

**SPECIFIC REGULATIONS FOR THE POSTGRADUATE DIPLOMA PROGRAM
IN
DATA SCIENCE AND ARTIFICIAL INTELLIGENCE
IN
COLLABORATION WITH IBM**

General

- a. This document presents the Regulations specifically applicable to the academic program Postgraduate Diploma in Data Science and Artificial Intelligence (hereafter referred to as PGDDS&AI) conducted and offered by IIIT D in collaboration with IBM.
- b. This is an academic program run under a collaboration with IBM, the responsibilities of each of the collaborators remain as defined in the MoU signed between IIIT-Delhi and IBM.
- c. For this program, Program Director (PD) and an Executive Committee (EC) chaired by PD for the PGDDS&AI program will be responsible for the day to day conduct of the program and from time to time, may recommend necessary changes to the program. Besides, IIIT-D faculty members, such a committee may also have a member from the IBM, the Industry Partner. Any recommendation towards a change in the program shall be approved by Academic Affairs Committee (AAC), and thereafter by the Senate of the Institute.
- d. The PD is the main functionary who ensures the program's smooth functioning and communicates the suggested changes in the program from time-to-time, if any as approved by the EC, to the AAC and the Senate.
- e. Responsibility of the PD includes - conducting admissions including verification of documents and on boarding students, collecting fee, engaging faculty members and teaching assistants, managing/processing the payment claims of the instructors, managing program content and recordings, Academic Calendar, managing day to day functioning of the program, overseeing website content, managing conduct of examinations and evaluations, arranging grade moderation, announcement of results, handling day to day queries of the students, maintaining academic records and any other work that may arise and liaising with the IBM, the Industry partner. The expenses towards any legal issue related to the program, if any arising at any stage due to these Regulations, will be met from the budget of the program.

Academic sessions and calendars

- a. The Academic Session of each PGDDS&AI program will comprise of 3 consecutive trimesters (spanning approximately 3 months each), running for about 9 months.
- b. All lecture/lab sessions and examinations will be conducted on Saturdays and Sundays.
- c. Start dates will be announced on a dynamic basis depending on the registration volume.
- d. Parallel batches of the different Academic Sessions of the PGDDS&AI programs can be run at any given point of time. The EC may run concurrent batches with the prior approval of the Senate.

- e. The Academic Calendar and course schedule will be announced at least one month before the commencement of each PGDDS&AI program. Calendar and the schedule will be proposed by EC and approved by the DOAA's office.

Eligibility for Admissions and Admission Process

- a. **Number of seats:** Upper limit is 300 students in a single batch.
- b. **Reservations:** The reservations will be followed as stated in the MoU with the Industry Partner, IBM, or otherwise as approved by the Board of Governors of IIT-Delhi.
- c. **Eligibility:**
 - i. Any Bachelor (≥ 3 years) degree holder is eligible for this program. Preference will be given to candidates who have completed their undergraduate degree in Engineering/Quantitative fields.
 - ii. Minimum percentage in graduation: 50% (or CGPA of 5.5 on a scale of 10).
 - iii. The candidate should have completed and passed at least 2 statistics/mathematics courses and 1 programming course either during university education or through those mainstream online Massive Online Open Courses (MOOCs) (with certificates) approved by the PD. This can be relaxed if one has relevant experience to be decided by the PD. If one has not done any of these, s/he should clear certifications on (Linear Algebra/Calculus/Programming). The PD will maintain a list of such MOOCs and revise it from time-to-time, as advised by the EC and approved by the AAC. A faculty mentor appointed by PD will ensure that the students have completed these in an appropriate manner.
 - iv. Preference will be given to experienced professionals.
 - v. The candidate should have the degree certificate mentioned in (i) above before the commencement of the program.
- d. **Shortlisting:** Candidates will be shortlisted based on their academic and professional credentials. The shortlisting criteria will require the prior approval of the Senate.
- e. **Interview:** Shortlisted Candidates will be interviewed by a panel consisting of at least one IIT-D faculty member and at least one Subject Matter Expert from the IBM.
- f. **Admission offer:** Based on the performance in the interview a merit list will be created by the Interview panel(s), and based on these, candidates will be offered admissions.
- g. **Enrolment:** Enrolment requires payment of fees by the given date and verification of the original documents. Dates for each admission cycle will be announced during the admission process by the PD. There could be other components of admission formalities, which the students need to complete before he/she could be enrolled; the details will be made public in the prospectus.
- h. **Foreign students:** Foreign students are allowed to apply. Equivalence of their credentials will be examined and evaluated by the EC and approved by the AAC and DOAA. In the event of any doubt about the equivalence of the educational certificate, s/he may be asked to submit equivalence certificate from the Association of Indian Universities (AIU), New Delhi. Based on the outcome of these, the candidature will be processed further or rejected. The decision of the DOAA in this regard shall be final.
- i. **Cancellation of admission:** The admission of a candidate to the program may be canceled if any material information provided is found to be incorrect, s/he has not paid

the fee by the given date, does not report on the announced day for registration or fails to comply with all the admission related procedures set out in the prospectus. The admission of a student may be cancelled by the Senate even at a later date if it is found that the student had supplied some false information or suppressed any relevant information while seeking admission.

Courses, credits, evaluation and graduation

a. Courses

Trimester	Hours			Course	Credit	Responsibility
	Classroom	Lab	Total			
1 (110 hrs)	90 hrs	20 Hrs	110 Hrs	Python Programming for analytics	2	IIIT-D
				Probability and Statistics	3	IIIT-D
				Mathematics and optimization theory	2	IIIT-D
				Business Intelligence	2	IBM
2 (160 hrs)	120 hrs	40 Hrs	160	Introduction to Machine Learning	2	IIIT-D
				Data Science	2	IBM
				Natural Language Processing	3	IIIT-D
				Big Data Analytics in application	2	IBM
				Data Mining	2	IIIT-D
3 (130 hrs)	100 hrs	30 hrs	130 hrs	Application of ML/DL	2	IIIT-D
				Deep learning	3	IIIT-D
				Artificial Intelligence in application	3	IBM
				Term project	2	Joint
Total	310 Hrs	90 Hrs	400 hrs	12 Courses+1 Term Project	30	

- b. **Changes in course structure:** The courses may change from time to time, upon the approval of the Senate.
- c. **Credits:** All the students will have to mandatorily take and obtain a passing grade for each of the above-listed courses, leading to a cumulative passed credit count equivalent to 30 credits.
- d. **Delivery mode:** The lecture delivery mode will be online. Recorded lectures can be played in the presence of the Instructor.
- e. **Class timing:** Online classes will be conducted from 9 AM to 5 PM, every Saturday and one Sunday every month, with one-hour break between 1 to 2 PM. IIIT-D reserves the right to change the timings, in which case, prior information shall be given to the students. However, the classes will be conducted on Saturday/Sunday only.
- f. **Teaching:** Each course is conducted by the Instructor-in-charge (IIIT-D faculty or Subject Matter Expert from IBM, the Industry partner) with the assistance of Tutors and/or Teaching Assistants (TAs). The faculty members of the Institute may opt to take courses of the program on voluntary basis. The Institute will provide the list of available TAs to the PD to choose from. The PD should ensure payment to the Institute for the amount equivalent to the TAship done by such students who are in receipt of stipend for M.Tech. or Ph.D. from the institute. The Instructor-in-charge is responsible for conducting the lectures, tutorials, and labs, holding the tests and examinations, evaluating the performance of the students, awarding grades at the end of the trimesters. The PD will provide all the grades for a particular batch or the batches that may be running concurrently to the academics in the result form for each trimester.
- g. **Continuous evaluation system:**
 - i. The Institute follows a system of continuous evaluation, in which, during a course, various instruments like tests, exams, assignments, projects, etc., are given by the Instructor to assess the learning of students and assign grades. All evaluations are the responsibility of the Instructor-in-charge of the course. End term examination is discretionary to the Instructor. However, all the end term examinations will happen as per the Academic Calendar.
 - ii. **Make-up exam:** If a student, for valid reasons such as illness, etc., fails to appear in the end-trimester examination in one or more course(s), he/she may make a request to the Instructor and the PD for a make-up examination within two days of the date of the scheduled examination. Such a request must, however, be supported by proper documentary evidence for justifying the request. For medical reasons, only two medical applications would be accepted during the entire duration of the program. Further, for the grant of medical leave, students are required to submit the Medical Certificate within five working days from the date of the missed examination to the PD. The PD reserves the right to get the Medical Certificate verified from the Institute Doctor. Finally, the request for a make-up examination will be approved by the PD.
 - iii. **Supplementary examination:** For all students who fail to secure passing grades in any of the courses, supplementary examinations may be conducted right after the conclusion of the trimester with a minimum 7 days' notice. Students are allowed to attempt only one supplementary examination per course.
 - iv. **Grading:** One of the letter grades given in the following table shall be awarded to a student reflecting his/her overall performance in a course. Each letter grade carries certain points as given in the table, and these points are used in the computation of

the Trimester Grade Points Average (TGPA)/Cumulative Grade Points Average (CGPA) as explained later.

v. **Letter grades:**

Letter Grade	Grade Points	Remarks
A+ (Outstanding)	10	Letter grades A+ to F and I are given only in the regular courses. This grading scheme is effectively A to F; A+ is only to recognize excellent performers in a course – it has same points as A.
A (Very Good)	10	
A(-)	9	
B (Good)	8	
B(-)	7	
C (Satisfactory)	6	
C(-)	5	
D (Marginal)	4	
F (Fail)	2	F Grade is not counted in the calculation of CGPA, however, it is counted in the calculation of TGPA.
I (Incomplete)	Nil	Incomplete (I grade) must be converted to one of the letter grades (A to F) as per the Academic Calendar

- vi. In the academic courses, the final grades awarded are A to F (A+ is a grade with same points as A, and is there to honor excellence).
- vii. An I (Incomplete) grade may be awarded in cases when all the requirements for a course are not met by the student at the time of submission of grades, and it essentially reflects an “incomplete” status. For all courses this grade must be converted to a regular letter grade (A to F) within one month of the end of the current term (moderation date). For courses, incomplete grade “I” is meant primarily for medical reasons. All unconverted “I” grades are automatically converted to F grade after the grade conversion deadline, which is one month after the moderation date.
- viii. All courses in which a student obtains an F grade must be repeated. A course may be repeated by a student with the prior approval of the PD.
- ix. **Performance indicator:** The trimester performance is indicated by a Trimester Grade Point Average (TGPA) which is a weighted sum of all the points earned in the courses done in a trimester. The TGPA is given for each trimester and is computed using the following formula.

$$TGPA = (u_1 \cdot w_1 + u_2 \cdot w_2 + \dots + u_n \cdot w_n) / (u_1 + u_2 + \dots + u_n),$$

Where u_i is the number of credits for the course i and w_i is the points earned through the letter grade in that course.

- x. The overall performance is indicated by a Cumulative Grade Point Average (CGPA) which is computed in the same manner as the computation of TGPA but for all the courses done in the program. While the F grade shall show on the grade sheet, the original grade of a course repeated is ignored in the computation of CGPA.
- xi. 'F' grade shall not be counted in the calculation of CGPA, however, it is counted in the calculation of TGPA.
- xii. **Change in grade:** A letter grade, once awarded, shall not be changed unless the request is made by the Instructor-in-Charge of the course and is approved by the Chairman, Senate. Any such request for change of grade must, however, be made within two weeks of the declarations of the grade, with all relevant records and justification.
- xiii. **Attendance:** Since this is an online program and the audience includes working professionals, there is no general policy of attendance. Instructors are empowered to include attendance as a grading component.
- xiv. **Graduation requirements:** The minimum graduating CGPA is 6.5. The minimum TGPA/CGPA for continuing in the program is 6.0. If the TGPA/CGPA falls below this, the student may be placed under warning first, and if the performance does not improve, may be asked to leave the program.
- xv. **Award of Diploma:**
 - a) Upon a satisfactory report from the PD, the Senate may recommend the award of the PGDDSAI to the student. While awaiting the actual award of the diploma in a regular convocation of the Institute or otherwise as decided by the PD with the concurrence of AAC and the Senate, the DOAA may authorize the Registrar to issue a provisional certificate to a student who completes the requirements for graduation.
 - b) Under extremely exceptional circumstances, where gross violation of the graduation requirements or use of dishonest means is detected at a later stage, the Senate may recommend to the Board of Governors to withdraw an already awarded diploma.

Fee payment

- a. **Stratification:** IIIT-D reserves the right to revisit the program fee, and can install a stratified merit-based fee payment regime.
- b. Entire fee/installment, as directed, needs to be paid within 15 days of receiving the admission offer and 10 days before commencement of each of the trimesters.
- c. Institute announced policy will be applied for late payment of fees.
- d. **Refund Policy:** If a student withdraws admission without attending any class, the fee paid will be refunded after 10% deduction. If s/he attends at least one class, no refund will be made and the entire fee deposited will be forfeited. The PD will be final authority to decide on the attending part as it is mostly an online program.
- e. **Withdrawal Policy:** In case the student withdraws after commencement of the course/trimester no refund for that trimester will be granted.

Leave Rules

- a. The students may be granted leave of absence on application to the Program Director.
- b. **Medical leave-** A student can also take up to seven days of leave due to medical reasons. PD can grant leave for additional days under special circumstances. All medical leave requests must be supported by a Medical Certificate issued by a registered Medical Doctor.
- c. **Maternity and Paternity leave-** In line with GoI rules, to be decided by the PD.
- d. **Unauthorized absence-** Absence of a student without any sanctioned leave for more than 5 days in a trimester may result in the termination of the student's program. The PD may relax such termination by accepting on record the justification given by the student for its reasonability and purposes.
- e. **Leaving the program-** If a student decides to leave the program, he/she has to leave the program at the end of the ongoing trimester. The student has to inform the PD.

Placement

- a. The students may receive placement assistance by the Institute.
- b. Such assistance may include physical, on campus placement drives. It may not be possible to organize such drives during week-ends exclusively.
- c. Specific placement policies for the students of the program will be formulated separately by the Placement Cell of the Institute in consultation with the Institute through its Faculty Coordinators to the Placement Cell and the PD.

Privacy issues pertaining to content

- a. Instructors will remain the owner of the teaching materials, lecture videos or other misc. contents shared with the students over Learning Management Systems (LMS) or through emails.
- b. Students are prohibited from disseminating any of these materials to a third party without the owner's written permission.

Disciplinary Action

IIIT-Delhi maintains global academic standards in its own education system; this extends to and includes this PGDDS&AI program. Therefore, it does not tolerate any form of indiscipline and/or academic dishonesty. Action will be taken against students found engaging in acts of indiscipline/ academic dishonesty by Disciplinary Action Committee (DAC) constituted by the Director. The disciplinary action may result even in termination of the program in extreme cases. The rules and regulations in force at the Institute will be followed for the students of PGDDS&AI as well.

-----****-----