

AIOU

Admission Autumn 2024

PROSPECTUS

Post Graduate Diploma

- **Data Science**



Allama Iqbal Open University, Islamabad

www.aiou.edu.pk

FOR ONLINE ONLY

PROSPECTUS
OF
POSTGRADUATE DIPLOMA
PROGRAMME

SEMESTER: AUTUMN, 2024



**Directorate of International
Collaboration & Exchange**

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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 of a distance and online academic programs, AIOU has now turned into the most favourite university of the country with high international 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 residences and along with continuing their jobs. After assessing the success of many degree programs in Pakistan, AIOU is now going to offer a range of 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 Postgraduate programs at rural and remote areas providing a paralleled opportunity to all the poor and deprived segments 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 programmes using their Learning Management System (LMS) Aaghi portal support online.



Committed to your bright future.

Prof. Dr. Nasir Mahmood
Vice Chancellor

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

International & Overseas Students Shall Submit their Admission using Online System

Dear Applicant

Allama Iqbal Open University and Directorate of International collaboration & Exchange welcome and thanks you for showing your interest in our programs. For online admission, please watch video guidelines:

Fresh Enrollment: <https://www.youtube.com/watch?v=14IPtu4vnk>

Continuing Students: <https://www.youtube.com/watch?v=d52VGci6XNQ>

Fee Depositing Process: <https://www.youtube.com/watch?v=A33WSSY9pbA&t=9s>

THANKS AND LET US KNOW HOW WE CAN HELP OR GUIDE YOUR FURTHER

Admission Schedule for International student:

From semester Autumn 2021, the AIOU has started offering of Matric, FA, Certificate Courses, AD, BS, B.Ed, BBA, PGD and MBA/MPA (COL) Level Programs for international students. Schedule of Admission is given below:

15th July 2024 to 20th August 2024

Address:

Directorate of International Collaboration and Exchange

Room No. 102, Block No. 11, Allam Iqbal Open University

Sector H-8, Islamabad, Pakistan

Telephone: 0092519572495

Email: overseas@aiou.edu.pk

IMPORTANT ACTIVITIES TO BE REMEMBERED

Activity	Spring Semester	Autumn Semester
Admissions	March – April	September – October
Study Period	June – October	December – April
Examinations	October – November	April – May
Result	January	July

Note: *Contact Directorate of International Collaboration & Exchange 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)*

**REVISED POLICY OF MINIMUM AND MAXIMUM DURATION OF
VARIOUS CERTIFICATES/DEGREE PROGRAMS OF AIOU**

Sr. No.	Degree Level	Minimum Duration	Maximum Duration
1	Ph.D	3 Years / 5 semesters	8 years*
2	MS/M.Phil/MSc (Hons)/MBA/COL MBA	2 years / 4 semesters	4 years*
3	MA/MSc (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 year

Revised Policy: Re-Appear and Again Reappear

The scheme of re-appear and again re-appear will be given from semester Spring 2023 onwards.

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 door-steps 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. Under graduate admissions are offered in both the semesters whereas post graduates 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), MBA (Marketing), MBA (HRM), 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.

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 PhD (computer Science), MS (Computer Science), BS (Computer Science) and Postgraduate Diploma (PGD) in Computer Science & Data Science.

The department is equipped with latest computers, IT infrastructure and services including a digital classroom, smart classroom and next generation video conferencing classrooms. The department 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 (Data Science). 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 Bachelor, HSSC and SSC level etc.

2. POSTGRADUATE DIPLOMA (DATA SCIENCE):

The Postgraduate Diploma (Data Science) (PGD-DS) is designed especially for those candidates who want to learn data science, whether they are experts in the field or amateurs. Professionals in marketing, software and IT development, and engineering can enroll in this data science diploma program. The highlights of program are as given below.

a) Eligibility Criteria

- Candidates who have completed a 14-year Bachelor's Degree in Science or any other field with mathematics as a subject, and have obtained a minimum 2nd division from institutions recognized by the Higher Education Commission (HEC), are eligible for admission into this program.
- Admission will be granted to all candidates satisfying the eligibility requirements.
- All eligible candidates are being offered admission in PGD-DS program, subject to formation of viable group of students.
- All eligible candidates are required to deposit fee of the program as per laid down procedure.

b) Program Status:

PGD (Data Science) Program is non-merit based program.

c) Mode of Teaching

PGD (Data Science) program being offered by DCS in a face-to-face mode of teaching through Learning Management System (LMS).

d) Award of Degree

The minimum marks required for the award of PGD (Data Science) Degree is 50% of passing marks.

e) Assessment Criteria

As per approved AIOU/Policy/Criteria for concerned department.

f) Propose Scheme of Study

Semester-1

Code	Title	Cre. Hrs.
CS4511	Fundamentals of Data Science	3 (2 - 1)
CS4512	Statistics and Probability	3 (3 - 0)
CS4513	Data Analysis and Visualization	3 (2 - 1)
CS4514	Data Management and Warehousing	3 (2 - 1)
CS4515	Data Structure and Applications	3 (2 - 1)
Total Credit Hours		15 (11 + 4)

Semester-2

Code	Title	Cre. Hrs.
CS4516	Data Mining	3 (2 - 1)
CS4517	Machine Learning & Artificial Intelligence	3 (2 - 1)
CS4518	Statistical Modelling and Inference	3 (3 - 0)
CS4519	Data Ethics and Privacy	3 (3 - 0)
CS4520	Big Data Analytics	3 (2 - 1)
Total Credit Hours		15 (12+ 3)

Grand Total 30 (23 + 7)

3. GENERAL GUIDELINES:

a) Method of Instruction:

The medium of instruction of the above PGD programs is English, all courses are being offered through English medium with blended learning mode. Detailed Academic Guidelines are given here.

b) Attendance Guidelines:

- i. 70% attendance is compulsory in online session held according to timetable that is communicated before the start of semester.
- ii. Midterm examination is held during the semester. It is compulsory for all students of all subjects.
- iii. In case of less attendance in online sessions and absence in midterm, student will have to re-admit in the concerned courses by paying full fee as per AIOU rules.
- iv. Failure in (Sessional) Assignments and Midterm examination results into re-admission in the course by paying full fee for that course as per AIOU rules.

c) Course Admission Criteria:

Note: Only 5 courses can be taken generally.

The University reserves the right to revise the fee structure as deemed or to add any fee considered appropriate any time during the study period. All such changes will be applicable to all students.

d) Course Calendar:

Course calendar will contain the timetable of classes & guidelines for the whole semester for PGD programs. The course calendar will be available on LMS website. Activities like online sessions, workshops, mid-term will be held according to the schedule given in this course calendar. Additional announcements will be made at the LMS website. Students should carefully observe and follow instructions made an important announcement at the website.

e) Online Tutorial Sessions:

Students prepare the solution and uploads the solution (in Microsoft Word format) before due date.

f) Midterm Examination:

Midterm has a weightage of 20% for each course. The course Instructor will conduct the mid-term as per schedule during the semester. Failing in midterm will result in re-admission of the course with full fee as per AIOU rules.

g) Reading Materials:

The university provides reading material and OER for each course. In some cases, recommended reading materials may be provided or uploaded on the website.

h) Announcements:

Announcements are being made from time-to-time on the website. Students are advised to carefully observe these announcements and updates. Teacher can make announcements at the LMS website. Students can view the announcements and may get further information from the concerned tutor.

i) News & Discussion Forums:

Using the forums, students can share the knowledge with each other and can have discussion on different topics of the course. This forum is available in each course.

j) Fail:

A student, who fails in continuous assessment (30%) or has availed three chances in final examination, must re-admit himself/herself in that course by paying requisite fee, as per AIOU rules.

k) Evaluation Scheme:

The evaluation of the program including different activities are given below:

1) Assessment Criteria:

For Theory Courses:

Sr. No.	Components	Total Marks	Weightage	Passing Marks
1	Assignments	10	20%	50% (in aggregate)
2	Assignment-2	10	30%	
3	Mid Term	30	30%	
4	Attendance	100	Nil	70%
5	Final Exam	100	50%	50%

For Theory-Practical Course

Sr. No.	Components	Total Marks	Weightage	Passing Marks
1	Assignments	10	20%	50% (in aggregate)
2	Assignment-2	10		
3	Mid Term	15		
4	Practical	15	30%	
5	Attendance	100	Nil	70%
6	Final Exam	100	50%	50%

For Practical/FYP Courses:

Sr. No.	Components	Total Marks	Weightage	Passing Marks
1	Attendance	100	Nil	70%
2	Final Exam	100	100%	50%

4. FEE TARIFF:

PGD PROGRAM

DESCRIPTION	FEE
Registration (if not registered) once at the time of first admission in the university	US \$. 50/-
Admission fee (Payable in advance at the time of first admission)	US \$. 50/-
Per 3 Credit Hour Fee = US\$ 100 (100 x 5) = US \$ 500/-	US \$. 500/-
Total Fee PGD-DS:	US \$. 600/-

Since this program is offered in face to face mode of learning through LMS. It comprises interactive tutorial support, online submission of assignments and other online activities.

For any assistance contact:
Directorate of International Collaboration & Exchange
Phone: +92-51-9572495
E-mail: overseas@aiou.edu.pk

GENERAL INFORMATION

- i. The certificates/degrees of AIOU are equivalent to any other recognized Board/University.
- ii. A candidate is required to apply for admission (LMS) online only.
- iii. If an applicant does not receive any information regarding admission within three months from submission of application, he/she should presume no admission.
- iv. A course taken by any student cannot be changed during the semester. However, in real hardship cases, the change in courses will be allowed before the start of study period after deposit of prescribed fee. Study period schedule is available on AIOU website.
- v. The address of a student will not be changed during the semester.
- vi. 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.
- vii. Study material shall be available at the LMS and Website at their given addresses.
- viii. After confirmation of admission students are usually intimated about the part time tutors for each course through student CMS/Aaghi portal. If you do not find information about tutors, you are required to contact the concerned AIOU Regional Office immediately without any delay.
- ix. 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.
- x. 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.
- xi. It is the responsibility of the student to remain in touch with the department regarding the selected programme.
- xii. 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.
- xiii. After completion of a programme successfully, a student has to apply to Controller of Examinations for issuance of certificate/degree.

- xiv. The university reserves the right to change the contents of this prospectus without any prior notice as per university policy.
- xv. The student must inform the Admission Department in writing about admission mistakes within the period of 15 days, which is not according to the admission form/ check list or mistake in name and address. No request for any change will be entertained after the stipulated period.
- xvi. Admission form received without prescribed fee, less fee or fee deposited after due date will not be considered in any case.
- xvii. 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 Examinations Department shall also issue certificate/ degree on the said name.
- xviii. 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.
- xix. The degree/diploma/certificate of the student will be quashed:
 - i) If any mistake found in compilation or declaration of result at any stage.
 - ii) If any candidate found ineligible for a degree/ diploma/certificate during the cross verification process of result and documents at any stage.

- iii) If found that candidate submitted forged/fake/ illegal document(s) in the University at any stage.

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.

Availability of Learning Material

- i. Learning material can be downloaded from university website: www.aiou.edu.pk
- ii. All learning material would be available online for international/overseas students after the commencement of classes.
- iii. Student shall download the learning material and tally with the course codes for which he/she had been registered in the semester.
- iv. Students can get their learning material through AAGHI LMS portal.

Procedure for Fee Payment

International and Overseas Students will have to pay their fee Online as per Guided Procedure:

1. Go to olpay.aiou.edu.pk
2. Enter challan number and **click on "search"** button.
3. Check & tally your challan details with the generated challan then **click on "submit fee"** button.
4. Enter credit/debit card number, card holder name, expiry and CVV code (mentioned on back side of card).
5. **Click on "pay now"** button.
6. A successful payment notification will be appeared with an Order ID.
7. Write Order ID and Transaction Date on the space given below.
8. Save the Order ID in your record till confirmation of your admission.

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.

Note: Beware that University has not authorized any person or private institute to collect payment All the students are instructed to deposit fee by themselves. 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.

REFUND OF OTHER FEE

1. All kind of other fee including but not limited to Degree fee,
Re-appear exams fee, change off name / father name, examiner registration fee, tutor registration fee, late assignment evaluation fee, analysis fee, rechecking of answer scripts fee, NOC fee, subject/group change fee, thesis evaluation fee, thesis extension fee, job fee, tender fee tec. will not be refunded. Only excess fee deposited will be refunded/adjusted.
2. The extension in thesis fee in excess shall be refunded on approval of concerned Dean with certificate that fee was deposited in excess.
3. The amount deposited in university accounts by any person/firm (other than student), by mistake or in excess shall be refunded after verification of the amount deposited

IMPORTANT TELEPHONE NUMBERS

Sr. #	Name	Telephone Nos.
1.	Director Admissions	+92-51-9250043 +92-51-9571501
2.	Controller of Examinations	+92-51-9250012 +92-51-9250013 (Fax)
3.	Director Students Affairs	+92-51-9572400 +92-51-9572401
Directorate of International Collaboration & Exchange		
1.	Dr. Zahid Majeed Director Zahid_majeed@aiou.edu.pk	+92-51-9572450
2.	Sehrish Khan Assistant Director sehrish.khan@aiou.edu.pk	+92-51-9572471
3.	Mr. Muhammad Ajab Superintendent overseas@aiou.edu.pk	+92-51-9572495