

ST. XAVIER'S TECHNICAL INSTITUTE

Founded in 1937

Managed by The Society of Jesus (The Jesuits)
Founded in 1540

This Institute is part of an International Network of Jesuit Educational Institutions which includes more than 38 Universities & over 3700 Educational Institutions worldwide

among them:

- * Georgetown University, Washington DC
- * Fordham University, New York
- * Heythrop College, London
- * Loyola University, Chicago
- * Marquette University, Milwaukee
- * Sophia University, Tokyo
- * Santa Clara University, San Jose

The Jesuit Educational Network in India includes 29 Colleges, 11 Technical Institutions 92 High Schools & 15 Specialized Institutions

among them:

- * Xavier Institute of Engineering, Mumbai
- * Loyola-ICAM College of Engineering & Technology, Chennai
- * St. Xavier's College, Mumbai
- * Xavier Institute of Management & Research, Mumbai
- * Xavier Institute of Communications, Mumbai
- * Xavier Labour Relations Institute, Jamshedpur
- * Xavier Institute of Management, Bhubaneshwar
- * St. Xavier's College, Kolkata
- * St. Joseph's College, Bangalore
- * Loyola College, Chennai
- * St. Aloysius College, Mangalore
- * St. Joseph's College, Tiruchirapalli
- * St. Joseph's College, North Point, Darjeeling

Contact Details

Address : ST. XAVIER'S TECHNICAL INSTITUTE

Mahim Causeway, Mahim, Mumbai 400 016

Telephone: (022) 24455937, 24454559, 24451961, 24460359

Fax : +91(22)24454482 Email : office@xaviertech.com Web site : www.xaviertech.com

CONTENTS	PAGE NO.
Vision and Mission	1
Introduction	2
Achievements of the Institute	3
Laboratories at X-TECH	5
Administration and Faculty	6
Diploma Programme in Electronics and Telecommunication Engineering	8
Admission Process	8
Category of Seats and Quota	8
Minority (Roman Catholic Applicants)	8
Centralized Admission Process (C.A.P.) for Non-Minority Applicants	9
Minimum Qualification	9
Direct Admission to Second Year of D.E.T.E.	9
Admission to Degree and Post Diploma Courses	9
Payment of Fees	9
Attendance, Progress and Promotion	10
Rules for Conduct, Discipline and Progress	11
Library	12
Autonomous Diploma Rules	12
D.E.T.E. Programme: Teaching and Examination Scheme	14
Subjects and their Rationale	25
Fees Structure	33
Courses for Marine Officers	34



VISION

TO NURTURE THE JOY OF EXCELLENCE IN A WORLD OF HIGH TECHNOLOGY

MISSION

TO STRIVE TO MATCH GLOBAL STANDARDS
IN TECHNICAL EDUCATION BY

- 1. INTERACTION WITH INDUSTRY
- 2. CONTINUOUS STAFF TRAINING AND
- 3. DEVELOPMENT OF QUALITY OF LIFE OF STAFF AND STUDENTS



INTRODUCTION

St. Xavier's Technical Institute (X-TECH) started operations in the premises of St. Xavier's College (Fort, Mumbai) in 1937 and was transferred to its own building in Mahim, Mumbai, in June 1967.

The aim of the Institute is to develop men and women who are not just top quality engineers but also well-developed persons. Our motto therefore is "The Joy of Excellence in a World of High Technology".

The Institute provides facilities for professional and specialized training in Electronics. In today's world of sophisticated technology there is a demand in industry for persons capable of handling sophisticated electronic equipment, with a focus on the ability to actually operate, maintain and adapt such equipment to customized requirements. The courses are therefore designed to combine up-to-date theory with much of 'hands on' practicals in the labs and workshops.

Further, the highly competitive world of today needs well developed persons and hence developing soft skills (Professional Practices and Academic Skills) and "Vocational Training" in different industries are required subjects in our full-time Diploma. All students are required to join various industries for vocational training after the completion of the fourth semester, during the vacation, for a period of 6 weeks to 8 weeks duration.

X-TECH has made it mandatory for all it's students to actively participate in Academic Skills and Presentations. Academic skills are the skills necessary to do well, in not just technical education but in any educational system. These skills encompass reading, researching and gathering information, synthesis and analysis of content matter, writing reports, making presentations and delivering them effectively with confidence. Academic skills are necessary for being successful in the educational environment, and more often than not, these skills finally filter into a well-developed personality with communication skills for a professional career.

- St. Xavier's Technical Institute arranges for conducting **Campus Interviews** for its' Final Year Students as per Industry requirements. Some Companies conduct interviews at their own premises.
- St. Xavier's Technical Institute organizes **technical lectures** as well as arranges **industrial visits** every year at Mumbai, Pune, Silvassa, Hyderabad, Chandigarh, Bangalore and other places for all the students.

The Government of Maharashtra has accorded Minority Status to this Institute as conducted by the Catholic minority.

St. Xavier's Technical Institute, presently offers a full time three year **Diploma course in Electronics and Telecommunication**. This course is recognized and aided by the Maharashtra State Government and **approved by the A.I.C.T.E.** St. Xavier's Technical Institute has been granted autonomy by the Government and issues its own Diplomas which are recognized by the Government and equivalent to the Diplomas issued by the **Maharashtra State Board of Technical Education (MSBTE).**



ACHIEVEMENTS OF THE INSTITUTE

- St. Xavier's Technical Institute started operations in 1937 in the premises of St. Xavier's College offering courses in Electronics and Radio. A year later it started the Marine Radio Officer's course for which it became well known worldwide in the Shipping Industry. The Institute used to provide consultancy to Coast Stations in India and abroad, to various Institutes and Radio Officers for the interpretation of Radio Traffic Regulations. **More than 70% of Radio Officers from India have obtained their certification and licenses from St. Xavier's Technical Institute.** Presently too, the institute offers Marine Courses like ROC, ARPA, GMDSS, etc. to students as well as officers sailing on board ships.
- St. Xavier's Technical Institute, after being transferred to its own building in Mahim, in the year 1967, continued its operations in the new premises by providing facilities and specialized training in **Electronics**. The areas covered were Diploma and Certificate courses in the field of **Radio**, **Television**, and **Video**, and with advances in technology over the years, progressed into areas of **Radar**, **Digital Electronics**, **Microprocessors and Computer Science**.
- St. Xavier's Technical Institute sent one faculty member for six months training in Radar Maintenance in Fleetwood and Essex, U.K. in the year 1986, following which the Institute was **the first in India** to offer the **Radar Maintenance Course** to officers sailing on board ships.
- St. Xavier's Technical Institute sent five of its faculty members for a **one year post Diploma Programme in Technical Teaching** at Technical Teachers Training Institute (TTTI), under **HRD**, **Government of India**, at **Bhopal** (presently known as the National Institute of Technical Training and Research (NITTR) in the year 1986.
- St. Xavier's Technical Institute was duly admitted by the Executive Council as **Institutional Member** of the Indian Society for Technical Education (Founded in 1967-1968) and is fully entitled to all the privileges granted by the constitution and bye-laws in the year 1989, the Institution Membership No. being IM 189.
- St. Xavier's Technical Institute began a full time **Computer Service to Schools** to conduct computer training programmes for school children, both in schools as well as in the Institute, in the year 1989.
- St. Xavier's Technical Institute started running a **Ham Radio Club** with station call sign VU2SX, which was in regular contact with many International Stations, during the years 1960 to around 1990. Students of the institute were trained to pass the examination required to operate the station.
- St. Xavier's Technical Institute deputed two of its faculty members to **UK** for a two week **Global Maritime Distress and Safety System (GMDSS)** training programme and certification in the year 1992. Following this the Institute was **the first in India** to conduct and impart GMDSS training and certification to marine officers sailing on board ships.
- St. Xavier's Technical Institute was granted *Academic Autonomy by Govt. of Maharashtra* (vide GR. No. WB-1093 (2640) (69) / VE-5 dated 30/05/94) in June 1994 and its diplomas recognized by the Government as equivalent to that of MSBTE. This is in recognition of the high standards maintained by the Institute in Technical Education. This means that the Institute conducts its own Diploma examinations which are recognized by Government as equivalent to those of the Maharashtra State Board of Technical Education. As an autonomous Institute, the curricula of the Diploma programme can be up-dated frequently in keeping with the rapid changes in technology. The Institute has its own Governing Council and Board of Studies to examine and approve such changes. Whereas a common complaint about technical education is that it lags far behind current technology and teaches much that is obsolete, this academic autonomy allows St. Xavier's to keep its content up-to-date with the latest in technology.
- St. Xavier's Technical Institute established a four year linkage / faculty training programme with **Saskatchewan Institute for Applied Science & Technology (SIAST), Canada**, under the Canadian International Development Agency (CIDA) project between April 1993 and March 1997. **During this period ten faculty members (including the then Principal of the Institute) and three administrative staff were sent to Canada in small groups for training in Competency Based Technical Education and usage of Information Technology ranging from 2 to 4 weeks.**



- St. Xavier's Technical Institute obtained the approval for the formation of an **ISTE Chapter**, with all privileges granted by the Constitution of the Indian Society for Technical Institution in the year 1995. St. Xavier's Technical Institute received the **Indian Society for Technical Education Narsee Monjee Awards** for Polytechnics in Maharashtra State having the best **Faculty Development** in the year 1995 and also the best **Overall Performance** in the same year.
- St. Xavier's Technical Institute was awarded **Quality certification** for its **Marine Department** in 1997 by **Det Norske Veritas (DNV)** and is currently under **ISO 9001:2000 standards**.
- St. Xavier's Technical Institute had set up a **Software Development Centre** which was awarded a number of prestigious projects. In 1999 the Directorate of Technical Education of Maharashtra State commissioned St. Xavier's to set up an electronic network of 46 technical institutions all over the state. This included the Directorate itself, the Directorate of Industry-Institute Co-ordination, the Board of Technical Education and 43 other Institutions in the State. This **project was funded by the World Bank**.
- St. Xavier's Technical Institute was also awarded a separate project for the **computerization of the Maharashtra State Board of Technical Education** which controls technical examinations in the state.
- St. Xavier's Technical Institute was also awarded a Project of providing an **On-line Examination** for the Government employees' confirmatory test by the State Board of Technical Education. This project includes the development of the entire Question Bank for the examination.
- St. Xavier's Technical Institute was also awarded a Project for the **computerization of Holy Family Hospital and Research Centre and the new Holy Family Heart Institute** with very modern facilities like MRI and CAT SCAN. This project was successfully completed by the Institute faculty and staff.
- St. Xavier's Technical Institute **Alumni Association**, Mumbai became a Member of the **Federation of Jesuit Alumni Associations of India** in November, 2001.
- St. Xavier's Technical Institute conducted a course on **Colour TV Servicing and Computer Hardware** for students from **Mizoram** in January 2004. This was conducted under the **World Bank Sponsored Project** initiated by **NPIU**.
- St. Xavier's Technical Institute re-organized the IETE Students' Chapter & conducted a **State level MSBTE** approved Quiz Competition in IT/COMPUTERS in the year 2008.
- St. Xavier's Technical Institute has developed **in-house Lab Manuals** for all subjects. In the academic year 2014-2015, the Institute has developed and set up two new labs, namely the **Project Lab** and the **Circuit Building Lab**.

The Institute conducted a one week **State level Maharashtra State Board of Technical Education (MSBTE) approved** content updating programme on **Biomedical Signals and Safety** in January 2010.

St. Xavier's Technical Institute organized one State Level and four National Level **Technical Paper Presentation & Project Exhibition in the last eight consecutive years from the year 2008.** In March 2012 and February 2013, the Institute also organized a **National Level Robotics and LAN Gaming Competition**, besides the National Level Technical Paper Presentation and Project Exhibition Competitions.

The Institute has been first in hosting a volleyball tournament with participation from students of various autonolous polytechnics from Mumbai.

St. Xavier's Technical Institute received the **Newsmakers Broadcasting and Communications Pvt. Ltd. (NBC) Best Polytechnic award** on May 1, 2012, under the tutelage category.

The Institute has been granted an "Excellent" performance grade by the External Academic Monitoring Committee constituted by the Maharashtra State Board of Technical Education (M.S.B.T.E.) in the last three academic years.