

# BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

## THREE YEARS UNDERGRADUATE PROGRAM



Knowledge is Supreme

### ABOUT THE PROGRAM

With growing use of computers and information technology in our day life, it is necessary that we have the trained manpower to develop, maintain and use computers as well as write the software required for effective and efficient use of computers and I.T. If we try to understand one of the most common feature that have enabled business. Role play by Information Technology is that of a driver rather than an enabler. I.T. is used from Simple Office Automation to Decision Support, Re-engineering and organisation Transformation. A new genre of man power / manager is required to harness the capabilities of Information Technology, is designed and introduced by the University of Mumbai to bridge this gap and produce employable graduates in Information Technology which will enable the industry to grow and the graduates to becomes successful in the field of Information Technology

### COURSE DETAILS

#### COURSES:

##### First Year: First Semester (Ten Courses)

- 1) Imperative Programming
- 2) Digital Electronics
- 3) Operating Systems
- 4) Discrete Mathematics
- 5) Communication Skills
- 6) Imperative Programming Practical
- 7) Digital Electronics Practical
- 8) Operating Systems Practical
- 9) Discrete Mathematics Practical
- 10) Communication Skills Practical

##### Second Year: Second Semester (Ten Courses)

- 1) Object Oriented Programming
- 2) Microprocessor Architecture
- 3) Web Programming
- 4) Numerical and Statistical Methods
- 5) Green Computing
- 6) Object Oriented Programming Practical
- 7) Microprocessor Architecture Practical
- 8) Web Programming Practical
- 9) Numerical and Statistical Methods Practical
- 10) Green Computing Practical

##### Third Year: Third Semester (Ten Courses)

- 1) Python Programming
- 2) Data Structures
- 3) Computer Networks
- 4) Database Management Systems
- 5) Applied Mathematics
- 6) Python Programming Practical
- 7) Data Structures Practical
- 8) Computer Networks Practical
- 9) Database management Systems Practical
- 10) Mobile Programming Practical

##### Fourth Year: Fourth Semester (Ten Courses)

- 1) Core Java
- 2) Introduction to Embedded Systems
- 3) Computer Oriented Statistical Techniques
- 4) Software Engineering
- 5) Computer Graphics and Animation
- 6) Core Java Practical
- 7) Introduction to Embedded Systems Practical
- 8) Computer Oriented Statistical Techniques Practical
- 9) Software Engineering Practical
- 10) Computer Graphics and Animation Practical

##### Third Year: Fifth Semester (Five Courses)

- 1) Network Security
- 2) ASP.NET with C#
- 3) Software Testing
- 4) Advanced Java
- 5) Linux Administration

##### Fourth Year: Sixth Semester (Six Courses)

- 1) Internet Technology
- 2) Project Management
- 3) Data Warehousing
- 4) Project Report
- 5) Project Viva Voce
- 6) IPR & Cyber Laws



## Admission Procedure

### F.Y.B.SC. (I.T.)

#### Eligibility

A candidate for being eligible for admission to the Degree Program of Bachelor of Science-Information Technology, shall have passed XII Std. (H.S.C.) examination of the Maharashtra State Board of Secondary & Higher Secondary Education or its equivalent with Mathematics as one of the subject and should have secured not less than 45% marks in aggregate (40% in case of reserved category) in first attempt. Every candidate admitted to the degree program in the affiliated colleges conducting the program shall have to register or enrol himself or herself with the university of Mumbai.

#### All Candidates must submit

(Original of all documents must be available for verification at the time of submission of the respective documents)

- 1) College copy of online pre admission form.
- 2) Duly filled F.Y.B.SC.(I.T.) admission form (available at the College office)
- 3) Two passport size photograph with **WHITE** background (pls. write name, current class & E-mail address on the back side of the photograph).
- 4) One photocopy of Blood Group Report
- 5) One attested photocopy of Aadhaar Card.
- 6) One Photocopy of cancelled cheque leaf of candidate account (parent's Account not required) (If cheque is not having the name of bank holder than photocopy of the page of bank pass book (containing details of bank account number, IFSC Code etc.)
- 7) One attested photocopy of standard X Mark sheet
- 8) One attested photocopy of standard X Leaving Certificate
- 9) Original and three photocopy of standard XII (HSC) Mark sheet out of which one should be attested and two without attested
- 10) One attested photocopy of Standard XII Leaving Certificate
- 11) Candidates seeking admission under the Linguistic (Sindhi) Minority are required to submit an affidavit on stamp paper of Rs.100/- certified by a Notary stating that they belong to the Sindhi Minority. (If Applicable)
- 12) Candidate of Physically Challenged Category are required to submit their Medical Certificate (Issued by **Government of Maharashtra** only) (If Applicable)



## **For Candidates from Colleges/Schools not affiliated to the Maharashtra Board, they must submit :**

1. Original and two attested photocopies of XII Marksheet issued by the relevant Board
2. Original and two attested photocopies of XII Passing Certificate issued by the relevant Board
3. Original and one attested photocopy of Transference Certificate/Leaving Certificate
4. Original and two attested photocopies of Migration Certificate (in the event there is no practice of issuing Migration Certificate by the Board, the candidate shall produce a letter to this effect from the Board)
5. All above documents must be submitted within 10 days after admission
6. 12th Class (10+2) Marksheet must be verified along with the stamps from the concerned Board/ University
7. Foreign candidates should have to get PRIMA FACIE LETTER from the Eligibility section - University of Mumbai at the time of FY, SY, TY, MCom-I Admission form Submission.

## **S.Y.B.SC. (I.T.)**

### **Eligibility**

A Candidate who has passed F.Y.B.SC.(I.T.) (or equivalent) from any recognised University can seek admission to S.Y.B.SC.(I.T.) subject to fulfilment of eligibility rules.

### **All Candidates must submit**

(Original of all documents must be available for verification at the time of submission of the respective documents)

- 1) Duly filled S.Y.B.SC.(I.T.) admission form (available at the College Office)
- 2) Photocopy of Mark sheet of F.Y. (Sem - I & Sem -II ) along with Original Mark sheets with all A.T.K.T. & Additional Mark sheets)
- 3) Two passport size photograph with **WHITE** background (pls. write name, current class & E-mail address on the back side of the photograph).
- 4) The original and photocopy of the S.S.C. And H.S.C. Mark sheet (s) & Passing Certificate
- 5) The Photocopy of 10th or 12th Leaving Certificate.
- 6) Photocopy of Aadhaar Card.
- 7) One photocopy of Blood Group Report
- 8) One Photocopy of cancelled cheque leaf of candidate account (Parent's Account not required) If cheque is not having the name of bank holder than photocopy of the Bank Passbook (containing details of bank account number, IFSC code etc.)
- 9) Candidate of Physically Challenged Category are required to submit their Medical Certificate (Issued by **Government of Maharashtra** only)
- 10) Candidates seeking admission under the Linguistic (Sindhi) Minority Quota are required to submit an affidavit on stamp paper of Rs.100/-, certified by a Notary stating that they belong to the Sindhi Minority and/or (If Applicable)



### **Candidates from other college which are affiliated to University of Mumbai (additional documents)**

- 1) No Objection Certificate signed by the Principal of the previous College
- 2) Original and two attested photocopies of Transfer Certificate
- 3) Eligibility Status Report from the previous College, giving details of confirmation of enrolment/eligibility
- 4) M.K.C.L. Transference Certificate with T.C. Code from previous college with PRN Number

### **For Candidates from Colleges/Schools not affiliated to the Maharashtra Board, they must submit :**

- 1) College copy of online pre admission form
- 2) Original and two attested photocopies of XII Marksheet issued by the relevant Board
- 3) Original and two attested photocopies of XII Passing Certificate issued by the relevant Board
- 4) Original and two attested photocopy of Transference Certificate/Leaving Certificate
- 5) Original and two attested photocopies of Migration Certificate (in the event there is no practice of issuing Migration Certificate by the Board, the candidate shall produce a letter to this effect from the Board)
- 6) All above documents must be submitted within 10 days after the admission
- 7) Original and two attested photocopies of First year - Sem I & Sem II marksheets & these must be verified along with the stamps from the concerned Board/ University.
- 8) Foreign candidates should have to get PRIMA FACIE LETTER from the Eligibility section - University of Mumbai at the time of FY, SY, TY, MCom-I Admission form Submission.
- 9) Candidates coming from colleges which are NOT affiliated to University of Mumbai should have to get PRIMA FACIE letter from the Eligibility section University of Mumbai at the time of Second & Third year admission (Enrolment and other additional fees are required to pay)
- 10) Candidates coming from Distance Education should have to get the NOC, Eligibility Confirmation Letter (if the 12th is done from other than Maharashtra Board) at the time of admission. Manual Transfer Certificate should be submitted after the admission. (Enrolment and other additional fees are required to pay)



## T.Y.B.SC. (I.T.)

### Eligibility

A Candidate who has passed F.Y.B.SC.(I.T.) (or equivalent) and S.Y.B.SC.(I.T.) (or equivalent) from any recognised University can seek admission to T.Y.B.SC.(I.T.) subject to eligibility rules

### All Candidates must submit

- 1) Duly filled T.Y.B.SC.(I.T.) form (available at the College Office)
- 2) Photocopy of Mark sheet of F.Y. (Sem - I & Sem -II ) and SY ( Sem-III & IV) along with Original Mark sheets with all A.T.K.T. & Additional Mark sheets)
- 3) Two passport size photograph with **WHITE** background (pls. write name, current class & E-mail address on the back side of the photograph).
- 4) The original and photocopy of the S.S.C. And H.S.C. Mark sheet (s) & Passing Certificate
- 5) The Photocopy of 10th or 12th Leaving Certificate.
- 6) Photocopy of Aadhaar Card.
- 7) One photocopy of Blood Group Report
- 8) One Photocopy of cancelled cheque leaf of candidate account (Parent's Account not required) If cheque is not having the name of bank holder than photocopy of the Bank Passbook (containing details of bank account number, IFSC code etc.)
- 9) Candidate of Physically Challenged Category are required to submit their Medical Certificate (Issued by **Government of Maharashtra** only) (If Applicable)
- 10) Candidates seeking admission under the Linguistic (Sindhi) Minority Quota are required to submit an affidavit on stamp paper of Rs.100/-, certified by a Notary stating that they belong to the Sindhi Minority and/or (If Applicable)

### Candidates from other college which are affiliated to University of Mumbai (additional documents)

- 1) No Objection Certificate signed by the Principal of the previous College
- 2) Original and two attested photocopies of Transfer Certificate
- 3) Eligibility Status Report from the previous College, giving details of confirmation of enrolment/eligibility
- 4) M.K.C.L. Transference Certificate with T.C. Code from previous college with PRN Number



### **For Candidates from Colleges/Schools not affiliated to the Maharashtra Board, they must submit :**

- 1) College copy of online pre admission form
- 2) Original and two attested photocopies of XII Marksheet issued by the relevant Board
- 3) Original and two attested photocopies of XII Passing Certificate issued by the relevant Board
- 4) Original and one attested photocopy of Transference Certificate/Leaving Certificate
- 5) Original and two attested photocopies of Migration Certificate (in the event there is no practice of issuing Migration Certificate by the Board, the candidate shall produce a letter to this effect from the Board)
- 6) All above documents must be submitted within 10 days after admission
- 7) Original and two attested photocopies of First year - Sem I & Sem II, Second year Semester - III & Semester - IV marksheets & these must be verified along with the stamps from the concerned Board/ University.
- 8) Foreign candidates should have to get PRIMA FACIE LETTER from the Eligibility section - University of Mumbai at the time of FY, SY, TY, MCom-I Admission form Submission.
- 9) Candidates coming from colleges which are NOT affiliated to University of Mumbai should have to get PRIMA FACIE letter from the Eligibility section University of Mumbai at the time of Second & Third year admission (Enrolment and other additional fees are required to pay)
- 10) Candidates coming from Distance Education should have to get the NOC, Eligibility Confirmation Letter (if the 12th is done from other than Maharashtra Board) at the time of admission. Manual Transfer Certificate should be submitted after the admission. (Enrolment and other additional fees are required to pay)



## FEE STRUCTURE FOR THE ACADEMIC YEAR 2019-2020

(Fees Structure is as per University of Mumbai's Circular No. CONCOL/FEE/292 of 2008 dated 07.07.2008 - revised w.e.f. 2008-2009 onwards) revised as per circular on UG/23 OF 2016-17 dated 1.7.2016. for FYBSCIT course w.e.f. 2016-17 & SYBSCIT Course w.e.f. 2017-18 and TYBSC IT Course w.e.f. 2018 - 2019 as per revised examination fees circular no UG/253 A of 2016-17 dated 14-3.2017, revised examination fee circular No. UG/253 of 2016-17 dated 07-03-2014 & circular No. Exam/ Fees/15/2018 dated 31-03-2018

<b>PARTICULARS</b>	<b>F.Y.B.SC.IT</b>	<b>S.Y.B.SC.IT</b>	<b>T.Y.B.SC.IT</b>
ADMISSION PROCESSING FEES	200	200	200
CAUTION MONEY (REFUNDABLE)	150	-	-
COMPUTER PRACTICAL FEES	1000	1500	2500
CONVOCATION FEES	-	-	250
DEVELOPMENT FUND	500	500	500
E-SUVIDHA	50	50	50
EXAMINATION FEES	2057	2057	2057
GROUP INSURANCE	40	40	40
GYMKHANA FEES	400	400	400
I.D. CARD & LIBRARY FEES	50	50	50
LABORATORY DEPOSIT (REFUNDABLE)	400	-	-
LABORATORY FEES	6000	6000	6000
LIBRARY DEPOSIT (REFUNDABLE)	250	-	-
LIBRARY FEES	1200	1200	1200
MAGAZINE FEES	100	100	100
NSS FEES	10	10	10
OTHER FEES/EXTRA CURRICULAR ACTIVITY	250	250	250
PROJECT FEES	1000	1000	1900
STUDENT WELFARE FUND	50	50	50
TUITION FEES	10000	10000	10000
UNIVERSITY DISASTER RELIEF FUND	10	10	10
UNIVERSITY E CHARGES	20	20	20
UNIVERSITY ENROLMENT FEES	220	-	-
UNIVERSITY PROJECT FEES	-	-	500
UNV. SPORTS / CULTURAL ACTIVITY	36	36	36
UTILITY FEES	250	250	250
VICE CHANCELLOR'S FUND	20	20	20
<b>TOTAL</b>	<b>24263</b>	<b>23743</b>	<b>26393</b>



1. F.Y.B.Sc. (Information Technology) Admission Form and Prospectus and Information Brochure Fees of Rs.100/-, to be paid by the candidate at the time of taking the admission form from the College office.
2. S.Y.B.Sc (I.T.) & T.Y.B.Sc.(I.T.) Admission Form Rs.20/- to be paid by the candidate at the time of taking admission form from the College office.
3. Document Verification fees of Rs. 400/- to be collected from candidates from Board / University other than Maharashtra State Board/University of Mumbai
4. Fees payable in the form of Demand Draft drawn in favour of “Tolani College of Commerce” Payable at Mumbai

**P.s. Fees are likely to be revised by the University of Mumbai / Government Authorities.**

### **ACADEMIC TERMS AND VACATION FOR 2019 - 2020**

First Term	:	6th June 2019 to 24th Oct. 2019
Mid Term Break	:	2nd Sept. 2019 to 7th Sept. 2019
Diwali Vacation	:	25th Oct. 2019 to 14th Nov. 2019
Second Term	:	15th Nov. 2019 to 2nd May 2020
Winter Break	:	26th Dec. 2019 to 1st Jan. 2020

### **ATTENDANCE REQUIREMENTS**

As per the provisions mentioned in the University ordinance, issued from from time to time.

Duration of the course and related information

The B.Sc. (I.T.) shall be full time program. The duration of the program shall be of six semesters spread over three years.

Number of Students : A batch shall consist of not more than 60 students.

### **EXAMINATIONS & EVALUATION**

As per the directives of University of Mumbai, the Choice Based Credit, Grading and Semester Systems will be followed.

The Degree Program will comprise of Six semesters spread over three years. Each year will consist of two semesters.

The Students will be briefed about the details of the Choice Based Credit, Grade and semester system at the commencement of the academic year.

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