

## 9. Admission to Master's Courses

### COURSES OF STUDIES, ADMISSION CRITERIA AND CAPACITY

The Master's courses- M.Chem.Engg., M.Pharm., M.Tech. (all branches) and M.E. (Plastic Engg.) are Two-Year Semesterised programmes [partly by papers (two semesters) and partly by thesis (one year)]. All M. Sc. courses are Two- Years Semesterised programmes only by papers. (See **Table 9.1** below for different courses).

**TABLE 9.1: MASTERS DEGREE COURSES**

SR.NO.	DEGREE	BRANCH	INTAKE		
			OPEN	SC	ST
1.	M. Chem. Engg. (full-time 2-years)	Chemical Engineering	18*	03*	01*
2.	M. Tech. (full-time 2-years)	Dyestuff Technology	04*	06	04
3.		Fibres and Textile Processing Technology	09*		
4.		Food Engineering and Technology	04*		
5.		Oils, Oleochemicals and Surfactants Technology	04*		
6.		Pharmaceutical Sciences & Technology	04*		
7.		Polymer Engineering and Technology	04*		
8.		Surface Coating Technology	04*		
9.		M. Pharm. (full-time 2-years)	Pharmaceutics		
10.	Pharmaceutical Chemistry		03*		
11.	Medicinal Natural Products <sup>@</sup>		02*		
12.	M.E. (Plastic Engg.) (full-time 2-years)	General Engineering	05*		
13.	M. Tech. (full-time 2-years)	Bioprocess Technology	23 <sup>#</sup>	05 <sup>#</sup>	02 <sup>#</sup>
14.		Food Biotechnology	07 <sup>€</sup>	02 <sup>€</sup>	01 <sup>€</sup>
15.		Green Technology	20 <sup>§</sup>		
16.		Perfumery & Flavour Technology	5 <sup>*</sup>		
17.		M.Sc. (full-time 2-years) (by papers)	Chemistry	20	
18.	Engineering Mathematics		20		
19.	Physics		20		
20.	Textile Processing		20		
21.	M. Tech. <sup>£</sup> (for industry sponsored candidates) (3-years)	Green Technology	30		

\* The tentative seat distribution given is for intake (Sr. No. 1 -12 in Table 9.1) of GATE qualified candidates eligible to receive UGC Fellowship (*Subject to sanction*).

The Director, ICT reserves the right to change the course/ branch wise distribution of these fellowships, based on availability of the candidates. The selection for the UGC Fellowships shall be based on the GATE/ GPAT score (Level 1- Table 9.2) and the performance in the Institute's written test (Level 2 and Level 3 – Table 9.2).

Additionally, two Fellowships (JRFs) are available as GE Fellowships for M. Tech. courses (all branches).

<sup>@</sup>"Medicinal Natural Products" includes the subjects related to Pharmacognosy and Pharmacology.

<sup>#</sup> The seat distribution given is for intake (Sr. No. 13 in Table 9.1) of GATE/ GPAT qualified candidates eligible to receive DBT Fellowship.

<sup>€</sup> The seat distribution given is for intake (Sr. No. 14 in Table 9.1) of GATE qualified candidates eligible to receive DBT Fellowship.

<sup>β</sup> No fellowships will be made available to M. Tech. Course in Green Technology from the current number (Full- Time Two- Years Semesterised Course (Partly by papers and partly by thesis) (Sr. No.15 in Table 9.1). Efforts are underway to get fellowships sanctioned along with approval. At the moment, the ICT will not guarantee any fellowship for this programme.

\* Subject to availability of fellowships from FAFFI and ICEOFF.

<sup>£</sup> M.Tech. Course in Green Technology is also available as Three-Years Semesterised Course for industry sponsored candidates (Sr. No.21 in Table 9.1). No fellowships are available to these candidates. The semester course work for this course is same as that for M. Tech. (full-time 2-years). Candidates admitted to this course need to clear the course work of first semester (of full time course) in first semester and that of second semester (of full time course) in fourth semester.

• No fellowships are available to M. Sc. Courses by papers (Sr. No. 17-20 in Table 9.1).

## 9.1 Eligibility Criteria for the Admission (Indian Nationals)

### 9.1.1 M.Chem.Engg., M.Tech. (seven branches) (Sr. Nos. 1-8 in Table 9.1)

The candidate should have passed any one of the following Bachelor's degrees of the ICT or any equivalent examination of a post-HSSC four-year degree course of IIT/NIT or any University recognized by the UGC, with first class (i.e., 60% of the marks in aggregate or equivalent grade average). [55% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State].

- i. B.Chem.Engg. or B.E. / B.Tech. in Chemical Engineering/ Biotechnology/ Biochemical Engg.
- ii. B.Sc. (Tech.) (Technology of Intermediates and Dyestuff) / B.Tech. (Dyestuff Technology).
- iii. B.Tech. (Textile Processing/ Textile Chemistry), B.Sc. (Tech.) (Textile Processing / Chemistry), B.Text. (Textile Chemistry), B.E. (Textile Chemistry or Textile Technology), B.Tech. (Textile Chemistry or Textile Technology), B.Tech. (Fibres and Textile processing Technology/ Fibre Technology) with significant emphasis on chemical processing of textiles.
- iv. B.Tech. (Food Engineering and Technology) or B.E./ B.Tech. in Food Engineering/ Food Technology/ Food Science/ Food Process Technology/ Food Process Engineering, or B.Sc. (Tech.) (Food Technology).
- v. B.Sc. (Tech.) (Oils Technology) or B. Tech. (Oils, Oleochemicals and Surfactants Technology).
- vi. B.Sc. (Tech.) (Pharmaceutical Sciences and Technology) or B. Tech. (Pharmaceutical Chemistry and Technology).
- vii. B.Tech. (Polymer Engineering and Technology /Surface Coating Technology); B.Sc. (Tech.) (Technology of Plastics or Technology of Paints), B.Sc. (Tech.) (Rubber Technology), B.E. (Polymer Engg. / Plastic Engg.), B.E. (Petrochemical Engineering/ Technology).
- viii. B.Sc. (Tech.) (Paints Technology / Plastics Technology), B.Tech. (Paints Technology / Polymer Engineering and Technology), B.Chem.Tech. (Paints Technology / Polymer Engineering / Polymer Technology / Plastic Technology), B.E. (Paints Technology / Polymer Engineering / Polymer Technology / Plastic Technology / Plastic Engineering).

### 9.1.2 M.Pharm. (Sr. Nos. 9-11 in Table 9.1)

The candidate should have passed the Bachelor's degree in Pharmacy (B. Pharm.) of the ICT or any UGC recognized University, with first class (i.e., 60% of the marks in aggregate or equivalent grade average). [55% of

the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State].

The following THREE specializations are offered for M. Pharm.

- Pharmaceutics (Sr. No. 9 in Table 9.1)
- Pharmaceutical Chemistry (Sr. No. 10 in Table 9.1)
- Medicinal Natural Products (Sr. No. 11 in Table 9.1)

For specialization, option form will be given at the time of admission offered. Once a candidate is offered a seat in any one specialization, according to the availability of seats at the time of allotment and in the order of merit and preference given by the candidate, no request for any transfer or change of preference shall be entertained. However, if seat falls vacant, the candidate shall be transferred to the higher preference and it shall remain binding on the candidate.

#### **9.1.3 M.E. (Plastic Engineering) (Sr. No. 12 in Table 9.1)**

The candidate should have passed B.E. or B.Tech. in Mechanical engineering/ Electrical Engineering/ Plastics engineering / Polymer engineering / Production Engineering /Chemical Engineering/ Chemical Plant Engineering of any post-HSSC for four year degree course of IIT/NIT or any University recognized by the UGC, with first class (i.e., 60% of the marks in aggregate or equivalent grade average). [55% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State].

#### **9.1.4 M.Tech. (Bioprocess Technology) (Sr. No. 13 in Table 9.1)**

The eligibility criterion for the admission to this course is as mentioned in 9.1.1 above. In addition, candidates with B.Pharm. degree of the ICT or any other equivalent degree of any University recognized by the UGC, of four-year degree course after HSSC/Std. XII, with first class (i.e., 60% of the marks in aggregate or equivalent grade average). [55% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State] are eligible.

#### **9.1.5 M.Tech. (Food Biotechnology) (Sr. No. 14 in Table 9.1)**

The candidate should have passed B. Tech. degree in Food Engineering and Technology of the ICT or any other equivalent degree of any University recognized by the UGC, **of four-year degree** course after HSSC/Std. XII, with first class (i.e., 60% of the marks in aggregate or equivalent grade average). [55% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State].

OR

B.Tech./ B.Sc. (Tech.) /B.E. in Food Engineering and Technology /Food Engineering /Food Technology /Food Science /Food Process Technology /Food Process Engineering/ Dairy Technology/ Biotechnology/ Chemical Engineering/ Biochemical Engineering/ Pharmaceutical Technology/ Oil Technology or any equivalent degree of full four-year's duration of any University recognized by the UGC. Three year degree programmes in these disciplines are not recognized for admission.

#### **9.1.6 M.Tech. (Perfumery and Flavour Technology) (Sr. No. 16 in Table 9.1)**

The candidate should have passed B. Sc. (Tech.)/ B. Tech. Degree in Dyestuff Technology/ Food Engineering & Technology / Food Engineering/ Oils, Oleochemicals & Surfactants Technology/ Pharmaceuticals Technology of the ICT or any equivalent examination of four-year degree course of any University recognized by the UGC, after HSSC/Std. XII, with first class (aggregate of 60% of marks and above or an equivalent grade average). [55% for the backward class candidate only from Maharashtra State].

#### **9.1.7 M.Tech. (Green Technology) [Full-Time Two-Years] (Sr. No. 15 in Table 9.1)**

The candidate should have passed any one of the following Bachelor's/ Master's degrees of ICT or any equivalent examination of IIT/NIT or any University recognized by the UGC, with first class (i.e., 60% of the marks in aggregate or equivalent grade average). [55% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State].

B.Chem. Engg./ B. Sc.(Tech.)/B.Tech (in any branch of Chemical Technology)/ B. Pharm.  
OR  
M. Phil. (Chemistry, Biology, Microbiology, Biotechnology, Biochemistry)  
OR  
M.Sc. (Chemistry, Biology, Microbiology, Biotechnology, Biochemistry).

**9.1.8 M.Tech. (Green Technology)[ Three- Years] (Sr. No. 21 in Table 9.1)**

**This is a course meant only for industry- sponsored candidates.** Candidates must possess two years industrial experience in production of chemicals, materials, drugs, intermediates, etc. or R and D of the said industries.

**AND**

The candidate should have passed any one of the following Bachelor's/Master's degrees of ICT or any equivalent examination of IIT/NIT or any University recognized by the UGC, with first class (i.e., 60% of the marks in aggregate or equivalent grade average). [55% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State].

B.Chem. Engg./ B.Sc.(Tech.)/B.Tech (in any branch of Chemical Technology)/ B. Pharm.  
OR  
M. Phil. (Chemistry, Biology, Microbiology, Biotechnology, Biochemistry)  
OR  
M.Sc. (Chemistry, Biology, Microbiology, Biotechnology, Biochemistry)

**9.1.9 M.Sc. (Chemistry) by papers (Sr. No. 17 in Table 9.1)**

The candidate should have passed with post-HSSC 3-year degree course of B.Sc. with Chemistry at the third year of the course of University of Mumbai or any University recognized by the UGC; and passed the qualifying examination with at least 55% of the marks in aggregate or equivalent grade average (50% for the backward class candidates only from Maharashtra State) are eligible to apply. The candidates who have cleared the qualifying examination in one sitting will be preferred.

**9.1.10 M.Sc. (Engineering Mathematics) by papers (Sr. No. 18 in Table 9.1)**

The candidate should have passed with post-HSSC 3-year degree course of B.Sc. with Mathematics at the third year of the course and any two of chemistry, physics and statistics as the two other subjects at the first and second years of University of Mumbai or any University recognized by the UGC; and passed the qualifying examination with at least 55% of the marks in aggregate or equivalent grade average (50% for the backward class candidates only from Maharashtra State) are eligible to apply. The candidates who have cleared the qualifying examination in one sitting will be preferred.

**9.1.11 M.Sc. (Physics) by papers (Sr. No. 19 in Table 9.1)**

The candidate should have passed with post-HSSC 3-year degree course of B.Sc. with Physics at the third year of the course of University of Mumbai or any University recognized by the UGC; and passed the qualifying examination with at least 55% of the marks in aggregate or equivalent grade average (50% for the backward class candidates only from Maharashtra State) are eligible to apply. The candidates who have cleared the qualifying examination in one sitting will be preferred.

**9.1.12 M.Sc. (Textile Processing) by papers (Sr. No. 20 in Table 9.1)**

The candidate should have passed with post-HSSC 3-year degree course of B.Sc. with Chemistry at the third year of the course of University of Mumbai or any University recognized by the UGC; and passed the qualifying examination with at least 55% of the marks in aggregate or equivalent grade average. [50% for the backward class candidates only from Maharashtra State] are only eligible to apply.

The candidates who have cleared the qualifying examination in one sitting will be preferred.

## 9.2 GRADUATE APTITUDE TEST IN ENGINEERING (GATE) & GRADUATE PHARMACY APTITUDE TEST (GPAT) FOR THE UGC FELLOWSHIPS

- (1) The candidates seeking admission to the degrees of M.Chem.Engg./ M.Tech./ M.E.(Plastic Engg.) are required to qualify the **Graduate Aptitude Test in Engineering (GATE)** conducted at the national level.
- (2) The candidates seeking admission to the degrees of M.Pharm., are required to qualify the **Graduate Pharmacy Aptitude Test (GPAT)** conducted at the national level. GPAT qualified candidates are also eligible for admission to M.Tech (Bioprocess Tech.) and M.Tech. (Green Tech.) courses.
- (3) Rules for availing GATE/ GPAT scholarships:
  - a. The Fellowships (subject to sanction and availability) are awarded only to the candidates who have passed the GATE/GPAT examination with valid score and on the basis of merit. NON-GATE/NON-GPAT candidates, if admitted, are not eligible for these Fellowships.
  - b. The student must give an undertaking to the effect that he/she would not leave the course midway in order to be eligible to receive the Fellowship. During the course of studies, the student shall not receive any emoluments, salary, stipend, etc., from any other source.
  - c. The student receiving the fellowship must secure minimum 60% marks or CGPA of 6.00 during the first and the second semester examinations to become eligible for continuation of the Fellowship at the existing rate during the second, third and fourth semesters, respectively.
  - d. According to UGC rules, a student who secures marks below 60% or CGPA below 6.00 in the first and/or second semester examination shall be eligible to get a reduced fellowship at the rate of Rs. 1,000/- p.m. only.
  - e. In case of failure at the semester I examination, the fellowship shall be discontinued during the remaining period of the course. The fellowship may also be discontinued at any kind of misconduct by the student receiving the same. The fellowship once discontinued shall not be restored, even if a student secures 60% marks or CGPA of 6.00 at the second semester.
  - f. The Fellowship amounts are normally disbursed every month after starting the Fellowship, subject to receiving the grant from the UGC. The fellowship amount shall be disbursed only after receiving the appropriate grant from the UGC.
- **The Institute shall not be responsible for non-receipt of fellowship grant from UGC in time. The students will be required to give an Undertaking in writing to this effect.**

## 9.3 ADMISSION CRITERIA

- Admission to the Master's courses are available to a course/branch (Sr. No. 1- 15 in Table 9.1) subject to the rules given below:
- The admission to a course/ branch will be based on GATE/GPAT score, as applicable.
- The first preference for admission to a course/ branch will be given to the candidates qualifying Bachelor's course with valid GATE/GPAT score, as applicable from the respective discipline (Level 1 - Table 9.2).
- Only after filling the vacancies by such candidates, the candidates possessing a qualifying Bachelor's degree with valid GATE/GPAT score from any other course/branch will be considered for admission. (Level 2 - See Table 9.2)
- Preparation of the merit list will be done at two levels.

**Level 1:** Merit list will be prepared on valid GATE/ GPAT score in the specified subject and no written test will be conducted. Admissions through Level 2 shall be made only if any seats remain vacant after exhausting the merit list from Level 1.

**Level 2:** Merit list will be prepared on the basis of valid GATE score (in any subject) and written test (based on the syllabus specified by the Department for the course in which the candidate is seeking admission) on the basis of **70:30**. In case of interdisciplinary shift of course/ branch, interviews will be conducted to find the suitability of the candidate. There will be an external expert on the interview committee. However, no marks will be assigned to the interview.

**Level 3:** Merit list will be prepared on the basis of written test alone (based on the syllabus specified by the Department for the course in which the candidate is seeking admission).

**Table 9.2: Criterion for Preparation of Merit List**

Department conducting the written test	Course in which the candidate is seeking admission	Preparation of first Merit list
Chemical Engineering	M.Chem.Engg.	Level 1 & 2
	M.Tech. in Bioprocess Technology	Level 2
Dyestuff Technology	M.Tech. in Dyestuff Technology	Level 2
	M.Tech. in Perfumery & Flavour Technology	Level 2
Fibres & Textile Processing Technology	M.Tech. in Fibres & Textile Processing Technology	Level 2
Food Engineering & Technology	M.Tech. in Food Engineering & Technology	Level 1 & 2
	M.Tech. in Food Biotechnology	Level 1 & 2
Oils, Oleochemicals & Surfactants Technology	M.Tech. in Oils, Oleochemicals & Surfactants Technology	Level 2
Pharmaceutical Sciences & Technology	M.Tech. in Pharmaceutical Science and Technology	Level 2
	M.Pharm.	Level 1
Polymer & Surface Engineering	M.Tech. in Polymer Engineering & Technology	Level 1 & 2
	M.Tech. in Surface Coating Technology	Level 1 & 2
General Engineering	M.E. in Plastic Engineering	Level 2
Chemical Engineering and Chemical Technology Departments	M.Tech. in Green Technology	Level 2
Chemistry	M.Sc. in Chemistry	Level 3
Mathematics	M.Sc. in Engineering Mathematics	Level 3
Physics	M.Sc. in Physics	Level 3
Fibres & Textile Processing Technology	M.Sc. in Textile Processing	Level 3

- The admission procedure for M.Tech. and M.Pharm. courses will be conducted after declaration of GATE/GPAT results, as required, but before the final semester examinations of the qualifying Bachelor's course for that year. The candidate must have obtained aggregate 60% of the marks or equivalent grade average [55% of the marks or equivalent grade average for the backward class candidate only from Maharashtra State] at the end of 6<sup>th</sup> semester of the qualifying Bachelor's course. Only a provisional admission will be offered. For confirmation of admission, at a later date, however, overall 60% of the marks in aggregate or equivalent grade average [55% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State] are necessary at the qualifying examination.

- In case the candidate is admitted to a course/ branch other than the one in which he/ she has obtained qualifying Bachelor's degree, he/she will have to undergo at least **Three Make-Up Credit Courses** (to be decided by the department admitting such candidate).
- Non-GATE/Non-GPAT candidates may also apply, however, the preference will be given to GATE/GPAT qualified candidates. The merit of Non-GATE/ Non-GPAT candidates will be totally based on the written test designed on the basic course, the syllabus of which shall be provided by each Department and displayed on the ICT website.
- Design of written test would be such that basic knowledge in the discipline in which the candidate is seeking admission is tested. The duration of test shall be 01 hour.
- The final merit lists would be prepared on the basis of the criteria given above.
- The group of selected candidates, unless selected on a specific project, will be given a presentation for all research activities in the department and available projects for selection of project / guide. The final allotment of the research guides will be done by the Departmental committee based on the merit and preferences given by the candidate and admissible rules and regulations.
- All these rules also apply to the candidates who shall be conducting their research work leading to a Degree under any type of sponsored projects (Govt. or Private).
- The admission procedure for M.Sc. courses (by papers) will be conducted before the final results of the qualifying Bachelor's course for that year. Only a provisional admission will be offered. The candidates who will have cleared the qualifying examination in one sitting will be preferred. For confirmation of admission, at a later date, however, overall 55% of the marks in aggregate or equivalent grade average [50% of the marks in aggregate or equivalent grade average for the backward class candidate only from Maharashtra State] are necessary at the qualifying examination.

## 9.4 APPLICATION PROCEDURE FOR MASTER'S COURSES

For admissions at the ICT for all the Master's courses, a candidate should obtain appropriate application form(s) for the course to which he/she is seeking admission; along with handbook (See page 1 for details).

**(Refer time schedule for each of the following stages displayed on ICT website [www.ictmumbai.edu.in](http://www.ictmumbai.edu.in))**

### 9.4.1 Step I: Purchase of Application Form

The candidate shall purchase and fill the appropriate application form/s, separate for each course of choice, namely,

- M.Chem.Engg.
- M.Pharm.
- M.Tech. (each branch separately)
- M.E. (Plastic Engg.)
- M.Sc. (Chemistry)
- M.Sc. (Engineering Mathematics)
- M.Sc. (Physics)
- M.Sc. (Textile Processing)

The admission form and Handbook will be available for sale at the ICT counter by payment of cash. The fees for application along with Handbook are given on page 1 of this Handbook.

The forms may also be ordered by post or downloaded from the ICT web site, [www.ictmumbai.edu.in](http://www.ictmumbai.edu.in). The payment, while ordering by post, should include the amount equal to the "**By Post**" amount and be made only by a **Pay Order/DD** of any Nationalized/ Scheduled/ Private Sector Commercial Bank drawn in favour of "**Institute of Chemical Technology, Mumbai**", payable at Mumbai and it is non-refundable and non-transferable under any circumstances. **Payment by cheque or money order will not be accepted.** The admission form along with a copy of the Handbook will be sent by **Registered Post Parcel**.



## 9.4.2 Step II: Submission of Application Form

All the relevant entries in the application form must be completed in legible handwriting or may be typewritten. Incomplete forms will be rejected and no correspondence will be made in this regard. **Writing contact details such as Mobile No./ Telephone No. and email address in the application form is essential.**

The duly filled form along with attested photocopies of required certificates to substantiate the claims made in their application form should be submitted, by the last date notified, at ICT counter or sent to the ICT by Post/ Courier, etc. along with a **Pay Order/DD** of any Nationalized/ Scheduled/ Private Sector Commercial Bank drawn in favour of "**Institute of Chemical Technology, Mumbai**", payable at Mumbai and it is non-refundable and non-transferable under any circumstances. **Payment by cheque or money order will not be accepted.**

The application form has a tear-off receipt at the bottom with the application number. The receipt should be filled in by the candidate and shall be signed and stamped by the clerk at the counter while accepting the form. **This receipt should be preserved and the application number must be stated for any future correspondence.**

**Applications received after the due date will not be considered for generating merit list. ICT is not responsible for the delay occurred by Post/ Courier, etc.** Incomplete applications shall be rejected without entering into any correspondence with the applicant.

- The candidates seeking admission at the ICT must submit attested photocopies of all the documents as given in **Table 9.3 below** along with the application form.
- Attachment of any certificates will not be accepted separately after submission of the application form.
- The candidates belonging to the SC/ ST categories will be required to submit **The Caste Certificate, the Caste/ Tribe Validity Certificate wherever applicable** at the time of submitting the application form, failing which the category claimed, will not be granted and the **candidate will be treated as a General candidate.**
- The candidates shall not attach a copy of any other certificate which is not asked for, such as certificates for participation in sports, cultural activities, etc.
- The photocopies of certificates or documents attached to the application form should be attested by the Principal of the College or Gazetted Officer or Special Executive Magistrate or Head Master of a Secondary School or teaching staff of a Government /Govt. Aided College / Polytechnic not below the rank of a Lecturer.
- If the candidate produces any certificate, which is not in Marathi, Hindi or English language, authenticated Marathi, Hindi or English version of the same, duly attested by a Gazetted Officer shall also be produced.

**TABLE 9.3: Documents to be attached with the Application form for PG admissions**

Sr. No.	Type of Candidate	Attested true copies of documents to be attached along with application form
I	All Candidates	1. SSC (Std. X) mark sheet, 2. HSSC (Std. XII) mark sheet, 3. All Mark sheets of Bachelor's Course 4. Bachelor's degree certificate 5. College Leaving / Transfer certificate 6. Migration certificate (within one month after confirmation of admission) 7. Industrial experience/ Gap Certificate, if any 8. GATE/GPAT score card
II	Backward class Candidates belonging to SC/ ST Categories	Caste certificate, Caste/ Tribe Validity certificate, as applicable. (In addition to the documents mentioned in Sr. No. I)
III	Backward class Candidates belonging to VJ/ DT (NT(A))/ NT(B)/ NT(C)/ NT(D)/OBC/ SBC categories ( <b>Maharashtra State candidates only</b> )	Caste certificate, Caste/ Tribe Validity certificate, Non Creamy Layer Certificate valid up to 31 <sup>st</sup> March 2012. (In addition to the documents mentioned in Sr. No. I)



- **Original certificates should not be attached with the application form. However, those must be made available at the time of admission, failing which the admission cannot be granted.**

## 9.5. Rules and Regulations about Reservation

Reservation in admission only for SC/ST categories on All India basis is applicable to all the Masters' courses M.Chem.Engg., M.Pharm., M.Tech.(all branches), M.E.(Plastic Engg.) M.Sc., as per the Government norms.

### 9.5.1 Caste Certificate and Caste/ Tribe Validity Certificate.

- Caste Certificate:** The candidates belonging to the backward class categories will be required to submit the Caste Certificate at the time of admission, failing which the category claimed will not be granted and the candidate will be treated as a General Candidate.
- Caste Validity Certificate:** The candidates belonging to the SC/ST category will be required to submit the Caste/Tribe Validity Certificate at the time of admission, failing which the category claimed will not be granted and the candidate will be treated as a General Candidate.

## 9.6 Fees, Concessions, Cancellations and Refund

### 9.6.1 Fees prescribed:

The candidates admitted in the first year during 2011-12 are required to pay fees as shown in following table:

Sr. No.	Fees	Open category and SC/ST candidates from 'other than State of Maharashtra'	Reserved Category Candidates from Maharashtra State Only
1.	Tuition fee	Rs.15,000/-	Nil
2.	Development fee	Rs.20,000/-	Nil
3.	Other fees	Rs.10,000/-	Rs. 50/-
4.	Caution Money Deposit	Rs.500/-	Rs.500/-
	<b>TOTAL</b>	<b>Rs.45,500/-</b>	<b>Rs.550/-</b>

**Notes:-**

- Institutional fees such as the Student dairy (Rs. 300/- per year), Alumni Association fees (Rs. 1050/- per year) are applicable to all students. Eligibility fees of Rs. 500/- (one time) are applicable to students other than ICT students. These fees may be paid either in cash or by DD/Pay Order separately.**
- Hostel Fees will be applicable in case of candidates opting for hostel accommodation. The details are given in Section on Hostels.**
- For SC/ST/VJ/DT NT(A)/ NT(B)/ NT(C)/ NT(D)/ SBC /OBC category candidates from the State of Maharashtra -No tuition fees will be charged for admission.
- Candidates claiming for fee concession under Backward Class category from the State of Maharashtra shall produce the **Caste Validity Certificate at the time of submission of application form**. Candidates claiming for fee concession **under OBC, SBC, VJ/ DT NT(A), NT(B), NT(C) and NT(D) category** shall also produce **Non-Creamy layer certificate Valid up to 31<sup>st</sup> March 2012**.
- The SC/ST Candidates belonging to 'other than state of Maharashtra' will have reservation in admission only and they will have to pay full fees at the time of admission. They should submit their fee concession claims to their respective state Govt. through ICT office.
- For confirmation of seat allotted, Candidates have to submit a Pay Order/ Demand Draft in favour of '**Institute of Chemical Technology, Mumbai**', payable at Mumbai. Candidates claiming concession in backward class category have to submit a Pay Order/ Demand draft of appropriate value.

### 9.6.2 Caution Money Deposit::

Caution money deposit received from the students shall be refunded after successful completion of the course or after cancelling the admission. Unless there is any recovery, no deduction shall be made from the caution money deposit. However, the amount of caution money deposit shall be credited to institute, if the candidate does not apply for refund, within 3 complete financial years after the student actually leaves the institution; or, within 3 complete financial years after the date of successful completion of the course, whichever is earlier.

### 9.6.3 Reimbursement of Tuition fee:

Candidates claiming concession under the categories of EBC and sons and daughters for teaching and non-teaching staff of primary, secondary and higher secondary schools shall pay entire fee as applicable at the time of admission and subsequently candidates have to apply to the respective authorities for reimbursement of tuition fees. The quantum of reimbursement received by the institute from the concerned authorities shall be disbursed to the candidate.

### 9.6.4 Cancellation of admission and Refund of fees:

#### Refund of tuition fee, development and other fees after cancellation of admission secured at ICT

Candidate who has been admitted to ICT may cancel admission by submitting an application in duplicate, in the prescribed **Pro forma - E** and request for refund of fees. The refund of fees as applicable shall be made in due course of time. It is made clear that such application for cancellations will be considered if and only if the admission has been confirmed by paying the prescribed tuition fee and other fees in full and by submitting all the necessary original documents. Refund shall be made after deduction of cancellation charges as shown below –

Sr. No.	SITUATION	REFUND
1	Request received before the date of start of academic session.	Entire fee less Rs.1000/-
2	Request received after the date of start of academic session.	Entire fee less the total fee for one month. (Tuition, development, other and hostel fee)
3	Request received after 30 days from the date of start of academic session.	No refund (except Library Caution Money Deposit)

Notes:

- 1) Academic session means start of lectures, which will be displayed on the website and ICT Notice Board.
- 2) For calculation of amount on the pro-rata basis, one month shall be treated as one unit.

All Rights regarding the admissions at the ICT are reserved with the Director (Vice Chancellor), ICT.

## 10. Admission to Doctoral (Ph. D.) Courses

### 10.1 Courses of Studies and Capacity

Table 10.1 shows the various doctoral programmes (by research) in various disciplines in Science and Technology. Apart from original research, all Ph.D. programmes have a course work component effective from September 2009.

**TABLE 10.1: DOCTORAL (Doctor of Philosophy) DEGREE COURSES**

No.	DEGREE	COURSE
1.	Ph. D. (Tech.) in Chemical Technology	Bioprocess Technology
2.		Chemical Engineering
3.		Dyestuff Technology
4.		Fibres and Textile Processing Technology
5.		Food Biotechnology
6.		Food Engineering and Technology
7.		Green Technology
8.		Nanotechnology
9.		Oils, Oleochemicals & Surfactants Technology
10.		Pharmacy <sup>@</sup>
11.		Pharmaceutical Technology
12.		Polymer Engineering and Technology
13.		Surface Coating Technology
14.		Plastic Engineering
15.	Ph. D. (Tech.) in Technology	Civil Engineering
16.		Electrical Engineering
17.		Electronics Engineering
18.		Mechanical Engineering
19.	Ph. D. (Sci.)	Biochemistry
20.		Biotechnology
21.		Chemistry (Inorganic/Organic/Physical)
22.		Physics
23.		Mathematics
24.	Post graduate Diploma course <sup>#</sup> (2years-4 semesters) [conducted on Saturdays and Sundays only]	Chemical Technology Management

<sup>@</sup> **Ph.D (Tech) in Pharmacy** is offered in four different branches: (i) Pharmaceutics, (ii) Pharmaceutical Chemistry, (iii) Pharmacology and (iv) Pharmacognosy. Separate written tests will be conducted for each of the above branches. Candidates may appear for written tests in one or more of these and a separate merit list will be prepared for each.

**Intake Capacity:** There is no prescribed intake capacity for any of the Doctoral courses/ branches since the number of available fellowships and the requirement by the research supervisors varies every year. Several research projects, either funded by various government agencies or private industries, have provisions for fellowships. No admission to a Ph.D. course is done without fellowship, although the amounts vary depending on the source of funding and the candidate's qualifications.

Candidates admitted to **Ph.D. (Tech.) in Chemical Technology** conduct research under the recognized faculty from the Department of Chemical Engineering, all Departments of Chemical Technology, DBT-ICT Centre for Energy Bio-sciences and ICT-DAE Centre for Chemical Engineering Education & Research.

Candidates admitted to **Ph.D. (Tech.) in Technology** conduct research under the recognized faculty from the Department of General Engineering.

Candidates admitted to **Ph.D. (Sci.) in Chemistry** conduct research under the recognized faculty not only from the Department of Chemistry, but also from the other departments which include Department of Chemical Engineering, all Departments of Chemical Technology, DBT-ICT Centre for Energy Bio-sciences, ICT-DAE Centre for Chemical Engineering Education and Research.

# The post-graduate diploma in Chemical Technology Management (30 seats) is meant for candidates registered for Doctoral degree from the ICT or other institutes/Universities as well as for industry personnel.

## 10.2 Fellowships for Doctoral Programmes

### 10.2.1 UGC-SAP Meritorious Fellowships for Ph.D. Programmes:

The Empowered Committee of the UGC has taken several innovative steps to encourage Science and Technology research and building of infrastructure in Universities and Colleges. Thus, UGC has been providing these fellowships to all Departments recognized under Special Assistance Programme (SAP) or non-SAP Departments. The number of fellowships sanctioned by UGC for a particular department depends on its track record of producing Ph.D.s, number of publications in peer reviewed journals, and the SAP status. Those qualified with a GATE/ GPAT score receive fellowship with HRA, whereas non-GATE students get a consolidated amount.

1. 15 **UGC-SAP** fellowships in Department of Chemical Engineering
2. 15 **UGC-SAP** fellowships in the Centre for Physico-chemical Aspects of Textiles, Fibres, Dyes and Polymers to be distributed among the three departments (Dept. of Fibres & Textile Processing Technology, Dept. of Dyestuff Technology and Dept. of Physics).
3. 15 **UGC-SAP** fellowships in Department of Food Engineering & Technology
4. 15 **UGC-SAP** fellowships in Department of Pharmaceutical Sciences & Technology
5. 05 **UGC-SAP** fellowships in Department of Chemistry
6. 02 **UGC-SAP** fellowships in Department of Oils, Oleochemicals & Surfactants Technology
7. 15 **UGC-SAP** fellowships for Green Technology (with University of Mumbai)

### 10.2.2. Inspire Fellowship from Department of Science and Technology, Govt. of India:

First Rank holders in Bachelor's degree or master's degree in Engineering/ Technology/ Pharmacy of any UGC/ AICTE recognized Indian University or Institute/ Statutory Body in India can apply for award of INSPIRE FELLOWSHIP, a scheme of the Government of India to avail research grants for a period of five years for doing research leading to Ph.D. (Tech.) degree. The Bachelor's degree holders need to register for Integrated Ph.D. (Tech.) degree from the beginning of the research, (unlike other Integrated Ph.D. (Tech.) candidates, who are first registered for Master's degree and only after successful completion of course work for Master's and in month of April of second year registered for Doctoral degree). Application format and necessary documents for application are available on the website [www.inspire-dst.gov.in](http://www.inspire-dst.gov.in). Eligible candidates may even apply directly to DST and after getting provisional acceptance, they may be considered for admission at ICT, subject to fulfillment of other criteria.

## 10.3 Eligibility Criteria for the Admissions:

### 10.3.1 Doctor of Philosophy in Technology – Ph.D. (Tech.)

#### A. General Eligibility Criteria

- For courses mentioned in Table 10.1 above, numbering 1 to 14, the candidate must have passed the Master's degree examination in the Chemical Engineering / Chemical Technology/ Pharmacy/ Plastic Engineering of ICT or any other UGC recognized University as equivalent thereto with First Class [60% marks or equivalent GPA (55% marks in case of backward class category or equivalent GPA)].
- For courses mentioned in Table 10.1 above numbering 15 to 18, the candidate must have passed the Master's degree examination in Civil/ Electrical/ Electronics/ Mechanical/ Production/ Industrial/ Instrumentation Engineering from any UGC recognized University as equivalent thereto with First Class [60% marks or equivalent GPA (55% marks in case of backward class category or equivalent GPA)].
- The candidates qualified in NET/ GATE/ GPAT/ CSIR/ DBT/ – JRF examinations or other equivalent examinations will be preferred.

- In addition, the candidates must undergo institutional written test and interview to qualify for admission through merit.

**Apart from regular full time on- campus candidates, following candidates are also eligible to take admission to Ph.D. (Tech.):**

- Permanent full time teachers of College/ Institute (See **10.3.1.B** below for details)
- Employees of National laboratories/ Institutes/ Government (See **10.3.1.C** below for details)
- Employees of Industry (See **10.3.1.D** below for details)

**NOTE:-** The selection of all the candidates for Ph.D. (Tech.) including GATE/ GPAT- JRF qualified candidates shall be based on the score in the qualifying examination, performance in the written test and interview (if short listed in written test) conducted by the Institute. However, Persons qualified in NET/ CSIR/ DBT–JRF and holding valid fellowship are exempted from the Written Test.

These rules also apply to the candidates who conduct research on sponsored projects (Govt. or Private) leading to a degree.

**B. Eligibility Criteria for Teachers for admission to Ph. D. (Tech.) / Ph. D. (Sci.)**

- The candidate should be a permanent teacher having full time teaching experience of at least two years in Degree College or five years in Junior college and should have First Class [60% marks or equivalent GPA (55% marks in case of backward class category or equivalent GPA)] at Bachelor's and/ or Master's degree from a UGC recognized University.
- Teachers who have been in the services of any Engineering and Technology Colleges approved by the UGC/ AICTE are entitled for registration for Ph D. (Tech.) with the faculty of the ICT.
- Teachers who have been in the services of any Science Colleges approved by the UGC are entitled for registration for Ph D. (Sci.) with the faculty of the ICT.
- The college management should undertake the responsibility of releasing the candidate for course work, experimental work or discussions with the concerned research guide from time to time. A proper time table should be prepared by the concerned teacher and his supervisor, which will be approved by the Head of Department/ Centre Co-coordinator. A bond in this regard should be signed and approved by the Director, ICT.
- Teachers can work in the ICT laboratories during vacations and holidays and after their office hours if they come from colleges in the city or nearby. They must indicate on which date they will avail of the research facilities in ICT. A proper log book must be maintained by the candidate duly signed by his supervisor which will be authenticated by the Head of Department/ Centre Co-coordinator.
- A maximum period of 5 years extendable by 1 year will be allowed in case of teachers who carry out research part time but put in at least 3 months full time work in a year in the ICT labs. In such cases, part of the experimental work could be allowed to be done in their premises for which their management will provide them with necessary facilities. The characterization and other sophisticated analysis must be done in ICT. Exclusive theoretical work should be discouraged as much as possible to give the teachers a hands-on experience and to bring them into an environment of research. However, this will be left to the individual supervisor's discretion, who should take abundant precaution to avoid unethical practices.
- The registered candidates will be required to publish or patent some part of their work within two years of the registration otherwise this registration will not be continued. The publication must be done in peer reviewed international journals. Multi-authored papers without much input from the teacher should be avoided. Conference proceedings which are not peer reviewed will not be considered as publications.
- Teachers registering themselves as Ph.D. student of ICT should not register any Masters students with themselves in his/her own college to avoid research by proxy. The candidate as well as his/her supervisor must give an undertaking, with a counter signature of the concerned principal to this effect to avoid degeneration of this novel concept into a Ph.D. by unscrupulous means.

i) If the teacher intends to join the ICT on leave without pay for a period of three years, then the candidate may be eligible for the UGC fellowship under our SAP programme, provided he/ she successfully clears the Institutional entrance tests.

j) All regular admissions criteria are applicable to these candidates and they must also do the course work required for Ph.D. programme.

### **C. Eligibility Criteria for candidates working in National Laboratories/ Institutes/ Government for admission to Ph. D. (Tech.) / Ph. D. (Sci.)**

Following are the requirements in addition to the criteria mentioned under heading **10.3.1. A** above:

a) The candidate should be a permanent employee working in National Laboratories/ Institutes/ Government Laboratories having minimum 2 years of service and should have First Class [60% marks or equivalent GPA (55% marks in case of reserved category or equivalent GPA)] at Bachelor's and/ or Master's degree from a UGC recognized University.

b) The management of the organisation should undertake the responsibility of releasing the candidate for course work, experimental work or discussions with the concerned research guide from time to time. A proper time table should be prepared by the concerned candidate and his supervisor, which will be approved by the Head of Department/ Centre Co-coordinator. A bond in this regard should be signed and approved by the Director, ICT.

c) Such candidates can work in the ICT laboratories during vacations and holidays and after their office hours if they come from organisation in the city or nearby. They must indicate on which date they will avail of the research facilities in ICT. A proper log book must be maintained by the candidate duly signed by his supervisor which will be authenticated by the Head of Department/ Centre Co-coordinator.

d) The registered candidates will be required to publish or patent some part of their work within two years of the registration otherwise this registration will not be continued. The publication must be done in peer reviewed international journals. Multi-authored papers without much input from the teacher should be avoided. Conference proceedings which are not peer reviewed will not be considered as publications.

e) All regular admissions criteria are applicable to these candidates and they must also do the course work required for Doctoral programme.

### **D. Admission for Industry Employed candidates to Ph.D. (Tech.) / Ph.D. (Sci.)**

1. Eligibility as per normal criteria set out by ICT in Section **10.3.1 A** and **10.3.2 A** and a minimum 2 years industrial experience.
2. Research organization/ Industry/ R & D Centres/ Industrial R and D labs/ QA Laboratory/ Eco-laboratory/ Testing Laboratory, which are recognized by DSIR, are also required to get recognition by the ICT for doing Ph.D. (Tech.) / Ph.D. (Sci.) work related to the specific topics from ICT. No individual can sponsor a candidate for the Ph. D. programme.
3. The sponsoring industry must give an undertaking on a stamp paper of Rs. 100/- that the candidate is their permanent employee with 2 years continuous service and is being sponsored by them for Ph. D. programme at the ICT, they will pay all fees in advance and that they have adequate research facilities including modern instrumentation required to do research for which the candidate is going to be registered. Industry must also agree to grant leave to the candidate to fulfil the course requirements at ICT.
4. Recognition of sponsoring industry by DSIR, DST, DBT or any central agency like ministry and by ICT is necessary.
5. ICT has a separate mechanism to grant recognition to industry upon payment of prescribed fees and recommendation by a team of experts.
6. For obtaining recognition by ICT, the industry will have to make application in specific format giving details of equipment/ machinery/ instruments available for research, along with an application fee of Rs. 1 lakh.
7. An appropriate committee will be constituted by ICT to visit the laboratory and to make recommendation to the Director for the recognition. All the expenses in connection with the visit by the committee will be borne by the industry.

8. The recognition will be valid for duration of 3 years with fees of Rs. 10 lakhs and will not be candidate specific. A maximum 2 students may be allowed to register under the ICT faculty during the first year. Continuation laboratory of recognition beyond 3 years will be subject to a fresh review and an amount of Rs. 3 lakhs per annum will be payable thereafter. The industry must ensure that the total period of recognition is consistent with the normal period of completion of Ph. D. programme by the candidate.
9. The rest of the procedure, i.e. institutional tests for admission, fee structure, course requirements etc. will remain the same. The candidate/s will be permitted to work in the ICT recognized laboratory and will be governed by all rules and regulations applicable to regular ICT students.
10. ICT is not responsible if the candidate wishes to change his/her job and the liabilities of the candidate towards the original sponsor. In that event, if the candidate changes his job during the period of registration, he/she should produce a “**No Objection Certificate**” from the previous as well as new employer, for continuation of registration as a student. Recognition of the new organization where the candidate wishes to join is governed by Rule 4 above.
11. During the programme of Ph. D. the candidate must spend at least two months every year at the ICT. A proper log book of candidate’s attendance should be maintained by the supervisor (guide) of the candidate, authenticated by the HOD.
12. The sponsor will also pay a contingency grant of Rs. 1.00 lakh (to be equally shared between Department and guiding teacher).

#### **E. Rules and Eligibility Criteria for admission to Integrated Ph.D. (Tech.)**

Institute of Chemical Technology (ICT) has a proven track record in training high quality manpower and in conducting research in Chemical Engineering, Chemical Technology, Pharmacy and Allied sciences. In view of the need of attracting talented graduates to Research career in Engineering and Technology, and for enhancing the number of quality Ph.D.s, ICT has initiated a programme of Integrated Ph.D. (Tech.) in Chemical Engineering, Chemical Technology, and Pharmacy.

The Integrated Ph.D. (Tech.) Degree Programme is designed to identify candidates with strong potential for a career in Research and to Develop Human resources for the India’s future needs in Chemical Engineering and Chemical Technology.

The programme has the following objectives:

- (i) To provide avenues for Doctoral degrees to candidates with talent and aptitude for carrying out advanced research and development activities in Technology.
- (ii) To furnish a multidisciplinary, flexible and innovative Doctoral research programme with special emphasis on
  - (a) Acquisition of proficiency in research, knowledge, data generation and analysis, mathematical modelling, and management with sharpening skills in innovative experimental methods and problem-solving capabilities;
  - (b) Creation of a pool of young talented, dedicated and committed individuals with passion and involvement in pursuing research and development as a career.
  - (c) Inculcation of attitude, temper and outlook for developing social commitment as well as high level of scientific ethics and integrity.
- (iii) To disseminate the new knowledge in the form of publications, patents, theses, seminars and conferences. Efforts will also be made to help the society and the industry and hence the economy of the country.

#### **Selection of candidates:**

i. The candidate, applying for the Integrated Ph.D. (Tech.) programme, must have a Bachelor’s degree in Chemical Engineering/ Chemical Technology/ Pharmacy with more than 65% marks or equivalent GPA (60% marks or equivalent GPA for candidates from reserved category) of ICT or from any accredited or AICTE recognized Engineering and Technology Institute. A valid GATE/GPAT is mandatory.

#### **Selection process:**

i. The candidates will be selected on the basis of an All India level written test and an Interview.



*At least one external expert will be invited for the interviews who will be nominated by the Director from a list suggested by the Department. The panel will also have at least one member from other departments of the Institute. Total number of members on the Interview Committee will not be less than five.*

- ii. The selection of the candidates should be strictly on merit and on the basis of performance in the written test and interview conducted by the ICT.
- iii. The candidate must score a minimum of 50% in the written examination of the Institute to qualify for the interview.
- iv. The list of qualifying candidates will be prepared on the basis of marks in written test and Interviews in 70:30 ratio.

#### **Course Work and Registration for Integrated Ph.D. (Tech.):**

- i. The registration of the candidate of integrated Ph.D. (Tech.) shall be initially for Master's degree in the same discipline until he/she completes the Course work.
- ii. The candidates will have to complete the course work of Master's degree in the same discipline with a minimum GPA of 7.0 before change of registration to Ph.D. (Tech.) degree.

Since the programme has an objective of developing best human resources in Research, it is essential that the selection of the candidates is done with utmost care. They are also emphasized about successful completion of the course work.

- iii. The candidate may be permitted to carry the credits of equivalent course, work of at least two semesters, if it is completed in IITs/NIT/ HBNI, or any other reputed Government/ AICTE recognized Institution that has signed an MoU with ICT for transfer of credits, provided as the course work is certified by the competent authority of that Institution. Such candidates may be exempted from taking the respective course work required for the Ph.D. (Tech.) programme.  
These candidates should be encouraged to take 4 audit courses related to their own research topic.
- iv. Only after the successful completion of the course work and one year of research the candidate's registration will be changed to Ph.D. (Tech.). The certificate for completion of course work will be mandatory for this.
- v. The Registration and review of progress of these candidates will follow the same procedures as for other Ph.D. (Tech.) candidates registered in the Institute.
- vi. Any candidate who completes the course work as specified above and completes minimum of 1 year of Research project will be awarded the Master's degree in respective discipline, if he/she wishes to discontinue further research or fails to acquire requisite GPA of 7.0 in Master's programme.
- vii. Candidate having poor performance in the Master's course work (as given above) will not be registered for Ph.D. (Tech.) degree and may be allowed to submit a thesis on the basis of one year of research work to get Master's degree.
- viii. On successful completion of the entire programme the candidate will be awarded both the degrees, respective Master's and Ph.D. (Tech.) (Dual Degree) at the end of the programme.

#### **NOTE:-**

1. The selection of all the candidates for Ph.D. (Tech) including NET/ GATE/ GPAT/JRF qualified candidates shall be based on the score in the qualifying examination, performance in the written test and interview (if short listed in written test) conducted by the Institute. However, Persons qualified in NET/ CSIR/ DBT-JRF are exempted from the Written Test.
2. These rules also apply to the candidates who conduct research on sponsored projects (Govt. or Private) leading to a degree.

### **10.3.2 Doctor of Philosophy in Science – Ph.D. (Sci.)**

#### **General Eligibility Criteria**

- For courses mentioned in Table 10.1 above, numbering 19 to 23, the candidate must have passed the Master's degree examination in the faculty of Science of any University recognized by UGC with minimum of 55% marks or equivalent GPA (50 %marks or equivalent GPA for backward class category).

OR

The candidate must have passed the Master's degree by research of ICT or of any other UGC recognized University.

OR

The candidate is a permanent teacher having full time teaching experience of at least two years in Degree College or five years in Junior college. (See **10.3.1.B** above for details)

OR

The candidate is a person with M.Sc. degree of any recognized university and is working in National laboratories/ Institutes/ Government. (See **10.3.1.C** above for details)

- The candidates qualified in NET/ CSIR/ DBT–JRF and holding valid fellowship will be preferred.
- In addition, the candidates must undergo institutional written test and interview to qualify for admission through merit.

**NOTE:-** The selection of all the candidates for Ph.D. including NET/ GATE- JRF qualified candidates shall be based on the score in the qualifying examination, performance in the written test and interview (if short listed in written test) conducted by the Institute. However, Persons qualified in NET/ CSIR/ DBT–JRF and holding valid fellowship are exempted from the Written Test.

**Apart from regular full time on- campus candidates, following candidates are also eligible to take admission to Ph.D. (Sci.):**

- (i) Permanent full time teachers of College/ Institute (See **10.3.1.B** below for details)
- (ii) Employees of National laboratories/ Institutes/ Government (See **10.3.1.C** below for details)
- (iii) Employees of Industry (See **10.3.1.D** below for details)

These rules also apply to the candidates who conduct research on sponsored projects (Govt. or Private) leading to a degree.

#### **Rules Governing the Course Work for the Ph.D. Candidates 10.3.1.A – D and 10.3.2**

As per the UGC directives and the Ph.D. reforms initiated at ICT, following are the rules governing the course work for a Ph.D. degree programme:

1. All candidates registered at ICT for the Ph.D. degree from academic year 1<sup>st</sup> July, 2009 will have to complete the course work.
2. Every Ph.D. candidate will complete two Credit courses (theory) and three Audit courses (theory) during the entire duration of Ph.D. The total credit points should be minimum 15.
3. All the course work must be completed before submission of synopsis for the thesis.
4. The selection of the credit and audit courses will be by mutual consultation between the Candidate and the Research Supervisor.
5. The candidate can select any courses offered by ICT that he/ she had not undergone earlier at ICT or elsewhere, either as credit or audit courses.
6. The candidate may choose to take the courses at Institute(s) other than ICT, provided there is an MOU signed between the Institute and ICT for transfer of credits.
7. For the audit courses, a minimum 75% attendance is compulsory.
8. Each course instructor will issue an Attendance certificate in a prescribed format to the candidate at the end of the semester on completion of the course.
9. Submission of copies of attendance certificates will be compulsory at the time of submission of synopsis of the thesis for the Ph.D. Degree.
10. The Attendance Certificates for the audit courses will be maintained by candidate and sent to the Academic Office through the Supervisor and Head of the Department at the time of the submission of the synopsis.

## **Ph.D. (Tech.) Programme in Chemical Engineering under ICT-DAE Centre for Knowledge Based Engineering**

This Ph.D. programme will induct maximum 20 students per year.

In view of the success of the collaborative programme through the Centre for Knowledge Based Engineering (KBE), BARC and IGCAR proposed to enlarge the scope of collaboration by establishing a ICT-DAE Centre for Chemical Engineering Education and Research that will synergize the strengths of both these organizations. ICT has proven track record in training high quality manpower and in conducting research in Chemical Engineering and Technology. On the other hand, BARC and IGCAR have demonstrated over decades their ability to conduct multi-disciplinary, mission oriented R&D leading to a large number of indigenous and innovative chemical engineering processes, equipment and instruments, and technologies. DAE and ICT have entered into MoU to establish the **ICT-DAE Centre for Chemical Engineering Education and Research**, to cover the following activities.

- (A) Instituting an interdisciplinary Ph.D. programme in Chemical Engineering.
- (B) Undertaking R&D projects in the areas of common interest and related to nuclear reactor, fuel cycle and advanced technologies.

The ICT-DAE Ph.D. Degree Programme is designed to identify candidates with strong potential for a career in Research and to Develop Human resources for the India's Nuclear Energy Programme. DAE and ICT agreed to jointly work for setting up the ICT-DAE Centre for Chemical Engineering Education and Research for implementing the following objectives:

- (i) To provide avenues for Doctoral degrees to Ph. D. scholars with talent and aptitude for carrying out advanced research and development activities in Science and Technology.
- (ii) To furnish a multidisciplinary, flexible and innovative Ph. D. research programme in Chemical Engineering with special emphasis on:
  - (a) Acquisition of proficiency in research, knowledge, data generation and analysis, mathematical modelling, and management with sharpening skills in innovative experimental methods and problem-solving capabilities;
  - (b) Creation of a pool of young talented, dedicated and committed individuals with passion and involvement in pursuing research and development as a career;
  - (c) Inculcation of attitude, temper and outlook for developing social commitment as well as high level of scientific ethics and integrity.
- (iii) To evolve a symbiotic relationship between the ICT and DAE Institutions in such a way that it enables the Collaborative Programme to grow and develop, and in turn ensures that research projects of relevance to the objectives of DAE research institutions are integrated with creative and innovative content.
- (iv) To select students on the basis of an all-India test and subsequent interview jointly conducted by ICT and BARC/IGCAR.
- (v) To promote effective linkages on a continuing basis between ICT, BARC and IGCAR and the Industry for joint research projects and training programmes and other academic activities related to these Institutes. The expertise and experience so gained shall be shared with other Universities in the country at large.
- (vi) To disseminate the new knowledge in the form of publications, patents, theses, seminars and conferences. Effort will also be made to help the society and the industry and hence the economy of the country.

The Ph.D. scholars will take up research projects primarily defined by BARC and IGCAR. However, there will be a certain degree of flexibility for selecting research projects outside the areas of relevance to DAE. To take advantage of the excellent laboratory and library facilities at the DAE institutions, the faculty and students will be provided access to conduct experiments and use of the library and computational facilities at the DAE institutions.

The research projects will be defined by the collaboration team, enumerating the work methodology, the components of research to be done at ICT and BARC / IGCAR, the starting point and the end goals and the performance indicators.

### **1. Selection of candidates:**

#### **1.1 Qualifications**

- a) *Masters degree in Chemical Engineering, Metallurgical and Mechanical Engineering*

The engineering post-graduate candidates should have a good academic record (more than 60 % marks) or equivalent GPA and above at the graduation /post-graduation level. Although GATE is not essential, qualifying GATE with minimum 85 percentile would be desirable.

b) *Bachelors degree in Chemical Engineering, Metallurgical and Mechanical Engineering*

The engineering graduate candidates should have a good academic record with more than 65 % marks or equivalent GPA and above at the graduation/ post-graduation levels. The Engineering graduates should have preferably cleared GATE examination with at least 85 percentile score.

c) *M.Sc. degree in Chemistry, Physics and Mathematics.*

The Science post-graduate students should have a good academic record with minimum 65% marks or equivalent grade in graduate and post graduate examinations.

Candidates qualified in CSIR/NET examination will get preference.

*(In exceptional cases candidates with B.Sc. qualification and a minimum 70% marks in qualifying examination will be considered for the programme)*

d) *DAE employees with above qualifications*

DAE scientists and employees in DAE establishments with above qualifications will be considered only on recommendation from respective DAE establishment's competent authority.

## **2. Selection process:**

2.1 The candidates will be selected strictly by merit on the basis of performance in the all India written test and interview conducted jointly by ICT faculty and DAE experts. External experts can be invited for the interviews.

2.2 The candidate must score a minimum percentage of 50% in the written examination of the Institute to qualify for the interview.

2.3 The list of qualifying candidates will be prepared on the basis of marks in written test and Interviews in 70:30 ratio.

## **3. Course Work and Registration:**

The Details of the course work prescribed to candidates with different backgrounds is given in guidelines separately.

3.1 For post-graduates in Engineering, the rules and regulations of Ph.D. Programme are the same as other candidates pursuing Ph.D. in the Institute. (See 10.3.1 A)

3.2 The Engineering graduates and Post-graduates in Science will initially register for M. Chem. Engg. and M.Tech in Chemical Engineering degrees, respectively, and will have to complete the course work with FIRST class *before applying for transfer of registration to Ph.D. degree in Chemical Engineering.* They will follow the ICT's rules for transfer of registration to Ph.D. degree.

3.3. The Post-graduate candidates in Science qualified in CSIR/NET examination can be considered for the selection without written test. They will have to appear however for the interviews. On selection they will have to clear the **course work** as prescribed in guidelines for the programme.

Since the DAE programme has an objective of developing human resources in Chemical Engineering, it is essential that the selection of the candidates is done with utmost care. They are also emphasized about successful completion of the course work.

3.4 DAE scientists/engineers with Master's degree holders in Chemical/Mechanical /Metallurgical Engineering disciplines can be considered for admission to the ICT-DAE programme of Ph.D. in Chemical Engineering provided they clear the Institute's entrance examination and interview.

3.5 The candidates with B. Tech./ M.Sc. degree from DAE establishments will be considered for the programme on a case- to-case basis, only if they have completed successfully the DAE-BARC Training School programme and/or completed equivalent course work in other recognized and reputed institutes such as IITs, HBNI, to get sufficient number of credits as prescribed by the Institute for Master's degree course work. These candidates will have to clear the entrance examination and interviews. The DAE candidates may be permitted to carry the credits of equivalent course work if it is completed in reputed Government/AICTE/ICT recognized Institutions, such as IITs, NITs, HBNI, BARC training school, etc. so long as the course work is certified by the competent authority of such Institution. Such candidates are exempted from taking up the course work required for the Ph.D. programme. But these candidates should be encouraged to take audit courses related to their own research topic.

3.6 Only after the successful completion of the course work the candidate's registration for Ph.D. programme will be confirmed. The certificate for completion of Course work will be mandatory for final registration to the Ph.D. degree programme.

3.7 The Registration and progress review of the candidates will follow the same procedures as the other Ph.D. candidates registered in the Institute.

3.8 Any candidate who completes the course work as specified against each category and completes minimum of 1 year of Research project can be considered for award of M. Tech. degree in Chemical Engineering.

**Course work- Typical List of subjects to be taken by Science Post Graduates, Engineering Graduates & post-graduates:**

Material and Energy Balance Computations	Chemical Reaction Engineering	Momentum Transfer
Industrial and Engineering Chemistry	Biochemical Engineering	Heat Transfer
Generation and Transmission of Power	Advanced Separation Processes	Mass transfer
Electrical Engineering and Electronics	Nuclear Chemical Engineering	Unit Operations
Applied Mechanics and Strength of Materials	Structure - Property Relationships	Engineering Graphics
Process simulation and optimization	Materials Physics and Chemistry	Process simulations
Materials Processing and fabrication technology	Advanced Reactor Engineering	Nuclear chemistry
Classical and Statistical Quantum Mechanics	Statistical methods of analysis	Transport phenomena
Instrumental methods of analysis	Advanced Mass Transfer	Sources of energy
Nuclear Reactor Theory	Radiation chemistry	
Advanced Chemical Engineering Thermodynamics	Project Engineering Management and Economics	

**Guidelines for Ph.D. (Tech.) in Chemical Engineering under ICT-DAE Centre**

**Category 1:** B.E. in Chemical Engineering / B.Tech (Chem.Engg.) / B.Chem.Engg. / B.Tech.(Chem.Tech.) (ICT)

*Required Courses:*

- (i) Course work for M.Chem.Engg. (credit courses). (to be completed in 2 semesters from the date of admission)
- (ii) 4 Credit courses related to Nuclear Engineering (to be completed in 3 semesters from the date of admission)

Nuclear and Reactor Physics	Chemistry of Radionuclides
Nuclear Chemical Engineering	Material Science in Nuclear Engineering

**Category 2:** Bachelor's degree in Chemical Engineering + Course work in BARC Training School

*Required Courses:*

- (i) 4 credit courses including one seminar in Chemical Engineering to be decided by the supervisor and approved by the coordinator followed by PGPC. (to be completed in 2 semesters from the date of admission)
- (ii) If the candidate has completed equivalent course work in reputed and recognized Institute such IIT, the credit transfer can be permitted for the candidates from DAE establishments.

**Category 3:** Bachelor's degree in any branch of Engineering (Mechanical/Metallurgical) (except Chemical Engineering / Chemical Technology) + Course work in BARC Training School

*Required Courses:*

8 courses and one Seminar in Chemical Engineering to be decided by the supervisor and approved by the coordinator followed by PGPC. (to be completed in 4 semesters from the date of admission)

Applied Mathematics – I, II and III	Material and Energy Balance Computations
Momentum and Mass transfer	Energy Engineering
Chemical Engineering Operations	Heat Transfer
Chemical Reaction Engineering	Design and Analysis of Experiments

**Category 4:** Master's degree in Chemical Engineering / Master's degree in Chemical Technology (ICT)

*Required Courses:*

4 credit courses related to nuclear Engineering(to be completed in 2 semesters from the date of admission)

Nuclear and Reactor Physics	Nuclear Chemical Engineering
Chemistry of Radionuclides	Material Science in Nuclear Engineering

**Category 5:** M.Tech. Degree in Chemical Engineering from HBNI + Course Work in BARC Training School

*Required Courses:* NIL

**Category 6:** M.Tech. Degree in any branch of Engineering (Mechanical/Metallurgical) (except Chemical Engineering / Chemical Technology) from HBNI + Course Work in BARC Training School

*Required Courses:*

(i) 5 credit courses and one seminar in Chemical Engineering to be decided by the supervisor and approved by the coordinator followed by PGPC. (to be completed in 2 semesters from the date of admission)

**Category 7:** M.Sc. Degree in Physics / Chemistry / Mathematics + Course work in BARC Training School

*Required Courses:*

(i) 10 credit courses and one seminar in Chemical Engineering to be decided by the supervisor and approved by the coordinator followed by PGPC. (To be completed in 4 semesters from the date of admission)

**Category 8:** M.Sc. Degree in Physics / Chemistry/ Mathematics

*Required Courses:*

(i) 14 credit courses and one seminar in Chemical Engineering to be decided by the supervisor and approved by the coordinator followed by PGPC. The typical courses will be those listed below (**similar to Category 9**) (to be completed in 4 semesters from the date of admission)

**Category 9:** B.Sc. Degree in Physics / Chemistry / Mathematics

*Required Courses:*

(i) Typically 20 credit courses related to comprising of: (to be completed in 4 years from the date of admission)

- (a) B. Chem. Level courses (Credit courses)
- (b) M. Chem. Level Courses (Credit courses)

Advanced Momentum transfer	Thermodynamics of Phase Equilibrium
Advanced Heat Transfer	Advanced Separation Processes
Advanced Mass Transfer	Advanced Reactor Engineering
Advanced Reaction Engineering	

(c) Nuclear Engineering Level courses (audit courses)

Nuclear and Reactor Physics	Nuclear Chemical Engineering
Chemistry of Radionuclides	Material Science in Nuclear Engineering

## 10.4 APPLICATION PROCEDURE FOR PH.D. COURSES

For admissions at the ICT for all the Ph.D. courses, a candidate should obtain appropriate application form(s) for the course to which he/she is seeking admission; along with handbook (See page iii for details).

**(Refer time schedule for each of the following stages displayed on ICT website [www.ictmumbai.edu.in](http://www.ictmumbai.edu.in))**

### 10.4.1 Step I: Purchase of Application Form

The candidate shall purchase and fill the appropriate application form/s, separate for each course of choice, namely,

- Ph.D. (Tech.)
- Ph.D. (Sci.)

The admission form and Handbook will be available for sale at the ICT counter by payment of cash. The fees for application along with Handbook are given on page iii of this Handbook.

The forms may also be ordered by post or downloaded from the ICT web site, [www.ictmumbai.edu.in](http://www.ictmumbai.edu.in). The payment, while ordering by post, should include the amount equal to the “**By Post**” amount and be made only by a **Pay Order/DD** of any Nationalized/ Scheduled/ Private Sector Commercial Bank drawn in favour of “**Institute of Chemical Technology, Mumbai**”, payable at Mumbai and it is non-refundable and non-transferable under any circumstances. **Payment by cheque or money order will not be accepted.** The admission form along with a copy of the Handbook will be sent by **Registered Post Parcel**.

### 10.4.2 Step II: Submission of Application Form

All the relevant entries in the application form must be completed in legible handwriting or may be typewritten. Incomplete forms will be rejected and no correspondence will be made in this regard. **Writing contact details such as Mobile No./ Telephone No. and email address in the application form is essential.**

The duly filled form along with attested photocopies of required certificates to substantiate the claims made in their application form should be submitted, by the last date notified, at ICT counter or sent to the ICT by Post/ Courier, etc. along with a **Pay Order/ DD** of any Nationalized/ Scheduled/ Private Sector Commercial Bank drawn in favour of “**Institute of Chemical Technology, Mumbai**”, payable at Mumbai and it is non-refundable and non-transferable under any circumstances. **Payment by cheque or money order will not be accepted.**

The application form has a tear-off receipt at the bottom with the application number. The receipt should be filled in by the candidate and shall be signed and stamped by the clerk at the counter while accepting the form. **This receipt should be preserved and the application number must be stated for any future correspondence.**

**Applications received after the due date will not be considered for generating merit list. ICT is not responsible for the delay occurred by Post/ Courier, etc.** Incomplete applications shall be rejected without entering into any correspondence with the applicant.

- The candidates seeking admission at the ICT must submit attested photocopies of all the documents as given in **Table below** along with the application form.
- Attachment of any certificates will not be accepted separately after submission of the application form.
- The candidates belonging to the SC/ ST categories will be required to submit **The Caste Certificate, the Caste/ Tribe Validity Certificate wherever applicable** at the time of submitting the application form, failing which the category claimed, will not be granted and the **candidate will be treated as a General candidate.**
- The candidates shall not attach a copy of any other certificate which is not asked for, such as certificates for participation in sports, cultural activities, etc.
- The photocopies of certificates or documents attached to the application form should be attested by the Principal of the College or Gazetted Officer or Special Executive Magistrate or Head Master of a Secondary School or teaching staff of a Government /Govt. Aided College / Polytechnic not below the rank of a Lecturer.
- If the candidate produces any certificate, which is not in Marathi, Hindi or English language, authenticated Marathi, Hindi or English version of the same, duly attested by a Gazetted Officer shall also be produced.

**TABLE 10.3: Documents to be attached with the Application form for Ph.D. admissions**

Sr. No.	Type of Candidate	Attested true copies of documents to be attached along with application form
I	All Candidates	1. SSC (Std. X) mark sheet, 2. HSSC (Std. XII) mark sheet, 3. All Mark sheets of Bachelor's Course 4. Bachelor's degree certificate 5. All Mark sheets of Master's Course 6. Master's degree certificate 7. College Leaving / Transfer certificate 8. Migration certificate (within one month after confirmation of admission) 9. Industrial experience/Relieving letter/ Gap Certificate, if any
II	Backward class Candidates belonging to SC/ ST Categories	Caste certificate, Caste/ Tribe Validity certificate, as applicable. (In addition to the documents mentioned in Sr. No. I)
III	Backward class Candidates belonging to VJ/ DT (NT(A))/ NT(B)/ NT(C)/ NT(D)/OBC/ SBC categories ( <b>Maharashtra State candidates only</b> )	Caste certificate, Caste/ Tribe Validity certificate, Non Creamy Layer Certificate valid up to 31 <sup>st</sup> March 2012. (In addition to the documents mentioned in Sr. No. I)

- **Original certificates should not be attached with the application form. However, those must be made available at the time of admission, failing which the admission cannot be granted.**

## 10.5 Rules and Regulations about Reservation



Reservation in admission for SC/ST categories is applicable to all Ph.D. courses (all branches) as per the Maharashtra government norms.

### 10.5.1 Caste Certificate and Caste/ Tribe Validity Certificate.

- a) **Caste Certificate:** The candidates belonging to the backward class categories will be required to submit the Caste Certificate at the time of admission, failing which the category claimed will not be granted and the candidate will be treated as a General Candidate.
- b) **Caste Validity Certificate:** The candidates belonging to the SC/ST category will be required to submit the Caste/Tribe Validity Certificate at the time of admission, failing which the category claimed will not be granted and the candidate will be treated as a General Candidate.

## 10.6 Fees, concessions, cancellations and refund

### 10.6.1 Fees prescribed:

The candidates admitted in the first year during 2011-12 are required to pay fees per year as shown in following table:

Sr. No.	Fees	Ph.D. (Tech.)/ Ph.D. (Sci.)		PG Diploma in Chemical Technology Management	
		Open category and SC/ST candidates from 'other than State of Maharashtra'	Reserved Category Candidates from Maharashtra State Only	Ph.D.- Registered Candidates	Industry Sponsored Candidates
1.	Tuition fee	Rs.15,000/-	Nil	Rs. 15,000/-	Rs. 45,000/-
2.	Development fee	Rs.25,000/-	Nil		
3.	Other fees	Rs.10,000/-	Rs. 50/-		
4.	Caution Money Deposit	Rs.500/-	Rs.500/-		
<i>TOTAL</i>		<i>Rs.50,500/-</i>	<i>Rs.550/-</i>		

#### Notes:-

g) Institutional fees such as the Student dairy (Rs. 300/- per year), Alumni Association fees (Rs. 1050/- per year) are applicable to all students. Eligibility fees of Rs. 500/- (one time) are applicable to students other than ICT students. These fees may be paid either in cash or by DD/Pay Order separately.

h) Hostel Fees will be applicable in case of candidates opting for hostel accommodation. The details are given in Section on Hostels.

i) For SC/ST/ VJ/DT NT(A)/ NT(B)/ NT(C)/ NT(D)/ SBC /OBC category candidates from the State of Maharashtra -No tuition fees will be charged for admission.

j) Candidates claiming for fee concession under Backward Class category from the State of Maharashtra shall produce the **Caste Validity Certificate at the time of submission of application form**. Candidates claiming for fee concession under **OBC, SBC, VJ/ DT NT(A), NT(B), NT(C) and NT(D) category** shall also produce **Non-Creamy layer certificate Valid up to 31<sup>st</sup> March 2012**.

k) The SC/ST Candidates belonging to 'other than state of Maharashtra' will have reservation in admission only and they will have to pay full fees at the time of admission. They should submit their fee concession claims to their respective state Govt. through ICT office.

l) For confirmation of seat allotted, Candidates have to submit a Pay Order/ Demand Draft in favour of '**Institute of Chemical Technology, Mumbai**', payable at Mumbai. Candidates claiming concession in backward class category have to submit a Pay Order/ Demand draft of appropriate value.

### 10.6.2 Caution Money Deposit:

Caution money deposit received from the students shall be refunded after successful completion of the course or after cancelling the admission. Unless there is any recovery, no deduction shall be made from the caution money

deposit. However, the amount of caution money deposit shall be credited to institute, if the candidate does not apply for refund, within 3 complete financial years after the student actually leaves the institution; or, within 3 complete financial years after the date of successful completion of the course, whichever is earlier.

#### 10.6.3 Reimbursement of Tuition fee:

Candidates claiming concession under the categories of EBC and sons and daughters for teaching and non-teaching staff of primary, secondary and higher secondary schools shall pay entire fee as applicable at the time of admission and subsequently candidates have to apply to the respective authorities for reimbursement of tuition fees. The quantum of reimbursement received by the institute from the concerned authorities shall be disbursed to the candidate.

#### 10.6.4 Cancellation of admission and Refund of fees:

##### Refund of tuition fee, development and other fees after cancellation of admission secured at ICT.

Candidate who has been admitted to ICT may cancel admission by submitting an application in duplicate, in the prescribed **Pro forma - E** and request for refund of fees. The refund of fees as applicable shall be made in due course of time. It is made clear that such application for cancellations will be considered if and only if the admission has been confirmed by paying the prescribed tuition fee and other fees in full and by submitting all the necessary original documents. Refund shall be made after deduction of cancellation charges as shown below –

SR. NO.	SITUATION	REFUND
1	Request received within 10 days from the date of admission	Entire fee less Rs.1000/-
2	Request received within 30 days from the date of admission	Entire fee less the total fee for one month. (Tuition, development, other and hostel fee)
3	Request received after 30 days from the date of admission	No refund (except Library Caution Money Deposit)

**Note:** For calculation of amount on the pro-rata basis, one month shall be treated as one unit.

### 10.7 POST GRADUATE DIPLOMA IN CHEMICAL TECHNOLOGY MANAGEMENT

The ICT has a rich tradition of first generation entrepreneurs as its graduates. In order to groom our Ph.D. students into etiquettes of business management, a certificate course in Chemical Technology was started for the ICT students. This popular course is now converted into a PG Diploma Chemical Technology Management to give Ph.D. research students and industry personnel, an orientation in business and technology management of chemical industry and to sharpen entrepreneurship skills.

The course covers topics such as Chemical Technology Management, Product/Process Design and Development, Finance Management, Marketing management, Intellectual Property Rights (IPR) and other laws, Communication, HRD, Project Management, Team and Organization Management.

The course is run with the assistance of the UDCT Alumni Association, with several alumni and other experts from within and outside ICT, having vast experience. This is a two-year semesterised course conducted on Saturdays and Sundays. The course commences in January, every year and the admission procedure may commence from October, every year (see website [www.ictmumbai.edu.in](http://www.ictmumbai.edu.in)).

SR. NO.	ELIGIBILITY AND TYPE OF CANDIDATE	SEATS
1.	Candidates registered for Ph.D. (Tech.)/ Ph.D. (Sci.) in the ICT, who have completed the course work required for Ph.D. and have spent at least a year in their Ph.D. programme	10
2.	Candidates registered for Ph.D. (Tech.)/ Ph.D. (Sci.) in any other University / Institute of repute, who have completed the course work required for Ph.D. and have spent at least a year in their Ph.D. programme	10
3.	Industry- sponsored candidates working for not less than 3 years, having Master's degree in Chemical Technology/ Chemical Engineering/ Science/ Pharmacy/ Mathematics or any other equivalent course	10

- Admission will be conducted on the basis of written test & interview (equal weight-age).
- In case the candidates from a particular type are not available, the seats may be transferred to other type of candidature on the basis of merit.
- Fees once paid shall not be refunded.

**All Rights regarding the admissions at the ICT are reserved with the Director (Vice Chancellor), ICT.**

## 11. HOSTELS AND COUNSELLING SERVICES

### 11.1. Preamble

Hostel accommodation on the ICT campus used to be a privilege in the past. Hostel No. 1, which is popularly called the Old Hostel, was built in 1951, as University and Birla Hostel, with provision of accommodation for students of all departments of the University of Mumbai. Students admitted on All India basis were given preference. In 1966, The so-called New Hostel (now Hostel No. 2) was built for accommodating UG and research students; however, the capacity was still inadequate. In 1987, a Joint Hostel (now Hostel No.3) was built to accommodate both ICT and JJ School of Architecture, which was exclusively reserved for ICT students in mid-1990s.. There was no hostel facility for girls till 1993. During mid-1990s, a 66-seater girl's hostel (now Hostel No. 4) was built. Hostel No. 5, a 7-storey building for 352 students was built during early 2000s and occupied in 2005. The hostel surroundings and grounds were beautified during 2007-9 and Hostel No. 2 and 3 reserved for girls. Hostel No. 1, 4, and 5 accommodate boys whereas Hostels 2 and 3 accommodate girls.

### 11.2. Process of Allocation of Hostels

1. Hostel No. 1, 4, and 5 are allotted to boys. Hostel No. 2 and 3 are only for ladies. All hostels are unaided and maintained by the Institute. Hostel No. 1 is allotted to 1<sup>st</sup> year undergraduate and Master's degree students and no senior undergraduate will be allotted two hostel. Hostel 3 will have first year undergraduate and Master's and Doctoral students.
2. The total number of hostel accommodation seats available for the students at the ICT is nearly 855 (for all courses and years) including 210 lady students.
3. Total number of seats available for fresh admissions is about 228 per year, which includes all Undergraduates, Master's and Doctoral students out of which seats available for the first year UG admissions (B.Chem.Engg., B.Pharm. and B.Tech.) are limited to only 30 girls and 90 boys. Those for first year Master's degree (M.Chem.Engg., M.E., M.Tech., M.Sc., M.Pharm.) are limited to 19 girls and 50 boys and those for new doctoral students are limited to about 30 boys and 9 girls. The seats of post graduate students, especially doctoral are subject to completion of degree work by earlier students.

Accommodation in hostels cannot be guaranteed to all candidates, who are advised to verify personally by contacting the hostel office.

**(Phone: 91-22-33611452, Time: 9.00 a.m. to 5.00 p.m.) e mail: hostel@ictmumbai.edu.in.**

4. Admission will be offered on **'first come- first served'** basis. Preference is given to out-station students who come from places beyond Mumbai and suburbs (i.e., beyond Virar, Titwala, Ambernath and Panvel). As a proof of stay beyond Mumbai and suburbs, they are required to submit certified copies of ration card and school-leaving certificate. Any false representation in this regard will be strictly dealt with.
5. Prescribed application form for accommodation to hostels may be purchased (Rs. 50/- in cash) from the Hostel Office situated at Ground Floor of Hostel No. 5. The Master's and Doctoral students are required to submit their applications through the Heads of the concerned Departments. The duly completed application form along with residence proof should be submitted at the Hostel Office.
6. The Hostel Office will advise aspirant students if a seat can be allotted to him/her. Once a seat is offered, the payment of charges should be made by separate Demand Draft/Pay order at the Hostel Office situated at Ground Floor of Hostel No. 5, as given below and a receipt for the same should be procured.
  - (i) **Accommodation Fees** (as per 11.3.1 below) by a Demand Draft/Pay order drawn in favour of **'Institute of Chemical Technology, Mumbai'**, payable at Mumbai.
  - (ii) **Common Charges** (as per section 11.3.2 below) by a Demand Draft/Pay order drawn in favour of **'Warden, ICT Hostels'** payable at Mumbai.

- (iii) The student will be then allotted the accommodation by the Hostel Office.
- (iv) The Wardens reserve the right to change/transfer a student from one room to other for convenience of the administration. Also, every year the student may be shifted from the accommodation provided in earlier year.

### 11.3. Hostel Fees

#### 11.3.1 Accommodation Fees:

(Including Electricity and Development Charges) for the Year 2011-12 for the academic year

Hostel	Category	Type of Accommodation	No. of Seats	Fees, Rs.
Hostel No. 1	Boys	Single Seated	52	15,000/-
		Triple Seated	144	12,000/-
		Six Seated	18	12,000/-
Hostel No. 2	Girls	Single Seated	27	15,000/-
		Double Seated	22	12,500/-
		Triple Seated	69	12,000/-
Hostel No. 3	Girls	Double Seated	88	15,000/-
		Triple Seated	9	15,000/-
Hostel No. 4	UG Boys	Double Seated	66	12,500/-
Hostel No. 5	UG Boys and Ph. D. Boys	Double Seated	332	17,000/-
		Triple Seated	33	17,000/-

Accommodation fees should be paid by a Demand Draft/ Pay order in the name of 'Institute of Chemical Technology, Mumbai' payable at Mumbai. No Cash payments will be accepted.

#### 11.3.2 Common charges to all Hostels – Rs. 3000/- per year to be paid at the beginning of every year by all students – UG, Master's and Doctoral.

- i) Students Sports & Cultural Activity Fees Rs. 2000/- per year
- ii) Other Fees / Charges (Mess Depreciation, Insurance, etc. ) Rs. 1000/- per year

❖ Thus, total hostel charges per year are Accommodation Fees for particular seat plus Rs. 3000/-







The hostel accommodation fees for Ph.D. students who are in receipt of HRA are paid by the Institute and the HRA component is fully retained by the Institute. These students need to pay the common charges themselves to ensure a hostel seat.

### 11.4. Hostel Messes

It is mandatory for all hostel students to join the Hostel Mess allotted to them. Each mess is run by the students on co-operative "no-loss - no-profit" basis under the Control of the concerned Warden. Hostel students have been managing their messes since 1951, with an excellent tradition and managerial skills. Typical mess charges including breakfast and two meals a day are around Rs. 1300/- per month. Mess Deposit Advances / Monthly Expenses will be extra as per the norms of the respective messes.

### 11.5. Hostel Management

Hostel No.	Warden	Telephone
	HEAD WARDEN - PROF. S. S. BHAGWAT	

<b>5</b>	<b>Prof. S. S. Bhagwat</b> (Department of Chemical Engineering.) Email: ss.bhagwat@ictmumbai.edu.in		3361 2011
<b>1</b>	<b>Prof. B. N. Thorat</b> (Department of Chemical Engineering) Email: bn.thorat@ictmumbai.edu.in		3361 2022
<b>2</b>	<b>Dr. D.D. Sarode</b> (Department of General Engineering) Email: dd.sarode@ictmumbai.edu.in		3361 2760
<b>3</b>	<b>Dr. Mrs. Shalini Arya</b> (Department of Food Engineering & Technology) Email:ss.arya@ictmumbai.edu.in		3361 2513
<b>4</b>	<b>Dr. U. S. Annapure</b> ( Department of Food Engineering & Technology) Email: us.annapure@ictmumbai.edu.in		3361 2507
<b>Hostel Office</b>	<b>Shri. F. M. Tariq (Hostel Officer)</b> Email: hostel@ictmumbai.edu.in		3361 1452

#### 11.6. General

1. Guest Rooms are available at Hostel No. 2 (only lady guests) and Hostel No. 5 for visitors/ parents who wish to make a short visit to meet their Wards studying at ICT on payment basis.
2. Hostels are equipped with T.V. Room, Reading Room, Playground, Health Centre, Gymkhana and Study Room Facilities.
3. Physicians visit the hostel health centre on all working days at designated times.
4. All students are covered under Accident Policy of the Institute.
5. Each hostel block is supervised by a Warden, who is a faculty member of the Institute.
6. It is mandatory that all the new entrants to the hostels get their hostel admission forms signed by the Student's Counsellor - Prof. (Ms) Rita Doctor, whose office is located on the first floor, Godrej Students Centre) (Tel No. 91-22-3361 1351; email: rf.doctor@ictmumbai.edu.in) within a short time after joining the hostel.

#### 11.7. Discipline and Decorum

1. The entire campus of ICT is smoking-free including public places and hostels.
2. Smoking and drinking liquor is strictly prohibited. Disciplinary action will be taken against anybody involved in misdemeanour and illegal activities.
3. All senior students must create a conducive and healthy atmosphere in the rich tradition of the ICT and the hostels. Several hostel residents have attained very high positions in their profession, as industrialists, educators and policy makers and brought laurels to the institute; including Padma awards of President of India. Three Directors of the ICT- Former Directors, Professor M.M. Sharma and Prof J.B. Joshi, the incumbent Director (Vice Chancellor) Professor G.D. Yadav as well as the Registrar, Professor S. R. Shukla have been hostel residents on this campus. Prof Yadav has also served as the Warden, and Head Warden, earlier. Professor Bhagwat, Professor Thorat, Dr. Annapure and Dr. Arya who are hostel wardens currently were themselves ICT Hostel residents during their student days. Several other faculty members have also been hostel residents. Faculty and staff quarters are also situated near the hostels bringing a sense of community feeling. Faculty members participate in the programmes arranged by the hostels and often make themselves available for counselling, whether they are wardens or not. Hostel Day is a special annual day in the lives of hostelites to show their skills and talents in sports, cultural programmes and the like.
4. Another grand tradition of the hostels is that the past students, from all over the world, try to assist the hostel activities by providing monetary help, either personal donations or company sponsorships.
5. **Action against ragging: Maharashtra Prohibition of Ragging Act 1999 is in effect from 15<sup>th</sup> May 1999. (See details later from UGC in this regard].** Any case of ragging should be reported by the victim in writing within three days of the incident to the respective warden with copies marked to the Head Warden, Professor S. S.

Bhagwat (ss.bhagwat@ictmumbai.edu.in), the Dean- Student Affairs and Human Resource Development, Professor M. D. Teli (md.teli@ictmumbai.edu.in), and the Registrar, Professor S. R. Shukla (registrar@ictmumbai.edu.in).

### 11.8. Counselling Services

Counseling services are available for the benefit of all the students of the Institute - right from First year to those doing their Doctorate. The Counselor – **Professor (Ms) Rita Doctor**, with her in-depth knowledge of Philosophy and Psychology, has been actively participating in this important activity. The Counselor deals with all types of personal and academically related problems and students are free to meet her from Tuesday to Friday any time between 11.30 a.m. and 4.30 p.m.

**It is mandatory for all the first year students (UG and PG) including hostelites to meet the Counselor [in her office on 1<sup>st</sup> floor, Godrej Students Centre) (Intercom No. 1351), in groups of ten for an interactive session.** Interactive Sessions are held from time to time to make the students aware of their plus points and weak points. Later on, a one – to – one session is held in order to help them develop confidence and overcome difficulties which may be too personal.