

Tata Centre for Technology and Design at IIT Bombay

The Tata Centre for Technology and Design at IIT Bombay is a virtual centre, which started its academic and research programs in August 2014.

The Centre focuses on innovation that is relevant to global societal needs and challenges, targeted at the bottom of the pyramid sections of the society. The goals of the Tata Centre are to train future leaders in engineering and business and to invent technologies and systems solutions that solve human needs, in the context of complex environmental, social, and political factors. The Tata Centre at IIT Bombay closely works with the Tata Centre at MIT, USA, on R&D in high impact technologies and in the development of a curriculum consistent with its goals.

Tata Fellowship Program for Masters Students (2015-17) at IIT Bombay

The Tata Centre is a virtual centre and does not have a direct admissions process. It offers fellowships to a select few Masters students already admitted to the various Departments/Centres/Schools at IIT Bombay. These fellowships will be awarded to students who are passionate about using their skills to make a positive change to society. In addition to the training that the Fellows receive in their core discipline, they will receive training in innovation, design and entrepreneurship, by way of course, laboratory work, immersion programs, and projects.

Benefits of a Tata Fellowship:

- Hands-on experience in product development, design thinking and in finding creative solutions to the most pressing problems faced by the society.
- Participation in immersion programs, workshops, conferences and lectures.
- Priority access to advanced fabrication facilities at Tata Centre (Fab-Lab) such as 3D Printing, PCB Printing, Mechanical and Electrical Workshops.
- In addition to degree granted from parent discipline, students will receive recognition as a Tata Fellow.
- Possible visit to MIT, USA, and collaborative work with the Tata fellows at MIT.
- Enhanced Stipend (Rs. 18000 p.m.) and Tuition fee waiver
- Fellows will NOT be required to perform any institute/department related teaching/research assistantship. However the fellows are expected to perform duties assigned by centre

Eligibility:

TA and RA category candidates admitted to select Masters programs offered by IIT Bombay for Academic Year 2015.

Fellowships & Projects offered in 2014-2015

There are in total 19 fellowships available for the 2015-2017 fellowship program. These are distributed across various departments as indicated below. They begin from August 2015.

S.No	Department	No of Fellowships
1	Aerospace	01 TA
2	Bioscience (BSBE)	02 TA
3	Chemical Engg	02 TA + 02RA
4	CTARA	02 TA
5	Electrical engg	02 RA
6	Environmental Science (CESE)	03 TA
7	IDC	01 TA
8	Mechanical Engg	01 TA + 01 RA
9	Material Science (MEMS)	02 TA

Selection:

The set-by-step procedure for the selection of Tata Fellow is given below:

- A briefing on Tata Centre and its projects will be given in the first week after the commencement of the M. Tech. program (end of July)
- The applications from the M. Tech. students will be invited.
- Candidates, who have applied, will be selected based on an interview in the second week of the Autumn semester (Aug first week).
- Candidates can apply to any number of available projects from their respective Department from the list given above. The interview will be conducted by the Principal Investigator of the project and a representative from TCTD. Selection will imply immediate assignment of a thesis topic and supervisor to the candidate.

Nature of Work for Tata Fellows:

In addition to the basic requirement of the M. Tech. program in their core disciplines, Tata fellows are expected to be involved in the activities listed below.

- Tata Fellows will do an interactive coursework called 'Proseminar'. This seminar will expose students to conceptual frameworks and case studies that collectively provide a holistic view of integrating technology identification, development and deployment via commercial and public initiatives to address challenges in bottom of the pyramid sections of society. The course will impart an understanding of key challenges faced by engineers and managers and is designed to equip students with a broad toolkit of perspectives and methodologies for problem solving. One of the objectives of this course is to foster a community of likeminded professionals.

- In addition to the Proseminar, fellows will be trained in Fab-Lab on using various fabrication facilities such as 3D Printing, PCB Printing, Lathe machine and so on in order to build prototypes. Fellows will also be trained to identify needs and fabricate products that address needs.
- Tata Fellows will work in the research project, for which they are selected, under the supervision of the P.I of the project; In this project work, Fellows will apply the techniques they learnt in course work and laboratory work.
- In addition to the above, they will also participate in immersion programs, lectures, conferences and other events conducted by Tata Centre. The Centre will organize joint workshops with Tata Centre at MIT and the Tata Fellows are expected to participate in these workshops and present their work.

FAQ

How does Tata Centre function?

Tata Centre at IIT Bombay operates as a virtual centre and draws on the expertise of faculty and students from the various academic units in IIT Bombay. The graduate students (M.Tech./M.Des) who are admitted to their respective departments are expected to comply with the degree requirements of their parent departments, while carrying out additional courses, Proseminar - I, Proseminar - II and Fabrication & lab work, which are based on the Centre's objectives and activities. Students' thesis-work will be based on projects sponsored by the Tata Centre. The degree finally obtained is through the parent department.

Are there any specific prerequisites such as CPI limit to join as Tata Fellow?

There are no such limits. The selection procedure for Tata Fellows is given above.

Do I get chance to select any specific project in a given projects?

You can apply for fellowship to any number of projects that are available in your department. If you are selected for more than one project, you can choose the one that you prefer to join. Please see the section procedure given above.

Can I convert into PhD during/after the project?

Yes, you can convert M. Tech. program to PhD. The rules & requirements for converting from M.Tech to PhD are same as applicable to other M.Tech students in your department.

Can I publish research papers and file patents from my work at TCTD

Yes. We expect fellows to file patents and publish research papers. The Centre will provide the required support.

Will on-campus placement rules be same as other TA students?

Yes. Tata Fellows will participate in placement just as their peers do.

In addition to Core discipline, what more placement opportunities exist for the Tata Fellow?

The diverse skill set and experience gained by Tata Fellows will open further avenues in areas such as Innovation consulting, CSR, Social Entrepreneurship. Fellows can also pursue entrepreneurship and such fellows will be linked to SINE, IIT Bombay

Who are the faculty members associated with Tata Centre?

These are the regular faculty members from the respective Departments/Centres/Schools. In addition to their core-research, they are also involved in the research activities of TCTD.

Will I get to travel to MIT through this program?

The first batches of fellows have spent a week in MIT learning research methods and work done by MIT Tata Centre. However it is not guaranteed that fellows will get to visit MIT. Spending time at MIT will depend on fellows own initiative in interacting with their peers at MIT. The centre will also encourage fellows to participate in various challenges such as MIT 100K competition and will support fellows in preparing for such competitions.

How do I find out more about TCTD?

Details about the Tata Centre can be found at <http://www.tatacentre.iitb.ac.in/>. There will be an information/discussion session conducted in the first or second week of the Autumn Semester where the students will get to interact with the faculty members working on Tata Centre research projects. You can also send in specific questions to us at office.tctd@iitb.ac.in