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INSTITUTE STUDENT MENTOR PROGRAM

Hey Guys,

Congrats on making it to IIT Bombay. Your tryst with IIT life has just begun. The next few years in this campus will be an incredible chapter in your life filled with memories that you will cherish all through your life. You will soon realize what a rare privilege it is to be a part of this institute. While on the one hand you will befriend amazing peers, you will also have to compete with the best. An all-round growth in this competitive environment is what you must strive for.

In the initial days on campus, you will meet new people, make friendships that will last you your whole life. Among the first people you will meet will be a student mentor allotted to you by an Institute-wide program. The Student Mentors will guide you during your teething period here. We urge you to take your mentor into confidence on every issue that concerns you. All the student mentors have volunteered to advise/counsel you on academic, extra-curricular and demic, extra-curricular and personal issues based on their own experiences.

They will help you in maintaining a crucial balance between academics (which of course, is your primary commitment) and a whole host of co-curricular activities. Make sure you take the initiative to meet your mentor on a regular basis right through the year. This will help you develop a personal rapport with him/her.
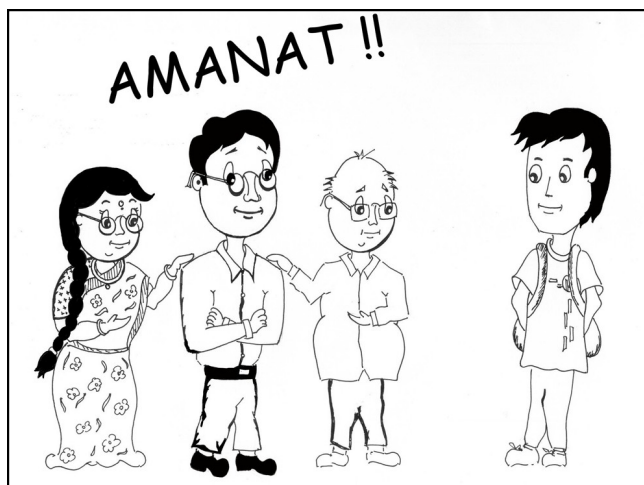
Soon you will receive a card with the contact details of your mentor when he/she meets you in your hostel. We would also recommend that you give these details to your parents/guardians as well, so that they can contact us if required.

Your mentor will be a friend, philosopher and guide to around 20 of your friends too. The two of us will coordinate the programme and be in touch with all of you. Prof. V.M. Gadre is the faculty-in-charge of the Institute Student Mentor Programme.

Let us categorically state that ragging is strictly banned at IIT Bombay. In the unlikely event that you are remotely uncomfortable or harassed, please feel absolutely free to speak to your mentor immediately.

We look forward to facilitating the paradigm shift that you might experience from your high school days to your college life at IIT.

Shantanu Gangal (9869008338)
Abhinav Arora (9819506911)
Coordinators, Institute Student Mentor Programme

Prof. V.M. Gadre
vmgadre@ee.iitb.ac.in
Faculty-In-Charge, Student Mentor Programme

History of the ISMP: In 2003-04, a committee was formed to reformalise the ISMP's structure (it used to be under the GSHA for a couple of years before that). In 2004-05, the ISMP was started in its present form - with 2 student coordinators, under the guidance of Prof. Gadre. It had about 35 student mentors.

A WORD FOR THE PGS (M.TECH, M.DES, M.SC, M.PHIL, M.MGMT)

Welcome to the second phase of your life. This may prove to be slightly different from the college you came from, probably because it *is* IIT after all. This section will give you the first booster dose to make you immune to the IIT system.

You might feel that you are sort of sandwiched between the B.Techs and the PhDs, but chill, you can have the best of both worlds…which means both course work and research work! In IITB, you can surely do all the things that you always wanted to do. Try your hand at all possible extra-curricular activities from sports to debating to fine arts to dram (and many more), all of which will make you feel like a school boy/girl once again.

This place has the charm of never letting you feel bored. You will always find yourself in the midst of assignments, TA work, course work and several other activities. And suddenly if you feel that there's nothing of this sort going on, then be sure it's midsem or endsem season. So, just sit back and relax, you will be grilled in every possible way that will make you a perfect workaholic.

Oh yes, the funda of TA work and the money which follows will always be a 'reason to live' in IIT (at least the money, if not the work). Well in the term 'Teaching Assistantship', the meaning of the word 'Assistant' is quite flexible and the Professor can interpret it according to his/her convenience. The range of work can be as measly as xeroxing for the Professor or as intellectually challenging as converting marks to grades. But you will definitely get a chance to be sadistic since you are now on the other side of the table (evaluating papers or taking labs for juniors) and can smirk at their ignorance. The TA money will keep pouring into your Canara Bank account and you can afford to be a spend-

thrift within the confines of the scholarship. Probably for the first time in life (if you have not worked elsewhere) you will feel monetary independence.

Choosing a guide is of course a Herculean task (which you may have to accomplish very soon depending on your department) before which you should consult your wise seniors. Yet, after taking such a calculated risk you will realize at the end of the day that there's only one true guide and that is you yourself. Yet, people who have a knack for academics and are serious about publishing a paper or two can surely do it. You will also get allowances for attending conferences from the institute, the process might be slightly tricky but many people have succeeded.

> **In IITB, you can surely do all the things that you always wanted to do**

Last but of course not the least, you fill find that your first home is your lab – not your hostel room. So you are free to keep mattresses and sleep there. (Don't forget your tooth brush, unlike soap and toothpaste it cannot be shared). You will soon find that your biological clock has altered. After doing all this you might be under the assumption that you are studying very hard but actually you will hardly be studying.

Still, your two years here will just fly by and in retrospect you will miss the place, feel the void and enjoy the memories. IITB is one of a kind, so do enjoy your stay here!

The first PGs entered IITB in July, 1960, when 76 students joined the Master of Technology programme

RESEARCH SCHOLAR WELCOME

Welcome aboard flight RS->PhD headed for the highest degree of your education. This flight will be quite long but we promise that it will provide you with many new things to explore and experience!!!

If you look out of the windows, on one side you'll see many flights carrying undergrad and masters passengers doing all that you did some time ago (and hopefully rekindling fond memories). On the other side you'll see your seniors (who boarded a similar flight a few years ago) wandering aimlessly probably thinking about some problem they have been engrossed in for a few months or years. You'll also see some other passengers (research scholars) working hard day in, day out and even night-out in the labs; they are the ones who may reach their destination a lot quicker than the others!

Your routine will be quite simple: meet the captain (your guide) regularly, seek direction, refuel with your inputs, work, cruise through clear skies as you start getting results, analyze, discuss, do not forget to sign the attendance muster daily, participate in RSF (Research Scholars' Forum) lectures, submit the RPC report, face some turbulence as you run behind RPC members, prepare many presentations (seminars, lab presentations, preparation for guide presentations), perform TA duty, politely meet many interesting flight attendants in the admin section, academic office, estate office, accounts section and of course make a fine landing as you submit your thesis with your guide's approval.

Fortunately for you the RSF has published an excellent manual to help you through all of these activities. Make sure you have received the PhD Handbook along with this kit, otherwise go and get it from your department RSF representative. (Unfortunately you will have to read it yourself for now, we are hoping to get attractive air-hostesses to enact the rules for the new passengers by next year.)

For your future career after you achieve your PhD, what matters most are the research articles that you publish during this flight. The institute will provide you with fabulous research facilities, an atmosphere conducive to research and funding to attend conferences in India and abroad especially if you have a paper published in them. So be prepared to do lots of exciting research which will soon change the world below you.

But in your fervour for research do not forget to enjoy the inflight entertainment; be a part of the institute's sports, cultural and other social activities. Although the hyper-active UGs will be making a huge racket all around, use your experiences and maturity to your advantage and make your presence felt. Do participate in intra-hostel and inter-hostel competitions. For those interested in leadership and policymaking, the RSF is the ideal platform for research scholars, but nothing stops you from taking up any of the other hostel and institute level student representative positions either. Or just sit back and enjoy the view of cultural and technological festivals and events which happen from time to time.

Make yourself comfortable. Feel free to use the institute facilities like the library, swimming pool, gymnasium, hospital and hostel facilities like the music room, gymnasium and hostel library. You will soon get a desk or cubicle in your lab, you can decorate it as you wish.

So, tighten your seatbelts and get ready for take-off. Right now we may not know exactly where you are going and how long your journey will take, but we promise you a pleasant and enjoyable flight.

IITB has a large number of newsgroups on various topics. The most popular of these is iitb.general. On general, professors and students discuss a huge variety of topics, so join up and start posting. You can access general using your LDAP ID at http://varta.iitb.ac.in
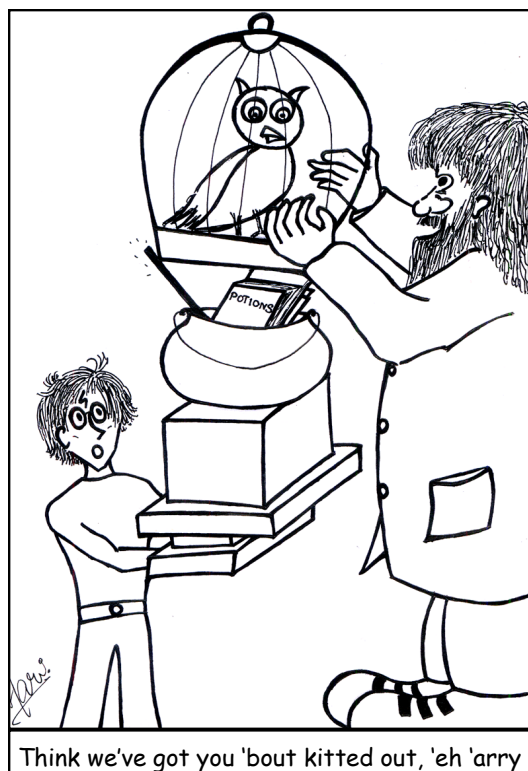
THE LIST

A list of items you'll need to settle down at IIT. It isn't exhaustive, but all this is stuff you'll definitely need.

- Umbrellas and/or raincoat
- Bucket and mug
- Floaters (They're about the only wearable form of footwear during the rainy months)
- Odomos, AllOut
- Netlon screens for window (Vendor at Main Gate)
- Clotheslines, clothespins
- Curtains, Curtain rods
- Tubelights, switchboards
- Clothes hangers
- Naphthalene balls
- Mattress, bed sheets, pillow and pillowcases. (have at least one change also, because things don't dry easily in the rain)
- Insulation tape, screw driver (with a tester), pliers, nails, screws
- A broom (Your rooms will be cleaned once a week by the hostel workers. Any further cleanliness is solely your responsibility.)
- A4 sheets (always useful)
- Workshop tools
- Room freshener
- Blank registers, pens in plenty
- Extension plugs and/or spike card
- Antifungal spray
- A Lab coat for Chemistry Lab (borrow this from a senior)

You'll be sharing rooms for at least a year, probably two. So remember, don't clutter up your room. Less is always more.

Places you can buy this stuff from:-

- **D Mart, Hiranandani** : This giant supermarket stacks pretty much everything from floaters to snack food. It's the best place to go when you're in a hurry and want to stock up quickly.
- **Haiku, Hiranandani** : Another supermarket, really close to D Mart, Haiku stocks slightly higher end stuff.
- **Y Point** : Our very own little market, YP stocks all

Think we've got you 'bout kitted out, 'eh 'arry

the essentials. A couple of general stores, a bookstore and a well stocked Chemist store are its prominent features.

- **The Cooperative store** : Located in the MB Basement, this store stocks pretty much everything if you search for it hard enough. This is the place to visit for Journal sheets and lab files. It often closes for lunch before 1 pm, so ensure that you're well stocked with journal sheets at least a day *before* lab, so you're never caught short.
- **Main Gate** : Electrical and hardware stores just outside the main gate and YP provide you with the essentials
- **Hostel Canteens** : You'll discover these for yourself, soon enough. Hostel canteens stock all immediate essentials– soap, shampoo, recharge cards.
- **Coffee Shack** : There's a recharge booth at the coffee shack, where you can buy validity and top up crds for your cells, as well as make STD calls.

Places to buy text books from:-

- **Jay Ambe book store**– Right outside main gate, this place stocks most regular text books and buys them back at 50%
- **Book World**– On the ground floor of the Canara bank and Gulmohar building, they also stock standard text books as well as some slightly rarer books. You can also place orders with them for books they don't have in stock.
- **New Popular book store**– At YP, this is the another place you can purchase most course text books from.

Between these three, most of your text book needs will be answered. Of course, asking a senior for his/her books should be your first option.

If you think you're having a tough time settling down, think again. The IITians of 50 years ago had it much worse. First of all, half the institute functioned at Worli, and half at the present location in Powai. Staff members had to shuttle between the campuses, and student activities were extremely limited. On Foundation Day, 1959, there was no water or electricity in the Institute! Lines were finally laid by the end of 1959, but the supply was erratic, at best. In the early days, there was only one approach road to the institute, and there were very few shops nearby. So, the next time you complain about having to go to the Cooperative store to buy a bucket, be glad you didn't join 50 years ago, when you'd have had to go miles for a bucket.

ACADEMIC SECTION

MESSAGE FROM THE GSAA

Hi,
You must be feeling great after clearing IIT-JEE and making it to IIT Bombay. You would be the toast of your family and friends. However, in case you are thinking of allowing yourself to bask in the glory of that achievement, I would like to tell you something about IIT Bombay so that you may think otherwise.

IIT Bombay's academic curriculum has undergone a change, the likes of which has never been seen before. The entire course structure and rules have been revamped to make your experience more meaningful. You now have a much lighter course load than previous batches, have an option for opting for a minor in any discipline and have the incentive to obtain an Honours degree in your own discipline. Phew! These are a lot of choices and you shall be amongst the privileged few and be able to exercise any of these only if you maintain a good academic record. You will also have the benefit of having a batch senior to you which is going through the same changes and providing feedback, so that your curriculum will be continuously monitored and changed as required. There is a separate article in this handbook articulating the changes in the curriculum.

There will be multiple activities going on around you when you are here including cultural and sports events and our institute festivals. Do get around to participating in these. But make sure you keep a healthy balance between your academic and extra-curricular activities. When it comes to your time of graduation, you would be either sitting for placements or preparing for further studies. In either of these cases, your academic record (CPI) matters the most, and only then are your other activities considered.

Taking '*fundaes* from seniors' might not help in your daily academic life as it would in your hostel life simply because most of the other batches are under a different curriculum and those in the batch just senior to you are also just finding their footsteps. Although your course load is lighter, all the courses will be much more rigorous to suit your bright minds. Hence, do not assume that your sem is 'peacemax'. Attending classes is the one thing over and above everything else that will ensure a good academic performance. Once you become lax it is very difficult to catch up again.

Reaching IIT may be great but doing well here is more important.
Consider IIT Bombay as a stepping stone to greater things in your life and not an end in itself. Do this and you will do just fine! I shall meet you at the academic orientation which will be conducted very soon.

If you have any doubts or queries or need any assistance during your stay here, feel free to contact me.

Internal Phone Number: 4071
Email: ganeshmani@iitb.ac.in, gsecaa@iitb.ac.in

Address: Room 352, Hostel 9

Regards,
Ganesh Mani
General Secretary, Academic Affairs

THE NEW CURRICULUM

IIT Bombay recently introduced a new academic programme for its undergraduate students based on the recommendations of the Biswas Committee and yours is only the second batch to follow this new programme. The structure of your degree programme is, as a consequence, radically different from that of the previous batches - but how?

IIT B Core Course System

Here at IITB, the academic year is divided into two semesters, each lasting about 16 weeks. Each semester, you have to complete a certain number of credits/courses. Based on your performance, you are assigned a grade at the end of each course. The weighted average of your grade points for all the courses in a particular semester gives your Semester Performance Index (SPI). The weighted average of these SPIs gives your Cumulative Performance Index (CPI). CPI gives an overall impression of your academic performance and plays an important role in course/project allotment in later semesters.

A word of caution. In order to be eligible to write the endsem for a course a student needs to have at least 80% attendance, otherwise he/she fails the course and receives an XX grade. In case a student is unable to achieve the minimum cutoff in a particular course he/she fails and receives an FR grade.

The New Curriculum

The typical student workload has been reduced considerably. You could use this extra time to pursue extra-curricular activities. As you will soon realise, the IITB environment gives you many opportunities to develop yourself through cultural activities (*cult*), technical activities (*tech*), sports, and just about everything else.

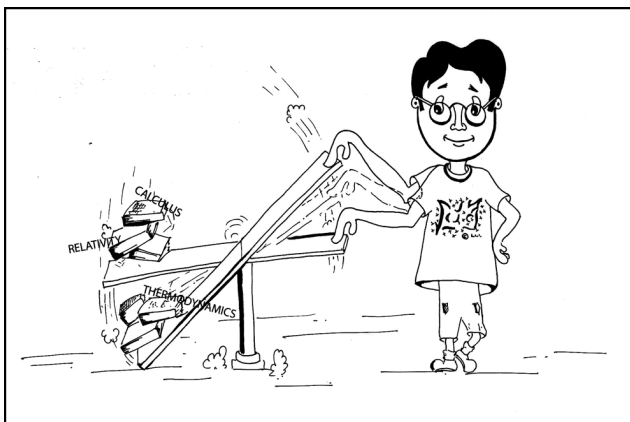An exciting new system for the academically-inclined is in place now in the form of **Minors & Honours**. The extra slots that the reduction in compulsory courses has freed up can be used to complete courses in any discipline that you might happen to be interested in (say, Electrical Engineering or Biology), from your 3rd semester onwards. You can earn a Minor by doing a certain 'extra' courses in specific areas. Be warned that registration for Minor courses, particularly in 'popular' departments, is expected to be very competitive, with a cap of 40 seats per course. If you are serious about your Minor ambitions, then be on your toes and *maintain a good CPI right through your degree programme!!!* Dual Degree students, in addition, must have a CPI of $>= 8.0$ and zero backlogs in order to be allowed to register for Minor courses. The B.Tech. students have the option of completing a certain set of courses in their own department (besides the compulsory courses) and earn a 'BTech with **Honours'** degree. These courses are compulsory for Dual Degree students.

Finally, If you happen to have backlog(s), you can use this extra time in order to repeat (and this time around, hopefully pass) whichever course(s) you have to. Sadly, the Committee has also recommended that course instructors award the FR grade to a greater number of students, as compared to the numbers in the past, since repeating courses has now become a much less sticky affair. In your previous batch, the first under the new system, typically $1/10^{th}$ of the class failed every course.

Turn the page to see a comparison of the old and new curricula.

BROAD COMPARISON OF THE OLD AND NEW CURRICULA

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Attributes	Old Curriculum	Biswas committee Recommendations
Student work load	• Around 170 Theory & Lab courses for entire program. • An average of 10.6 hours of work load per week	• Only 148 Theory & Lab courses for the minimum program • Nearly 9 hours of work load per week
Advantage	The Committee made this recommendation because it hopes that the extra time that this move frees up will enable you to "develop multifarious competencies". In simple terms, use your time in whatever manner you see fit- hopefully in a fruitful manner.	
Flexibility from a student view point	• Approximately **330** credits to be earned to graduate • No provision for **Minors/Majors**	• A minimum of **250** credits need to be earned to graduate as a BTech • An optional Minor in **another discipline** can be earned by doing at least 30 credits in an area of your choice. • An optional **Honours in a Major area** can be earned through a minimum 30 credits, as per the norms defined by the Department
Advantage	The new curriculum incentivizes academically motivated students by awarding Majors. Also, it will provide an opportunity to interested students to choose from a wider spectrum of courses through Minors. This will help students to develop their skill set.	
Miscellaneous	• **Re-examination**: A student was awarded an FF grade in case he/she barely missed the cut-off mark. The student could attempt a re-exam and pass with a DD. • The first year courses comprised only of Basic Science and Engineering Courses.	• No Re-examination, only **FR** grades will be awarded and the student will have to repeat the course. • Two new courses, **Experimentation and Measurement** and **Data Analysis and Interpretation**, have been introduced to equip the engineers of tomorrow with enhanced analytical skills

AN OVERVIEW OF FIRST YEAR COURSES

In each of your first two semesters, you have to take 4 theory courses and 2 practical courses. Lectures for theory courses are in the mornings. In addition, most theory courses also have weekly tutorial sessions, where you are divided into batches of ~40 students. A TA (Teaching Assistant) solves problems from the tutorial sheets (usually distributed in advance) during these 1-hour sessions. Your labs (including your Engineering Drawing and Workshop sessions) take place during the afternoons, from 2 to 5 PM. For theory courses, 6 credits mean that you are expected to devote 6 hours per week for that subject (3 hrs lectures/ tutorials + 3 hrs self study).

Theory Courses

CS101 intends to give you a crash course in programming (using C++) and general computer use, including an introduction to UNIX/LINUX. Those with a background in programming will find this course pretty easy. However, those who are new to computers or programming might not be in for a joy ride. The course is very interesting though, and if you devote some time and practice, you won't find it difficult. Attend all your labs (held in the Old Software Lab (OSL), in the Maths Department) and solve homework problems diligently, i.e. on your OWN, for best results.

Content: Unix shell, primitive types, arrays, expressions, control statements, functions, basic I/ O, structures and classes, elementary graphics programming, applicative problems.

MA 105 - Calculus (8 Credits)

One of your seniors said: *'I thought I knew Calculus, until I encountered epsilon – delta in MA105'*. As you will soon realize, MA105 calculus is quite different from JEE calculus. The course content can be broadly divided into Single-variable Calculus, Multi-variable Calculus and Vector Calculus. The course begins by teaching you the basics of limits, continuity and differentiability, covering theoretical as well as practical aspects of concepts you've so far been trained to take for granted. You will continue with Integration (including surface and volume integrals) and then jump into Multivariable Calculus and Vector Calculus, meeting several Greek letters on the way.

A word of caution from experienced seniors - *Do not take this course lightly*. At a 8 solid credits, this course can easily pull down (or push up) your CPI quite significantly.

HS 101 - Economics (6 Credits)

This is offered by the Department of Humanities & Social Sciences. The first half of the course covers Microeconomics, the study of economic principles that operate on a small scale, such as the laws of Demand and Supply and various market structures. The second half is about Macroeconomics: how economies function as whole entities, and is covered largely from the Indian perspective. Take this course seriously and you will find it a greatly enlightening experience. Students who are not comfortable writing in English may be handicapped somewhat in this course, but rest assured that the instructors are aware of this; the exams are not very difficult. What will help more than the theories is the insight you will get into Economics and the general thought processes which will be inculcated.

Note: Electrical Engineering students will have to do a departmental course (EE 111) in place of HS 101.

CH 103 - Chemistry (6 Credits)

This course is split into 3 sections and is taught by 3 different instructors. Physical Chemistry essentially comprises quantum chemistry: you will encounter operators, Schrödinger's famous Equation, particles in boxes, the wave function for the Hydrogen atom, and subsequently, atomic orbitals and molecular orbitals. Inorganic Chemistry will cover in some detail Co-ordination Chemistry and Organo-Metallic compounds. In Organic Chemistry, you will be taught Stereochemistry, some concepts of molecular orbitals and the chemistry of carbonyl compounds, though the exact syllabus may vary.

P W Atkins, Shriver & Atkins/J D LEE and Morrison & Boyd/Solomon & Fryhle are the recommended texts for the respective sections, though for most purposes the slides provided by the instructors should suffice.

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The examinations are moderately difficult, but you shouldn't have problems as long as you study regularly. The grading might be a bit tough though, so don't take the course lightly.

PH 103 - Electricity & Magnetism (6 Credits)

PH 103, fondly (?) referred to as *E-Mag*, is a core course for all students of the Electrical, MEMS, Civil, Aerospace and EP departments. The course begins with a quick introduction to a couple of co-ordinate systems you probably have not used before, the Cylindrical and Spherical system. Mastering the use of these systems along with the familiar Cartesian system will make this course, as well as MA105 and CH103, a lot more *peaceful* for you. After rushing through the fundamentals of Vector Calculus, you study electric and magnetic fields in turn (both in vacuum and in material media) using the tools that you've learnt: this constitutes the bulk of the course. Some other topics may be touched upon if time permits.

Your Bible for this course will be *Electrodynamics* by DJ Griffiths, a clear and concise text, with the occasional splattering of humour. The problems in this book are of a level slightly higher than those of the course, but you should give them a shot nonetheless. The grading for this course was relatively harsh: solve your tutorial sheets regularly if you want a decent grade!

PH 105 - Modern Physics (6 Credits)

This is a core course for all students of the Mechanical, Chemical, CS and Chemistry Departments. You will begin by studying the Special Theory of Relativity, Minkowski Space-Time (a fancy name for a 4x4 matrix) and then move on to Wave/Particle duality, the Uncertainty Principle and the Schrödinger Wave Equation, with the course giving you a look at Quantum Mechanics. If time permits, you may be given a brief introduction to Statistical Mechanics. If you devote some time, this course won't be a major difficulty.

IC 102 - Data Analysis and Interpretation (6 Credits)

IC 102, referred to by your previous batch as *Da-I'* or simply *IC*, is a new addition to the core curriculum of all UG students, with yours being only the second batch to have the course. Whatever *gyaan* we present here is based on the experience of only one batch, so standard disclaimers apply.

The pre-midsem portion of this course is the easiest and is mostly a repetition of School/JEE stuff like graphical representation of data, probability and introduction to random variables. The post midsem content is substantially harder and requires a good bit of thinking. You will encounter various kinds of distributions - normal, poisson, binomial, chi-square, t- and F- among others. Be sure not to get intimidated by these.

Read the prescribed book carefully (and well in advance) and practise questions (experience tells us that it pays to read through the portions of the books declared as out of syllabus...). The examinations can, at best, be called unpredictable in their extreme easiness/difficulty levels.

> No matter which the course, remember, studying regularly and solving tutorials will get you everywhere.

MA 106 - Linear Algebra (4 Credits)

Linear Algebra is the study of systems of linear equations as well as vector spaces and linear transformations - two things you probably haven't heard of yet. MA 106 is a half-semester course that crams a lot of theory as well as techniques into a very short duration. The abstract concepts might take some time to set in, so spend a while on them. You will have to be on your toes at all times. If you put some time into this course, though, it can actually be quite likable.

Keep in mind that Linear Algebra has widespread engineering applications and you will need to use it several times, so you might as well take it seriously.

MA 108 - Ordinary Differential Equations (4 Credits)

This course is pretty straightforward. You will start with some material you have already seen before, and then proceed to additional concepts and techniques for solving Second Order Differential equations. You will then move on to Improper Integrals, Laplace Transforms and Convolutions. This is a half-semester course and so runs pretty fast, so make sure you know your

stuff well.

The course content is highly relevant to engineering students of all disciplines so do pay attention as you will need these tools very soon.

Lab Courses

PH 119 - Physics Lab (3 Credits)

You'll be made to do a series of 9 experiments over the course of the semester. Manuals are not allowed while performing experiments, so remember to read up on your experiment well in advance (this does NOT mean the lunch break before the lab) and to finish writing the preliminaries (Aim, Apparatus, etc.) on your journal sheets. 40% of the weightage goes to the endsem, where you'll be randomly assigned an experiment to perform. There will also be a quiz on the fundamentals of measurement and error analysis at the beginning of the semester.

CH 117 - Chemistry Lab (3 Credits)

You will do 8 interesting experiments during the semester. Unlike in the Physics lab, you will be allowed to take manuals with you and will have to do all written work in the Lab itself. However, you will be expected to read up on the experiment beforehand. The in-semester work will have 80% weightage and the end-semester exam (where you will be assigned an experiment randomly) will have 20% weightage.

Don't forget to put on your shoes and lab coat unless

you want to go back all the way to your hostel!

ME 119 - Engineering Graphics & Drawing (5 Credits)

Here, you will learn about Projections of lines, planes, solids, sections and intersections and surfaces of solids on a 2-D surface (in your case, the Half-Imperial Drawing Sheet). You will also do Ortho-graphic and Isometric projections.

Those who have taken this subject in their +2 find the course a cake-walk, but it has a moderate difficulty level. We will leave it to you to decide. Be prepared to study on your own as the lectures might baffle you. Trying to answer the questions yourselves (instead of misusing the Xerox shop) will help you a great deal. The prescribed book is *Engineering Drawing* by ND.

Two tests of 50 marks each comprise 50% of your net score but almost 100% of the practically effective total, and more or less decide your grade. Take them seriously.

ME 117 - Workshop Practice (4 Credits)

This course gives you a brief exposure to working on five different trades: fitting, pattern-making, the lathe machine, shaping and welding. Fitting and pattern-making involve working with metal and wood respectively, and are the only trades that require physical exertion of any kind. The lathe and shaper are machines that do most of the work for you; your only responsibility is to accurately and regularly take measurements.

XX 1XX - Department Introductory Course [DIC] (6 Credits)

Nothing much can be written about this because each department has its own DIC. You will take it in the second semester and it will be your first departmental course. As of Spring '08, the DICs were:

- Aerospace - AE 152 (Flight Mechanics 1)
- Chemical - CL 152 (Introduction to Chemical Engg.)
- MSc. Chemistry - CH 104 (Chemistry 2)
- Civil - CE 102 (Engineering Mechanics)
- Computer Science and Engineering - CS 152 (Abstractions and Paradigms)
- Electrical - EE 112 (Digital Circuits)
- Engineering Physics - PH 106 (Modern Physics)
- Mechanical - CE 102 (Engineering Mechanics)

ACADEMICS

The welding section requires you to melt a single straight line into a slab of metal, but it is surprisingly easy to mess up, especially because any and all mistakes are permanent.

There is a quiz towards the end of the semester, with multiple-choice questions (one or more correct answers - JEE nightmares return!) based on material covered in the weekly lectures and the prescribed textbook (only known as *Hajrachoudhury*; a two volume nightmare that only a handful of legendary seniors have read completely). You will also have an end-

semester practical exam, where you are randomly assigned a trade. Remember to wear shoes to all workshop sessions!

A hot tip: study as hard as you can for the theory quiz, since it acts as the differentiating factor and can really make or break your final grade.

Course Comparison Chart

To give you a rough idea of the relative difficulties of the courses, we have made a comparison chart which rates (on a scale of three stars) all the courses on a few parameters. We have tried our best to give an unbiased comparison reflecting the feelings of a majority of the batch. It should be noted that the comparison should be used to get a very general idea of the course and should not be taken quantitatively. Also, the parameters change drastically depending on the Instructor, so your experience may be very different.

*** = Maximum, * = Minimum

	MA 105	CS 101	HS 101	PH 103	PH 105	ME 119	CH 103	IC 102	MA 106	MA 108	ME 117	CH 117	PH 117
New Concepts	***	***	**	***	***	**	**	**	***	***	*	*	**
Difficulty Level	***	**	*	**	**	**	**	**	***	**	*	*	*
Difficulty of Exams	**	**	*	***	**	**	**	**	**	***	**	*	**
Strictness of Evaluation	***	**	**	**	**	***	**	***	***	***	**	**	**
Strictness in Grading	***	*	*	***	**	***	***	***	***	**	**	*	*

KNOW YOUR DEPARTMENT

Mechanical Engineering

This is the biggest Department of IITB. It has more than 41 faculty members, 400 UG students, 240 PG students and 63 permanent supporting staff. The faculty members are grouped under three broad specializations – Design, Manufacturing and Thermal & Fluids Engineering. The Department has decided recently to focus major research efforts in the following five areas: Computational Mechanics, Nuclear Thermal Hydraulics; CIM; Refrigeration, A/C and Cryogenics; and MEMS, NEMS and Mechatronics.

In your second semester, you will receive your department id, and you will be granted access to various facilities like a 24 hour computer lab, your own homepage, and storage space on our server. Besides, our department has an annual festival called *Radiance*, usually held in March.

In Mech, you will get many opportunities to interact with your seniors, faculty and different companies.

Chemical Engineering

Besides an emphasis on Chemical Engineering fundamentals there also is a specialization made possible through research in fields as varied as Biochemical & Food Process Engineering, Environmental Engineering and Process Safety, Interfacial Science and Engineering and Petroleum.

The department also boasts of a great record of successful APPers (students going abroad on a fellowship for further studies). The ChE Association comprises of students and faculty of the department and is managed by a democratically elected team from amongst the members. The association ultimately aims at enabling its members to benefit from its activities. The ChEa also organizes an annual department festival Azeotropy in the last week of March.

Computer Science and Engineering

The CSE Department and the Kanwal Rekhi Institute of Information Technology (KReSIT) together make up the Department of Computer Science and Engineering. The department has three labs: the OSL (Old s/w lab), the NSL(New s/w lab) and NSL – annexe. There are, in total, about 200 machines. These labs are available to students 24 hours a day, 7 days a week.

Students of this Department have won laurels for the institute in several contests like TechVista, ACM International Collegiate Programming Contest(ACM ICPC), and so on. The department also continues to receive attractive fellowships for its M.Tech, DD and Ph.D programs.

Metallurgical Engineering and Material Sciences

The department of Metallurgy Engineering and Material Sciences (MEMS) is located next to the Physics Department. All your seniors will tell you it is the most "lukkha" department in the institute. But the department (affectionately called 'Meta') does pioneering research on materials you would probably work with in the near future and in no way is it "lukkha".

The department boasts a national facility for analysis of materials that is used by students and professors from all corners of the country. Recently, steel baron Lakshmi Mittal noted that IIT Bombay has a strong metallurgical engineering department. Also, the department organizes a yearly fest for its students called *Padarth* towards the end of March.

Aerospace Engineering

This was established in 1966-67 as the Department of Aeronautical Engineering. Five broad areas of specialization are offered: Aerodynamics, Control and Guidance, Propulsion, Structures, and Systems Engineering. The department maintains close links with aerospace industries and defense organizations. The faculty has contributed to the success of national programs like the LCA and GSLV. World class facilities such as wind tunnels, an aeromodelling lab and excellent computational facilities are available.

The department organises a fest called *Zephyr* in November. Zephyr '07 was notable for featuring a talk by Sunita Williams.

Engineering Physics

The department offers a 4-year B.Tech. programme in Engineering Physics, a 2-year M.Sc. programme in Physics and two DD programmes, B.Tech-M.Tech. in Engineering Physics and M.Sc.-Ph.D. in Physics. The department also has about 50 PhD scholars.

Faculty members and research scholars of the department are engaged in cutting edge research on various active fields in physics from Nanoscience to High Energy particle physics. It also has state-of-the-art labora-

ACADEMICS

ACADEMICS

tory facilities to support the research work in various fields.

Electrical Engineering

The EE department at IIT Bombay has been active in teaching and research since its inception in 1957. Currently, about 45 faculty members are engaged in research in the areas of Communication and Signal Processing, Control and Computing, Power Electronics and Power Systems, Microelectronics and VLSI design, and Electronic Systems.

The Department is home to about 320 undergraduate and 200 postgraduate students.

Civil Engineering

The department of Civil Engineering was established in 1958. The Department has grown tremendously over the years and is now recognized as one of the major engineering departments in the country.

The Department has developed strong links with the building and construction industry as well as with academia, both within and outside the country. Besides high quality teaching and instruction at both UG and PG levels, the Department is actively involved in basic and applied research and consultancy and provides high quality technical advisory support through various R&D projects and consultancy to various organizations. For example, faculty members of this Department provided valuable inputs after such natural disasters as the Bhuj earthquake.
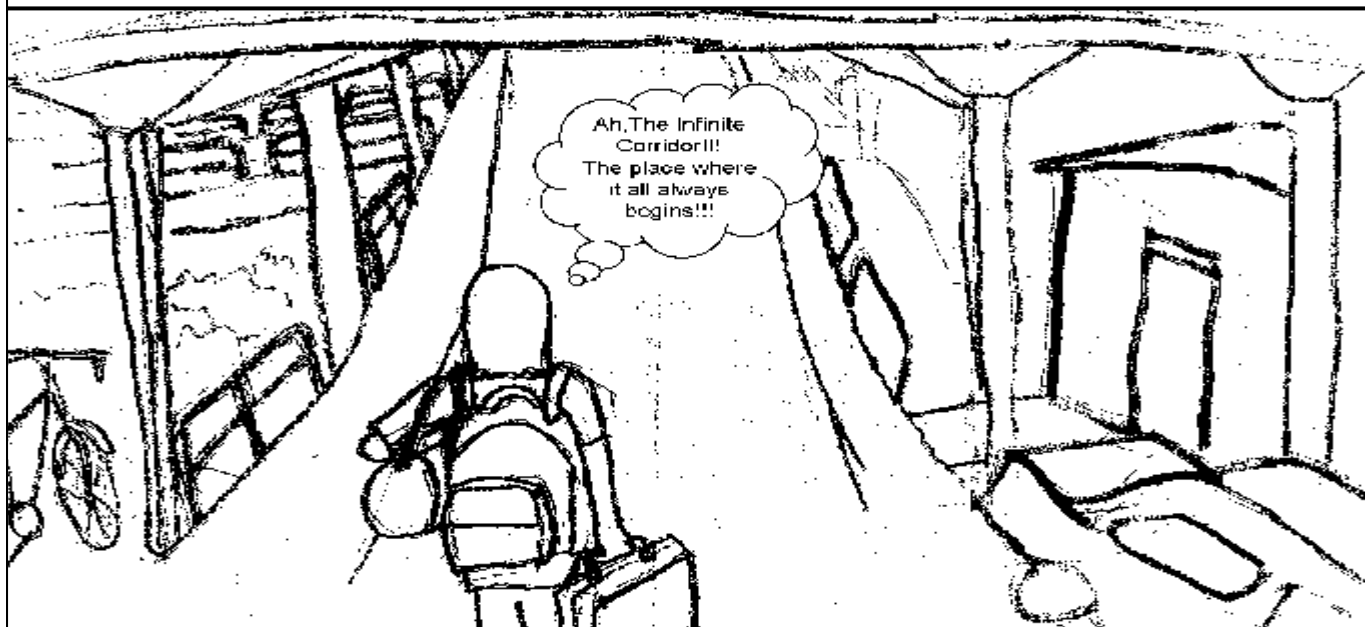
Earth Sciences

The Department of Earth Sciences offers academic programs leading to M.Sc. (Applied Geology), M.Sc. (Applied Geophysics), M.Tech. (Geo-exploration), M.Tech.(Petroleum Geoscience) and PhD. The department annually admits about 30 students in its M.Sc. Programme, about 12 in its M.Tech. programme and about 5 students for its Doctoral programme.

Apart from teaching commitments, faculty members undertake several sponsored research programmes, consulting assignments and short term courses under the Continuing Education Programme (CEP) of IIT Bombay. The Department enjoys close links with both industry and research organizations.

Chemistry

From a small department started in 1965, the Department of Chemistry has grown into a major center for teaching and research in Chemistry in India. There are about 49 M.Sc. students in the 2-year M.Sc. program and 61 in the five year integrated M.Sc. program. The department also has a strong Ph.D. program with around 125 Ph.D. students working under 27 faculty members with areas of research encompassing all major sub-disciplines of chemistry. The departmental research is funded by major Indian and international agencies and supported by many departmental and institute central facilities. The department also encourages strong links with industrial sponsored research.

ENTRANCE TO THE INFINITE CORRIDOR

STUDENT ACTIVITIES

Students at IITB do ever so much more than study. Whatever your talent, you will be able to nurture it here. If you're still discovering your talents, we're here to help. Whether your interests lie in music, astronomy, basketball, writing or pretty much any activity under the sun, this is the place to be.

Remember though, that the bottom-line is that you're here to study. Any other activity must only always be secondary to that.

The Student activities section has been classified into

- Cultural Activities

- Technical Activities

- Sports

So go ahead, find your passion!

MESSAGE FROM THE GS CULT

CULTURAL ACTIVITIES

Hey folks,

Welcome to this institute for the 895648th time. Right now, you would be on cloud #9 and your god-knows-where-they-live relatives and friends would be calling you up to congratulate you for getting in. Instead of raising you to the next cloud level, I'd rather tell you some things which will guide you throughout your stay at IIT Bombay along with acquainting you with the numerous cultural activities which go on here.

It is well known that IITB enriches the overall personality of an individual and adds new and hitherto undiscovered dimensions to his/her way of living and thinking. Amongst the various extra-curricular activities, cultural activities have their pride of place. All the cultural activities can be roughly divided into four parts:

Intra-hostel events: Each hostel has its own cultural calendar and hardly a fortnight goes by without a competition happening within the hostel. The first, and only, rule for the intra events is – PARTICIPATE. This is the best way to get to know your batchmates and seniors. The hostel cultural councillor (you'll know him/her as the cult co) makes these events happen. You'll be rewarded with milk shakes, cool drinks or ice creams depending on the generosity (and current financial status) of your cult co. But there's so much more - you'll learn what you always wanted to learn but never could.

Institute level events: These take Cult@iitb to the next level. Overseeing cult at the institute level is the elected Institute Cultural Committee, consisting of the General Secretary Cultural Affairs, Institute secretaries (Fine Arts, Literary Arts, Dramatics, Music & Dance, Debating and Photography) and representatives. This committee plans and executes a number of activities in each of the spheres.

Events at the institute level can be categorized into:- Open Events (open to all students regardless of hostel or year), Inter hostel Events (these are akin to the Olympics where every hostel decides to do without sleep to win that coveted first place), Workshops (where you can learn skills as diverse and interesting as scrabble, clay modelling, animation, playing drums and monoacting) and special Nites and Exhibitions (stars of the IITB cultural firmament showcase their talent at these non – competitive shows).

Inter-collegiate cultural festivals: Come December and every Indian fortunate enough to be in college has only one thing on his/her mind: Mood Indigo - India's largest college festival. Apart from MI, we also participate in other inter-collegiate festivals such as Malhar (St. Xavier's College), Chaos (IIMA), and Brouhaha (Sydenham). Watch out for posters informing you of these interesting ways to spend your weekends!

Performing Arts Festival: The zenith of the cultural year. The reason most IITians don't sleep much in March. The grand-daddy of 'em all. The one event that can seamlessly integrate different types of cultural events.

Trios of hostels are grouped into four teams. Rehearsals, script writing and prod making start at least a month in advance. Each group presents its performance at the Open Air Theatre. An hour and half long performance that adds a whole new dimension to the meaning of the phrase 'hostel pride'. Winning or losing doesn't matter here (your seniors, however, might take a slightly different view:P). You learn a lot of things while working for a PAF – not least, teamwork.

Before ending this letter, a word of caution. Whenever you decide to do any activities do it only if you love to do it. No one can make you like what you don't want to. Your first year is the year to explore new things. Don't overdo anything - quit if you don't like it. But if you like something, pursue it till you attain expertise.

Remember, IIT makes each of us more competent in this world than we were before, but it's finally people like you and me who have earned the reputation for themselves and hence for this institution. Uphold yourself and the name of IIT will automatically be upheld.

Reiterating Mark Twain's quote: "Don't let schooling interfere with your education!".
Take care and good luck for the journey ahead,

Regards,
Sajid Shariff
General Secretary, Cultural Affairs

Cult @ iitb

FINE ARTS

FIELDS APLENTY

DRAMATICS

DEBATING

MUSIC

LITERATURE

DANCE

CULT CLUBS

Dramatics

Dramatics have always been an integral part of IITB cult. It offers exposure to all aspects of culture – be it acting, music, dance, fine arts or speaking. Dram is not restricted merely to acting and direction. It also requires an active interplay of diverse allied arts. at IITB nurtures all of the above and more.

BONDA is the dramatics club of IIT Bombay.

Institute Dramatics Secretary: Aniket Behera
aniketbehera@iitb.ac.in

Fine Arts

Fine arts are defined as the study and creation of visual works of art. Here in IITB, Fine Arts are all about how creative and aesthetically appealing you can make your art forms look. We hold a variety of events like Workshops, Open events, Competitions and Exhibitions.

RANG is the fine arts club of IIT Bombay.

Institute Fine Arts Secretary: Rohan Gupta
rohan.gupta@iitb.ac.in

Debating

All speaking events like formal or informal debates, extempore, elocution and the radio play come under debating. The Speaker's Club is a platform where people can interact informally and try to get rid of their stage fright. It serves as an opportunity to polish up those latent speaking skills.

Institute Debating Secretary: Rajat Chakravarty
rajatc@iitb.ac.in

Literary Arts

Literary Arts include trivia and topical quizzes, cluing games like dumb charades and pot-pourri, and vocabulary related events like wordgames. Literati, the Lit Club of IITB, organizes informal meetings and workshops, where you can learn everything you always wanted to know – but didn't know whom to ask.

Institute Literary Arts Secretary: Rahul Gaur
rahul_gaur@iitb.ac.in

Photography

Whether you are a pro who wants to discuss equipment, or an amateur looking for a place to learn about lighting details, or just somebody who knows nothing about Photography, but thinks it is worth a shot... this is the place for you!

PIXELS is the photography club of IIT Bombay

Institute Photography Secretary: Gnyanendra Kumar
gnyanendra@iitb.ac.in

Music

Inter-hostel music events comprise events in Western and Indian music, in classical and light categories, both instrumental and vocal. Institute level events also give our musicians, vocalists and instrumentalists alike, to prove their mettle.

Staccato and Saaz, the western and Indian music clubs at IITB, are two good places to meet your fellow music lovers.

Institute Music Secretary: Anirudh Srinivasaraghavan
anirudh.s@iitb.ac.in

Dance

IITB has a flourishing dance scene with the active dance club In-Sync, with its highly enthusiastic club members, always ready to experiment with innovative and pathbreaking ideas.

IN-Sync is the dance club of IIT Bombay.

Institute Dance Secretary: Akshay Shrivastava
akshay_shrivastava@iitb.ac.in

SPIC MACAY

IITB is proud to be an an active part of SPIC MACAY (Society for the Promotion of Indian Classical Music and Culture Amongst Youth). The noteworthy feature of programmes organized under SPIC MACAY is that they are conducted in an informal atmosphere – unlike concerts. The audience is thus enabled to interact personally with the artistes.

THE PERFORMING ARTS FESTIVAL

Colourful and diverse as the cultural scene at IITB already is, it would be incomplete without the Performing Arts Festival or PAF. The PAFs are a series of large scale cultural performances. Each performance is also referred to as a PAF. Four teams (each made up of made up of 3 or 4 hostels) battle for the coveted PAF Winners'. To describe the PAF as a cultural event using only words is tricky because it is so unique.

PAFs are cultural performances, about an hour and a half long, held in the Open Air Theatre (OAT) during the last two weeks of March. However, the preparations begin at least a month before that. PAFs may be based on real personalities, events, fictitious plots or even everyday life. PAFs incorporate almost all imaginable form of stage arts like acting, singing, music, dancing, speaking, choreography, artwork, set-making (forget this term, use the word *prod),* direction, lighting, and script writing. Watching a PAF is almost like seeing a feature film happening live in front of you.

It can as well be said that the limit on what can be performed in a PAF is the creativity, talent and resourcefulness of the participants. The actors perform with lifelike actions and emotions while the dialogues are read out by voiceover artists. The acting can be of any style ranging from street play to monologues to fighting and action scenes. The songs, music and dance performed can range from Bollywood to traditional, regional and international styles. Also the sets for PAF

(not sets, *prod*) are large and life-size, made from giant newspaper-rolls mounted on bamboo frames. After this, paper and other materials painted by artists are glued to these frames to give them the required appearance of a background, a building, a phonebooth… in fact, almost anything!

Apart from the obvious details of the scale and grandeur of the performances, there are other features that make PAFs very special. Firstly, PAFs are exclusive to IITB. Next, this is one of the rare events where many students from various different years, departments and hostels come together and work as a team. The feeling of being a part of such a grand event rather than just being a spectator is a really satisfying experience in itself.

Know that you will be allotted a hostel at the end of this year where you will stay for the next 3 or 4 years. You will be a part of the PAF team of that hostel. For you, a PAF would not only be a learning experience but also a good chance to get to know your future fellow hostelites.

Be a part of the PAF. It's the biggest and best thing there is in IITB cult.

CULTURAL ACTIVITIES

PAFs are unique to the culture of IITB. Famous PAFs are recollected and their stories passed down through generations of students. Last year in the winning PAF 1984, an entire replica of the Golden Temple of Amritsar was built on the OAT stage, complete with pools of water in its front.

Déjà vu, perhaps the most famous PAF ever, dealt with the issue of IITians committing suicide. This hard-hitting PAF created such an indelible impression on people's minds, that IITB sanctioned funds for it to be made into a movie. The movie Déjà vu was released in April of this year.

COLLEGE FESTS

IITians participate in more than just intra-collegiate events. We go in droves to several cultural festivals during the year and even if we don't always lift the overall trophy, we certainly do have a lot of fun trying. Inter-collegiate festivals also give us a chance to see how incredibly talented even non-IITians can be, and of course, there's always something new to learn. So here's a list of the fests we generally attend, and hopefully some of you will be a part of the contingent in the next one.

Malhar – St. Xaviers

The first big fest to hit the headlines in the academic year is '*Malhar*', the one stop destination for all, ahem, enthusiastic bachelors of IIT to pay homage to the dainty girls of St. Xaviers. The geekyness of IIT Bombay meets the 'Whateva!' of Xavierites. And once you've overcome the "stick to the wall" stentorians and one way traffic for humans, you can enjoy two weekends of high quality events, assuming you take your eyes off the girls there. Xaviers' undoubtedly draws the best in the Bombay circuit and a good platform the culturally enthusiastic.

Mood Indigo – IIT Bombay

In the month of December, the merriment hits a new high with our very own Mood Indigo. If the scale of publicity and preparation doesn't amaze you before the 4 day extravaganza, then the sheer volume of activities and their clockwork organization will surely leave you dumbfounded. With events to suit every taste, be it serious debating to entertaining karaoke, MI offers the entire range. And you can even play guide to lost guests from faraway colleges by showing them the way thanks to the sprawling campus. Be sure to catch the Professional nights and the After nights for some amazing performances. This is one fest where you will never be in want of things to do.

Chaos – IIMA, Unmaad – IIM B

When you reach the even semester, it's time to pay a visit to either IIMA or IIMB and enjoy a very chilled out 'Chaos' or '*Unmaad*' respectively. Quite contrary to the expectations, the management students don't seem to follow time schedules. Instead, they offer two of the most laid back and enjoyable college fests possible. With very few events, with some of them highly delayed or even cancelled, a perfect place to just relax and play cricket in the evening and go dancing at nights. It's a great favourite for those who would like to enjoy train or bus rides with a contingent exceeding 100 students. But for the serious people, lots of cash up for grabs as the competition is not very strong particularly in Lit and Debating scene.
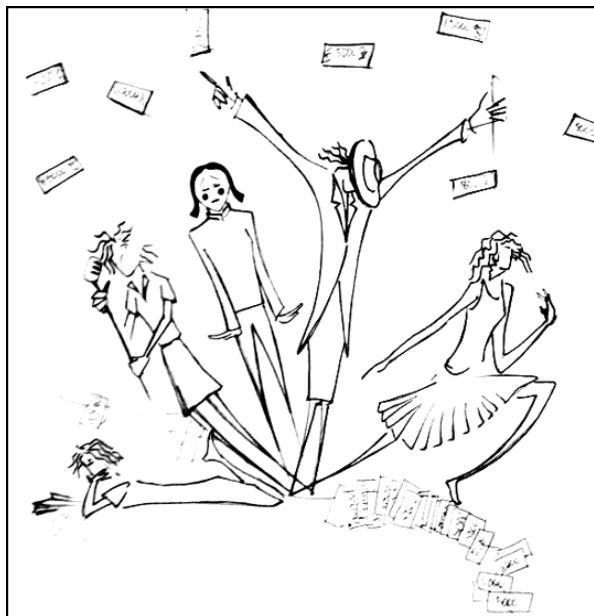
The Others

In the earlier part of Feb. if you are hanging around Matunga, in the vicinity of VJTI then do make it a point to peep into '*Pratibimb*', the intercollegiate cult fest of VJTI.

K.J. Somaiya (the well known management school) will flip you 360 degrees in its 'KJ 360' festival with seminars, workshops, technical events and literary events. 'Symphony' also rocks the floor of KJ Somaiya's engineering campus.

Students of S.I.E.S college at Nerul have taken the initiative to start a brilliant festival called 'Frames' for film making enthusiasts which includes short films, documentaries, Ad films, and music videos to 'frame their imagination'.

To add to the list of fests happening in Mumbai are Brouhaha at Sydenham, Aarohan at Ruia's, Ole by Wilson college and many more.

THE SCIENCE CLUB

A Club for Science in the Indian Institute of Technology?? Don't we get enough in our course-work that we should need a club for doing more? Well, as Tom Sawyer discovered, *Work consists of whatever a body is obliged to do, while Play consists of whatever a body is not obliged to do.*

We bring the fun back into Science by letting you explore in your own way those facets of Science which our academics never care about. We are *a club for the pursuit of scientific hobbies.*

We're amateur HAMmers and Astronomers. We fly aeroplanes (we build 'em too). We're masters of practical electronics.

We pretend to be great scientists and have our own 'Royal Society' meetings and talk and debate over various topics in science. At other times, we call some real scientists to lecture us on exciting subjects. We even have our own little room in SAC, and it could give Dexter's lab a run for its money!

The Science Club contains five smaller clubs which carry out activities in their respective fields. Here is a small introduction to each of the five clubs.

Aeromodelling Club

Ever wished you could fly? Nothing could bring you closer to the fulfillment of this desire. We make and fly paper planes, boomerangs, balsa-wood gliders and also remote-controlled fliers powered by electricity or IC-engines. We make Parachutes, and even Kites!We also enthrall ourselves in the experience of piloting real aircraft in our Flight-Simulator sessions and competitions. Our room in SAC has all the basic facilities to make the models. It's great because it gives you an opportunity to widen your imagination and try different things.

Niranjan Parab   niranjanparab@iitb.ac.in

Ph.: 93269 97911

Krittika *The Astronomy Club*

The sky is the lower limit! Every child is amazed by the spectacle of the night sky and feels curious about it, but few follow it when they grow up. Here at IIT-Bombay, you have a chance to satisfy that curiosity buried inside you since you were little. Our club caters to the needs of seasoned Astronomers through Progressive Observations, and also the casual gazer who comes-by asking

"What's Up?"

We have great telescopes and equipment, much of which we make ourselves. Imagine the fun of passing a night awake with your friends out in the open watching not only Planets and Stars, but also Meteors, Asteroids, Nebulae, Clusters, Satellites and countless celestial objects. This is what we do at star-parties (excursions), and believe me, they are thrilling like nothing else.

Many of us do Astrophotography (snapping celestial objects), and some love using their computers to do number-crunching looking for Extra-Terrestrial Intelligence.

Come with us to seek the treasures of the night-sky!

Viraj Deshpande   virajbdeshpande@iitb.ac.in

Ph.: 98601 22618

HAM Club

Remember the scene in *Rambo* where Sylvester Stallone uses a radio-set to communicate from a jungle? Or the one in *Vertical Limit,* where they communicate using nothing but little ticks and tocks? You could do it too! Amateur radio, often called ham radio, is both a hobby and a service in which participants use radio equipment to communicate with other amateurs. Besides recreation, HAM is also used for public service and is of great help during an emergency when other means of communication fail.

We have our own HAM equipment and use it to chat with other HAMs in Bombay. With us you can learn the Morse-Code, how to use HAM, its special lingo and etiquette (where you greet your friend by saying "73"), and have loads of fun with it! You may also pass an exam and earn the HAM Radio License, which makes you an official user of HAM. In the coming year, we are planning to work with the Astronomy Club on building a Radio Telescope, and you can only imagine how exciting that will be.

Mandar Kulkarni   mandardkulkarni@iitb.ac.in

Ph.: 93244 03882

Electronics Club

The E-club promotes hobby electronics and tells you what no course in your department will: the nitty-gritty

TECHNICAL ACTIVITIES

of electronics engineering. As a member of E-club, you can obtain guidance, tips and tools from senior members and seek out exciting new projects no matter which department you are from. Geeks and wannabes can indulge themselves in all kinds of circuit-work through the Elec hobby room which is accessible 24/7. A must-join for all enthusiasts of electronics and for those who want to learn!

Anand Malpani anandmalpani@iitb.ac.in

Ph.: 99208 00126

Papers Club

If I have seen further, it is by standing on the shoulders of giants. - Sir Issac

Newton

Indeed, this applies as much to Newton as to us. If you're the kind that thrives on this vantage, Papers club is for you. We are a small bunch of folks who love to have a lively discussion on any topic that interests us - be it photosynthesis, carbon nanotubes, or quantum mechanics.

And banish any thoughts of not being able to measure up because we're all equal before the ocean of knowledge. Come, and share with us your knowledge and love for science!

Shreyas Shah syshah@iitb.ac.in

Ph.: 98190 80836

TECHNIC

Have you ever dreamt of driving an F1 car? Ever thought that you would like to make a flying platform or a Mowgli-style boomerang of your own? TechniC is the place to convert all those scientific fantasies of yours into reality. To Wonder, Think and Create. After all, Tech *is* what you came to IITB for, isn't it?

TechniC is the club that promotes technical activities in the Institute. We conduct a number of workshops to start you off on whatever wacky thing you wish to build. We organize the Inter Hostel Tech GC as well as a number of other open competitions and quizzes. Our aim is to foster Tech@IITB and to have a lot of fun doing it. You will soon get to hear of various tech-related activities from your hostel notice boards. Keep your eyes peeled for such awesome events as Robotics, Electronics, Hacking, Reversing, Robowars, Aquabots, Lock-picking, Clock-reversing and Rubik's cube solving. If you are worried that you haven't done any of this before, don't. Very few people have done Tech before

coming to IIT. Once you start doing things yourselves, you will realize that you are much better than you thought.

Your hostel tech secretaries and TechniC team members will always be available to help you. So do make the most of TechniC. You could browse through our website as a starting point. More details at the tech orientation.

So together, let's WONDER, THINK and CREATE!!
The Technical Club (TechniC) has its website at
http://gymkhana.iitb.ac.in/~technic

Overall Coordinators:-
Omkar Wagh
omkarwagh@iitb.ac.in
Sulabh Jain
sulabh_jain@iitb.ac.in

A team from IITB built the winning micromouse in Techfest 2008. A micromouse is an autonomous, self contained machine that has to get to the center of a maze in the shortest possible time. The team's mouse reached the center of the maze in 12 seconds, creating a record in the process.

IITB'S STUDENT SATELLITE

If the words "in orbit" mean more to you than just a mall in Mumbai, then read on!

IIT Bombay has taken up an exciting new initiative to become a part of the space age, with a group of about 40 students and faculty working on building a small satellite to be launched in the third quarter of 2009, under the aegis of the Aerospace Department and the Dean, R&D.

The satellite is designed to be a complete and independent unit replete with all the systems used in larger satellites launched the world over. The experience is designed to give students an opportunity to learn hands-on the latest technologies being used today in their respective fields, and is also an excellent way to teach students how to engineer a complex system such that every component interfaces perfectly with every other component, like a technical jigsaw puzzle.

The first version of the satellite is expected to produce data on the electron count in the atmosphere and also reach out to students in universities all over the country by broadcasting a signal that can be picked up with the appropriate radio receivers which students will be encouraged to build.

Work on the satellite is divided among six groups. The Payload Group headed by Ashish Goel is in charge of designing the electron count experiment and analyzing the data received. The Controls group under Shashank Tamaskar works to keep the satellite within the correct orbit, prevent it from drifting off course and orient it appropriately towards earth. The Structures & Thermals Group led by Haripriya is designing the satellite body to withstand the forces exerted on it, maintaining a favourable environment of temperature around each component and fabricating the final model. The Power Systems Group under Mehul Tikekar generates power using solar cells and distributes it to all systems without allowing excess power consumption and overheating.
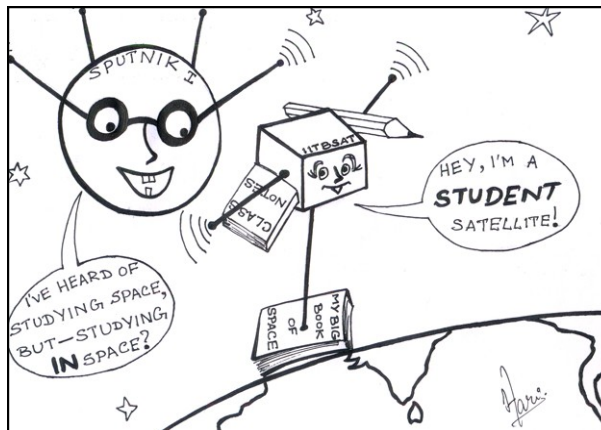
The Onboard Computer Group led by Omkar Wagh controls all the operations performed by the satellite and stores the data. The Communications Group headed by Kartavya Neema handles the transfer of data between the satellite and earth and will also be building a ground station to connect with the satellite. All six subsystems are interfaced to work in unison with no glitches by the System Engineer Saptarshi Bandyopadhyay.

In its first year, the project saw enthusiastic participation mainly from freshmen and sophomores from all departments. The satellite team welcomes new talent from the 2008 batch of freshmen and encourages interested students to contact the group leaders and help to send India's first student satellite into space.

For, the ultimate testimony to our skills as engineers would be to be able, one day, to point up at a bright speck in the sky and say - "I helped make that!"

The first student-built satellites were launched in the US about 10 years ago. The first student-built satellite in Europe was launched from Russia in 2005. India doesn't have a student satellite yet. Here's to IITB achieving this first for India!

MAV

Over the century since the Wrights first flew their pinewood and canvas aircraft, aviation technology has progressed, literally, in flying leaps, to sophisticated present-day models. There is now an increasing demand for Mini Aerial Vehicles, useful in military reconnaissance operations and disaster management. With accelerating progress in electronics, sensor technology and greater understanding of aerodynamics at the size scale, these flying eyes seem more and more possible. Realizing MAVs is a great technical challenge as conventional aerodynamics ceases to be efficient at that size scale. Low inertias make these very sensitive to perturbations requiring new flight control strategies.

The US Army organises an annual MAV competition every year, with MAV'08 being held in Agra. The mission was to identify the room in which simulated hostages were held inside a bank building around a kilometer away from the base, with inputs only from an MAV small enough to fit in a 300mm sphere.

A team headed by Prof. Hemendra Arya, and including Prof. Sanjay Bhat, Aditya Mule, Ashish Bhat and Vishal Prabhu has been working on this problem for around a year and developed a fixed wing and a rotary wing MAV. They developed a 'flying disc' where the fuselage and tail assembly are omitted, with elevons combining the conventional elevator and ailerons used

for control, along with an autopilot. The aircraft includes sensors for position, attitude, altitude and airspeed measurements and an onboard computer for data analysis and command, with an onboard camera transmitting back a live video.

A continuous video of a small area or a building requires a hovering platform, for which a quadrotor aircraft powered by four counter-rotating rotors was made, which is manoeuvred by slightly altering the rotational speeds of each rotor and has autonomous take-off and landing capabilities. An internal stabilisation system continuously monitors the aircraft and makes appropriate corrections to the rotational speeds of the rotors. The autopilot designed by IITB alumnus Ashish Bhat, is the smallest and lightest autopilot in the world, weighing a mere 9 grams. The two aircraft can both be remotely controlled from a ground station software, by just clicking the points on a map they are to visit.
The competition at Agra featured a great number of vehicles of various designs and capabilities from all over the world, thus making for not only a great experience, but also an extremely stimulating environment to inspire us to further challenge technological limits and compete successfully among the world's best.

Here's a list of some amazing websites you can use to kick start your interest in technical stuff:-

Howstuffworks.com : The ultimate go-to site for anyone wanting to understand how anything from car engines to invisibility cloaks work. Howstuffworks explains in simple language, making ample use of illustrations and videos.

Evilmadscientist.com: For everyone looking to have a little fun with electronics, or even for those just looking for a fascinating read. The evil mad scientists will try everything once, from cooking a hot dog with high voltage to making the kookiest Halloween costumes.

education.rec.ri.cmu.edu :This website teaches the principles of making robots, using lego structures as models. There's a lot to learn in here, for all you serious robotics fans.

FORMULA SAE

Formula SAE (FSAE) is considered to be the most prestigious Engineering Design competition at the University level in the world, as well as being a breeding ground for future racecar engineers and designers. The annual competition is held by the Society of Automotive Engineers (SAE). In short, this is Formula 1 at the student level.

It challenges students to design, build and race a one man, open-wheeled race car assuming that they have been engaged by a manufacturing firm to produce a prototype car for evaluation as a potential production item.

Restrictions on the engine capacity and the car frame force the students to widen their realm of creativity and imagination and think out of the box. Therefore, the car must have very high performance in terms of its acceleration, braking, and handling qualities. Factors like Cost, Maintenance, Reliability and Safety must also be taken care of.

In short it is a great experience for creative and talented students to hone their talents in a meaningful engineering project. It also tests their talents at various non engineering skills like marketing, sales and team spirit giving them the opportunity of working as a part of a dedicated team.

Work on FSAE started in June 2007, when work on race car began. The final competition was held in Michigan in May 2008. IIT Bombay was the only Indian team participating in the event.

TECHNICAL ACTIVITIES

MESSAGE FROM THE GS SPORTS

SPORTS

Hello boys and girls,

Welcome to IIT Bombay. I'm sure you all are still getting calls from relatives you didn't know existed congratulating you for securing a rank in JEE. In this short letter, I'm going tell you a few things that will help you get acquainted with the sports activities and facilities in the campus. IITB offers students ample opportunities to take part in organized as well as recreational sports. Sports activities are roughly divided into 3 parts:

1. **Recreational activities**: This involves landing up at the court or field and playing with whoever you find whether it be inside your hostel or outside.

2. **Inter-hostel events and camps**: These events are organized by the various secretaries and encompass students of all hostels. It gives an opportunity to interact with seniors. Various camps are held every year in several sports under the guidance of the respective coaches. The Institute Football League (IFL), though not an inter-hostel event, is held in the same breath as these events. An Inter-Hostel General Championship for Sports (the *Sports GC*) is held every year, and is the highest level competition at the intra – IITB level. The GC features competitions in as many as 14 sports, and spans both semesters. In addition, there are various Intra-Hostel and Open events to showcase your talent.

3. **Institute level events**: The best in the institute get a chance to represent IIT Bombay at various local tournaments/leagues and Inter-University competitions. A few examples: Athletics (local road races), Basketball (West Zone and YMCA open tournaments), Cricket (MCA Leagues), Football (BDFA's 3rd Division league), Hockey (BHA's 2nd Division league) and Squash (All India Inter- University). But the mother of all these is the Inter-IIT Sports Meet -the biggest sports event in an IITian's life, which is held in December every year. Winning an event in the Meet is considered to be the ultimate honour for any sportsperson in IITB. Tiring workouts, losses, victories, glory and ecstasy are but a few of the words that best describe the Meet. Last year the Meet was held in Bombay and IITB drubbed every other team, and won the General Championship. This year the Meet is going to be held in Chennai and freshies will be called upon to fill the shoes left by pass outs.

A fourth aspect, though only for freshies, is the NSO/NCC/NSS program. Freshies hoping to be a part of Institute teams can use this opportunity to hone their skills in any one sport of their choice (though conditions apply, mainly in the form of selections for each sport).

I would like to end this letter by asserting the need to take part in some form of physical activity whether for the ecstasy and passion for a sport or merely for fitness purposes.

Take care and good luck for the future,

Rohit Drolia

(GS Sports Affairs)

rohitdrolia@iitb.ac.in

P.S. Make sure you attend the Sports Orientation.

SPORTS FACILITIES

Racquet sports: 3 tennis courts (and 3 more coming up), 1 squash court, 1 badminton court. You'll need to get a tennis card made at the SAC before you can use the tennis court. For badminton and squash, proper footwear needs to be worn.

Swimming: A swimming pool already exists and another pool is being built. Students need to get a swimming card made at the swimming pool.

Gymnasiums: 2 institute Gymnasiums. Several hostels also have basic gymming equipment. One is located inside SAC and the other next to the badminton court.

Fields: 1 well maintained field each for football, hockey and cricket. The football field has floodlights.

Athletics: 1 athletics track. Equipment for other track and field events such as shot put, javelin and hurdles is also available.

Basketball: 2 basketball courts with floodlights.

Table Tennis: One table tennis room inside the SAC.

Volleyball: 2 Volleyball courts with lights.

Hostels: Hostels generally have a gym, one small field (for football and cricket), a volleyball court and table tennis equipment. Hostels also usually provide the necessary equipment to use these facilities such as table tennis bats, football studs, etc. Several hostels also have pool tables, fooseball tables and basketball hoops.

A new SAC is being built and this is expected to be completed by April '09. It is to contain an Olympic size swimming pool.

For purchasing sports equipment one can go to X-treme sports in Galleria (on the 1st floor) or Adidas (next to the BG India building in Hiranandani). Other options include going to Churchgate, Andheri or Ghatkopar. If a student is selected for the Institute Team in any sport, he/she is provided with good quality equipment.
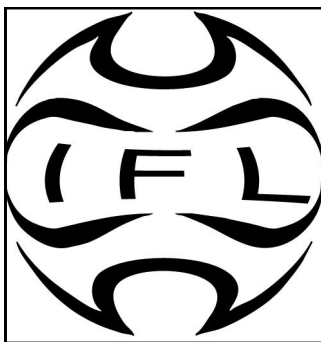
THE INSTITUTE FOOTBALL LEAGUE

The IFL is an institute-wide round robin football competition between 8 teams. More than 250 students participated in the inaugural edition.

First, shares for each club are floated up and non-playing students buy these shares. These share-owners come together, elect a President and select their players at an auction. The IFL, unlike other institute events, has a registration fee for players and this money is used to provide jerseys. Depending on the results of each match played, the share price of each team changes and at the end of the League, the best team wins the League with the dividends going to the share-owners.

All the famous football clubs in the world have their namesakes in the IFL. Thus, the inaugural edition of the Insti Football League featured such well-known names as AC Milan, Liverpool, Arsenal, Chelsea, Real Madrid, Bayern Munich, ManU and Barcelona.

The matches are played under floodlights, in the institute football fround, adjoining the badminton court. One can usually see team managers screaming instructions from the sidelines. The IFL also acts a talent spotting zone for budding footballers who intend to try out for the Institute Team. Make sure you enroll in this year's league either as a player or a share-owner. You never know, you could be the next Cristiano Ronaldo or even the next Sir Alex Ferguson.

INTER-IIT

The ultimate honour for any IITB sportsperson is a chance to represent the institute at the Inter-IIT Sports Meet, held annually in October/December. The Inter-IIT Sports Meets are organized at one of the IITs and include 12 sports for Men and 6 for Women. Come October(1st week) and December(2-3rd week) nearly 130 of the best sportsmen and sportswomen of the institute will be braving the winter cold and the tiring workouts, for nearly 20 days, with just one objective in mind – to bring glory to the institute, to bring home the coveted Inter IIT General Championship (GC).

For the uninitiated, a sports meet is organized every year, for the students of all the IITs, and involves the sports of Athletics, Aquatics, Badminton, Basketball, Cricket, Football, Hockey, Lawn Tennis, Table Tennis, Volleyball and Weightlifting for men and Athletics, Basketball, Badminton and Table Tennis for women. The swimming events are usually organized in October and the other sports in the second or third week of December. Started in 1961 at IIT Bombay, the main aim of the meets is to promote goodwill and solidarity among the IITians, and to provide them a platform to exhibit their excellence in competitive sports and an opportunity to develop their organizational capabilities, leadership qualities and interpersonal skills. The Inter-IIT Sports Meets, where nearly 700 people from all across the country compete, are probably the closest an average IITian can get to experience the spirit of the Olympics. It is the single biggest sporting event an IITian can participate in.
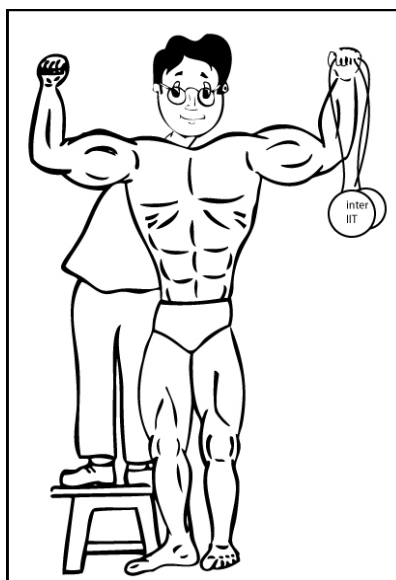
All of the meets are closely-fought encounters, with the GC being decided, more often than not, by the last event. Add that to the amount of preparation and expectations that go into each meet and it leaves a few hearts broken in the end. The 42 previous Inter IIT meets are rich with stories of people overcoming adversity and performing beyond belief, beyond expectations and beyond "possibility". Sometimes such performances act as inspiration to the teams that follow, and winning becomes a habit; just ask our Men's Volleyball (they have won Gold in six of the last 12 years) and Athletics teams (won gold last year and have never finished lesser than 2nd since 1975, barring twice when they finished 3rd and once when they finished 4th). The Hockey Team has won four golds in the last five years. The Badminton Team has won two golds in the last two years. Over this we have won Swimming gold for the last three years with exceptional performance in Water polo; our Swimming contingent has been called one of the best in sports meet.

Apart from winning, losing and competing, what sets these meets apart is the amount of interaction they facilitate, not only among members of different contingents, but also among the same contingent. The 12-day camp, where the entire contingent spends a chunk of the day together – be it on the field or the mess, the long train journey, the endless cack and cheering sessions – remain the most nostalgic. Although the contingent comprises 16 teams, the amount of time they spend together and the fact that the outcome of the GC is related to how each team fares in their own discipline, it is like one closely-knit family and the relations endure the test of time. When you are a part of the Inter-IIT contingent, you cease to be a fresher, a sophomore or a PG. Ask any alumnus and you'll learn the amount of solidarity that exists within the Inter-IIT contingent.

IITB has a college cheer, memorize it immediately and chant it on all possible occasions. It is

IIT ka dhoom dhadaka

Hoo haa hoo haa

HOSTEL AND CAMPUS

MESSAGE FROM THE GS, HOSTEL AFFAIRS

Surely you swell with pride while informing outsiders of your admission to IITB. So will it be within the campus, when you lay claim to being an inmate of so and so hostel. The next 2/4/5 years of your life are going to be spent amongst these old, though now with a fresh new coat of cement and paint, buildings (Except H12 and 13). And much of your education will take place right here, not in the MB, LT, IC's or Liby (refer to chapter on IIT Lingo). So settle down, feel right at home and get used to running through the wing at 2 AM before a test trying to find a free copy of Atkins.

One of the first things you should do is get acquainted with the administrative body of your hostel, which includes the warden, assistant warden, hall manager and mess manager. Almost all day-to-day hostel matters, however, are sorted out and managed by the students, who are given a free hand in most cases. The student body – composed of the General Secretary, Councillors and Secys – is always available to address your problems and suggestions, too.

In IIT, hostels generally assert their excellence by doing their best in the all-important GCs or General Championships. This is where you can help win laurels and earn glory not only for yourself but also for your hostel.

As the buzzword goes: "The Hostel Needs YOU." Picture here a dirty, sleep-deprived IITian pointing at you with a larger than normal index finger. To channelize your talents (trust me, you unknow-

ingly come with truckloads of it) and to make sure you are a contributing and productive member of the hostel society, a number of orientations will be held for you. This is why attending orientations and intros is so important, as these sessions will help you discover and hone your talents.

However, don't be overwhelmed. From the outset keep in mind that the road ahead promises to be full of memorable experiences!
The Deluxe Tour

Mess – This is where you shall be fulfilling your daily need of nutrients by the consumption of various concoctions, which look like something out of Getafix's cauldron. (Nah, Nah, just kidding, the food is not all that bad.) Though breaker, lunch, tiffin and dinner, or some very distant cousins of the abovementioned are served in the mess, most IITians tend to skip breaker which seems to hamper a much more important job of sleeping.

Lounge & TV Room – It's where the newspapers are kept every morning and it is also equipped with the latest editions of popular magazines to remind you of the world outside which tends to get ignored on campus. TV rooms are for your daily dose of MTV,F1 and Saas-Bahu serials. Packed to full capacity on match days, get ready to curse the Indian team w/o any inhibition.

Gym - You may have arrived as a 98 pound weakling, but make sure you don't leave as one.

HOSTEL & CAMPUS

For the more serious enthusiast, a better-equipped one is situated at the SAC.

The Launderette/Washing Rooms – Shut that mouth that unwittingly opened in astonishment! We at IIT too look after personal hygiene once in a while (rarely actually, but what the hell). So if you do feel the need to wash your or your friend's borrowed clothes, whichever the case might be, the washing machine is at your service.

The Compy Room – A haven for mailing, surfing and yes, the odd acad. requirements as well.
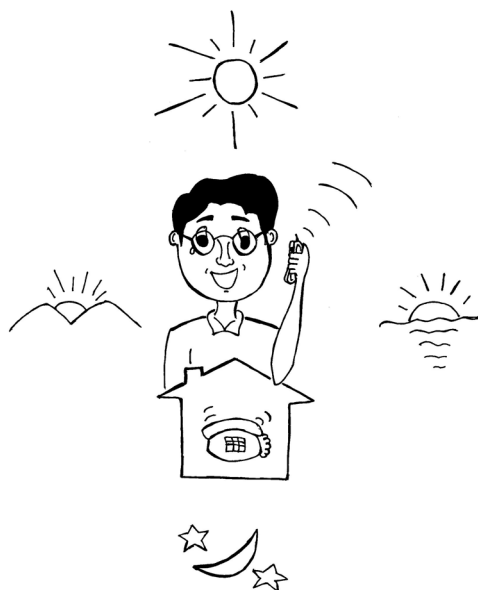
The Canteen – An extension to the Lounge, this, as you shall soon learn, is the guardian angel in the life of every IITian. From providing soap when you finally realize you need a bath after a week or a pen when one finally decides to attend lectures after that bath. But most importantly it provides the much needed supplements to the mess food, which you have already realized leaves much to be desired, in the form of rolls, pastries, cakes, milk shakes and other such delicacies (read grub).

The Playgrounds – (those vast stretches of mud, grass and the occasional splatter of ...). The ideal way to loose up and relax after a hectic day of lectures and labs. Use the volley and footer courts to the fullest.

Notice Boards – All the important (and not so important) stuff is put up here. Be sure to make a habit of giving it a glance on a regular basis (applies to the institute NBds as well). You never know what you may miss.

Homesick? Soon, the hostel will be your home.

The PA System – The cumulative name given to the small white switch, the mike near the mess manager's office window, the box covering the mike and the many speakers put up all around the hostel. Be warned though, this transformation into a booming voice can only be used for important announcements, and not trivial matters such as - "oye Rahul, meri ma 103 ke notes to lete aana."

Some more stuff...

You must have probably figured out by now (with some help from the numerous posters put up) that ragging is absolutely banned in IITB. So fear not us non-freshies (read evolved species) as we "Come in Peace".

However, ragging must not be confused with friendly interaction between freshies and seniors, given the friendly sounding name of "Intros". This is where you get to tell all, or as one of my seniors put it: "Tell us, what have you done in life?" These friendly interactions have only one end that we get to know you better and vice versa. However, if you do have a genie crib the ever-caring DoSA of IITB has established a Student Mentor Team. So feel free to approach them if ever need be.

Well, best of luck in your years to come, and remember – freshie year is the most relaxed, so make the most of it.

Ashwin Soni
General Secretary, Hostel Affairs
gsecha@iitb.ac.in

PUBLIC TRANSPORT @ IITB

You must have seen a few green or blue buses plying on the streets when you entered the hallowed portals of IITB. These, as you probably already know, are called TumTums.

These are the unsung heroes of transportation in the institute. You can buy TumTum coupons from your watchmen at your Hostel, at the main Gate and at the Y Point Gate. The coupons are priced at Rs. 6 and entitle you to two journeys (of any length). Alternatively, if you think you'll be using TumTums at least two times a day, you can buy Passes which are valid for varying time durations (contact the Security Office in the Main Building for Details). Produce your I-card, shell out 100/200/300/400 bucks and you are the proud owner of a TumTum pass for 1/2/3/4 months respectively. It is rumoured that CVMs (Coupon Vending Machines) will soon be installed at various spots on campus.

The service starts in the morning at 6:30 and runs till 11:30 at night. The frequency of TumTums is high just before classes start and just after they end. There are a total of 9 TumTums (6 small and 3 big). The ubiquitous Murphy's Laws apply to TumTums too, with all TumTums always going in the direction opposite to your intended direction of travel.

You will soon find yourself complaining about the frequency of the service, but the TumTums are probably a boon to the institute, considering the public transport scene a few years back. Our advice, jump on them anyway!

Other popular means of transportation are cycling and walking. There are two cycle repair shops on the campus, one at Y Point and another next to H8.

Cycling is probably the best method of transportation since TumTums are often filled to bursting. But remember that maintenance of your cycle is crucial, especially in Mumbai's rainy weather. A sturdy lock is also a good investment.

HOSTEL & CAMPUS

CROSSY

Of course, the most popular and widely used form of public transport at IITB is walking. It keeps you fit, and nothing can beat it in the rainy weather. (Try struggling with an umbrella while pedaling a cycle in pouring rain) And of course walking is all very well, but when it's 8:30 and you're late for class, running seems better. And just to get you in shape for those mad morning dashes, is the cross country race or the crossy.

As a freshie, you will be called for crossy practice as soon as the rain shows signs of abating. Enthusiastic seniors will drag you reluctant freshies out evening after evening and make you run all around the campus in one huge gasping pack. After weeks of training will come the final event. You'll be advised to sleep well the night

before and to drink banana shakes at the canteen. When finally the time to run comes, enthusiastic seniors will stand all along the route, shouting encouragement and proffering glucose. And when you finally pant to the finish line and collapse on the ground, you'll finally feel you belong.

The Crossy is an integral part of your initiation. Of course, playing hooky from practice is part of the fun, but do run in it. Winning isn't important, just finishing.

COMPUTER ACCESS

Right from the first lecture, you will hear professors say that Lecture notes or other stuff have been uploaded on their sites or on Moodle. What remains to be tackled is, how exactly are you supposed to access the internet? Here, we provide you some basic information.

All hostel rooms have a LAN Port which you can use to connect to the IIT Bombay network and to the Internet, provided you have a computer. You will need to set the IP Address and some other parameters before you are able to do that. Ask your Hostel Computer Secretary for help. You can also visit web.iitb.ac.in for the basic details.

To access the internet, you will need to change the proxy settings of your browser. Go to **Tools > Options** or **Edit > Preferences** if you are using Mozilla or go to **Internet Options** (in case of Internet Explorer) and look for **Network Settings** (the 'Advanced' tab in Mozilla). Select *'Set proxy manually'* and enter *netmon.iitb.ac.in* in the text field provided. Enter 80 for the Port. Enter these settings for all protocols (HTTP, FTP etc) and then go to the 'No proxy for' field. Enter '*localhost, *.iitb.ac.in*' there and you are done. Alternatively, you could select 'Automatic Proxy Configuration URL' and enter http://www.cc.iitb.ac.in/autoproxy.pac The second method may not work every time, so it's best if you stick with the first.

Once you have set the Proxy, you will be asked your user-name and password when you try to access any site. Here you will have to enter your LDAP id (the one starting with z and ending with the last seven digits of your roll number, with the general form z8xxxxxx). You must have got a printed sheet with details regarding how to access the LDAP account. If you do not own a computer, you can use the Hostel Computer Room (*compi room*, as it is generally known) for accessing the Internet (after the hostel computer orientation). Some Hostel Xerox shops also let you surf the Net (you have to pay, though). The Xerox shop is also the place where you can get notes copied/printed, buy recharge coupons and other things of daily use. Apart from these two, there are two other important places from where you can access the Internet.

OSL (Old Software Lab)
The Old Software Lab (OSL) can be found in the Mathematics Department and is the favourite haunt of quite a few freshies. Formally used for the Lab exercises of the CS101 course, the OSL is filled almost 24/7 with First Year Students of all branches who find it suitable as an air-conditioned refuge from the hustle and bustle of the 'outside world'. Use it productively for practising CS101 programs, checking/sending emails and using Linux (if you are new to it, this is the best time to start). Time slots will be allotted to you in which you can access the OSL. A warning: you will realize that relying on being able to use OSL during the last few hours before the CS101 project submission is, at best, suicidal. So, better finish your work early.

In the first semester, all students will be given OSL login ids. After that, OSL is open only to CSE students. Contrary to popular belief, NSL (New Software Lab, never mind where it is) is not open to non-CSE students. Venture there at your own peril.

Computer Center (CC)
If you are stranded without Internet access (especially at times when normal human beings sleep), turn your eyes towards your department computer lab (if it is open at night) or towards the Computer Center (CC) in the Main Building (MB).The CC is situated directly above the MB-1 class room on the 1st floor of the Main Building. Entry is not-very-strictly on the basis of I – card display. This is one place which is packed to the proverbial brim with night outs on Orkut or tribal wars. Do use it as productively as possible.

LAN Ban
This term, that you will soon learn to hate, is used for the highly periodic switching-off of the LAN connection provided in all Hostel rooms. Effectively the Internet facility provided to you in the rooms doesn't work from 12 in the night to 7 in the morning. If you just *have* to submit an academic assignment, you'll have to be ready to go for a walk to the Comp-room (which would be full; 2-3 computers for 400 hostelites) or the much discussed OSL.

The LAN Ban has a rich history, which you must have read about in the newspapers, if you are the type whose heart used to start fluttering at any news item mention-

ing IIT. Earlier, apart from the night ban, there used to be an evening ban from 4:30 to 7:30 PM., which was an attempt to encourage people to take part in sports and other evening activities.

Your friends at IITK are explicitly forbidden to bring personal computers to college until the 3rd semester. IITD and IITM also have LAN Bans, if that's any consolation.

HOSTEL & CAMPUS

MISCELLANEOUS

This is the section that fills in all the gaps. The bits and pieces that you definitely need to know, but can't classify as academic or cultural or HA. In the final chapter of your initiation to IIT, we list all the info you need to get started off as a full fledged member of the community.

The section kicks off with a Golden Jubilee special. As most of you know, IIT Bombay is celebrating 50 years of an eventful existence in 2008 and 2009. We give you a look at the glorious history of our Institute. We do hope that a look at how IITB has grown and evolved evokes a feeling of belonging.

If you've been in IIT for longer than a day, chances are you've heard of MI, Techfest and E-Cell. The second part of the 'Miscellaneous' section takes an in-depth look at these Independent bodies of our Institute.

We then move on to more Independent bodies, touching on InsIghT, Aawaaz and the RSF. We also present a feature on two bodies that show that IITians are socially conscious as well – Unnati and GRA.

After this, we move to the part that's meant to give you the *gyaan* you'll need as an IITian. First, a quick look at all the places you need to know, so that you'll never have to, for example, hunt desperately for an SBI ATM at 2 in the morning. After teaching you how to walk like an IITian, we teach you how to talk like one – our Lingo section should help you understand your seniors when they start talking in IITB-language.

FIFTY YEARS OF HISTORY

In March 2008, IIT Bombay turned fifty. The celebrations – which are to last a year and a half – kicked off in September 2007. With lectures by Nobel Laureates, international seminars and cultural performances by eminent artistes, the celebrations mark the passage of a remarkable half-century. To note this passage, we present to you a brief history of our institute. The story of IIT Bombay's transition from a tract of government endowed land to a world renowned institution is one of tremendous endeavor, of talented but little exploited youth, and of the vision of a few great men.

The Beginnings

Professor Humayun Kabir, the Indian delegate to UNESCO, first proposed the idea of funding a higher technical institute in Mumbai. Named the Institute of Higher Technology, Bombay, this was to be set up in association with the erstwhile USSR. The idea was met with approval and with Soviet funding, the planning began.

In March, 1959, shortly after laying the foundation stone to the Main Building, Prime Minister Nehru climbed into an open jeep. Two Soviet delegates and an interpreter were in the back and the jeep was driven by the first Director of IIT Bombay, Brig. S K Bose. Across a barren landscape, Brig. Bose pointed out the locations of Hostel 1, three workshops and two teaching sheds. Classes meanwhile were already being held at SASMIRA building in Worli.

Symbolic of the Russian collaboration, President Leonid Brezhnev of the erstwhile USSR planted an Ashoka tree in 1961, outside the newly erected Lecture Theatre. A bronze plate even today marks the spot. Construction of recreational facilities including a Gymnasium (now the SAC) and three clay courts, flourished over the next five years. During the Indo-Pak war in '65, work on a building with a revolutionary thin concrete folded plate roof in the form of a curved fan proceeded without interruption. To this day, students proudly receive their degrees in this Convocation Hall.

Research and Teaching

In the 70s, a new and rather revolutionary curriculum was designed to produce engineers with enduring skills. A shortage of R&D funds given to the institute resulted in limited research output. This prompted the professors to concentrate on their courses; and hence IIT Bombay's reputation as a teaching institute grew. Alumni confess to have studied to kill boredom, solving books like Kreyszig and Resnick from cover to cover!

In an age when there was no LAN or HN, and with a revised curriculum giving them ample free time, the IITians of that era still found plenty to keep themselves occupied. The origins of our now burgeoning club culture can be found in this period. The Film club was never more active and hundreds of students would flock to the LT on a Friday evening to watch famous Hungarian and Italian films of the time. A Radio broadcasting station was also set up at the height of Indo-Pak tension and promptly nipped in the bud by suspicious local police. Rock and roll music had found its way into hostel radio sets and Elvis ruled. Amitabh Bachchan's questionable fashion choices passed unquestioned on the streets of IIT Bombay. Bell bottoms and sideburns were almost a student uniform for quite a while.

After the research slowdown that continued through the 80s, IIT Bombay was trying to pick up steam despite the adverse economic and political conditions in India. The first and most important of these changes was the enmeshing of the whole campus in an intricate web of cables, the pioneering Local Area Network that was to bring about a transformation. Hot on the LAN's heels came the dramatic change in the face of the campus - vast new buildings mushrooming all over through alumni generosity and at the same time, a paradigm shift in research and development activity. But we're getting ahead of our tale.

MISCELLANEOUS

The Brand named IIT

During the early 90s India was in the throes of a major economic crisis. With a vast foreign debt hanging over the country's head, money was in extremely short supply. It was a period of double digit inflation and precarious employment. At such a time, there weren't enough funds in the institute's coffers for even routine maintenance of infrastructure, while the ongoing technological revolution ensured that all laboratory and research equipment was fast becoming obsolete. IIT Bombay was perhaps the only one among its sister institutions to still have nothing better than card readers for its main-frame computer in the late 80s.

At the same time, the IITs were suffering a tidal wave of public disapproval. In Prof. Rohit Manchanda's words, IITs were considered "*Sophisticated conveyer belts for the outflow of the nation's intellectual capital.*" They were nowhere near addressing the nation's needs – the very purpose of their existence. In such a depressing period, it was inspiring and dedicated administration that got us through.

The then Director Dr. Nag and the Deputy Director Dr. Kudchadker identified four thrust areas on which they focused their attention. These were – an administrative process overhaul, automation, faculty recruitment and reaching out to alumni. As time would show, this very vision alongside the economic resurrection of the country was to prove the saving grace of the institute. By the mid–nineties things started looking up. The IITB Heritage fund had been set up and now was finally reaping dividends. Nandan Nilekani, Kanwal Rekhi, Raj Mashruwala and various other illustrious alumni made good their pledges and donated millions of dollars to the institute. Renovation of hostels, building of the SOM, the Guest House, academic scholarships and awards– all these were started. Not only was it a direct investment in the institute's infrastructure, this goodwill of giving back to the alma mater was reflected in an increasing amount of trust laid on IIT by the government, which only furthered development. India had also clawed her way back from the economic slump and there was more money than ever before for education. So much so, that the Institute, in 1999, envisaged raising a sum of Rs 500 crore for its Golden Jubilee in 2008 – which it is in the process of achieving.

The Past Decade

As the new millennium dawned, things were looking pretty perky. Alumni funding was steadily pouring in and with ventures like C-DEEP started, the institute was giving back to the country as best as she could. The "teaching institute" label was also to be gradually eroded during this period as the Dual Degree Program was started in 1996 and undergraduate research was taken seriously with UROP. Before the end of the nineties, student enrolment had gone up by 30% - mostly Post Graduates - to further research activity. The institute also made it easier for undergraduates to convert to Dual Degree Students, making its intentions crystal clear.

Through the period of the nation's economic turmoil student activities still flourished. In 1992, Bombay was torn apart by riots and Shiv Sainiks invaded the campus. MI was postponed twice and finally held in March 1993. The students were technically and culturally as active as ever, but it was only in the late nineties that we see the seeds of our now burgeoning club culture. InsIghT, Aawaaz, Insync, BONDA and Staccato all trace their origins to this period.

A revolution came with the setting up of LAN in hostels and this system of arteries constructed of cables became a lifeline, carrying colossal amounts of information, entertainment and knowledge as vital as blood to the students. They fast discovered its many uses and exploited it to the fullest. Communication had never been easier or more painless. Students became more and more creative; IIT Bombay was famed for its dramatics club, Mood Indigo and, from 1998 onwards, Techfest. The slow yet steady progress shown by the institute was reflected in its growing reputation abroad. The hallmark of recognition was the IIT feature in CBS' *60 minutes* – where the stature of IIT in India was compared to that of "MIT, Princeton and Harvard combined"!

This is but a glimpse into the rich and glorious past of our institute. Remember, as you walk in its corridors and classrooms, the history that has gone into the making of them, and remember that you too will someday shape that history, for the years to come.

THE INDEPENDENT BODIES

MOOD INDIGO

Come December, the campus is abuzz with more activity than ever, with students from various years working hard to organize the legendary college cultural festival Mood Indigo, fondly known as MI.

With over 50,000 visiting students, a budget heading towards 8 figures, over 80 competitions, workshops, performances, and informal events around the clock, MI gets bigger and better every year.

MI has seen performances by Pt. Shiv Kumar Sharma, Ustad Zakir Hussain, Jagjit Singh, Pankaj Udhas, Lucky Ali, Shaan, KK, Indian Ocean, Euphoria and Hema Malini besides staging the winners of Livewire, the amateur rock band competition of MI which is the largest of its kind in India.

MI has varied, never-seen-before competitions in every possible genre. There are also workshops from salsa and jive to hypnotism, aqua games, couple games, discothèques and other informal games for all those who just want to have a good time. Mood Indigo definitely has something for everyone. Do visit us at www.moodi.org

THE ENTREPRENEURSHIP CELL

Take some action! Make a difference! The Entrepreneurship cell, IIT Bombay, commonly known as E-Cell, is a student organization that believes in taking the path less traveled. Motivating people to bring out the spirit of enterprise within them, it not only shows them the opportunities they have but also shows them the path that helps them make the difference.

With budding entrepreneurs getting motivation and mentorship and organizers interacting and working with the likes of Mr. Ajay G. Piramal (MD, Piramal group of companies), Siddharth Basu, Parnab Mukherjee, Kiran Mazumdar Shaw, Vishal Gondal (Indiagames) and many other bigwigs of the corporate world, the organization works through the year to make successful entrepreneurs of the brilliant minds at IIT.

Its initiatives include *Eureka* – the annual International Business Plan Competition, *Ideaz* – the Pan IIT Business Idea Contest, *E-Summit* – The Entrepreneurship summit, *InCorpora* – the business club of IITB, *GEN* - the Global Entrepreneurship Network (www.genportal.org), *EnSpace* – a newsletter and *ECampaign* – the Nationwide Entrepreneurship Drive. For more details, do visit www.ecell.in.

TECHFEST

In the month of January IIT Bombay turns into a Mecca for all technology enthusiasts. Thirty Thousand students from over 1,000 colleges spread across India and countries like USA, Singapore, Iran, Nepal and Sri Lanka throng the campus to experience the largest science and technology festival in Asia.

Techfest provides a platform for the confluence of the industry, the academia and the students. Competitions that set the mind ablaze, series of lectures by world renowned personalities, workshops to experience technology in your hands, on the spot events to experience the thrill of the moment, exhibitions to visualize the stuff which your dreams are made of, from robots to dinosaurs Techfest has seen and presented everything that is branded as science and technology. Techfest events and other competitions held throughout the year provide an opportunity to garner invaluable hands-on experience in making machines and models by exploring different facets of technology.

Techfest has many firsts to its credit including the display of McLaren Mercedes F1 car, NASA's Mars Rover project and exhibits from the Royal Society, UK. Eminent personalities who have graced the fest in previous editions include Dr. APJ Abdul Kalam (Hon'ble President of India), Prof. Kevin Warwick (First Cyborg), Prof. John Nash Jr. (Nobel Laureate) and Mr. Narayan Murthy (Founder of Infosys).

Whether you want to get your hands dirty while making your own robots or learn the nuances of organizing an event, Techfest will be there to help you. Hoping for an enthusiastic response, Team Techfest 2008 welcomes you to IIT Bombay. For more details do visit http://www.techfest.org

MISCELLANEOUS

InsIghT

Insight is your friendly neighbourhood magazine which keeps you abreast of campus happenings. From resignations to raids to PAF ratings, we see all, hear all and report all. We publish a monthly print issue, one copy of which is intended for every two rooms. Do watch out for our posters informing you that a new issue of InsIghT is out. If, for some reason, you can't get hold of a physical copy, a soft copy is always available on our site.

In addition, we also put up reports of day-to-day happenings at IITB on our Bulletin Boards (located at the Coffee Shack, Bhavani Juice Centre and the Staff Canteen). Our site is always updated with the latest news as well, in addition to video coverage of Institute events, competitions and archives of print issues of InsIghT, dating back to as far back as 2002! Do visit us at http://gymkhana.iitb.ac.in/~insight
Or
 www.insightiitb.org

If the life of a reporter has always fascinated you and you want to join the team, do write a mail to insight@iitb.ac.in. Even otherwise, if you wish to write freelance or if you want to send in any feedback/brickbats, do mail us. We would love to hear from you. Our first issue of the year will be in your hands soon. We hope you'll enjoy it.

Aawaaz

Kalpana karne lagi ab raah man mein, Chandani faili gagan me chah man mein.

Aawaaz is the Institute's monthly Hindi newsletter reporting all the events that are going on in the campus and revealing the talents of the authors and poets around you. If you want to express your views on any issue then this is the perfect platform for you. Even if you don't write in Hindi we will translate it for you, and if you love to write in Hindi then it can't get any better.

To join us or to give us any valuable suggestions or feedback, please mail us at aawaaz@iitb.ac.in.

Research Scholars' Forum

The genesis of the RSF lay in the dreams of B. Jayaraman who was infused by a motivation to address the problems faced by research scholars. What started in 1998 under his leadership, as an attempt to undertake activities beneficial for the research fraternity of IITB, has laid the foundation for a new platform where the research scholar community could unite under a common umbrella.

Sessions of the RSF lead to a discussion of research ideas and are useful for new and aspiring scholars to jot down specific topics for research in the minimum time. While scanning literature for their PhD program scholars come across many gaps in literature but stick to addressing a specific gap for their doctoral degree. The others are discarded. The *Idea Generator* is an effort to create a repository of such research gaps.

Please visit http://www.iitb.ac.in/~rsf for more details.

Unnati

Unnati and the NSS (National Service Scheme) act as umbrella organizations for all the social service-related activities happening in and around the institute. Unnati looks at a more serious aspect of personality development, with the objective of social concern and giving back to society what we owe.

Unnati's activities range from teaching all kinds of underprivileged students, dropouts, handicapped, aged and deprived people to working on technical areas, applying engineering knowledge to solving practical problems in rural areas as well as slums.

Other activities include participation in meditation and Yoga to working on various projects with the Campus School and Kendriya Vidyalaya in IIT. Unnati also helps in collecting used materials from inside IIT for distribution in slums and serving as a platform for volunteering. Any help, participation, suggestion or criticism will be welcome.

Visit our website http://gymkhana.iitb.ac.in/~unnati, or mail us at unnati@iitb.ac.in.

GRA (Group for Rural Activities):

An adventure, a remote village and one aim: 'To know the *real* India'. If you have ever felt any interest in any of these, here is a platform. The 'Group for Rural Activities' (GRA) is an informal group in the campus involved in many activities that can help teach us the way most of our country lives and how we can contribute towards the progress of the nation.

GRA arranges camps at the end of each semester to some remote village(s). This is where one gets a chance of exploring another (and possibly more significant) aspect of Indian life – the rural life. Also, one gets to see, understand and analyze the direct relationship between technology and its impact on our society. The experience of a GRA camp is something which has one has to actually experience to appreciate fully, yet the short description provided above seeks to make people aware of the existence of a very 'different' effort that has been going on in the campus.

Slums, which can be considered reflections (albeit in a very negative light) of villages in urban areas, are another domain where the GRA seeks to help. Twice a week, children from Mahatma Phule Nagar, a slum next to to IIT, come to the campus and are involved in learning sessions.

More details are available at http://gymkhana.iitb.ac.in/~gra.

We invite you to be a part of this Group. For any ideas/suggestions/queries, contact us at gra@iitb.ac.in.

FAMOUS ALUMNI

Nandan Nilekani

If there is one man that we must all thank for giving IIT Bombay the iconic buildings of Hostels 12 and 13 then it must be Nandan Nilekani. He graduated from the Dept. of Electrical Engineering at IIT Bombay in 1978 and co-founded Infosys along with N. R. Narayana Murthy. He is presently serving as the co-chairman on the board of this IT giant. He has been honored with the Padma Bhushan and has been regarded as one of the "100 Most Influential People in the World" by TIME magazine. He continues to be associated with the institute as a member of the Board of Governors and the co-chairman of the IIT Bombay Heritage Fund. Touted as the inspiration behind Thomas Friedman's bestselling book "The World is Flat", hostels 12 and 13 was his 'small' gift to his alma mater.

Here, we present short biographies of famous alumni from IITB. Their careers will surely serve as inspirations to every new batch of freshmen.

Jairam Ramesh

Jairam Ramesh is a classic example of the eccentric IITian who will always choose the path less trodden. Like most IITians, he went to the USA for higher education but unlike most he pursued a master's degree in public management at the Carnegie Mellon University. After a brief stint at MIT, he returned back to India to apply his newly acquired knowledge for the progress of the nation. Presently he is the Minister of State for Commerce and a member of the National Advisory Council. He has been an advisor to the Prime Minister, Finance Minister and numerous state governments in the past. He played a major role in putting together the Common Minimum Programme of the present UPA government and was a key member of the team behind the 1991 and 1997 economic reforms. He is also a widely read columnist and a popular TV anchor.

PLACES YOU SHOULD KNOW

MISCELLANEOUS

IITB's vast campus has many facilities. Unfortunately, some people take years to discover some of the most useful of these. During the course of your stay on the campus, you'll need to go to places to get things done (or undone). For these reasons we are listing here some of the places you need to know.

Main Building

Most of the Institute Offices (including those of the Director, Deputy Director, and the Deans) are in the MB. To start with, you should know the Academic Office as a place from which to collect course registration and adjustment forms, railway concessions, grade cards, information on scholarships and all other academic matters. The Academic Office is situated on the second floor of the Main Building.

The Accounts Office and the Cash Section are places for settling accounts and cash transactions, respectively. They deal with your mess-bills, scholarships, medical reimbursement, TA stipend payment, and so on. For General Information about IIT you can contact the Publications and Public Relations Section. The MB is also the place where you'll go once a week for your drawing labs.

Library

The Library (*Liby*, for most of us) is very close to the MB. It is one of the best technical libraries in India, and houses a huge number of full-text electronic journals, online databases and electronic theses and dissertations (ETD). The Web-based Library Catalogue is accessible from any where on the Campus LAN. Up to seven books can be borrowed by students of BTech up to 3rd year for exactly thirty days (after which a fine will be levied). Some books (called study room books) are issued after 10 p.m. for one night against your I-card. And the Library only closes on three days of the year!

The Central Library, under the Technology Lending Library (TLL) scheme, a facility for students whose parents fall in the low-income group, lends up to five books at a reduced price for a semester. You will need to produce an income certificate for this purpose. Books from the BC collection are issued to SC/ST stu-

dents. You may visit the web site at http://www.library.iitb.ac.in.

Hospital

This is a 52-bed hospital with full-time doctors and visiting specialists. The OPD timings are 8 AM to 6 PM on all working days and 10 AM to 12 PM on all institute holidays. Emergency or Night duty medical officers provide emergency medical care. An ambulance is available on a telephone call (# 1101/1110). If you fall ill before or during exams, you need a medical certificate (a 'pink slip') from the Hospital to be able to take a retest.

For more information visit the website http://www.iitb.ac.in/hospital/
Note: Medical facilities are free for IIT students.

Banks

There's an SBI branch (open from 10 AM to 3 PM on weekdays and 11 AM to 2 PM on Saturdays) with an attached ATM, and a Saraswat Co-op Bank branch (8.30 AM to 1.30 PM on weekdays and 8.30 AM to 11.30 AM on Saturdays). Both these are near the Main Gate. Another SBI ATM booth is located near TANSA.

A Canara Bank Branch (with attached ATM) operates in the Gulmohar building between 9 AM and 2 PM on weekdays and 9 AM to 12 PM on Saturdays. To open an account, you need the mess manager's or the hall manager's signature on the form. An ICICI ATM is just outside the Main Gate.

Shopping

There is a market at the Y-Point Gate both inside and outside the campus. No wonder it's called the IIT market gate by bus conductors!

All your other shopping needs will be met in Hiranandani – just go to Galleria.

IIT Souvenirs

IIT Souvenir items like T-Shirts, Mugs, Tea Coasters, Bags, and so on are available at The Alumni Associa-

tion Souvenir shop, situated on the first floor of the Gulmohar building.

Guest Houses – Van Vihar & Jal Vihar

You can book rooms for your guests in these guest-houses. A warning: be sure to book well in advance (three months is usually safe) as the guest house is always full. Parents and spouses get concessional rates, if you get your HOD's or Warden's signature on the guesthouse application. The internal number to check availability of rooms is 8946.

Booking of guesthouse rooms can be done in the Publications and Public Relations section in the MB (internal #7026).

Xerox/Printing services

Photocopying and Laser Printing facilities are available at shops in H1, H3, H4, H5, H7, H8, H10, H12 and H13. There are also many shops (for example, Famous Patel Xerox) offering these services outside the IIT market.

THE LINGO– THE IITIAN'S DICTIONARY

arbit - /a'r-bit/ - **adj.** – short for arbitrary. Something you say when you can't think of anything else to say. Eg. *"Hence, e=mc^2." "– Arbit"*

babe - /bayb/ - An exceptionally good-looking bandi (See **bandi**)

bandi - /bun-dee/ **noun** – A non-male. A rare species in IIT.

crack /crakk/ - **noun, verb – also craxxx** (when the number of x's exceed 8, pronounced as /craks-ks-ks-ks-ks-ks/) - a big-time achievement

daya - /the-YA *also* the-YAAAAAA/ - **adj.** – a substitute for any term/action with a negative/positive connotation you might/might not want to use. Eg. *"Kya daya aadmi hai!", "Kya daya kar raha hai!", "Dayaaaaaaaa!"*

dep - /depp/ - **noun** – department. Just another prison cell.

ditch - /d-ich/ - **excl.** – Drop the old plan (and start working on a new one!)

fart - /fART/ - **noun, verb, adj. excl.** – One word which we are unable to define, simply because of the fact that it has so many different meanings (It is rumoured that the word is the topic for a PhD thesis). We

> When in IIT, do as the IITians do. Here's your guide to the first step – speaking their tongue

stop at giving you the most common way it is used – "Kya *fart* hai!"

farra- /fu'r-rah/ **noun.** – FR. A grade you totally, desperately, insanely want to avoid

generaal - /jen-eh-r'aal *formerly* zen-eh-r'aal/ - Nothing in particular. Eg: *"-What's up?" "-Generaal"*

Give-up - /givaap/ - **verb** - give-up maarna – to finally let go of all hope

grub - /grub/ - **noun** – (1) food that one gets from home. (2) food that one MUST get from home (3) food

infinite - /in-fie-nite/ - **noun** – Any number greater than ten

insti - /in-stee/ - **noun** – The Institute. Yes, this one.

liby - /lie-bee/ - **noun** – The Library. A source of knowledge, wisdom and cool air.

lukkha - /look-kha/ - **verb** – To do some time-pass that takes you somewhere. Anywhere. On second thoughts, even nowhere. Especially Nowhere!

macha - /Much-AA/ - **excla.** - often followed by any number of x's (as in "MACHAXX!", "MACHAXXXX!", "MACHAXXXXXXXXX!") – to

infinitely crack something (See **infinite**. See **crack**)

MUG - /mug/ - **verb** – (1) study (2) pretend to study

nightout - /nie-tout/ - **noun** – avoiding sleep throughout a night in a bid to mug, watch a movie, or for nothing in particular. Lukkha is often cited as both the cause and effect of nightouts.

pain - /payn/ -**noun** - something that makes you give-up (See **give-up**)

poltu - /pole-too/ - **adj.** – someone who practices politics – in every sense.

RG -/ar-jee/ - **noun** - Short for 'One who tries to improve his grades, taking unjust advantage of *'Relative Grading'*

scope – /sko-p/ - **excl.** - No chance in hell!

senior - /seen-yer/ - **noun -** One who is always right

YP - /why-pee/ - **noun** - Nothing to do with calls of nature. It's actually short for the Y-Point gate. Your one-stop solution for everything from stationery, books, bicycles to hair-cuts, and vada-pavs.

HOSTEL TRADITIONS

Your hostel is the place that's going to be your come for a while now. And an IIT hostel comes with its own traditions, some of them quite unique.
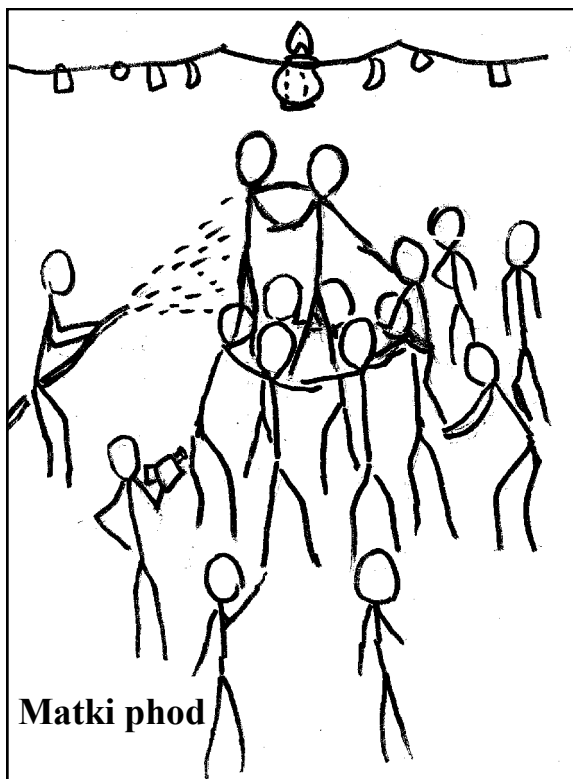
Freshie Night

Every hostel has a freshie night that allows seniors to get to know their freshies. You are required to put up some kind of performance (exact details from your hostel's Soc Secy) and introduce yourself to your seniors. It's a fun initiation and marks the end of the ragging ban.

Scavvy

The Scavener Hunt or Scavvy as it's called is held by each hostel independently. You'll be given a list of items, ranging from men's fairness cream to railway tickets, and you'll have one hour to find as many of them as possible. Whether you're begging, borrowing or stealing, scavvy's are always wonderful fun.

Matki phod

Mock Rock/Fash Comp

Mock Rock is where you form the funkiest bands possible and you could air guitar away to glory, or pretend your broom is a guitar and throw it around. The competition runs wing-wise, and gen get really intense. Fash Comp is Hostel 10's answer to mock rock (More details in the H10 magazine)

Matki Phod

Celebrated on Janmashtami, the matki phod requires freshies to form a pyramid and break the matki while seniors try to thwart your every move. Soaking wet freshies clamber over each other to reach the matki, while seniors try to jerk it away. Of course, you are allowed to break it in the end, and the process is quite uproarious fun.

Ganesh Chaturti

While only the sincere few attend the pooja that hap-

pens for 10 days before the visarjan, the visarjan itself is attended by most of the hostel. The destination is the Powai lake, where the hostel's Ganesh statue is immersed. In the procession on the way there, each hostel ensures it makes enough noise to rouse several neighbourhoods.

Holi

Possible the most popular festival of all, Holi is celebrated with great enthusiasm in all hostels. Hostels arrange for hosepipes, water and large quantities of colour. It is the one holiday on which students wake up of their own accord in the morning and rush out into the hostel field, to spend hours playing in mud, water and colours.

National Festivals

On Independence and Republic day, we have flag hoisting in each hostel. Since this happens at around 7:30 am, it is not unusual on 15th August or 26th January, to see a bunch of sleepy hostellers lustily singing the national anthem. A central hoisting and a march-past by the security guards is also held at the MB, for profs and early risers.

MISCELLANEOUS

Eating out and Home delivery

One can not survive by mess food alone and treats are a regular necessity for almost every IITian. So here we present a brief list of the places you can go to and order from, in Mumbai.

Hirnandani

Pizza Hut: The closest pizza place to IIT, they always have interesting offers going on. Pizza Hut is a convenient treat location , but beware, if you go there during lunch or dinner hours with a large party, you will have to wait a bit for a table.

Dominos, Smokin' Joe's Garcias: All these pizza joints are located in Galleria, close to one another. They each have their specialties, it's up to you to choose your favourite.

Galleria: This place provides a plethora of food options, like parathas, biryanis, pizza, chaat, Thai food, up market pastry shops, corn club, juices and icecreams. This is the favourite hangout of many IITians.

Rodas: 5 star restaurant good ambience, if you are flushed with money. Their midnight buffet is worth sampling.
Natural Icecreams : As the name suggests, healthy (& tasty) seasonal fruit icecreams.

Utsav: Nice restaurant.. provides good value for money with great veg and non-veg fare.

Subway: Have 6" or foot-long "subs". Good for health conscious junta.

Main Gate and YP

Laxmi: A vegetarian restaurant, just outside the Main gate, Laxmi has recently undergone a makeover and looks all the better for it. The food is generally quite good, but stick to safe options like paneer, mushroom or mixed vegetable curries.

Radhakrishna (RK): A place for booze, vegetarian and non-vegetarian food, prices are on the higher side. Located opposite the middle gate, which is now closed.

Vadilal's: Outside middle gate, this place is great for a late night cup of coffee and serves great ice cream and famous for samosas too. Provides a veg-thali for 30 bucks.

Monginis: Located outside the main gate, this is a place to gain weight. Pastries, burgers, cakes, pitawich. the scrumptious list goes on.

Maddu Mess: A small room on the road to Classic between YP and middle gate, open from 5:30am to 11pm, this place represents good value for money. It serves both veg. and non-veg. and Chinese food. A haven for nightout junta.

Vadilal's: Outside middle gate, this place is great for a late night cup of coffee and serves great ice cream and famous for samosas too. Provides a veg-thali for 30 bucks.

Home Delivery Numbers

Restaurant	Ph. no
Gulmohar	25722222
Laxmi	25785963
Dominos	25705720
Pizza Hut	56780044
Smokin Joes	25702927
Subway	55034444
Parathas	25797923
Garcia`s Famous Pizza	56780044

On Campus

The Coffee Shack: Located near the STD/PCO booth in MB, this coffee shack serves Maggi noodles, soup, hot/cold coffee and hot/iced tea. It's the perfect place to catch a quick snack between classes.

Kresit Canteen: This small but self sufficient stall makes the most amazing vadas. Try one when you get a chance.

Chem and Elec department canteens: Located within the respective departments, these canteens provide you with a much needed *chai* between exhausting lectures.

Staff Canteen: It is near the security office in MB. StaffC serves meals and snacks and is just fine so long as you aren't too particular about hygiene. Open till 2 am.

Srishti: Located just opposite to H1, this place gives you a quick snack when you're on the go.

CCD Express: Located inside H8, they make a pretty good milkshake.

Bhavani Juice Center: We can no longer imagine how we existed without Bhavani. While they do stock a selection of *chaats*, it is the fresh fruit juices that are the ultimate draw. Located at the crossroad next to H5.

Ahar: Run by Shakti (Ladies) Club, behind Van Vihar guest house. Clean wholesome lunch, reasonable price.

Gulmohur: Our very own campus restaurant, *Gullu* is fames for its relaxed service. This restaurant is located on the second floor of the Canara Bank building, which is incidentally called the Gulmohur building by most. The food is surprisingly good here an prices very reasonable.

Lost and Found :)

We do hope you don't feel lost anymore.