ENTRANCE TEST AND ADMISSION TO:
M.Sc. in **Big Data Analytics**
IN
ST. XAVIER'S COLLEGE, MUMBAI
(AN EMPOWERED AUTONOMOUS INSTITUTE)

CONTENT

Admission Notice-2024

1. <u>Introduction</u>

Data today is treated as a source of energy, in any venture. It is this very data that gives us glimpses of the where we were yesterday, our current status and what areas we need to improve upon in order to excel in the future. In today's context, the one who has data and can interpret it with the right kind of analysis, he or she becomes the modern-day oracle. The initiative taken by **Tata Consultancy Services (TCS)** has made remarkable strides in shaping the talent capability aligned to data analysis, business requirements and to accrue seamless mutual benefits for the world of academics and industry. The objective of this course is to contribute to overall development of the student community in order to enhance quality and consistency of talent supply by channelizing practical industry knowledge to the classroom. The course has gained a great admiration and reverence from academia, students and various stakeholders across the country. We are proud to announce that Padma Shri **Dr. Bimal Roy**, former Director, Indian Statistical Institute has developed the curriculum for Big Data Analytics. The course work comprises Statistical Methods, Probability & Stochastic Process, Linear Algebra & Linear Programming, Computing for Data Sciences, Machine Learning and Database Management. The Department of Information Technology, St. Xavier's College (Autonomous) started a new Master's degree course - M.Sc. in Big Data Analytics in June 2019 in collaboration with **Tata Consultancy Services (TCS)**. This year, we are accepting applications for our fourth batch of

students. Applications are invited for admission to the two-year, full-time course for the academic year 2024-2025.

2. **Course partner:**

M.Sc. in Big data analytics program will run in collaboration with Tata Consultancy Services (TCS), Information Technology department and Statistics department of St. Xavier's college, Mumbai. This program is under NEP2020 frame work.

Objectives and outcome

Objective: The main objective of this program is to develop the skill of Big data analytics, Data Mining and Machine Learning.

Outcome- Students will get an opportunity to apply for data scientist or big data analyst positions in the IT industry

Highlights of the course

• Mandatory internship from industry in the fourth semester comprising of 16 weeks.

• Dedicated lab

• Live session and guest lectures from TCS and other industry experts.

• summer internship after semester 2

• Faculty expertise exposure to the students which covers areas of Economics, Statistics, Mathematics, rational thinking and Information Technology.

• Research projects focusing on Bank Analytics, Retail Analytics, and Healthcare.

Course structure

- The M.Sc. in Big Data Analytics programme is a full-time Master's degree programme consisting of four semesters over two years.
- The course will teach the following Modules across the four semesters.

Semester I		Semester II	
PSBDA6001 CR1	Linear Algebra & Linear Programming	PSBDA6005CR1	Foundations of Data Science
PSBDA6002 CR1	Probability & Stochastic Process	PSBDA6006 CR1	Advanced Statistical Methods
PSBDA6003CR1	Data Base Management - Relational	PSBDA6007CR1	Machine Learning-I
PSBDA6004CR1	Basics of Programming	PSBDA6008CR1	Enabling Technologies-1
PSBDA6501EL1	Computing for data science	PSBDA6003EL1	Cloud computing
PSBDA6502EL2	Data Structures	PSBDA6004EL2	Operation Research
		PSBDA6001OJ1	Value Thinking
PSBDA6504RP1	Research Methodology and Statistical Methods		

Semester III		**Semester IV**
PSBDA7001CR1	Enabling Technologies-II	
PSBDA7002CR1	Machine Learning 2 including Deep Learning	
PSBDA7003CR1	Introduction to Econometrics and Finance and Data Visualization	• Internship based project
PSBDA6501EL1	Bioinformatics	
PSBDA6502EL2	Time series Analysis	
PSBDA6501RP2	Research Project	

Course fee structure

First year M.Sc. (Big Data Analytics): Rs. 150000/-

Number of seats

The intake is a maximum of 40 students per year.

3. Allocation of seats

St. Xavier's College is a Christian Minority College, administered under the Provisions of the Indian Constitution, to promote the welfare of the minority community and to extend its services to all other communities in India, so as to contribute to the harmony and integration of the Indian society. 50% of seats are reserved for Christian minority students.

As per the Judgement dated 12th October 2017 of the Honourable Bombay High Court vide Writ Petition No.1726 of 2001, Minority Colleges do not need to set aside seats for Backward Classes. This was reiterated by the University of Mumbai Circular (No.Aff. / Recog.I / Admission (2018-19) / 10 / of 2018) dated 30th May, 2018.

Accordingly, the allocation of seats is as follows:

Category	Percentage of seats reserved	Number of seats out of 40
Management Quota	15%	6
		Number of seats out of 34
Christian Minority	50%	17
General	42%	14
Persons with disability	5%	2
Special**	3%	1

** The Special category is for the wards of transferred State / Central Government, Defence Personnel, Ex-Servicemen, Freedom Fighters; for students who have met with an accident and also for award winners at the District / State / National Level in Sports or Cultural activities.

Admissions for this course will follow the relevant Government and University Directives pertaining to Minority Colleges, and the extant practices of the Autonomous College.

Candidates applying in the Special category have to first select the General category and then select the appropriate special category they wish to apply to.

Candidates applying under the Christian minority have the option of applying for the Student with Disability category provided they upload the supporting documentation.

4. Eligibility for M.Sc(BDA)

A student who has completed or is appearing for semester VI in B.Sc(Maths), B.Sc(Statistics), B.C.A , B.Sc(Information Technology, Computer Science, Data Science), B.Sc(Physics) in the academic year 2023-2024, from any recognized university from India.

A student who has completed or is appearing for semester VIII in B.E(Electronics / Computer Science) in the academic year 2023-2024 from any recognized university from India.

B.Sc(Physics) - students who have done Physics as a major subject and Mathematics or Statistics as a second subject (up to second year) during their graduation.

5. Admission Process

Stage One: Online Registration

From **May 9th 2024**, the link for online applications will be available on the official college website www.xaviers.edu. It will stay open till midnight on **June 5th 2024**

Students must log on to the official registration portal when notified and fill out the online application form by following the instructions given in the form. The details required to fill include:

- Demographic information
- Information about your Bachelor's degree and university
- In the case of minority/special category applicants, you will need to upload a **clear and legible** scanned copy of your proof e.g. Baptism certificate or equivalent for Christian minority and a corresponding proof for the special category applicants depending on what special category the student is applying under
- If a student has completed the Bachelor's degree prior to 2024, He /She needs to submit **Semester VI marks (the form states Semester V but you will enter Semester VI marks) while filling the form** for calculating merit ranking. Kindly upload a clear legible copy of the marksheets where required in the form
- If a student has completed the Bachelor's Engineering prior to 2024, He /She needs to submit **Semester VIII marks (the form states Semester V but you will enter Semester VIII marks) while filling the form** for calculating merit ranking. Kindly upload a clear legible copy of the marksheets where required in the form

Please note that provisional admission will be given to the students (those who are appearing for the semester VI/VIII examination in 2023-24) based on Semester V/VII marks subject to the student passing Semester VI/VIII and submitting the marksheets and passing certificate within 5 days of the declaration of results by the University.

You are encouraged to take a printout of the form once completed. The application fee is Rs. 3000. After payment, the student will receive information regarding the time and date of the entrance examination

ISSUING OF ADMIT CARDS FOR 2024 ONLINE VIDEO PROCTORED ENTRANCE TEST:

1.1. Candidates will be able to download the admit card from their login from 10th June 2024 onwards.

1.2. The Admit Card will have Instructions printed on it for the benefit of the candidates. Please make sure you carry your admit card on the day of XET 2024 to the designated Centre

1.3. If the Admit Card is not received by 11th June 2024, the candidate should write to the email to **online.admission@xaviers.edu** (managed by a third party)

Stage Two: Entrance Examination (XET 2024)

The XET 2024 for all the students who have applied (irrespective of category) will be held offline. The language of examination will be English. The duration of the examination is two hours. All the questions are of MCQ type.

The centers of the entrance exam are Mumbai, Pune, Delhi, Bangalore, Jaipur, Cochin, Kolkata, Guwahati. Students can choose any one centre nearest to their hometown. In case sufficient number of students are not available in any of the above centers then the college will allot you the next nearest center.

6. Nature of the Content of XET 2024

Topic wise weightage for the M.Sc. (BDA) Entrance Test

Sr.No	Topic	Weightage
1	Mathematics	25%
2	Statistics	25%
3	Computer Science	33%
4	Logical Reasoning and Quantitative Aptitude	17%

For entrance exam syllabus visit Information Technology - Postgraduate (xaviers.edu)

Stage Three: Admission to the course

Students will be ranked based on their marks in Semester V/Semester VI (40% weightage) and their performance in the Entrance examination (60% weightage). Students who are offered admission in the First merit list are required to pay their fees by the stipulated time and date notified in the merit list. On failing to do so, the offer lapses and students in the Second merit list will subsequently be offered admission.

7. **<u>Tentative Schedule</u>**

- **May 9th, 2024** - Opening of online registrations

- **June 5th, 2024** - Closing of online registrations (midnight)

- **The Xavier's Entrance Test 2024 (XET 2024) is scheduled to take place on 13th and 14th June at Mumbai, Pune, Delhi, Bangalore, Jaipur, Cochin, Kolkata and Guwahati.** Exam slots will be automatically assigned and are non-negotiable. Your designated exam slot will be communicated to you via your admit card.

- **For the first merit list date please check the college website**

For any queries or clarifications, please send an email to
bigdata@xaviers.edu

PRINCIPAL
St. Xavier's College (Autonomous), Mumbai.