

St. Xavier's College-Autonomous, Mumbai
M.Sc. in Big Data Analytics
Admission Notice-2023

Introduction

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 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 2023-2024.

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.

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 or remote project under the guidance of external experts and internal faculty in case they fail to get an internship from industry in the fourth semester comprising of 16 weeks intensive hands-on work in the industry.
- Dedicated lab
- Live session and guest lectures from TCS.
- summer internship after semester 2
- Faculty expertise exposure to the students which covers areas of Economics, Statistics, Mathematics, rational thinking and Information Technology.
- Practical based approach.

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.

<p>Semester I</p> <p>SITS0701 Statistical Methods</p> <p>SITS0702 Probability & Stochastic Process</p> <p>SITS0703 Linear Algebra & Linear Programming</p> <p>SITS0704 Computing for Data Sciences using R, Python and Java</p> <p>SITS0705 Database Management – Relational and Non-Relational</p> <p>SITS07PR1 Computing for Data science & Statistics</p> <p>SITS07PR2 Data base Management Systems and Linear Algebra</p> <p>SITS07PR3 Python Programming</p>	<p>Semester II</p> <p>SITS0801 Foundations of Data Science</p> <p>SITS0802 Advanced Statistical Methods</p> <p>SITS0803 Machine Learning-</p> <p>SITS0804 Value Thinking</p> <p>SITS0805 Enabling Technologies for Data Science</p> <p>SITS0806 Cloud computing /Operation Research</p> <p>SITS08PR1 Machine Learning I & Foundation of Data Science</p> <p>SITS08PR2 Enabling Technologies for Data Science and Advanced Statistics</p>
<p>Semester III</p> <p>SITS0901 Enabling Technologies for Data Science 2</p>	

SITS0902	Machine Learning 2 including Deep Learning	Semester IV <ul style="list-style-type: none">• Internship based project/ Internal Project -20 credits
SITS0903	Data Visualization with Tableau & Modelling in Operations Management	
SITS0904	Introduction to Econometrics and Finance / Advanced Analytics	
SITS0905	Time series Analysis & Forecasting /Bio informatics /	
SITS09PR1	Machine Learning 2 including Deep Learning &elective 1	
SITS09PR2	Enabling Technologies for Data Science 2 & elective 2	
SITS09PR3	Data Visualization with Tableau & Modelling in Operations Management	

Course fee structure

First year M.Sc. (Big Data Analytics): Rs. 103500/-

Number of seats

The intake is a maximum of 40 students per year.

Allocation of seats

St. Xavier's College is a Catholic 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 Indian society. 50% of seats are reserved for Catholic 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 and Private Sector employees, 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.

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), B.Sc. (Computer Science), B.Sc. (Physics) in the academic year 2022-2023, 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 2022-2023 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.

Selection Process

Stage One: Online Registration

From **May 4th 2023**, the link for online applications will be available on the official college website www.xaviers.edu. It will stay open till **June 2nd 2023**

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/Student with disability (SWD) 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/SWD applicants depending on what category the student is applying under.
- If a student has completed the Bachelor's degree prior to 2023 or has given the exam in this academic year and the results are awaited in either case, you are to enter your **Semester V marks and upload the marksheet for the same 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 in Engineering degree prior to 2023 or has given the exam in this academic year and the results are awaited, in either case, you are to enter your **Semester VII marks and upload the marksheet for the same 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 2022-23) 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.

Please note that applicants from Undergraduate colleges affiliated to Mumbai University must enter their marks obtained for the subject in Semester V (as stated above), NO GRADE POINT will be accepted.

Please note that applicants from Undergraduate colleges affiliated to other Universities across the country can enter either their marks or Grade points (out of 10 only). [Marks if available are preferred over Grade points and GPA]

The application fee is Rs. 3000. Candidates will be able to download the admit card from the application portal after logging into their account. The same will be available from the 5th of June 2023 onwards. The Admit Card will have

Instructions printed on it for the benefit of the candidates. The Admit Card must be self-attested and retained by the candidate. Please make sure you carry your admit card on the day of exam to the designated Centre. If the Admit Card is not received by 6th June 2023, the candidate should write to the email mentioned at the bottom of this document.

In case you belong the Economically Weaker Section (EWS) as defined by the Government of India and you desire to avail of a concession in the application fee for the Programme then please apply with all requisite documents to the Rector, The Bombay St. Xavier's College Society at rectors.office@xaviers.edu

Stage Two: Entrance Examination (XET 2023)

The XET 2023 for all the students who have applied (irrespective of category) will be held offline. The language of the examination will be English. The duration of the examination is two hours. All the questions are of MCQ type.

Centers Outside Mumbai, XET 2023 for MSc Big Data will be held between the 10th (Saturday) and 11th (Sunday) of June 2023.

Center in Mumbai, XET 2023 for MSc Big Data will be held between the 7th (Wednesday), 8th (Thursday) and 9th (Friday) of June 2023

The Schedule will remain unaltered even if the above dates are declared Public Holidays.

The centers of the entrance exam are Mumbai, Pune, Delhi, Bangalore, Jaipur, Chennai, Cochin, Ranchi, Hyderabad, Kolkata and Guwahati. Students can choose any one nearest center. 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.

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 \(xaviers.edu\)](https://www.xaviers.edu/information-technology-postgraduate)

Stage Three: Admission to the course

Students will be ranked based on their marks in Semester V (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.

Tentative Schedule

- **May 4th, 2023** - Opening of online registrations (12 noon)
- **June 2nd, 2023** - Closing of online registrations (6:00 p.m)

For any technical queries regarding the form and form related issues please mail: online.admission@xaviers.edu

For any queries regarding the course structure or course details please mail: bigdata@xaviers.edu

Please note that unsolicited emails or emails sent seeking wrong or inaccurate information, will not be replied too. Please address your queries to the appropriate email id as given above or you will get no replies to the same.

INTERNATIONAL STUDENTS SEEKING ADMISSION IN ST XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI:

The University of Mumbai has introduced a Single Window System to admit all **International Students** i.e., Foreign Students (FR/FS), Person of India Origin (PIO), Overseas Citizen of India (OCI) and Non-resident Indian (NRI) through a service provider – Edulab Educational Exchange Pvt. Ltd. and therefore candidates whose applications are considered or rather approved by the University of Mumbai as International Students are issued a formal letter for admission to the College. Therefore, candidates seeking admissions under the above quota (i.e. International student) are required to visit the University of Mumbai website www.mu.ac.in for details. The University has provided the following link regarding Post Graduate College admissions to International students. The corresponding link is mu.admissiondesk.org. **NOTE:** You should not apply to the college or fill the college application form. The number of these students, who are sent to the College directly by the University, are over and above the sanctioned seats. Kindly refer to this circular for further details:

[https://xaviers.edu/files/International%20Admission%20Circular%20\(2022\)%20\(1\)_230420_172945.pdf](https://xaviers.edu/files/International%20Admission%20Circular%20(2022)%20(1)_230420_172945.pdf)

N.B.: St. Xavier's College will implement the National Education Policy (NEP) 2020 from the academic year 2023-24. Further detail on the same will be updated on our website www.xaviers.edu post the 15th of May 2023.

PRINCIPAL

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