



ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI
POST GRADUATE DEPARTMENT OF BIOTECHNOLOGY
ENTRANCE EXAMINATION AND ADMISSION NOTIFICATION

MSC BIOTECHNOLOGY

Biotechnology-led academia and industry, a sector which utilizes cellular and molecular processes to create technologies and products to improve health care, agriculture output, and create livelihood opportunities, is thriving well for the past four decades. In the present knowledge driven economy, there is a constant need for innovating young professionals in the areas of Biopharmaceutics, Bio-IT services including Bioinformatics, Agribiotech, and Bioprocess industries. To cater to this increasing need for trained professionals, St. Xavier's College began the Two- year MSc- Biotechnology programme from the academic year 2007-08. The programme offers extensive biotechnology training in cutting edge techniques and technology to tackle global needs in Biotechnology Research, Product development and Bioentrepreneurship, thus enabling students to prepare for careers both in India and internationally.

Highlights of the Department:

- ✓ Qualified and Well-Trained Faculty with expertise in fundamentals and applications of Proteomics, Bioinformatics, Molecular Biotechnology and Mammalian Cell technology.
- ✓ Well Equipped Laboratory and Instrumentation Facility (Molecular Biology, Animal Cell Culture, Bioinformatics and Molecular Dynamics)
- ✓ Research Grants from DBT-BUILDER, UGC and University of Mumbai
- ✓ Research driven department with focus on projects in Bioinformatics, Mammalian Cell Culture, Cancer Biology, Natural Products research, Bioprocess technology and Environment Biotechnology.

Highlights of MSc- Biotechnology (2Years- 4 Semesters) Programme:

- ✓ Dynamic and Interdisciplinary curriculum
- ✓ Holistic training to meet Industry 4.0 skill sets of technical abilities in Biotechnology, Content and Communication skills, Critical thinking, Problem Solving and Resource Management.
- ✓ Research Focused Experiential learning with Projects culminating in conference presentations and publications.
- ✓ 6 months Dissertation in Semester IV at reputed Institutes (IITB, TIFR, BARC, ACTREC, ICMR-NIRRH, NIIH, CDRI, IGIB-Delhi, CIFE, IISER-Pune, NCCS, NCL, ICGEB - Delhi, etc.)



Details of the Programme Curriculum can be checked at

<https://sites.google.com/xaviers.edu/biotechnology>

Programme Structure:

It is a 2year full time programme with courses and projects distributed across 4 semesters as follows:

| Semester 1 and Semester 2 Knowledgebase Strengthening & Skill Development | Semester III &IV Application of Concepts & Analysis |
|---|---|
| <p>Core courses with Lab Skills</p> <ul style="list-style-type: none"> Biochemistry Immunology Genetics Cellular Processes Metabolism Molecular Biology Animal Biotechnology Analytical Techniques Nanotechnology Scientific Comm Skills | <p>Applied Biotechnology -Project based learning</p> <ul style="list-style-type: none"> Bioprocess technology Bioinformatics & Biostatistics Drug designing Clinical Research & Regulatory affairs Environmental biotechnology Research Methodology IPR & Entrepreneurship 2 months Internal Research Project 6 months Research project with Dissertation |
| <p>Credits: 48</p> | <p>Credits: 48 credits</p> |

Career Scope:

Higher Education: PhD, MBA

Research & Development: Fundamental and Applied Biotechnology, Biopharmaceutics, Bioinformatics, Agri and Food Biotech, Bioprocess industries

Application /Technical Specialist: Medical Diagnostics, Environment biotechnology, Agri and Food Biotech, Bioprocess industries, Bio-IT services, Clinical Research, Biotech-IPR, Geneticists, Patent Analysts, Biotech -IPR specialists, Bioinformatics Data analysts (Genomics and Proteomics), Biocurators, Drug Discovery and Development,

Scientific Communication: Content Creation, Science Communicators, Scientific Editors, Animators, Illustrators.



St. Xavier's College (Autonomous), Mumbai invites applications for admission to the **MSc Biotechnology Programme**.

- ❖ **ELIGIBILITY:** Bachelor's degree under 10+2+3 pattern of education in Biological Sciences (Biochemistry/ Bioinformatics / Biotechnology/ Botany/Life Science/ Microbiology/ Zoology) with at least four core papers in either of the following topics Genetics and Molecular Biology, Immunology, Microbiology/ Algae/Fungi, Biochemistry, Cytogenetics, Plant and Animal Biotechnology with Chemistry upto SYBSc level.
- ❖ **ADMISSION TO MSc PROGRAMME IN BIOTECHNOLOGY**
 - The admissions for M.Sc. Biotechnology (2 years) programme in the Post Graduate Department of Biotechnology, St. Xavier's College (Autonomous), Mumbai will be through an Entrance Examination.
 - **ADMISSION CRITERIA:** The admission for MSc Biotechnology programme in St. Xavier's College (Autonomous), Mumbai will be based on the merit list derived using the following weightage:
 - a. Score obtained in the entrance examination - **70% weightage.**
 - b. Qualifying BSc examination percentage (SEMESTER 5) - **30% weightage**
 - c. Please note that provisional admission will be given based on Sem V marks subject to the student passing Sem VI and handing in proof when released by the University.
- ❖ **DETAILS OF THE ENTRANCE EXAMINATION:**
 - a. The Question Paper for XET 2023 for MSc Biotechnology will be in English only.
 - b. There is NO NEGATIVE marking.
 - c. The Examination will be conducted as a Computer Based Test (CBT) at various centers.
 - d. Individual candidates' entrance exam scores are not released. Only the merit lists are uploaded to the college website.
 - e. The format of the entrance exam will comprise of Multiple-Choice Questions in the following areas as given below.



| Sections (Graduate / Bachelor's level) | Question Type | No of Questions | Marks |
|---|---------------|-----------------|-----------|
| Basic Biology, Cell Biology, Immunology, Microbiology, Biochemistry, Molecular Biology, Bioprocess Technology, Bioinformatics, and other allied areas | MCQ | 60 | 60 |
| Numerical Ability Testing (Based on 10+2 concepts in Physics, Chemistry, Biology) | MCQ | 15 | 15 |
| Total | | 75 | 75 |

Please Note: The entrance examination is applicable *ONLY* to those students applying for the master's degree (M. Sc in Biotechnology) in the Post-Graduate Department of Biotechnology, St. Xavier's College (Autonomous), Mumbai.

❖ **SCHEDULE:**

- The Entrance Examination will be held on the following dates:
 - Mumbai at St. Xavier's College: **7th (Wednesday), 8th (Thursday) and 9th (Friday) June 2023.**
 - All over India (except Mumbai): **10th (Saturday) and 11th (Sunday) of June 2023.**
- The Schedule will remain unaltered even if any of the above dates are declared as Public Holidays.
- Test Duration: 1.5 hours (90 minutes)

❖ **LOCATIONS FOR ENTRANCE TEST 2023:**

- 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.
- 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.



- Applicants can select one Centre for the exam in the application form. The exact address for the venue of the exam will be mentioned in the Hall ticket.
- Please note that if a Centre has less than the required quantum of students for the exam, applicants will be shifted to the nearest Centre from the one selected earlier.

❖ **NUMBER OF SEATS: 30**

- **Allocation of seats:** St. Xavier's College is a Catholic Minority College, administered under the Provisions of the Indian Constitution. As per the Judgement dated 12th October 2017 of the Honorable 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 30 |
|-------------------------|------------------------------|----------------------------------|
| Management Quota | 15% | 5 |
| | | Number of seats out of 25 |
| Christian Minority | 50% | 12 |
| General | 42% | 11 |
| Persons with disability | 5% | 1 |
| 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 for award winners at the District / State / National Level in Sports or Cultural activities.



- # Seats for international students are supernumerary. **Applications for those seats must be done through the University of Mumbai website (www.mu.ac.in).** Please email us and inform us if you are applying in the international student category. Students that fall under this category include - Foreign students (FR/FS), Persons of Indian origin (PIO), Overseas Citizens of India (OCI), SAARC students, Non-Resident Indians (NRI). The definitions of these categories are available on the Mumbai University website. Students who have done their undergraduate degrees abroad also fall into this category. The University has provided the following link regarding admissions to International students. International students needs not apply to St. Xavier's college and need not appear for the entrance exam. The corresponding link is mu.admissiondesk.org. If you are unsure, please contact us. Kindly refer to this circular for further details:

[https://xaviers.edu/files/International%20Admission%20Circular%20\(2022\)%20\(1\)_230420172945.pdf](https://xaviers.edu/files/International%20Admission%20Circular%20(2022)%20(1)_230420172945.pdf)

❖ **APPLICATION PROCEDURE:**

- Candidates can apply online by logging on to the Homepage of St. Xavier's College (Autonomous), Mumbai: www.xaviers.edu. Click on the link provided to fill in the online Application Form.
- The online application portal will be open from 12 noon (IST) on **4th of May 2023 to 6 pm (IST) on 2nd June 2023.**
- Online Application Form and Entrance Test 2023 for MSc Biotechnology Fee:
Rs. 2000/-

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

- Candidates are required to make an online payment through the provided payment portal only. NOTE: **Filling of the Application Form and the Payment for the entrance exam will be only through the online portal of the college.**



❖ **INSTRUCTIONS FOR APPLYING ONLINE:**

- Log on to www.xaviers.edu (Between 4th of May and 2nd June 2023).
- Follow instructions given on the website for filling the online Application Form.
 - The quota in which the candidate is applying for a seat, in case of minority/special quota/Student with disability (SWD), it is mandatory to upload a clear and legible scanned copy of proof e.g., Baptism certificate for Catholic minority or document for special category or SWD as required.
 - Semester V marks must be entered. It is mandatory to upload a clear and legible scanned copy of the Semester V marksheet as proof.
- **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]**
- Once a payment has been officially received, the candidate will receive a confirmation email, informing him / her about the same.
- Please note that you must enter **all the subjects** and the **corresponding marks** in the online application form. The best 4 or 5 subjects will not be accepted.
- Last date for receipt of Application Form is the 2nd of June 2023 (6.00 pm). Any application received after this date will not be accepted.
- **Admit Card:**
 - **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 appropriate email mentioned in this document.



❖ **RESULT ANNOUNCEMENT**

- The Category-wise Final Merit List from all those who qualify for admission through the entrance exam will be announced through the College website.
- The Merit Lists are time-bound as will be mentioned in the Admission Notification on the college website.
- If a candidate in the 1st Merit List fails to complete the admission process within the stipulated date and time as mentioned on the notifications, their candidature stands lapsed. The candidates in the 2nd and subsequent Merit Lists will subsequently be admitted.
- Candidates who accept the offer of admission shall pay the necessary fees (as displayed on the College Website or College Notice Board).
- Fees for the entrance test once paid will not be refunded.

All queries with regard to the Entrance Test should be clarified and settled within the stipulated time on the email given below.

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: biotech.dept@xaviers.edu

Please note that unsolicited emails or emails sent seeking wrong or inaccurate information or emails sent to the incorrect id will not be replied too. Please address your queries to the appropriate email ids as given above

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.



SXC/PGDBT/2023