

IIT Bombay guide for visitors

February '09

by Karim Alexander Adiprasito

In this I intend to give a short introduction to IIT Bombay for international visitors, giving impressions & some practical advice in general and about the Mathematics Department in particular.

First of all, what is IIT Bombay. The IITs (Indian Institute of Technology) are renowned universities for research and teaching in India, there are several IITs in India, and the one in Bombay is considered the best of these.

I don't know what you expect of India, but if you expect Mumbai to be a city bursting of culture and history, you will be unpleasantly surprised. In the town live about 20 million people, most of them in various slums, and you won't find it a city of superficial beauty but crammed with dirt and dust. However, try to remain open for the city to discover the treasures below, inside and outside Mumbai.

Formalities&Essentials

Before we begin: what you should bring to India, apart from the usual things, are pass photos. Bring around 20 of them, you'll need them on various occasions (Registrations, Mobile Phones etc.). Also, since payments can be quite big (and 1000 rupees~20\$ is the biggest bill), you should consider bringing travelers checks.

1. Application and Registration (to IIT)

The process is actually quite easy to handle, but can get quite stupid and can pose a major bureaucratic hindrance once you come to the actual registration at IIT. You decide on your study program, which can be a regular undergrad/graduate program, or a visiting student program (Course work or Project Work). Depending on this program, you have to pay different amount of fees, but the application is about the same. You need 2 letters of recommendation, grade transcripts, a bonafide certificate (granting you are student of a university), a curriculum vitae and a letter of purpose. Once you are admitted to IIT, you should contact the Dean of your Faculty or your counselor, and discuss with him the courses you can take and which suit you best, or which project you should work with. You should not bother to contact them, it will make things much easier, and I found the exchange quite useful. For the registration of courses itself you have to be at IIT, and you will be guided by the Office of Dean A.I.R., the process is quite a bureaucratic issue, you will be happy once you're done with it.

2. Officialism

Depending on whether you stay at IIT as a Student, for work or as a short time visitor, you obviously need a Visa which you get in the consulate in your

homeland, and depending on the visa you need, you have to submit certain documents. When you are staying in India for more than 180 days, you have to register at the F.R.R.O (=Foreign Residents Registration Office) within the first 2 weeks after your arrival, bringing with you a bonafide certificate of IIT (apart from passport, pass photos and a fee of 300 Rupees total).

3. First Steps in Mumbai

Once you arrive, probably at the international airport, you will have the first contact with transport systems in Mumbai. If it is possible to them, the university and the Dean AIR will offer you a taxi from airport, if not, you should get yourself a prepaid taxi ticket at the airport office. Now, you have 2 different kinds of taxis in Mumbai, both black and yellow. The first type is a car, and the second the rickshaw (or auto), a smaller three-wheeled cab. The drivers of both will try to cheat you occasionally, so you should force them to use the meter, or to bargain a good price with them. The meter has a science on its own, the price displayed on it is not the actual price, it depends on the time of your drive and the type of your taxi, you will find the tables for example on (http://www.mumbai77.com/City_Info_Guide/Auto_Fares_Mumbai.html / http://www.mumbai77.com/City_Info_Guide/Taxi_Fare_Rate.html) This should be your choice for short distances. A method far cheaper is the bus, which comes quite often, and who takes a stop near IIT Main Gate. Once again, search for the current bus plan on the web (or use <http://bestundertaking.com/>). The advantage of the bus is that you will find a seat in most cases.

But overall you will want to avoid the traffic in Mumbai, since it can take you a long time, even for short distances. Well you'll see it for yourself, but it is a mess.

So, you could take the train. The next station to IIT is Kanjur Marg, you can either take second class, which can get quite crowded in rush hours, or the first class. After at most 40 minutes, you will arrive in the most southern part of Mumbai, which is in most cases the fastest method.

Eventually, you can buy a bike on the IIT Campus. A new one will cost you around 40 \$/ 30 €. It is very practical for visiting nearby areas and on the campus, where you may want to avoid rickshaws. Also, on Campus there is a special bus, called tum-tum, which drives only inside IIT.

4. A place to rest

Before you arrive at IIT, you can request accommodation at IIT for the length of your stay. This could mean either Guest Hostel, Staff Hostel or Student Hostel. You will find electricity and Internet available in most cases, sometimes you may have to ask your way through on how to configure your IP and create an account (ask in your Department). Also, you will find a mess to eat in, serving 4 meals a day plus the night canteen, and Xerox shops who have most of the things you may need in the first days after your arrival. The mess is paid in advance, so you don't have to pay for every meal, except the night canteen.

5. The Campus

IIT is structured like a US university, which means you will find almost anything on campus. There is a hospital for emergencies, a small mall (containing barbershops, bookstores etc.) near market gate, a restaurant (which can give you some diversion from the usual mess food), a bank, sport facilities and of

course the departments. These are arranged in a circle, with the Main Building in front, facing the main road, and the departments on the perimeter. One can say that the university is surely one of the best places to stay, strictly divided from the rest of Mumbai, it seems more like a national park, very green and sustaining a calm atmosphere, you will often be reluctant to leave it. There are many animals, among them snakes (be careful), cows, stray dogs, parrots and monkeys. Considering the last ones, they are observed in groups, and you better not carry food in the open when you notice them present.

6. Needful things

Almost everything you need you will find in IIT itself or in the area around it, I already told you about the Xerox shops, and there are 2 supermarkets close by, Haiko Store and D-Mart, and a mall, called Hiranandani Galleria. There you will get everything from clothes over electronics to stationery. But, apart from drinking and eating, which you get to MRP (mass retail prices) or by fixed restaurant prices, storekeepers will try to charge you around 300% more than the usual price so keep that in mind.

7. Digressions

In case you want to leave school behind, you will find various distractions in- and outside Mumbai. There are too many things to mention, so I just will state a few things.

During your stay, a variety of festivals will probably take place, and if you want, take your time to witness one or two, for example Diwali, the Hindi New Year, or Holi, the Festival of Colors. These are very lively and fun, and to see 20 million party is quite an experience.

Additionally, there are many temples and cave settlements nearby of different origin (Buddhism, Hinduism etc.), the nearest ones in Sanjay Gandhi National Park. Even more you will find in Ajanta (cave temples), and Varanasi (capital of Hinduism). And in the evening, you will find Nightclubs and Restaurants, most of them in southern Mumbai, with tastes from all parts of the world. And of course, you can visit the beaches in Kerala, Goa and Pondichery.

For venturing India, you should probably ask a fellow student, or Indian friends, since they will be able to help you far better than I will ever be able to and better than every book you can get your hands on.

Education and the Math department

1. Courses and exams

Well, you know what courses are, at IIT they are arranged in Slots that determine when they are. You should get the course list beforehand (although it may not appear online, ask for it then), and when you aren't sure, you can discuss your coursework with your counselor. Depending on the professor, you will write quizzes in the semester, announced or not, and have two scheduled exams, one in the middle of the semester and one at the end.

2. Seminars, colloquia and talks

There are talks in the every department on a regular basis. You can look up the timings on the department homepage, where you will also find a brief synopsis. They vary greatly in their requirements, but are always worth a try. After the

talks, there is usually a high tea, where you can ask questions about the talk and discuss the results.

3. Math Department

I can wholeheartedly say that I enjoyed my stay at MathDept. The courses were overall enjoyable and not too hard, and the contact in case of questions is easily established. Also, I found the level of research at a high level, and the system is less hierarchical than what I am used to. (You will maybe get asked by professors to prepare short talks on your subject, or even to give a lecture) Also, you will find that the math department doesn't suffer as much from poor equipment as other departments do, which is quite a bigger problem in physics or chemistry.

About me; *I was born 1988 in Aachen as a son of physicians, raised in Germany with his 2 younger siblings, and attended school in Halver and Lüdenscheid, Germany. Since summer 07, I am studying in Dortmund and Bombay, with focus on mathematics, but also attended lectures in computer science, physics, economics, microbiology and philosophy. I won prizes and scholarships in school and university, speak 5 languages, enjoy games (fav. Bioshock) and literature (Harper Lee, Conrad) and take interest both in science and the underlying philosophy and history (e.g. Questions of language and logic).*

