller will process the fee transaction
8. Fee will be paid and student will receive confirmation SMS on mobile number. Transaction charges will be mentioned in the confirmation SMS.
9. Student will write **Transaction ID** and **“Paid via Upaisa Agent/Franchisee/Teller”** on the challan and admission form. Bank stamp will be embossed only in case the fee is paid through U Microfinance Bank branches. Students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Jazz Cash

Through Jazzcash App

The account may be created after downloading the Jazzcash Mobile App from Playstore. For using this mode, student must have balance equal to his/her payable fee in Jazzcash mobile

account. There are **no transactions charges**, if student use this mode to pay his/her fee. Following is the procedure of fee payment through Jazzcash App.

1. Login to Jazzcash App
2. Please click on “Education Fee”
3. Select “Universities” from the Menu
4. Select “AIOU” from the Sub Menu
5. Enter “Challan Number”
6. Jazzcash App will show the payable amount and due date
7. Enter MPIN
8. Fee will be Paid & student will receive confirmation SMS
9. Student will write **Transaction ID** and “**Paid via Jazzcash App**” on the challan and admission form. Students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Through USSD String *786#

The Jazzcash mobile wallet account may be created by dialing *786#. For using this mode, student must have balance equal to his/her payable fee in Jazzcash mobile account. There are **no transactions charges**, if student use this mode to pay his/her fee. Following is the procedure of fee payment through

USSD string *786#

1. Dial *786#
2. Select “Payments”
3. Select “Education Payments”
4. Select “AIOU”

5. Enter Challan No.
6. Screen will show the payable amount
7. Enter MPIN
8. Fee will be Paid & student will receive confirmation SMS
9. Student will write **Transaction ID** and “**Paid via Jazzcash786 String**” on the challan and admission form. Students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Through Jazzcash Agent Shop/Jazz Franchise /Mobilink Microfinance Bank Branches

Fee can also be paid by visiting any Jazzcash Agent shop, Jazz franchise and Mobilink Microfinance Bank branch. For using this mode, student has to pay **Rs.20 per transaction** in addition to the payable fee. Following is the fee payment procedure through this mode.

1. Student may visit any nearest Jazzcash Retailer (Agent) Shop, Jazz Franchise or Mobilink Microfinance Bank branch
2. Student will inform the retailer/franchisee/teller that he/she wish to pay fee of AIOU
3. Retailer/Franchisee/Teller will ask the student to share CNIC number, Mobile Number & Challan Number
4. Retailer/Franchisee/Teller will enter the Challan Number in his Jazzcash Tab/system
5. Tab/System will show the payable amount & due date
6. Student will hand-over the fee amount to retailer/franchisee/teller

7. Once the fee amount is handed over, the retailer/franchisee/teller will process the fee transaction
8. Fee will be paid and student will receive confirmation SMS on mobile number. Transaction charges will be mentioned in the confirmation SMS
9. Student will write **Transaction ID** and **“Paid via Jazzcash Agent/Franchisee/Teller”** on the challan and admission form. Bank stamp will be embossed only in case the fee is paid through Mobilink Microfinance Bank branches. Students are advised to keep the confirmation SMS save in phone until the receipt of intimation of admission confirmation from AIOU.

Admission form (Original) to be sent to Directorate of Admission and Mailing through Post Office or any other courier service.

Note: Beware that University has not authorized any person or private institute to collect payment/forms. All the students are instructed to deposit fee by themselves in designated bank branches. In case of any discrepancy in admission fee/admission form the University will not be responsible and the student will have to face the consequences.

REGULATIONS FOR REFUND OF ADMISSION FEE

- i. The Applicant/candidate/student who have submitted his/her fee for Admissions but do not wish to continue and applied for refund of fee before the start of his/her study period as per Academic Calendar available on the AIOU website corresponding to his/her respective semester i.e Autumn or Spring, the fees will be refunded after the deduction @ 10% of the total fee.
- ii. The Applicant/Candidate who was not eligible but deposited the fee for admission and applied for refund within one year from the date of fee deposit, the fee shall be refunded after deduction @15% of total fee.
- iii. The student who has deposited his/her fee in excess of due fee that total excess amount shall be refunded or adjusted as the case may be.
- iv. The Treasurer Department shall verify the fee of students and shall send the case to the Audit Department for pre-audit.
- v. The cheque will be issued to the candidate by the Campus Payment Section (CPS), Treasurer’s Department.
- vi. In the case of death, the full fee will be refunded through crossed cheque in favour of the Blood Relative of deceased student, after fulfilling all the codal formalities. The refund case must be submitted within one year of fee deposit.
- vii. In case the students who are not allowed/granted admission to a program offered by the University due to less enrollment/non formation of viable group/non offering of courses, full fee will be refunded to them.

viii. If the admission of an Applicant/Candidate is not matured due to any reason beyond the control of the University or due to unforeseen issues, the whole paid fee, without any deductions shall be refunded to the respective applicant/candidate. The refund case must be submitted within one year of fee deposit.

IMPORTANT TELEPHONE NUMBERS

Sr.#	Name	Telephone Nos.
1.	Director Admissions	051-9250043 051-9250162 (Fax)
2.	Controller of Examinations	051-9250012
3.	Director Students Affairs	051-9250174
4.	Superintendent (Postgraduate)	051-9057422
Helpline: (051) 111 112 468 Help Desk: support.aiou.edu.pk		

ALLAMA IQBAL OPEN UNIVERSITY, REGIONAL NETWORK

FEDERAL AREA ISLAMABAD
Adl. RD, Regional Campus, AIOU,
Block No.27, (Services Block) Sector H-8,
ISLAMABAD. Ph:(051)9250171-
92507178. Email: vd_jsb@aiou.edu.pk

PUNJAB
DRD, Regional Centre, AIOU, Street No.5,
Major Tahir Sadiq Road, Dar-ul-Salam
Colony, ATTOCK.
Ph: (057)2610610,9316418
E-mail: rd_attock@aiou.edu.pk

Adl. RD, Regional Campus, AIOU, Chak
No. 12-A/BC, Near Airport Hasilpur
Bypass Road, BAHAWALPUR.
Ph:(0304)9983138-9
E-mail: rd_bahawalpur@aiou.edu.pk

ARD, Regional Centre, AIOU,
Opposite Allied Park, Near Food Godam
Railway, Bypass Road, CHAKWAL
(0543)553566-77
E. mail: rd_chakwal@aiou.edu.pk

Adl. RD, Regional Campus, AIOU,
Railway Road, Near Veterinary Hospital,
DERA GHAZI KHAN. Ph:(064) 9260386-7
Email: rd_dgkhan@aiou.edu.pk

RD, Regional Campus, AIOU,
F-Block, Near STN Tower, Millat Town,
FAISALABAD. Ph: (041) 9330791-3
Email: rd_faisalabad@aiou.edu.pk

DRD, Regional Campus, AIOU, 10-X Block,
Peoples Colony, GUJRANWALA.
Ph:(055)9230251-2
Email: rd_gujanwala@aiou.edu.pk

DRD, Regional Campus, AIOU,
Toba Road, Opposite Officers Colony,
JHANG. Ph. (047) 7630953, 7631166
Email: rd_jhang@aiou.edu.pk

ARD, Regional Centre, AIOU, Ghaffar
Chowk (Bhatta Corianwal), Main Road,
KASUR CITY. Ph: 0492-723723
Email: rd_kasur@aiou.edu.pk

ARD, Regional Centre, AIOU, Near Under
Pass, MIANWALI. Ph:(0459) 920024-6
Email: rd_mianwali@aiou.edu.pk

RD, Regional Campus, AIOU, CF-7, Shah
Rukn-e-Alam Colony, Near Thana Stop,
MULTAN. Ph:(061)9220202-3, 6772499
Email: rd_multan@aiou.edu.pk

ARD, Regional Centre, AIOU, Al Huda
Street, Amin Colony, Near Govt. High
School, NAROWAL.
Ph: 0542-413122,413232
Email: rd_narowal@aiou.edu.pk

DRD, Regional Campus, AIOU, Hidayat
Campus, Near Sheikh Zaid Airport.
RAHIM YAR KHAN Ph.068-9239046,
9239166 Email: rd_rykhan@aiou.edu.pk

Adl. RD, Regional Campus, AIOU, House
No.CB/190-A, Lane No.4, St.1, Near
Maryam Memorial Hospital, Peshawar
Road, RAWALPINDI. Ph: 051-9334264-5
Email: aiourwp@aiou.edu.pk

DRD, Regional Centre, AIOU, House
No.268, St. 3 Mokai Colony near Imliaz
Hospital, SAHIWAL. Ph: (040) 9330456-7
Email: rd_sahiwal@aiou.edu.pk

Adl. RD, Regional Centre, AIOU, H. 145,
Muradabad Colony, Near Daewoo
Terminal, University Road, SARGODHA
CANTT. Ph:(048)3211217-8
Email: rd_sargodha@aiou.edu.pk

DRD, Regional Centre, AIOU, Mohallah
Mumtaz Pura, Haji Pura, Daska Road,
SIALKOT. Ph:052-3241300, 3241400
Email: rd_sialkot@aiou.edu.pk

DRD, Regional Centre, AIOU, House No.
166, Faisal Town, Opposite Govt. Boys
Post Graduate College, VEHARI.
Ph: (067)3360636-37
Email: rd_vehari@aiou.edu.pk

ARD, Regional Centre, AIOU, Opposite
office of Punjab Food Authority, Near
Railway Phattak, Main Chishtian Road,
BAHAWALNAGAR. Ph: 063-9330012
Email: rd_bahawalnagar@aiou.edu.pk

Adl. RD Regional Centre, AIOU, Street
No. 01, Jamil Town, Lahore Road, Near
Superior College, SHEIKHUPURA.
Ph: (056)3545041
Email: rd_sheikhupura@aiou.edu.pk

DRD, Regional Centre, AIOU, Mujahid
Abad, Near Jada, Main G. T. Road,
JHELUM. Ph: (0544)273378-9
Email: rd_jhelum@aiou.edu.pk

Adl. RD, Regional Campus, AIOU, 346 -
Raza Block, Allama Iqbal Town, LAHORE
Ph: (042)99333580
Email: rd_lahore@aiou.edu.pk

Superintendent, Model Study Center,
AIOU, Near Sat Sira Chowk Marala Road,
MANDI BAHAUDDIN. Ph: (0546)571171
Email: msc_mbdin@aiou.edu.pk

SINDH
DRD, Regional Centre, AIOU, Bungalow
No.46, B1-8, Unit No.02, Railway
Employee Housing Society, Autobahn
Road Latifabad, Near Lal Oila Restaurant,
HYDERABAD. Ph: (022)9330052-3
Email: rd_hyderabad@aiou.edu.pk

RD, Regional Campus, AIOU, ST-6, D-I,
Block No.14, Federal 'B' Area, KARACHI.
Ph:(021) 99246099-101
Email: rd_karachi@aiou.edu.pk

Assistant Director IT, Model Study Centre,
AIOU, House No.61, Shaheed Zulfiqar
Colony, Near Daro Road, Dadu.
Ph: 03337208688
Email: rd_dadu@aiou.edu.pk

ARD, Regional Centre, AIOU, Sachal
Colony, Banglow No.67, Near City
Hospital (Bakhtiarwar Park), LARKANA
CITY. Ph (074)9239044
Email: rd_larkana@aiou.edu.pk

ARD, Regional Campus, AIOU, Near
Session Court Mai Bhaghi Chowk, MITHI,
Ph (0232)920089
Email: rd_mithi@aiou.edu.pk

ARD Regional Centre, AIOU, Banglow/H.
No. 74, Main Ghulamullah Raod Near City
School Makli Society, THATTA
Ph: (0298)920717-8
Email: rd_thatta@aiou.edu.pk

RD, Regional Centre, AIOU, Plot No. 31,
Block-A, Jaffria Co-operative Housing
Society, Shikarpur Road, SUKKUR.
Ph (071)5807213
Email: rd_sukkur@aiou.edu.pk

Incharge, Noor Model Study Centre,
AIOU, Old Girls College Hostel, Opp. DCO
Office, UMER KOT. (0238) 920010,
920016. Email: msc_uk@aiou.edu.pk

ARD, Model Study Centre, AIOU, First
Floor, Plot No. 16, ROW A, Block II,
Survey NC 90 Deh Khanto, Sindhi Jamat
Cooperative Housing Society, Bin Qasim
Town, District Malir, KARACHI. Ph: 021-
99333846 Email: rd_malir@aiou.edu.pk

RD, Regional Centre, AIOU, A Little
Ahead of Dars Bus Stop Near Feroze
Jamali Sahib's Bungalow on National
Highway N.5, Moro. Ph: 025-4550506
Email: rd_moro@aiou.edu.pk

Superintendent, AIOU Model Study
Centre, District Complex, Goli Maar Road,
Kandkot, District Kashmir.
Ph:0722921614
Email: msc_kandhkot@aiou.pk

KHYBER PAKHTOON KHWA
DRD, Regional Campus, AIOU,
Murree Road, Adjacent B.I.S.E.,
ABBOTTABAD Ph:(0992)39092390927
Email: rd_abbottabad@aiou.edu.pk

ARD, Regional Centre, AIOU, Near BISE
Peshawar Camp Office, Governor Cottage
Road Goldoor, Chitral Town, District
Lower, CHITRAL. Ph:(0943) 413419-
413811. Email: rd_chitral@aiou.edu.pk

ARD, Regional Campus, AIOU, Neli Kothi,
Behind District Auditorium, District Courts,
DERA ISMAIL KHAN Ph:(0966) 9280168-
9280178. Email:rd_dikhan@aiou.edu.pk

ARD, Regional Campus, AIOU, Plot
No.14, Sector A-3, Phase V, Hayatabad
PESHAWAR Ph:(091)9217603-6
Email: rd_peshawar@aiou.edu.pk

DRD, Regional Centre, AIOU, Bunglow
No. 237, Sector-E, Sadberg Road, Sheikh
Maltoon Township, MARDAN.
Ph: (0937)841020, 841030
Email: rd_mardan@aiou.edu.pk

ARD, Regional Centre, AIOU, House
No.43, Sector A/2, Phase No. II, KDA,
KOHAT. Ph: (0922)513882
Email: rd_kohat@aiou.edu.pk

DRD, Regional Centre, AIOU, College
Colony, Opposite Shahuda Park, SAIDU
SHARIF (SWAT) Ph:(0946)9240205-6
Email: rd_swat@aiou.edu.pk

ARD, Regional Centre, AIOU, Bangla No.
2, Village Andheri, Link Road, Balambat,
TIMERGARA. Ph: (0945)9250070
Email: rd_timergara@aiou.edu.pk

BALOCHISTAN
ARD, Regional Centre, AIOU, Bus Stand
Road, Near Ghazali Public School, Gola
Chowk, DERA MURAD JAMALI
Ph: 0838-710375
Email: rd_dmjamali@aiou.edu.pk

ARD, Regional Centre, AIOU, Near B & R
Rest House, KALAT. Ph: 0844-210569
Email: rd_kalat@aiou.edu.pk

RD, Regional Campus, AIOU, Eastern
Bypass Takhtani Ro ad, QUETTA
Phone: 081-2674429-2674398
Email: rd_quetta@aiou.edu.pk

DRD, Regional Campus, AIOU, Pishkan
Road, Near Bahria College, GWADAR.
Ph: (0864)410300
Email: rd_turbat@aiou.edu.pk

ARD, Regional Center, AIOU, House No.
34, St No. 26, Muhala Khudaiddad
Imambara Road Circular No. 01, Zhob
Ph: 0822-413018
Email: rd_zhob@aiou.edu.pk

Superintendent/Incharge, AIOU, Model
Study Center, near Wapda Office,
KHARAN. Ph: (0847)-510777
Email: msc_kharan@aiou.edu.pk

GILGIT BALTISTAN
ARD, Regional Centre, AIOU, Shakra-i-
Quaid-i- Azam, Near Army Public School
& College, Khumer Cantt. GILGIT
Ph:(05811) 960378, 960603
Email: rd_gilgit@aiou.edu.pk

ARD, Regional Campus, AIOU, Near
Elementary College Sundus, SKARDU,
Ph:(05815)960258, 960915
Email rd_skardu@aiou.edu.pk

Superintendent, Model Study Centre,
Nagar, AIOU, Shakra-i-Quaid-i-Azam,
Near College Road Near Boys Inter
College Aliaabad Hunza. Gilgit Baltistan
Ph: (05811)960378,960603
Email: rd_nagar@aiou.edu.pk

AZAD JAMMU KASHMIR
DRD, Regional Campus, AIOU, House
No.1-A, Sector, F-1, Kotli Road, MIRPUR
(A.K) Ph:05827-960028, 960029
Email: rd_mirpur@aiou.edu.pk

Adl. RD, Regional Campus, AIOU, Zero
Point, Jalalabad, MUZAFFARABAD
(AJK) Ph: (05822)960839
Fax: (05822)960840
Email: rd_muzaffarabad@aiou.edu.pk

ARD, Regional Centre, AIOU, Officer
Colony Near New Rawalakot International
Hotel, CMH/Bagh Road, Supply Bazar,
RAWALAKOT (POONCH) A.K
Ph: (05824)960241
Email: ard_rawalakot@aiou.edu.pk