ISCP

Handbook

2020-21

**Center for Technology
Alternatives for Rural Areas**
IIT Bombay
Mumbai 40076

DISCLAIMER

Though the ISCP (institute student companion program) has taken care while compiling the handbook, neither the council nor the institute can be held responsible for errors/inadequacies that may inadvertently creep in. This handbook cannot be used as a basis for making a claim on facilities/concessions/interpretation of rules/statues or the like. If there is some critical information to which the reader of this handbook refers, it is with his or her responsibility that it is put to use, with cross verification if need be.

CTARA

About us

In the last two decades, our country has witnessed significant and rapid changes in several spheres and at an increasingly fast speed. The economic reforms and the policies of liberalisation, globalisation, and privatisation have resulted in momentous changes in perspectives, policies and practices about technology, Development, and the interrelationship between the two. CTARA (The Centre for Technology Alternatives for Rural Areas) is also gearing itself to face the challenges posed by these changes through research projects as well as new academic and training programs. CTARA now has an m. Tech. Program in technology and Development (started in July 2007) and a PhD program. Apart from these programs, CTARA also offers technology and Development supervised learning (TDSL) courses to the B.tech students across the institute. CTARA has over the years developed relations with various governmental departments at the centre and in different states; industrial houses, and non-governmental/ community-based organisations.

Our vision

To use our knowledge, expertise and skills for the benefit of the marginalised and disadvantaged sections of society and the neglected regions of the country.

Our mission

Our long-term mission is to make a contribution at the perspective, policy and practice levels to all dimensions of the interrelationship between the technology and Development, including the techno-economic, economic, socio-cultural, legal, governance and institutional aspects. Our medium-term mission is to establish CTARA as a leading academic and research centre.

CTARA believes in carrying out multi-disciplinary, multi-dimensional and grounded policy studies and research on key technology and development related sectors and issues. Further, CTARA carries out Development and dissemination of technologies relevant to the felt needs of rural society, especially of neglected sections and regions.

http://www.ctara.iitb.ac.in

MESSAGE FROM THE HEAD OF THE DEPARTMENT

Dear students of 2020-22 batch,

Welcome to CTARA family!!

First of all, heartiest congratulations on getting admitted to the M.Tech. (Technology and Development) program at the Centre for Technology Alternatives for Rural Areas (CTARA) at IIT Bombay. You might be aware that you have been picked through a rigorous selection process from a large pool of candidates who were eager to join our program. I appreciate your decision to join this somewhat unconventional post-graduate program, and also expect that you will bring with you the enthusiasm and aspirations that you expressed during the interviews.

This is a special year. All of us are trying to cope up with the COVID-19 pandemic. For the first time, we will try out the "online instructions". As both of us (instructors as well the students) are new to this mode of conducting classes, let us try to adapt ourselves and co-learn. Please bear with us, just in case, if the things don't work out as planned.

Let me reiterate and emphasise a few things that I already wrote to you about the program, as you prepare yourselves to join CTARA and probably change the course of your career and life:

1. The program was started with an objective to sensitize engineering graduates towards the wider needs of society. What is the role of "Technology" in addressing the "Development" issues? Today we need professionals across various sectors who can work at the interface of "Technology" and "Development" – hence the focus of the program is on the connector "and" between the two keywords. This is an interdisciplinary program, which will require you to be open to new ideas, fields and subjects and "unlearn" some of the past ways of doing/ thinking while absorbing new perspectives and methodologies.

2. "Fieldwork" and "Stakeholder Engagement" are the key features of the research work undertaken at CTARA, which is mostly "Demand-Driven" and addressing issues of the unorganized and disadvantaged sections of our society. CTARA faculty work in various domains such as technology assessment, grass-root interventions, governance, policy, and consultancy. We regularly engage with several NGOs, government agencies and ministries, Please go through CTARA's website (www.ctara.iitb.ac.in) to familiarize yourselves with the various initiatives and research projects enlisted by individual faculty.

3. Many of you have expressed "social service" as the motivation to join the program. Though I appreciate your altruism, please keep in mind that this is a professional degree program. Please don't leave your engineering knowledge and skills behind! You should build on that base using the inputs received through the program at CTARA.

As you have been already notified, the semester will be conducted in "online" mode. Thus, access to a computer, reliable power supply and the internet connection is very critical for everyone. Please feel free to contact me if you have serious constraints in attending classes (live sessions) and/or accessing the course material through internet. We will try our best to help you to overcome those constraints.

Looking forward to meeting you in-person, whenever the situation allows.

Best regards,

Prof. Anand B. Rao
a.b.rao@iitb.ac.in

First and foremost let me congratulate all of you - the 2020 incoming batch of MTech students - for being selected to join CTARA. You must be proud and certainly relieved that the selection process is over and that a new journey can now begin.

This journey is indeed going to be new in more ways than one because the times we live in are unprecedented. There is a huge churning along all axes - political, social, economic, and technological - and no one knows what the new 'normal' is going to be. These are difficult times, and for that reason, these are also anxious times. We see this all around us, and you would have experienced it in a small way in the uncertainties and challenges of the selection process itself. That it went off so smoothly was thanks entirely to a very dedicated, efficient and creative team of CTARA students who made it all happen. As Faculty-Advisor (Fac-Ad) for your batch, I must say you are joining an excellent community of peers and, I join them in welcoming you all.

This is/would be a strange welcome because we will not be seeing you in person for a few months at least; the disappointment is as much ours as it is probably yours. Conducting an entire semester online will be a totally new experience for all of us, and hopefully, we'll be able to pull it off together. Please don't hesitate to reach out to me as your Fac-Ad, to other faculty in CTARA or indeed to the student community for information and help of any kind. Maybe, I should reverse that order ☺(!) because CTARA (and indeed IIT Bombay) has a very vibrant student community of which you are now part - they will be more than happy to engage with you and sort out any issues you have. This handbook prepared by the Institute Student Companion Programme (ISCP) provides some of the basic information that you will need, and you will surely discover more as you go along.

The values that we stand for, the interdisciplinary nature of thinking and research and the goals that we seek to achieve, make CTARA a rather unconventional academic place. There is as much to unlearn here as there is to learn, and an extra effort will be needed on your part to catch up and to match up. This will not happen unless you engage sincerely and work really hard. I urge you, as you begin, that you keep this uppermost in your mind and that there be no compromise on that front.

Admittedly, you begin this journey in difficult times, but then the possibilities and opportunities this allows you are also unique and rich. I am confident you will make the best of it.

Congratulations once again on joining CTARA, a warm welcome to you and my best wishes for a safe, productive and meaningful exploration in the two years that lie before us.

Prof. Pankaj Sekhsaria
pankaj.sekhsaria@iitb.ac.in

MESSAGE FROM THE ISCP TEAM

Dear new entrants,

These are tough times, but you are not alone.

We welcome you to one of the most prestigious institutes in the nation. Congratulations on having achieved this incredible feat. You are about to become part of a culture that will leave its traces within you for a long, long time, even if it begins 'untraditionally.' you will be the ones witnessing the first term to happen entirely online in the history of IIT Bombay. It might feel overwhelming, and for all the right reasons, we must say. There will be several things you might be worried about, from coping up with the academics in online mode to missing out on things; however, as we said, "you are not alone."

Institute Student Companion Programme (ISCP) is a student body with the primary objective of building a relationship of trust and comfort between the final year students and the incoming students of the PG programmes. We are here to help you in getting familiar with the ways of IITB, which is even more critical in these times. You will become a part of a culture where people want to perfect their craft and thus work day in and day out at it. The scope of these is not limited just to academics. Various online events are and will be organised by the cultural, technical, and sports clubs in IITB, like code in quarantine, fitness challenges, dance challenges, etc. Managing these along with online lectures might seem daunting at first, and hence, to help you with a world of problems including these, we assign you a student companion.

The student companions are self-motivated volunteers who will genuinely help you in low and high tides as an act of giving back what they received from the programme. You can look up to the team for any form of support, any information before venturing out into an unknown domain, be it academics or extracurricular activities. You can reach out to us for any issue regarding the curriculum, facilities provided, your physical, social or mental health, and last but certainly not the least, reach out to have a chat with us because that is what we are for, for you.

The COVID -19 pandemic has affected all of us. For now, health concerns prevent your arrival in our beautiful lush-green IITB campus; it also prevents your participation in hostel activities, sports, cultural activities. There are many things here at IITB waiting for you, but the most important thing is the campus, and the buildings do not define IITB. It's you. You set the culture, the activities, you represent IITB to the world, and you make IITB what IITB is. So, knowing that time flies at IITB, we strongly suggest participating in things that happen online other than attending lectures, make memories, reach out to us for any queries, and relax with the comfort of your home. At least till we get an opportunity to welcome you into the campus, let's be safe, let's be optimistic and let's keep our learning spirits high.

Looking forward to getting know you. Giving out some motivation for these difficult times, we end with a quote by Albus dumbledore: "happiness can be found, even in the darkest of times, if one only remembers to turn on the light."

Stay safe!

Overall coordinators,

Institute Student companion programme (2020-21)

IIT Bombay

iscp@iitb.ac.in

Satyam Rathore

73891 02399

er.satyamrathore@gmail.com

Aakrit Anshuman

89040 59856

aakritanshuman1@gmail.com

https://gymkhana.iitb.ac.in/~scp/scp/index.html

MESSAGE FROM POST-GRADUATE ACADEMIC COUNCIL

Dear first-year students,

Congratulations to all freshmen for making it to one of the premier institutes of the country. Despite the stiff competition, you all managed to come out with flying colours. So on behalf of the PG students of IIT Bombay, it is my honour to welcome you all here.

So now all of you are a part of IIT Bombay PG community or "pg junta" as we call them. The institute has a wide range of facilities and services to offer to all its students. This will not only ensure a fruitful educational experience but also promote overall skill development. In the institute, there are several student-run bodies, that focus on the improvement of skills, sports and extracurricular activities such as music, dance, drama etc. Along with academics, we urge you all to explore and make the most of the excellent facilities that the institute has to offer.

As the institute master's representative, my entire team and I aim to address your grievances and help you to the best of our abilities. This time since the first semester for you all is going to be online, and you might have a lot of queries in your mind. Please feel free to contact us at any time. Our council PGAC is one that is for the PG students, of the PG students and most importantly by the PG students. So whenever you face a problem, we are always there to help you out. Supporting the students in their academic endeavour is also our foremost priority, and we will try to improve the IITB experience in all the ways we can. On this note, I once again welcome you all to IIT Bombay, hoping to welcome you all back in the campus as soon as the situation gets better, and wishing you every success in your future endeavours.

Institute masters representative (2020-2021)

Post Graduate Academic Council

Sohini Dasgupta

imr@iitb.ac.in

WELCOME MESSAGE FROM THE GENERAL SECRETARY (STUDENTS' COUNCIL, CTARA)

Dear All,

It is an honour and privilege for me to welcome you, on behalf of all Masters and PhD students of the Centre for Technology Alternatives for Rural Areas (CTARA), IIT Bombay. Heartiest congratulations on making it into one of the premier institutes in the country.

I remember when I came the first time. I was a little nervous and with a lot of hopes and enthusiasm. I think you are also feeling the same way. You are about to begin one of the most exciting times in your life. CTARA has its unique and experienced faculty. You are now a part of the CTARA family where you will get ample opportunities to explore multiple disciplines mainly focused on Rural Development.

This COVID pandemic has separated us and put some restrictions on us. Don't worry about it. As the General Secretary of CTARA's Student Council, our team and I, we will work hard to address all your concerns and help you to the best of our abilities. Our main priority is to support you in your academic endeavours, and we will try our best to make your CTARA experience fruitful.

Best wishes to all of you in your new endeavour.

Together we can make the difference for sure.

Guys, this time will not come again, participate in everything whatever you can.

Thanks & Regards,

General Secretary (CTARA)

Pavan Muttepawar

pavan.muttepawar@gmail.com

Sweta Shaw
Dancing, Sketching,
Calligraphy,
Playing TT.

79089 02985
shawsweta180@gmail.com

Akshay G
Prom Writing,
Travelling,
Trekking, Driving

82375 26496
akshayrg05@gmail.com

Ritesh Singh Sisodia
Playing cricket,
Reading books

90093 03473
riteshsisodia786@gmail.com

Vishnu Jayan
Photography, Programming,
Reading, Travelling

80861 07770
mailtovishnu.jn@gmail.com

DEPARTMENT COUNCIL

Pavan Vithalrao Muttepawar
General Secretary

7841957147
pavan.muttepawar@gmail.com

Abino Simon
Cultural Secretary

9479380223
abinosimon82@gmail.com

Ritesh Singh Sisodia
Sports Secretary

9009303473
riteshsisodia786@gmail.com

Aditi Yadav
Secretary Publishing and Design

9588889409
aditivijayyadav@gmail.com

Shivanand Nalgire
Secretary of External Affairs

8830252428
shivnalgire4@gmail.com

Amogh Upadhyay
Department Placement Coordinator

8989536268
amoghupadhyay007@gmail.com

OTHER POSITION OF RESPONSIBILITIES

Akshay G
Company Coordinator
Institute Placement Team

8237526496
akshayrg05@gmail.com

Anjali James K
AURAA

9400561089
anjalijamesk@iitb.ac.in

Danyal Bin Islam
Company Coordinator
Institute Placement Team

8291993319
danyalbinislam@gmail.com

Krritika R Patel
Executive Member
PGAC

9661791477
krritikapatel@gmail.com

Vishnu Jayan
Web Manager
Institute Technical Council

8086107770
mailtovishnu.jn@gmail.com

FACULTY MEMBERS

Prof. A. W. Date
(Emeritus Professor)
Heat Transfer, Thermodynamics and Energy Conversion,
Energy Systems, Appropriate Technology
awdate@me.iitb.ac.in

Prof. Satish B. Agnihotri
(Emeritus Professor)
Child malnutrition, Renewable Energy and Energy Policy,
Gender, Rural development and technology scale-up,
Use of Mapping Techniques in social Sector planning, Public Policy
sbagnihotri@iitb.ac.in, sbagnihotri@gmail.com

Prof. Amit Arora
Bioenergy, Bioprocessing, Downstream Processing, Food Processing,
Membrane separations, Process Design and Development,
Microwave Technology, Paper and Pulp Engineering
aarora@iitb.ac.in

Prof. Anand B. Rao
Energy and Environment, Climate Change,
Carbon Capture and Sequestration, Renewable and Energy Efficiency,
Sanitation and Waste Management
Rural electrification, Energy Policy and Planning, Technology Assessment
a.b.rao@iitb.ac.in

Prof. Bakul Rao
Environmental impact framework for rural areas,
State of environment studies, Field assessments & remediation,
Matrix characterization, Climate change
bakulrao@iitb.ac.in

Prof. Milind A. Sohoni

Combinatorial Optimization, Mathematical Programming,
Algorithms, Drinking Water for Rural Areas

sohoni@iitb.ac.in

Prof. N. C. Narayanan

Water Policy and Governance, Development Theory,
Transdisciplinary Research, Scaling up decentralised PV Solutions,
Environment and development (political ecology)

ncn@iitb.ac.in

Prof. N. G. Shah

Post-Harvest Process Engineering,
Small Scale Renewable Energy Applications
Agro-based Industrial Development

nshah@iitb.ac.in

Prof. Pennan Chinnasamy

Surface water and groundwater management,
water accounting and budgeting, remote sensing,
Large Data Analysis, GIS and climate change impact on water resources.

p.chinnasamy@iitb.ac.in

Prof. Priya Jadhav

Rural Electrification, Energy efficiency,
Energy usage in irrigation: Technology and Farmer behaviour,
Solar Photovoltaics, Organizational models in electricity distribution

jadhav_priya@iitb.ac.in

Prof. Subodh Wagle

Analysis of On-Ground Performance of Public Policies,
Policy and Institutional Dimensions of Solar Technology Dissemination,
Analysis of Regulatory Governance in India, Urban Water Issues

subodh.wagle@iitb.ac.in

Prof. Vishal R. Sardeshpande

Thermal engineering and heat transfer, Product development, Energy efficiency and benchmarking, Solar energy, Social enterprise, Technology for rural MSME (Micro small medium enterprises), Biogas/biomass systems

vishal.sir@iitb.ac.in

Prof. Pankaj Sekhsaria

Science and Technology Studies, S&T visioning and policymaking, Technology, Society and Development, Citizen Science, Wildlife Conservation, Island Studies, Andaman and Nicobar Islands, Media Studies

pankaj.sekhsaria@iitb.ac.in

Prof. Rupal Dalal

Pediatric Care and Medicine, 1st 1000 days health and nutrition of the child, Lactation Education, Community involvement in Pediatric nutrition and urgent care issues.

dalal_rupal@yahoo.com

RURAL TECHNOLOGY ACTION GROUP

Rural Technology Action Group or RuTAG is a brainchild of the Principal Scientific Advisor (PSA) to the Government of India. RuTAG was devised to be a mechanism to achieve rural advancement through S&T interventions. The interventions are fundamentally demand-driven and have a focus on problems associated with marginal communities in rural areas.

- Modifying Design of De-husking Machine for minor Millets in Maharashtra
- Work process and product optimization, Value creation and Livelihood augmentation
- Design of protective dress to be worn while harvesting honey from Beehive in wilder
- Designing a Tool for Removal of Calyces from Ambadi Fruit
- Livelihood augmentation using Coconut Shell with Design and Technology intervention
- Onboard Fish Hold Cooling and Potable Water Generation
- Improving the efficiency of aerators in aquaculture
- Design improvisation of Hirda decortication machine
- Design Improvement of Chironji Decortication Machine
- Designing small scale equipment to extract Kokumoi
- Hybrid Solar Food Dryer to Dry Agriculture Produce
- Evaluation of locally available fibres for water storage tank construction
- Designing a Portable System to Lift a Downer Cow
- Old saree cutting machine for handlooms operated by visually challenged individuals
- Process and product improvements in Kolhapur type Jaggery making unit
- Design of the floating structure for fishing nets for cage fishing
- Hand operated machine for making dhoop sticks from cow dung.

UNNAT MAHARASHTRA ABHIYAN

Unnat Maharashtra Abhiyan (UMA) is a project of the Ministry of Higher and Technical Education, Government of Maharashtra. Its mandate is to build an independent and public knowledge infrastructure for the state of Maharashtra which will bring socio-economic and cultural development for its people, especially those in the bottom 80% of the socio-economic strata.

Sep 2011	Mar 2015	May 2015	Jul 2015	Mar 2016
Sugve Water Scheme: Multi-village drinking water scheme analysis.	Drinking water solutions for Varcha Tembha -- Analysis and Design report	Improving Drinking Water Provisioning in Parbhani City -- Phase I report	Watershed interventions for habitations in Kurlod and Botoshi - Phase II report	Vajreshwari-Ganeshpuri Rural Regional Scheme -- Feasibility Report on Options for Scheme Improvement and Augmentation

TECHNOLOGY AND DEVELOPMENT SOLUTIONS CELL

Technology and Development Solutions Cell(TDSC) is a resource centre for providing technology-based solutions for the development sector. Projects are undertaken given below.

- Support for the assessment of Jalyukta Shivar Abhiyan works in Amravati district.
- Water-resources based livelihood planning for Mokhada taluka
- Taluka level Jalyukta Shivar Abhiyan training for Palghar District
- Evaluation of Thakkar Bappa Yojana in Palghar district
- Rural Drinking water in Thane district
- Rural Drinking water in Palghar district

FELLOWSHIPS

UNICEF-CTARA Fellowships under the Child Nutrition (ChiNu) Centre of Excellence

UNICEF has supported CTARA with five Fellowships covering the second year of M.Tech and one year post-M.Tech with a stipend of Rs15,000 pm and Rs60,000 pm respectively. The Fellowship scheme has now evolved into a CoE. Fellows work on issues related to child malnutrition in the country in fields like data analytics, geo-analytics, products and programme intervention and capacity buildings. The Fellows have done well academically, including participation in conferences abroad based off their papers/posters and in job terms by getting nutrition-related jobs with UNICE, CFNS Piramal Swasthya among others.

Ministry of Rural Development –MoRD Fellowships

Prestigious Fellowship in the field of Development and chance to work in Central Ministry at the start of the career. This Fellowship is started in 2014 with five f Fellowships/year in CTARA. The Fellowship starts in 2nd year of M.Tech + 1 year Post M.Tech in Ministry. M.Tech 1st year paid through MHRD TAship Rs.16,400/- per month in 1st year of Fellowship (2nd-year M.Tech) 60,000/- per month in 2nd year of Fellowship. The student who gets this fellowship chooses projects in 2nd year M.Tech connected with MoRD programs and year of Fellowship, work with Joint Secretaries of MoRD with guidance from CTARA Faculty. Since 2020, ten Fellowships are available.

TAships under the RuTAG project

IITB has a vibrant group on Rural Technologies which incorporates;

a) RuTAG: Rural Technology Application group, supported by the office of the PSA (Principal Scientific Adviser to GoI)

b) Unnat Bharat / Unnat Maharashtra Abhiyan, supported by MoHRD and Go Maharashtra

c) Technology Development and Solutions Cell – as an implementation arm of CTARA.

Under these schemes, we work on actual projects related to the problems in the field. This year we propose to support one or two TAships for CTARA M.Tech students from the first year itself depending on their interest and aptitude.

PLACEMENT DETAILS 2018-20 BATCH

Development sector

Swapnil Labade Deshpande Foundation	Nisha B Sathish Dvara e-Dairy Solutions	Naik Shweta Vinayak BAIF
Prathamesh Antarkar BAIF	Sameer Kulkarni BAIF	Nilesh Vadgave BAIF

Corporate Social Responsibility (CSR)

Swagatika Priyambada
Atul Foundation

Engineering & Technology

Gaurav Kishore Dubey General Mills	Setu Dabhi Atul Griffyn Robotech Pvt. Ltd.

IT/ Software/ Analytics

Shailesh Holkar Antuit India Pvt. Ltd.	Anshul Kumar SAP Labs India	Sunny Johri Broadridge Financial Services
Akanksha Chavan HCL Technologies Ltd.	Divya Singh Hitachi Japan	Aman Lonare Hitachi Japan
	Yambal Mukul Ratnakumar HSBC Global Service Center	

GRADING POLICY

For every course taken by a student, he/she is assigned a grade based on his/her combined performance over the semester in all the assessments in that course. These grades are described by the letters AP, AA, AB, BB, BC, CC, CD, DD, FF, FR and XX, each of which not only indicates a qualitative assessment of the student's performance but also carries a quantitative (numeric) equivalent called the grade point as given below.

Grade	Remarks
AP	10
AA	10
AB	9
BB	8
BC	7
CC	6
CD	5
DD	4 (Min Passing grade)
FF	0 Fail (Eligible for one re-exam)
FR	0Fail (Repeat the course)
DX	Fail (Lack of attendance - Repeat the course)
II	Incomplete (on health grounds)
DR	Dropped
PP	Passed
NP	Not Passed
AU	Audit

FR and FF Grade

The letter grades FF and FR shall be treated as failing grades. FR grade will be awarded in cases wherein the opinion of the instructor, the student hasn't had adequate academic exposure to the course and should, therefore, repeat the course. FR grade may also be awarded in cases of minor malpractice in examinations/assessments.

A student, whose in-semester performance is very poor, maybe awarded the 'FR' grade by the instructors, even if he/she had missed the end-semester examination due to any reasons. If a student either does not submit his seminar report by the prescribed date or he/she is absent for presentation on the scheduled date he/she shall be awarded FF grade unless he/she is given an extension by the coordinator under exceptional circumstances. Re-examination may be permitted for a course if he/she obtains FF grade. After such re-examination if the student passes in that course, he/she will be awarded the maximum grade of DD in that course. If a student does not take or fails in the re-examination, he/she will be awarded the grade FR. A student getting an FR grade has to re-register for the same course if it is a core subject. If this course is an elective course, he/she may register for an alternative course as prescribed by the DPGC/IDPC/SPGC, without this being counted as an additional course.

DX Grade

The grade DX in a course is awarded if a student does not maintain the attendance requirement in the Lecture/Tutorial classes. The DX grades may also be awarded to the students having bad or incomplete in-semester records on non-medical reasons. The DX grade will be declared in the first week of November for the Autumn Semester Courses and in the first week of April for Spring Semester Courses (in general one week before the semester end exams). A student with DX grade in a given course is not permitted to take the semester-end examination in that course. She/he is also not eligible for 50% marks reexamination in that course. Such a student has to re-register for the same course whenever offered. DX Given to students with attendance shortage. This does not count in the SPI / CPI. However, it will be counted as a backlog.

Incomplete Grade (II)

Grade 'II' is awarded in a lecture/lab course if a student has satisfactory in-semester performance but has not appeared for the end-semester examination on medical grounds. The student is entitled to 50 marks re-examination given at the end of the particular semester. 'II' grade will be converted into a performance grade (depending on the overall performance in the course) after the re-examination.

Audit Grade (AU)

The student registered for a course as audit shall be awarded the grade AU if they fulfill the requirement of minimum of 80% attendance and duly satisfactory in-semester performance as prescribed by the Instructor. The Instructor shall include such AU grades in the final grade report for that course. If the student does not qualify for the grade AU, it will be assumed that the course has been dropped by that student.

Dropping of course(s)

If any student finds his course load to be too heavy then he can drop one or more of his/her courses within a stipulated time. Even the core courses can also be dropped in condition of that she/he will complete the dropped course(s) within his degree tenure. In case of electives the students need not to take the same courses, she/he can select any other elective(s) as well. Such courses will appear in the transcripts and final grade card with a 'W' grade (withdrawn grade). These courses will have no impact on SPI/CPI. The last date for dropping a course by the student will be two weeks after the mid-semester examination for the semester-long courses and one week after the mid-semester examination for the half-semester courses. The last date for course drop will be included in the Academic Calendar.

Grade Improvement

1. A student in a PG Programme, where minimum CPI for coursework is 6.0, will be eligible for repeating a course for grade improvement if he/ she has a CPI less than 6.0 and has been permitted by PGAPEC to continue in the Programme on Academic Probation.

2. For Grade improvement, a student has to re-register in the course in a subsequent semester if the course is offered. The grade obtained in the re-registered course will supersede the earlier grade and the same will be reflected in the Semester Grade Card and in the Final Transcript.

3. The student can avail this option only for TWO courses in the entire programme and only.

Attendance

Attendance in classes is compulsory and will be monitored. A student not having 80 per cent attendance may be debarred from appearing in the semester-end examination and given XX grade, and such student has to re-register for the same course. In general, the institute expects 100% attendance. The 80% attendance is permitted only for health or another emergency situation. A medical certificate from IITB hospital or Government hospital is necessary for getting leave on health grounds. The mode of taking attendance for every class in a course is decided by the course instructor and can be either manual or bio-metric.

IMPORTANT INFORMATION YOU SHOULD KNOW

- LDAP ID: It is the unique identification of each individual in IIT Bombay. By default the LDAP ID assigned to you will be your roll number and the associated password will be generated after you have come to the institute and the requisite registration processes are completed.

- Moodle: It is the website which provides for academic interactions between faculty and students in IIT Bombay. From Moodle, you can download all the course materials uploaded by the Course Instructor for the course you have registered for and also interact with the faculty, and it is a forum for academic discussions. http://moodle.iitb.ac.in

- Webmail: This is your personalised email in IIT B. You will get your Id when you get enrolled in IITB. https://webmail.iitb.ac.in

- ASC: This is the leading website for all your administrative needs. You can pay your fees, register for courses, check syllabi of various courses and also check your academic performance and many other things. http://asc.iitb.ac.in

- CAMP: The following elements will be available in CAMP Website

    o Changing Password

    o Changing UserID (Only Once)

    o Modifying Personal Details

    o Set / Reset mail Auto Reply Text

    o Set / Reset mail Forwarding Address

    o Department Sys-Ads List

    o Hostel Sys-Ads Lists

    o Find your UserID from Roll number / Employee Number

    https://camp.iitb.ac.in/

LINKS FOR OTHER MISCELLANEOUS

- Accessing IITB Internal Sites with VPN
  https://www.cc.iitb.ac.in/page/services-vpnssh

- Configuring IITB-Wireless in laptop/android/desktop
  https://www.cc.iitb.ac.in/page/configurewireless

- Access GPO mail on mobile mail
  http://homepages.iitb.ac.in/~yatindestel/docs/GPO%20in%20Gmail.pdf

- Free Licensed Software
  https://www.cc.iitb.ac.in/page/services-software

- How to forward GPO mail to Gmail
  http://camp.iitb.ac.in/cgi-bin/index.cgi

- Rules and Regulations for M.Sc.
  http://www.iitb.ac.in/newacadhome/rulesPG.jsp

- Link for External ASC site
  https://portal.iitb.ac.in/asc/Login

- Link for Central Library
  https://www.library.iitb.ac.in/

- Link for Internship Portal
  http://placements.iitb.ac.in/internship/login.jsp

- Link for placement portal
  http://placements.iitb.ac.in/placements/login.jsp

- Link for the academic calendar
  http://www.iitb.ac.in/newacadhome/toacadcalender.jsp

- Link for academic timetable
  http://www.iitb.ac.in/newacadhome/timetable.jsp

- Link for IITB Holiday List
  http://www.iitb.ac.in/en/about-iit-bombay/iit-bombay-holidays-list

- Link for circulars
  http://www.iitb.ac.in/newacadhome/circular.jsp

InstiApp

InstiApp is an Android App that helps you navigate through the IIT Bombay Campus. It is a one-stop solution for all the queries above and beyond. An app of the Insti, for the Insti, and by the Insti, it connects all the aspects of one's Insti life, weaving around hostels, academics, co-curricular activities & recreation.
https://play.google.com/store/apps/details?id=app.insti&hl=en_IN

Instimap

InstiMap is a searchable map of the campus, specially designed for first-time visitors and new entrants, to find their way around IIT Bombay with ease. It is available on instiApp - an Android App that helps you navigate through the various events on IIT Bombay Campus. It is available at https://insti.app/map

m-Indicator

This app contains the Local Train Timings of Mumbai and also details the local train routes for IIT Bombay. One can also find the various bus routes and the bus numbers on this app.
https://play.google.com/store/apps/details?id=com.mobond.mindicator

OpenVPN

Connect App OpenVPN Connect is the official VPN application for Android developed by OpenVPN, Inc. It is a universal client serving the following OpenVPN products: Access Server – server solution for businesses, OpenVPN Compatible Server – solution for self-hosted servers. It can be used for connecting with IITB Internal sites using VPN.
https://play.google.com/store/apps/details?id=net.openvpn.openvpn&hl=en_IN

MYBYK App

Whether you want to ride a cycle at home or use it to commute within your campus, whenever you need a cycle, find an MYBYK near you. Unlock using your smartphone and pedal your way to a healthy life.
https://play.google.com/store/apps/details?id=in.greenpedia.mybyk

SHIRU CAFÉ

Order your free drink in the app. Simply launch the app and tap the drink you would like to order. Download Link: https://play.google.com/store/apps/details?id=jp.co.enrission.shirucafe

Aarogya Setu

Aarogya Setu is a mobile application developed by the Government of India to connect essential health services with the people of India in our combined fight against COVID-19. The App is aimed at augmenting the initiatives of the Government of India, particularly the Department of Health, in proactively reaching out to and informing the users of the app regarding risks, best practices and relevant advisories pertaining to the containment of COVID-19. Download Link:
https://play.google.com/store/apps/details?id=nic.goi.aarogyasetu

THE REMINDER OF THINGS BEFORE COMING TO IIT BOMBAY

- The following documents are necessary for the completion of the admission process

    o Gate/JAM/CEED scorecard

    o 10th and 12th mark sheet

    o Semester wise grade sheet or mark-sheet

    o Final transcript

    o Provisional Degree Certificate / Degree Certificate

    o Migration / Transfer Certificate

    o Passport-size photograph (at least 12).

    o ID and Address proof (PAN card, Driving License, Passport, Voter ID)

    o Category Certificate (if applicable)

    o Also, bring at least two photocopied of each of the documents and bring at least 12 copies of your passport size photograph.

       Note: Moreover, if you are unable to produce the final transcripts, you can submit them till September by providing an undertaking.

- Room allotment process in the hostel starts 1-2 days before the orientation. This is on a first-come, first-serve basis. If you come early, you will have more room options to choose from.

- Bring umbrella or raincoat with you even though they are available in campus shops, it's raining continuously in Mumbai. Make your luggage light. The campus has a variety of shops (like Y-point or IIT Market) where you can purchase all the basic required things. Each hostel has a general store for other essentials. There are couples of supermarkets (D-Mart, Haiko) within 1 km from the main gate. Try to avoid bringing things like mattress, pillow, buckets, etc. small shops with these things will be put up in the campus itself during a few initial days. Bed dimensions are 6ft * 3ft. So, you can bring bed sheets accordingly; otherwise, you can buy here, it's readily available.

REACHING IIT BOMBAY

IIT Bombay is located at Powai, which is in the North-Eastern part of Mumbai. One can travel by auto-rickshaws or taxis to reach IIT from the nearest stations. The closest stations for Central Railway are Kanjur Marg or Vikhroli. The nearest station for Western Railway is Andheri. International flights land at Sahar Airport which is about 7kms from IIT. The Domestic Airport Santa Cruz is about 11kms from IIT Bombay, and autorickshaws/prepaid cabs are readily available from there for IIT.

From Western Railway

If you are coming by the western railway line, get down preferably at Borivali/Bandra/Andheri. From Bandra (local railway station) west, you can take the 422 bus to IIT Bombay main gate. From Borivali East and Andheri East, there are a number of buses which come to IIT main gate. Alternatively, you can take a three-wheeler or taxi from these stations. If you get down at Mumbai Central, then travel in the reverse direction to Dadar (Western Railway). From Dadar Western Railway, you will have to change to Dadar Central Railway. To reach IIT Bombay from Dadar Central Railway, follow the instructions given under Central Railway.

From Central Railway

If travelling by the central railway line [with tickets to Kalyan/Thane/Kurla/Dadar/CST, get down at Kalyan/Thane/Dadar and take a local train to Kanjur Marg/Vikhroli, which are the nearest stations to IIT Bombay. Come out through the western-side gate and take a bus or, auto-rickshaw to IIT main gate.

From the Airport

Those travelling by air can take taxis/auto-rickshaws from the domestic (40-60 min travel time)/international (20-40 min travel time) airport to reach IIT Bombay.

Reaching IIT Bombay Guest House (Van Vihar/Jal Vihar)

There are three gates to IIT Bombay. It is advised to enter through the main gate. If you are coming by an auto rickshaw/taxi, enquire form the security at the main gate for the directions to IIT B Guest House (Van Vihar/Jal Vihar Guest House)

Reaching IIT B Hostels

There are three gates to IIT Bombay. It is advised to enter through the main gate. If you are coming by an auto-rickshaw/taxi, enquire from the security at the main gate for the direction.

IITB - MAP

Map is not to scale
Map does not cover all the residential areas.
○ Bus Stop

Andheri (towards airport)

Kanjurmarg

SEARCH BY GROUPS AND SERIAL NUMBERS

Academic, Non academic and Lab's

Aerospace Engg	D5	1
Bio-diesel Lab	B4	4
Bio-science & Bio-energy 1	C4	5
Bio-science & Bio-energy 2	C5	6
Bio-science & Bio-energy 3	B4	7
Central Library	B3	12
Centrifugal Lab	B4	14
CESE	C5	15
Chemical, Chemistry	D4	16
Civil Engg	C4	17
Computer Science & Engg	D3	18
Computer Science Dept.	B4	19
Construction Div.	C5	20
CSRE	C4	22
Cummins Engine Research facility	B5	23
Earth Science	C4	26
Electrical Engg.	C4	27
Electrical Engg. Annex	C4	28
Ele. Maintenance Dept.	C5	29
Energy Systems Lab.	B4	30
Estate Stores	C5	31
Heat Pump Lab	B4	36
Heat Transfer Lab	B4	37
Heavy Structure Lab	B4	38
Hostel **1**	A3	H1
Hostel **2**	A2	H2
Hostel **3**	A2	H3
Hostel **4**	A2	H4
Hostel **5**	B2	H5
Hostel **6**	B1	H6
Hostel **7**	B1	H7
Hostel **8**	B2	H8
Hostel **9**	B1	H9
Hostel **10** Girls' Hostel	D3	H10
Hostel **11** Girls' Hostel	C2	H11
Hostel **12**	A1	H12
Hostel **13**	B1	H13
Hostel **14**	B1	H14
Humanities and Social Sciences (HSS)	D4	40
Hydraulics Lab.	B4	41
Hydraulics Lab (new)	B4	42
IC Engine Lab	B4	43
IDC	C4	44

Inter-disciplinary Prog. in Systems and Control Engg.	B4	7
IRCC	C3	45
KReSIT Building	D3	18
Lecture Hall Complex-1	D4	47
Lecture Hall Complex-2	D4	48
Machine Tool Lab	C5	49
Main Building	C3	50
Mathematics	B4	53
Mechanical Engg.	C4	54
Medical Store	E5	55
Metallurgical Engg.	D4	56
Micro Fluidics Lab	B5	57
NanoTech. & Science Research Centre (ACRE)	B4	58
NASA	C5	59
ONGC Research Centre	D5	62
OrthoCad Lab	B5	63
Physics	D4	65
Power House	B5	67
Printing Press	C5	68
SAC	B3	69
SAMEER	A4	70
SEMT Lab	C5	73
SITAC	B4	74
Solar Lab	B4	75
SOM	C3	45
Sophisticated Analysis Instrument Facility (SAIF)	B4	58
Steam Power Lab	B4	80
Stores and Estate office	C5	81
Thermal Hydraulic Test Facility	B5	87
UG Lab/S2 Bay	C5	88

Residential

Ananta	A4	2
Director's Bungalow	E3	24
DRDO	A3	25
Guest House/ **Jalvihar**	D2	33
Guest House/ **Vanvihar**	D3	34
Staff Hostel	C3	76
Tansa House (Proj. Staff)	B2	84
Vihar House	B5	90
White House	F2	91

Auditoriums and Halls

Convocation Hall	C3	21
G Gaitonde Lecture Hall	C4	32
Lecture Hall Complex-1	D4	47
Lecture Hall Complex-2	D4	48
PC Saxena Auditorium (LT)	C4	64
Seminar Hall	C4	72
Victor Menezes CC	C4	89

Food

Brewberry Cafe	B2	9
Gulmohar Restaurant	D3	35
Nestle Cafe (Coffee Shack)	C3	61
Staff Canteen	C3	77

Banks and ATMs

ATM - Canara Bank	B1	ATM
ATM - Canara Bank	D3	ATM
ATM - State Bank	B2	ATM
Canara Bank	D3	10
State Bank	F3	79

School

Campus School	E4	11
Central School	E5	13
Kendriya Vidyalaya (KV)	E5	13

Activities and Sports

Badminton Court	B2	3
SAC	B3	69
Staff Club	D3	78
Swimming Pool	B3	82
Swimming Pool (new)	B2	83
Tennis Court	C3	86

Others and Medical

Boat House	D1	8
Lake Side Gate	F1	46
Hospital	C3	39
Main Gate	F3	51
Market Gate	E5	52
Medical Store	E5	55
NCC Office	B3	60
Post Office	E5	66
Sarovar Udyan	F2	71
Temple (Padmavati Devi)	E1	85

Map Design
Shishir Bhagade. IDC, IITB

Project Guide
Prof. Mandar Rane. IDC, IITB

Source: http://www.iitb.ac.in/sites/default/files/article/images/IITB-Map---2D_ENG-PRINT.jpg

MESSAGES FROM SENIORS

Congratulations to all of you. Welcome to CTARA. Welcome to IIT Bombay. Here, you have lots to explore.
Aditi Yadav

Welcome to CTARA
Akshay G

Welcome to CTARA, MTD1. Wishing you for the most constructive time of your academic life!
Amogh Upadhyay

Hope CTARA will enable you to change your worldview and help you to grow just like it did for many of us.
Anjali James K

All the best and best of luck! Welcome to CTARA… Welcome to IIT Bombay… and Welcome to Mumbai….
Anshul Dhakar

Heartiest congratulations for making into one of the premier institutes of India!
Danyal Bin Islam

Welcome to CTARA ;)
Fathima Nidha

A warm welcome to CTARA family. CTARA is not about academics only, CTARA shows you how to be a human
Krritika R Patel

Hearty congratulations to you all. And welcome to the CTARA family.
Shivanand Nalgire

Congratulations and a hearty welcome to CTARA family. Enjoy the essence of one of the top institutes of our country.
Vishnu Jayan