

# INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

HANDBOOK 2021-22



# **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 own responsibility that it is put to use, with cross verification if need be.

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# MESSAGE

HOD

Dear students:

I am delighted to welcome each of you to Industrial Engineering and Operations Research (IEOR) at IIT Bombay for your post-graduate studies. The field of IE & OR may be quite new to most of you, and you will be eager to know more. Let me start there. IE & OR, as a field, studies complex human systems (such as supply chain, transport, healthcare, manufacturing, agriculture, financial services, defense etc.) and the formal structures therein (planning, timetabling, scheduling, queueing, etc), using structured rigorous methods (optimisation, simulation, statistics, probability, game theory, machine learning, etc.). Your post-graduate studies curriculum at IEOR has been carefully designed to provide you with the right mix of tools, techniques, theory and applications. You will be doing compulsory and elective courses to enhance your understanding of the field. The curriculum also involves a significant research component where you will get a chance to do some significant work, under the guidance of faculty experts. All faculty and staff of IEOR are eagerly looking forward to working with you, and providing you with an enriching education. Your experience here will be what you make of it, limited only by the limits you put on yourself.

This new academic year will bring in new challenges, especially with the upcoming semester being Online. We are working hard to provide you with the same quality of education that you have come to expect from us, albeit virtually. It will be a new experience for all of us, which I hope we eventually come to relish. You can turn to your faculty advisors, and informally to your seniors, for any help you may need in settling down.

I wish you all the very best in your endeavours, and would like to thank you for choosing IEOR for doing your post-graduate studies.



**PROF. JAYENDRAN VENKATESWARAN**  
HOD

# MESSAGE

## FACULTY ADVISOR (M.Tech)

Dear students,

Welcome to IEOR@IIT Bombay and we hope to meet all of you soon, initially in online mode, then soon on campus and perhaps in physical classes and meetings also. Under the circumstances, it is all the more important that each and every one of you stay in touch with us (and with each other), so that we can get to know each other well and make the best use of the opportunity.

I urge you to be in regular contact with faculty members regarding all matters, especially academics, but even other things. You should feel free to talk to any of us. As faculty advisor, I would try to be in frequent touch with you regarding registration, choice of electives, performance in courses, and anything else that you wish to talk about. You could suggest the best medium to do this and from my side, I am keen on exploring all possible modes of interaction.

The coursework at IEOR is quite demanding and it is important that you get off to a quick start. Even in the first semester courses, some background in quantitative techniques and mathematics is expected, and you could revise some basic concepts in applied probability and calculus, and linear algebra. Computation is another aspect of our program and you will be expected to do some numerical work leading to analysis and implementation of algorithms and various ideas that you come across in your courses.

The M.Tech project is an important part of the program and you could plan some of your coursework with this in mind.

Finally, a number of students in the last few years have converted from M.Tech to M.Tech-Ph.D. and you can explore this option if you are keen on pursuing research work in our group.

All the best in your studies and in your future career, at this exciting juncture!



**PROF. NARAYAN RANGARAJ**  
Faculty Advisor

# MESSAGE

FACULTY ADVISOR (M.Sc.-Ph.D.)

Welcome !

Welcome to IEOR ! Welcome to your exiting days of academic and non-academic explosion ! Please be honest and grab the most out of the opportunity !

Thanks,  
Kavitha



**PROF. VEERARUNA KAVITHA**  
Faculty Advisor



# MESSAGE

## Overall Coordinators, ISCP

Dear students,

Heartfelt congratulations for embarking on one of life's most memorable journeys—the journey of learning. The prestigious institute of IIT Bombay welcomes you aboard.

Your dedication, hard work, and perseverance brought you here, and we are confident that your experience will lead you towards great opportunities. Owing to the ongoing covid-19 pandemic, the onboarding will be online. However, rest assured that we are there to assist you in any way possible, from smooth orientation to cope with academic pressure.

Institute Student Companion Programme (ISCP) is a student body with the primary objective of building a relationship of trust and comfort between the on-roll students and the incoming students of the PG programs. We are here to help you get 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. The scope of these is not limited just to academics. Various online events will be organized by the cultural, technical, and sports clubs in IITB, like code in quarantine, fitness challenges, dance challenges, and many more. 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 program. 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 is you. You set the culture, the activities, represent IITB to the world and 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, making memories, reaching out to us for any queries, and relaxing in the comfort of your home. At least till we get an opportunity to welcome you into the campus; let us be safe, let us be optimistic, and let us keep our learning spirits high.

We welcome you to IIT Bombay— A journey where you Learn, Grow and Enjoy.

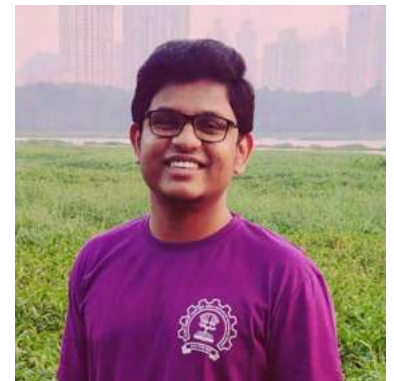
The campus of IIT Bombay awaits your presence; we will soon see you there.



**JAYANT POPLI**  
Overall Coordinator



**MAYANK SETH**  
Overall Coordinator



**SIMHADRI ADITHYA**  
Overall Coordinator

# MESSAGE

## Department Coordinators, ISCP

Dear New Entrants,

Congratulations on making it to IITB and welcome to the IEOR family.

Hope you and your family are in good health. These are real tough times but we are here to help you out with your needs in these starting days at IITB. This year, due to these unavoidable circumstances owing to the pandemic, the journey of your Master's program starts through the online mode. This includes orientation, registration, classes etc. This is indeed unique and also a little bit challenging for all of us. We wish we could meet you in person! Nevertheless, work from home (online mode) is the new common thing worldwide. We must adapt to this as soon as possible. We will have interactive sessions over various online platforms which will be informed to you.

IITB has a rich culture in academics as well as in extracurricular activities like sports, cultural etc. Students of IEOR have a real good reputation of doing well in academics as well as in extracurricular activities. We hope that you guys will help this tradition to only improve and things will only get better in your presence.

Coming to ISCP, we are a students body and we are here to help you out in your early days at IITB. Initially, you will have a lot many doubts and queries regarding courses and many other academic and non-academic matters. But worry not for we are here to clear out all those doubts and help you to the best of our capabilities. We will have meetings regularly over some online platform and we encourage you to contact us in all your needs. Each one of you will have one student companion assigned, please reach out to him first for any problem or queries. In addition, do feel free to reach out to us or any of the council members, any senior student or even anyone from the faculty in our department. We will be glad to help you!

Let us take the opportunity to welcome you once again to the IEOR family. We wish you all the very best for your future journey at IITB and also for the journey that follows after. Hope to see you soon.

Cheers and best wishes.



**ABIJITH P Y**  
Department Coordinator



**BHEESHM SHARMA**  
Department Coordinator



# MESSAGE

## PG Academic Council

Even in these turbulent times, you have focused on academics and have qualified for the exams with flying colors. As a result, you are now a part of one of the most prestigious institutes of our nation.

IIT Bombay not only gives you the privilege of interacting with the best faculty and being a part of the cutting-edge research, but also gives you an opportunity to explore a culture that will develop within you the skills for a lifetime.

With your first semester being online and a possible lack of peer interaction, the situation might sometimes get overwhelming. The Post Graduate Academic Council (PGAC) is a student body whose aim is to serve our students whenever in need. Our team has plans to improve the prospects of PG community in academics, placements, and skill development and enhance your overall experience at IIT Bombay.

I would suggest you make the best out of our institute's services and facilities and participate in various academic and non-academic activities. And always remember that PGAC is here for the students, and you can reach out to us whenever you need. Wishing you all the best for your journey at IITB.



**SHREYA BARI**  
**Institute Master Representative**

# ABOUT INSTITUTE



Established in 1958, the second of its kind, IIT Bombay was the first to be set up with foreign assistance. The funds from UNESCO came as Roubles from the then Soviet Union. In 1961 Parliament decreed the IITs as 'Institutes of National Importance'. Since then, IITB has grown from strength to strength to emerge as one of the top technical universities in the world.

The institute is recognised worldwide as a leader in the field of engineering education and research. Reputed for the outstanding calibre of students graduating from its undergraduate and postgraduate programmes, the institute attracts the best students from the country for its bachelor's, master's and doctoral programmes. Research and academic programmes at IIT Bombay are driven by an outstanding faculty, many of whom are reputed for their research contributions internationally.

IIT Bombay also builds links with peer universities and institutes, both at the national and the international levels, to enhance research and enrich its educational programs. The alumni have distinguished themselves through their achievements in and contributions to the industry, academics, research, business, government, and social domains. The institute continues to work closely with the alumni to enhance its activities through interactions in academic and research programs as well as to mobilize financial support.

Over the years, the institute has created a niche for its innovative short-term courses through continuing education and distance education programs. Members of the faculty of the institute have won many prestigious awards and recognitions, including the Shanti Swaroop Bhatnagar and Padma awards.

Located in Powai, one of the northern suburbs of Mumbai, the residents of the institute reap the advantage of being in the busy financial capital of India, while at the same time enjoying the serenity of a campus known for its natural beauty. A fully residential institute, all its students are accommodated in its 15 hostels with in-house dining; the campus also provides excellent amenities for sports and other recreational facilities.

# ABOUT IEOR

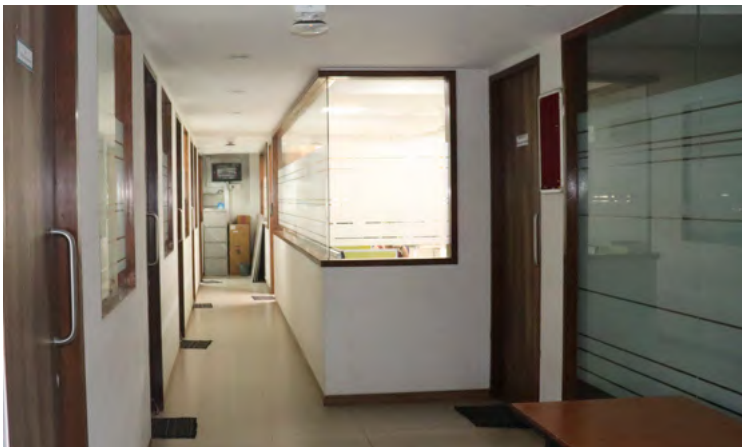
Industrial Engineering and Operations Research (IEOR) is an academic discipline concerned with making systems more efficient. Often this goal is achieved through the use of modelling and other computational methods.

Industrial Engineering and Operations Research (IEOR) at IIT Bombay offers research-based M. Tech., Ph.D., and M.Sc.-Ph.D. dual degree programmes, and is actively involved in research (including sponsored projects), consulting and continuing education. The discipline offers a blend of theory, modelling, and application, drawing from traditional as well as modern areas of operations research, together with a system view derived from long-standing principles of industrial engineering. This approach provides a backdrop for technically sound decisions at operational and tactical levels and occasionally at the strategic level, for a variety of organizations.

Established as one of the first interdisciplinary programs in IIT Bombay, IEOR contributes significantly to achieve the goals of IIT through various activities such as offering academic programs, conducting continuing education programs (CEP), carrying out research projects of different types.

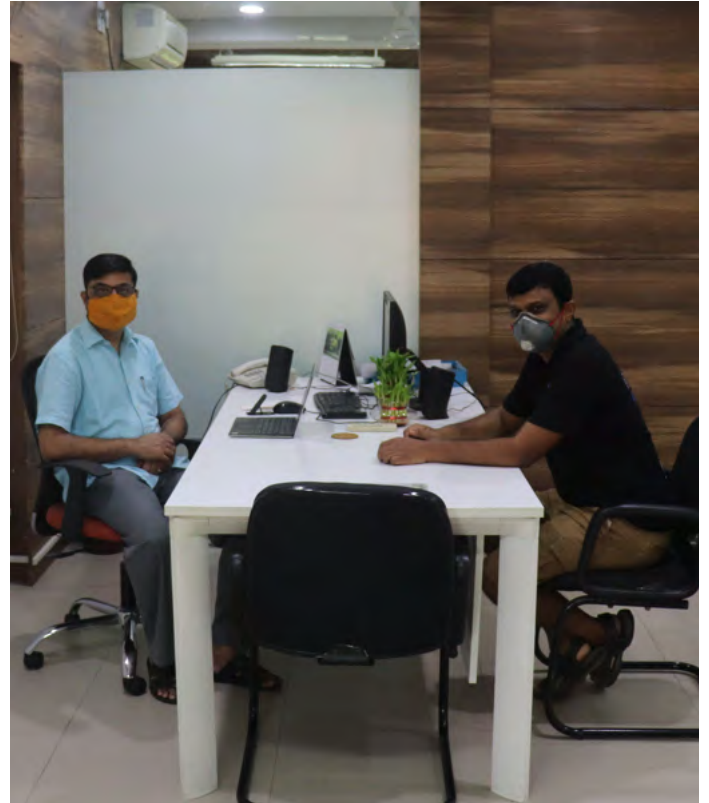
The IEOR program also has steady interaction with a wide spectrum of industries and sectors of the economy and society through participation in conferences, hosting visitors from academia and industries, carrying out sponsored projects, and placement of students in different sectors, etc.

IEOR graduates work in a variety of research labs and industries, including manufacturing, communications, transportation, banking, pharmaceuticals, finance, travel, semiconductor, and business, sports, health, and information technology.





# IEOR GALLERY



# FACULTY AT IEOR



**Prof. Jayendran Venkateswaran**

Email: [jayendran@iitb.ac.in](mailto:jayendran@iitb.ac.in)

**Research Interests:** Modelling, simulation, and analysis of complex systems (viz. supply chains).



**Prof. Nandyala Hemachandra**

Email: [nh@iitb.ac.in](mailto:nh@iitb.ac.in)

**Research Interests:** Operations Research methodologies like Markov decision models, Queueing models, Game theory, etc. Application areas include Communication networks, Supply chains, Financial Engineering, Logistics and Power systems



**Prof. K.S. Mallikarjuna Rao**

Email: [mallik.rao@iitb.ac.in](mailto:mallik.rao@iitb.ac.in)

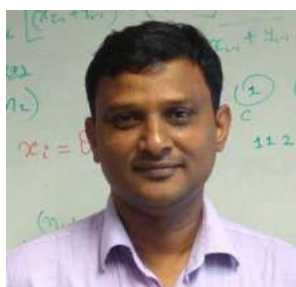
**Research Interests:** Deterministic and Stochastic Control, Game Theory, Viscosity Solutions, Markov Decision Processes, Mathematical Finance.



**Prof. Narayan Rangaraj**

Email: [narayan.rangaraj@iitb.ac.in](mailto:narayan.rangaraj@iitb.ac.in)

**Research Interests:** Railway Operations Management, Optimisation, Logistics and Supply Chain Management, Pricing and Revenue Management



**Prof. Manjesh Kumar Hanawal**

Email: [mhanawal@iitb.ac.in](mailto:mhanawal@iitb.ac.in)

**Research Interests:** Communication Networks, Machine Learning, Network Economics.

# FACULTY AT IEOR



**Prof. Vishnu Narayanan**

Email: [vishnu@iitb.ac.in](mailto:vishnu@iitb.ac.in)

**Research Interests:** Mathematical Programming especially Integer Programming, Convex Optimization, Polyhedral Theory.



**Prof. Ashutosh Mahajan**

Email: [amahajan@iitb.ac.in](mailto:amahajan@iitb.ac.in)

**Research Interests:** Mixed-Integer Linear and Nonlinear Optimization, Algorithms, Software and Applications of Optimization.



**Prof. Veeraruna Kavitha**

Email: [vkavitha@iitb.ac.in](mailto:vkavitha@iitb.ac.in)

**Research Interests:** Stochastic processes, Queuing Theory, Polling systems, Optimal control, Game theory, Stochastic approximation, Wireless communications.



**Prof. P. Balamurugan**

Email: [balamurugan.palaniappan@iitb.ac.in](mailto:balamurugan.palaniappan@iitb.ac.in)

**Research Interests:** Theoretical and practical aspects of Machine Learning, Data mining, Optimization for data science, Longitudinal Data Analysis and related application.



**Prof. Siddhartha Sengupta (Adjunct Professor)**

Email: [siddhartha.sengupta@tcs.com](mailto:siddhartha.sengupta@tcs.com)

**Research Interests:** Large scale automated Automated Railway Planning, Transportation planning, Creating value from ICT, Logistics and Supply Chain Management (including Pricing/Revenue Management), Machine Learning and Artificial Intelligence



# FACULTY AT IEOR



**Prof. Madhu Belur**

Email: [belur@iitb.ac.in](mailto:belur@iitb.ac.in)

**Research Interests:** Railway timetabling: development of tools, Singular and descriptor systems: impulse elimination, Dissipative systems: algorithms for storage functions, Operations research: timetabling, bottleneck identification and congestion control, Graph-theoretic methods and structural control, Allocation problems and matching techniques



**Prof. Avinash Bhardwaj**

Email: [abhardwaj@iitb.ac.in](mailto:abhardwaj@iitb.ac.in)

**Research Interests:** Conic (mixed) integer programming, Linear and Non Linear Discrete Optimization, Polyhedral cutting planes for mixed-integer programming, Polyhedral Combinatorics, Optimization under uncertainty, Combinatorial Optimization, Approximation Algorithms, Computational Optimization



**Prof. Jayakrishnan Nair**

Email: [jayakrishnan.nair@ee.iitb.ac.in](mailto:jayakrishnan.nair@ee.iitb.ac.in)

**Research Interests:** Queueing theory, Communication networks, Heavy tails.

# ACHEIVEMENTS IN IEOR

- The department of IEOR has had a 25-year long collaboration with the Indian Railways (IR) with Prof. Narayan Rangaraj having played an instrumental role in establishing this relationship. He has spent a considerable amount of time in this industry by serving as a guest faculty at the Railway Staff College (now National Academy of Indian Railways) in Vadodara where railway officers undergo a formal training, and later at the Indian Railways Institute of Transportation Management, Lucknow
- “Localization of Solar Energy through Local Assembly, Sale, and Usage of 1 Million Solar Urja Lamps (SoUL)”, initiated by Prof. Jayendran Venkateswaran and Prof. Chetan Solanki, IIT Bombay aims to empower populations in underserved communities, through high-quality programs that meet their real needs to improve the quality of their lives. IIT Bombay has received a sanction from the Government of India’s Ministry of Finance’s National Clean Energy Fund (NCEF) through the Ministry of New and Renewable Energy (MNRE) for distributing 1 Million solar lamps to several states across India
- FOSSEE (Free and Open Source Software in Education) is a project that aims at improvising the quality of education and comes under the National Mission on Education through Information and Communication Technology (ICT) and is funded by the Ministry of Human Resources and Development, Government of India. Prof. Ashutosh Mahajan contributed to the FOSSEE Optimization Toolbox (FOT) by providing to the users of Scilab, an interface to several open-source solvers like IPOPT, CLP, Symphony, CBC, and others to solve different types of optimization problems
- Timetabling has been an integral part of Prof. Ashutosh Mahajan’s work here at IIT. He works on both exam and regular lecture timetabling. Prof. Ashutosh and his students work along with Prof. Jayendran Venkateswaran and Prof. Narayan Rangaraj in this endeavor
- IEOR has worked with Mercedes-Benz and Daimler Fuso since 2014, where students under the guidance of Prof. Narayan Rangaraj,
- Prof. Manjesh Hanawal and Prof. N. Hemachandra have undertaken sponsored projects involving the analysis of the performance of various vehicle components and inventory aspects and also exploring the field of video analytics.

# ACHEIVEMENTS IN IEOR

- IEOR has been working with Delhivery on various aspects of Network Optimization, under the supervision of Prof. Ashutosh Mahajan.
- Prof Manjesh Hanawal played a pivotal role in the development of the app Corontine, which helps in identifying and isolating the carriers of Covid-19.
- Prof. Jayendran Venkateswaran, Head of the department has been appointed Institute Chair Professor for 3 years from 18-3-2021.
- Five research scholars of IEOR, Khushboo Agarwal, Shiksha Singhal, Vartika Singh Anand Kumar, and Pintu Kumar have been awarded the prestigious PMRF fellowship. The Prime Minister's Research Fellows (PMRF) Scheme aims at improving the quality of research in various higher educational institutions in the country. With attractive fellowships, the scheme seeks to attract the best talent into research thereby realizing the vision of development through innovation. The candidates are selected through a rigorous selection process and their performance is reviewed suitably through a national convention.
- IEOR student Akash Saha's research has been featured in the latest issue of ACR Newsletter for February 2021. The work is titled 'Learning with Operator-valued Kernels in Reproducing Kernel Krein Spaces' under the guidance of Prof. P Balamurugan
- IEOR students, Ms. Chhavi Sharma and Ms. Vanessa Ann Beddoe Sawkmie have been awarded the highly competitive ACM-W scholarships for attendance at research conferences.

There are even more achievements from our faculty and students, do check the IEOR Department Website for more details

# Laboratories & Research Facilities

## **LIBRARY**

The Department library is located at Room No. 301 (Third floor), IEOR Building. Irrespective of its size, it proves to be a valuable resource for IEOR students because a number of IEOR specific books which are not available in the central library and are expensive to buy are available here. Some M.Tech. dissertations are also available in our library, so that students can refer to them and get some ideas about writing a dissertation. The library affairs are handled by the Joint Secretary (Library and Publications). For more information regarding library, go to: [www.ieor.iitb.ac.in](http://www.ieor.iitb.ac.in) → User Login (LDAP ID and Password) → internal → IEOR Library.

## **IEOR LAB**

The IEOR lab has nine PCs with internet connectivity plus one Wi-Fi router and a few additional LAN ports so that people with laptops can make use of it in the lab. All the PCs have both Windows and Linux operating systems. Also, the PC's are connected to the OPTIMUS server of IEOR where one can login to use the software. Whatever may be the purpose (of course it should be strictly academic), the Lab is at your service 24\*7. All you have to do is get a permission to issue the key from IEOR Office (First Floor of the building) and use the lab any time you want. The lab affairs are handled by the Office Holder, Mr. Abasaheb Molavane.

## **PH.D. LAB**

The Ph.D. Lab is where the brilliant research minds of IEOR are at work. The Ph.D. students are no less than guides and mentors for the M. Tech. and M.Sc.-Ph.D. students, so never hesitate to drop by and get your doubts cleared by them. This lab has 24 hours internet connectivity through LAN and an additional Wi-Fi router so that personal laptops can be used. The Lab also houses the OPTIMUS and the PASSPOLI servers of IEOR through which softwares like AMPL, Scilab etc. can be accessed. Also Ph.D. lab is well known for its cleanliness, always keep in mind whenever you visit lab, keep your footwear outside the lab.

## **OTHER FACILITIES**

- Teaching Lab
- Conference Room with an interactive projector
- Seminar Room with an interactive projector
- Meeting Room with an interactive projector
- Solar Urja Lamp (SoUL) Office

# Important Websites

## IEOR website

This is the department's website. It has the contact details of all faculty members, staff, and students of the department. It also displays the academic research areas of IEO. We have a student council in our department, abbreviated as IEORSA. Get familiarized with the council members, you will get the contact details of everyone on the website under the People tab. Since this semester is going to be online, get in touch with Joint Secretary (Acad.) for all academic grievances. Also, information about various events happening in the department can be found here.

Visit at <https://www.ieor.iitb.ac.in>.

## Application Software Centre (ASC) – Administration

This website is the main interactive website for a student for all administrative requirements. The website also has links to all other websites of the institute. Some of the most important facilities offered by this website are shown:

- **Running courses:** You will get to know about the courses of different departments running in the current semester in the Running Courses tab. Make sure you visit it before the course registration date
- **Status:** You will get to know about all the courses you've registered in till now in your curriculum
- **Timetable:** Once you register for the courses, a timetable will be generated automatically for your current semester
- **Course withdraw:** If you want to withdraw from a course you registered for at the start of the semester, You can do so in the Course Withdraw section. You need to get permission from the faculty advisor for the same

Visit at <https://asc.iitb.ac.in> .

## Moodle-Academics

This website is designed to get content shared by faculty to students. You can download study material uploaded by a professor from here and also submit assignment\quizzes submission when asked by professors. There is also an announcement tab for every subject where the professor announces some information related to the course, following which you will get a notification on your Webmail. But when you use the announcement tab to send something, it will go to every student registered for the course, hence avoid sending mails from this platform unless necessary.

Visit at <https://moodle.iitb.ac.in/>.

## Webmail

This service enables you to access your mailbox (IIT-B email ID \ LDAP) from anywhere (inside or outside IITB) via the Internet. You will get notifications of various updates via webmail, do check it multiple times a day.

Visit at <https://webmail-ss0.iitb.ac.in/> .

# Important Websites

## Computer Centre

IIT-B provides students with various Computer Facilities which include Email, Web Browsing, File Storage, and Terminal Access. All these are based on your LDAP-ID and password.

Click here to visit the website

But you should be thinking about what is this LDAP?

### Details about LDAP:

IITB provides students with various Computer Facilities which include Email, Web Browsing, File Storage, and Terminal Access. All these are based on your LDAP-ID and password.

It is suggested to use these facilities responsibly for your and IITB's security.

Every student/staff will get an LDAP account, when (s)he joins IITB. Using this, (s)he can browse the internet (using this user ID for authentication on IITB proxy server netmon.iitb.ac.in). The user will also get a mail account (userid@iitb.ac.in). The user can also log into the machines in the CC user area using the same user ID. NETMON proxy access and user-area login will expire the moment (s)he completes his/her study at IITB. The email address may be retained as a forwarding address to an external address of the user's choice.

The following things will be available on [CAMP Website](#) :

- Changing Password
- Changing User ID (Only Once)
- Modifying Personal Details
- Set / Reset mail Auto Reply Text
- Set / Reset mail Forwarding Address
- Department Sys-Ads List
- Hostel Sys-Ads List
- Find your User ID from Roll number / Employee Number

The following information will be useful to you for accessing LDAP login and password:

- [LDAP Details](#)
  - Your initial password is your date of birth in DDMMYYYY format. For example, if your birth date is January 5, 1983, your password will be 05011983.
  - If for some reason your initial password does not work, your Department System Admin. will help you fix it.

- [Updating LDAP Details](#)

After registration it is recommended that you visit <http://camp.iitb.ac.in/cgi-bin/index.cgi> and do the following:

- Important: Reset your password immediately
- Choose a new LDAP ID after a month of your registration. You will be able to send/receive emails at YOUR\_LDAP\_ID@iitb.ac.in. You can change your ID only ONCE.
- If you forget your LDAP password then contact your respective Department System Admin.



# Important Websites

## External IIT-B Portal

This is the external page of IIT Bombay which can be accessed from anywhere (inside or outside of IITB). This is the portal that is used for registration of bank account, payments of semester fees, hostel fees, etc. Bank account registration is done only once at the start of the first semester. This is important because you will get your stipend in the account that you put in, hence do it very carefully. Along with that, this page also shows a summary of your academic performance to date. You will get to know your grades, courses you did, your credits fulfillment, etc. as shown.

Visit at <https://portal.iitb.ac.in/asc/Login> .

## Central Library

The website for the central library offers a search engine for books available in the library. You can also check the number of books issued at any given time, renew them, and “queue” up for any book already drawn by some other individual.

Visit at <https://www.library.iitb.ac.in>.

## CDEEP

CDEEP is the platform where you will get access to video lecture series uploaded by professors in every department in current and previous semesters for certain courses.

Visit at <https://www.cdeep.iitb.ac.in> .

## InstiApp

An app design by insti , for the students of insti , to get all the information about the institute and various events happening here. The app contains the map of institute , blogs about various events in the institute , information of various technical as well as non-technical clubs ,menus of various hostel mess and placement\internship blogs.

For more details visit at : <https://www.insti.app> or get at [google play store](https://play.google.com/store/apps/details?id=com.instiapp) .

**P.S.:** No need to worry about all the nitty-gritty. You will be informed about everything in due course of time. These references are to give you an overview of the facilities that you'll be using most of the time.

# SUPPORT STRUCTURES

TO HELP US ALL IN TIME OF NEED

## Student Wellness Center

After securing admission at the Institute and starting your stay here, you may feel that a lot of parameters around you are different. You would have more responsibilities to handle at the hostel and at the academic level. Take heart, you will not be the only one. There are a few issues that almost everyone in the Institute faces initially like academic concerns, social (family and peer) pressure etc., leading to feelings of loneliness, low confidence, anxiety, stress, anger and sadness, to name a few.

To help you refrain from losing focus and being unhappy, the counsellors of SWC encourage you to approach them for any problem that you are facing- be it academic, emotional, social or financial- without hesitation.

Counselling provides an opportunity for individuals to learn to make better choices, improve interpersonal skills, develop confidence and increase educational effectiveness. In a one-on-one meeting with a counsellor, students are helped to explore and express feelings, examine beliefs and ways of thinking about their present situation, reflect on patterns of behaviour, and work toward making healthier and happier changes.

As Covid forced us to be physical separated and make everything uncertain in the near future, it is understandable for anyone to be feeling stressed. SWC is always there to hear from you.

Click [here](#) to visit the website

## Gender Cell

IIT Bombay's Women's Cell has been in existence since 2002. With the enactment of the Institute's policy on sexual harassment, the Cell has been renamed the Gender Cell (GC). In recognition of the Institute's belief that its employees and students have a right to be treated with dignity and respect, the Cell works proactively towards developing a safe and secure environment for employees, and to ensure that all students may gain their education without fear of prejudice, gender bias, hostility or sexual harassment.

Click [here](#) to visit the website

## SC/ST Students Cell

The SC/ST Students Cell addresses academic and non-academic issues and complaints received from students in reserved categories. The institute strives to maintain an environment where all communities can participate in academic and research activities without any sort of discrimination with respect to caste or creed. In order to maintain such an atmosphere, the SC/ST students cell is responsible for sensitizing the campus community about the importance of having diversity.

The cell aims to ensure that anti-discrimination laws in the context of race/caste/creed are followed in letter and in spirit.

The cell is where any complaints by students about discrimination and/or harassment are to be brought up. We encourage student victims to feel free to write to the following email address. In addition to by email, one can also consider filing an anonymous complaint at the website: <https://goo.gl/forms/F3BKMxkdGu28OGRz2>. The cell strives to ensure that anonymity is maintained throughout the investigation. The cell is currently headed by Faculty Advisor, Prof. Arindam Chowdhury, Department of Chemistry.

# COURSE STRUCTURE & GRADING POLICY

## For M.Tech. Curriculum

IEOR offers M. Tech. Degree in Industrial Engineering and Operations Research. The M.Tech. The program is designed to prepare students for professional careers in the area. The academic program leading to the M.Tech. program involves course-credit requirements and research work.

Registration of courses NOT on the approved list needs prior approval from the student's faculty advisor. The final course plan of the student has to be approved by the student's faculty advisor.

## SEMESTER-WISE CREDITS DISTRIBUTION FOR M. TECH.

### Semester 1

Subject code	Course Name	Lecture	Tutorial	Practical	Credit
IE609	Mathematical Optimization Techniques	3	0	0	6
IE621	Probability and Stochastic Processes I	3	0	0	6
IE503	Operations Analysis	3	0	0	6
IE605	Engineering Statistics	3	1	0	8
IE507	Modelling and Computation Lab	0	1	3	5
---	Elective1	3	0	0	6
Total					37

### Semester 2

Subject code	Course Name	Lecture	Tutorial	Practical	Credit
IE630	Simulation Modelling and Analysis	3	0	0	6
---	Elective2	3	0	0	6
---	Elective3	3	0	0	6
---	Elective4	3	0	0	6
IE684	IEOR Lab	0	1	3	5
IE694	Seminar	0	0	4	4
HS791 + IE792	Communication Skills	2	0	0	4*
Total					33+4*

For the M.Tech. Degree, the student must do 90 credits (48 + 42) of Research Work, which culminates in an M.Tech. Thesis. Through the research work, the student must exhibit the ability to think independently and make significant contributions to the field of IEOR.

There are two review stages en-route to the completion of the thesis work, with the second being the final open presentation. Typically, the Stage I review presentation is held at the end of the 3rd semester (October); and Stage II final review presentation is held at the end of the 4th semester (May-June). The final Thesis defense will include an external examiner from outside IITB and an external chairman from outside IEOR.

# COURSE STRUCTURE & GRADING POLICY

## For M.Sc.-Ph.D. Curriculum

The M.Sc.-Ph.D. dual degree in Operations Research is an integrated doctoral program, for those interested in a research-oriented career. The program is open for students who have at least 2 years/4 semesters of Mathematics or Statistics as their B.Sc. Honors (Major) subject, and are interested in research in engineering / interdisciplinary areas. The academic program leading to the M.Sc.-Ph.D. the dual degree involves foundation (core) courses, advanced courses, and research work (To view the list of courses visit the website of IEOR-IIT Bombay). The candidate will be awarded both the M.Sc. and Ph.D. degrees simultaneously on successful completion of the entire program. However, a student may opt to leave the program with an M.Sc. degree at the end of the 4th semester on fulfillment of credit requirements (the department has to be notified by the end of the 3rd semester).

M.Sc.-Ph.D. coursework includes compulsory & elective courses spread over 4 semesters. First-year courses are designed to equip students with concepts & paradigms of engineering and service systems and provide a strong foundation of the various mathematical & computational models for decision making. Two lab courses (one to learn programming using Python and the other is Modeling and Computation Lab for learning languages like AMPL, Scilab, R, etc.) to strengthen computer-based modeling skills are part of the curriculum. In the second year, students get the option to take multiple elective courses of their choice to specialize in their topic of interest.

Seminar and Project Work are part of the curriculum to expose students to independent reading, writing & presentation of technical ideas in a rigorous manner. As part of Ph.D. requirements, students need to do an IEOR Ph.D. level (8xx level course with at least 6 credits) course and individual projects before starting work on their Ph.D. thesis.

## SEMESTER-WISE CREDITS DISTRIBUTION FOR M.Sc-Ph.D

### Semester 1

Subject code	Course Name	Lecture	Tutorial	Practical	Credit
IE501	Optimization Models	2	1	0	6
IE503	Operations Analysis	3	0	0	6
IE507	Modelling and Computation Lab	0	1	3	5
IE509	Computer Programming Lab	0	0	3	3
IE605	Engineering Statistics	3	1	0	8
IE621	Probability and Stochastic processes I	3	0	0	6
HS791+ IE792	Communication Skills	2	0	0	4*
Total					34+4*

# COURSE STRUCTURE & GRADING POLICY

## Semester 2

Subject code	Course Name	Lecture	Tutorial	Practical	Credit
IE614	Linear Systems	3	0	0	6
IE616	Decision Analysis and Game Theory	3	0	0	6
IE622	Probability and Stochastic processes II	3	0	0	6
IE630	Simulation Modelling and Analysis	3	0	0	6
IE684	IEOR Lab	0	1	3	5
IES601	Seminar	0	0	5	5
---	Elective <sup>1</sup>	3	0	0	6
Total					40

The minimum credit requirement in total is 161+4\* which should be completed by the end of the 4th semester.

For course details about the remaining semesters, visit the IEOR website and check for the course structure under Academics → M.Sc.- Ph.D. → Course Work

### Grading Policy

The academic system in IIT Bombay is based on credits. All students must complete the required credits for obtaining a degree. The grading scheme is as follows:

Letter Grade	Grade Point
AP	10
AA	10
AB	9
BB	8
BC	7
CC	6
CD	5
DD	4
FF	0 Fail (Eligible for Re-Exam)
FR	0 Fail (Repeat the Course)
DX	Fail (Lack of attendance - Repeat the Course)
II	Incomplete (On Health Grounds)
W	Withdrawn
PP	Passed
NP	Not Passed
AU	Audit

# PLACEMENT STATISTICS

The IEOR curricula at IITB are very well structured and prepares you for the best. Being an interdisciplinary course, we get students from a broad spectrum and everyone knows something about something else, jack of various trades!!

We see recruiters coming from a number of sectors - Core Operations Research, Data Science, Finance (Banks), Health Care, Retail, Technology startups, Information Technology, Automobile/Production, Machine Learning, Supply Chain Management to name a few.

Owing to the wide range of courses and projects that are being carried out in IEOR, the department has a high number of job offers being offered to the students who apply for placement.

Year	Program	Registered	Total Offers	% Placed	Total % Placed
2020-21	Ph.D.	0	0	0	95.65
	Dual Degree (M.Sc. + Ph.D.)	0	0	0	
	M. Tech.	19	18	94.74	
	M. Sc.	4	4	100	
2019-20	Ph.D.	0	0	0.0	81.82
	Dual Degree (M.Sc. + Ph.D.)	0	0	0.0	
	M. Tech.	16	15	93.75	
	M. Sc.	6	3	50	
2018-19	Ph.D.	0	0	0.0	96.43
	Dual Degree (M.Sc. + Ph.D.)	0	0	0.0	
	M. Tech.	22	21	95.45	
	M. Sc.	6	6	100.0	
2017-18	Ph.D.	0	0	0.0	85.2
	Dual Degree (M.Sc. + Ph.D.)	1	0	0.0	
	M. Tech.	21	21	100.0	
	M. Sc.	5	2	40.0	
2016-17	Ph.D.	0	0	0.0	86.4
	Dual Degree (M.Sc. + Ph.D.)	2	1	50.0	
	M. Tech.	15	14	93.3	
	M. Sc.	5	4	80.0	
2015-16	Ph.D.	1	1	100.0	80.0
	Dual Degree (M.Sc. + Ph.D.)	2	0	0.0	
	M. Tech.	20	18	90.0	
	M. Sc.	2	1	50.0	

**Disclaimer:** The above figures show only the on-campus placement statistics. Many M.Sc. as well as M.Tech. Students opt for Ph.D. from other top universities while Ph.D. students opt for Post-Doctoral research after their Ph.D.



# PROJECTS OF STUDENTS

## M. TECH. 2ND YEAR STUDENTS

Name	Roll no	Email ID	Projects/seminars	
Mayank Seth	203190001	203190001@iitb.ac.in mayankrdseth@gmail.com	MTP	Deep Learning for Multimedia Analytics. Supervisor: Prof. P Balamurugan
			Seminar	Automatic Speech Recognition : End to End Speech Recognition. Supervisor: Prof. Manjesh Hanawal
			Other	Cinephile Chatbot, Integration of Blockchains to meat and poultry supply chains in India, Exploring the Tree.
			PoR and Credentials	Overall Coordinator, Institute Student Companion Program
Shubham Bhasin	203190002	203190002@iitb.ac.in	MTP	Assessment and improvement of inventory ordering decisions Supervisor: Prof. Jayendran Venkateswaran
			Seminar	Image Denoising using Convolutional Autoencoders Supervisor: Prof. Narayan Rangaraj
			Other	AI Based Moderator for online forums, Design of Transfer Pricing Model for Global Supply Chain, Forecasting the recession and recovery of COVID 19, Airline Crew Scheduling
			PoR and Credentials	Department Alumni Secretary, Student Alumni Relations Cell (SARC) 2021-22, Overall Coordinator of IEOR DAY 2021 Interview Coordinator, Institute Placement Team 2020-21
Mohammad Sikander Khan	203190004	203190004@iitb.ac.in sikanderkhanmae@gmail.com	MTP	Optimization of long-haul transportation Supervisor: Prof. Ashutosh Mahajan
			Seminar	Modelling the spread of COVID in different communities Supervisor: Prof. Veeraruna Kavitha
			Other	Electricity demand prediction using LSTM and ARIMA, Cutting stock problem analysis using column generation and FFD.
			PoR and Credentials	Student companion, team ISCP(2021-2022)

# PROJECTS OF STUDENTS

## M. TECH. 2ND YEAR STUDENTS

Rishabh Kumar	203190005	203190005@iitb.ac.in	MTP	Traveling salesman problem with fairness goals Supervisor: Prof. Veeraruna Kavitha
			Seminar	Machine learning approaches for time series analysis and forecasting Supervisor: Prof. Vishnu Narayanan
			Other	Generating subtour elimination constraints for TSP.
Mulla Dada Khalandar	203190010	203190010@iitb.ac.in khalandarchoc@gmail.com	MTP	To be decided.
			Seminar	A Literature review of Machine Learning in Supply-Chain management Supervisor: Prof. Vishnu Narayanan
			Other	Forecasting the Covid -19 recession and recovery for Manufacturing sector in India, NBA Games winner prediction
Utkarsh Konge	203190013	203190013@iitb.ac.in	MTP	Improving efficiency of port terminals Supervisor: Prof. Narayan Rangaraj
			Seminar	Interplay between Machine Learning and Combinatorial optimization. Supervisor: Prof N. Hemachandra
			POR and Credentials	Department general secretary
Harshit Kumar	203190014	203190014@iitb.ac.in	MTP	Deep Learning in Medical Data Analysis Supervisor: Prof. P Balamurugan
			Seminar	Vehicle Routing & Appointment Scheduling with team Assignment for Home Services Supervisor: Prof. Vishnu Narayanan
Kshitij Agrawal	203190015	203190015@iitb.ac.in	MTP	Neural Architecture Search Supervisor: Prof. P Balamurugan
			Seminar	Attention Mechanism and Transformer Architecture for Neural Machine Translation Supervisor: Prof N. Hemachandra

# PROJECTS OF STUDENTS

## M. TECH. 2ND YEAR STUDENTS

Chinmay Naik	203190016	203190016@iitb.ac.in chinmaysandeepnaik@gmail.com	MTP	Deep Learning for NLP Supervisor: Prof. P Balamurugan
			Seminar	Few-shot Image Recognition using Knowledge Transfer Supervisor: Prof. P Balamurugan
			Other	Developing a chatbot for the Spoken Tutorials website, Sentiment analysis of product reviews using deep learning, Developing a cinephile chatbot on Telegram, A hybrid approach based on Ant Colony Optimization heuristic for solving TSP, Blockchain for Supply-chain management.
			POR and Credentials	Joint Secretary (Cultural), IEOR dept.
Kshitij Kushwaha	203190021	203190021@iitb.ac.in	MTP	Electric Vehicle Routing Supervisor: Prof. K.S. Mallikarjuna Rao
			Seminar	Fairness in Carpool scheduling algorithm Supervisor: Prof. Veeraruna Kavitha
			Other	Car detection for self driving vehicles using Machine Learning, Vehicle Routing for optimising supply chain cost.
			POR and Credentials	Student companion, team ISCP(2021-2022)
Amit Gadekar	203190022	203190022@iitb.ac.in	MTP	Forecasting models with hierarchies Supervisor: Prof. Narayan Rangaraj
			Seminar	Machine learning for demand forecasting and supply chain performance analysis Supervisor:
			Other	Human activity recognition using machine learning, A hybrid approach based on Ant Colony Optimization heuristic for solving TSP, Optimizing cost in a supply chain mid-mile distribution using VRP heuristics.
			POR and Credentials	Student companion, team ISCP(2021-2022) Interview Coordinator, Institute Placement Team 2020-21

# PROJECTS OF STUDENTS

## M. TECH. 2ND YEAR STUDENTS

Amit Kumar Seth	203190023	203190023@iitb.ac.in	MTP	Machine Learning for Cybersecurity Supervisor: Prof. Manjesh Hanawal
			Seminar	A Simple Rule for Pricing with Limited Knowledge of Demand Supervisor: Prof. K.S. Mallikarjuna Rao
Abijith P Y	203190024	203190024@iitb.ac.in abijith.py@gmail.com	MTP	Healthcare analytics Supervisor: Prof. Narayan Rangaraj
			Seminar	Analysis of compartmental models of COVID -19 Supervisor: Prof. Veeraruna Kavitha
			Other	Intern at Caterpillar, ML based approach on Railway time scheduling, Application of blockchain in Meat Supply Chain of India, Comparative study of Branching strategies in Integer Programming
			POR and Credentials	Department Coordinator, team ISCP (2021-2022)
Sajith Menon	203190025	203190025@iitb.ac.in	MTP	Missing Data Imputation Supervisor: Prof. N Hemachandra
			Seminar	Optimal sparse decision tree Supervisor: Prof. Ashutosh Mahajan
Zubeen Kishore Borkar	203190026	203190026@iitb.ac.in iamzubeen@gmail.com	MTP	Modelling and analysis of a localized/last mileage supply chain (distribution) network for market expansion and service support in solar off-grid sector Supervisor: Prof. Jayendran Venkateswaran
			Seminar	Prediction of Heart Disease using Machine Learning Algorithms Supervisor: Prof. Narayan Rangaraj
			Other	Grouping of Non-Daily Trains into Daily Trains using ML, A study on Integration of Blockchains to Meat & Poultry Supply Chain In India, Exploring the Tree (Using different Branch and Bound Techniques)
			POR and Credentials	Student companion, team ISCP(2021-2022) Interview Coordinator - 2020



# PROJECTS OF STUDENTS

## M. TECH. 2ND YEAR STUDENTS

Arvind Kumar	203190027	203190027@iitb.ac.in arvind17a@gmail.com	MTP	Global optimization of water networks. Supervisor: Prof. Ashutosh Mahajan
			Seminar	Minimization of finite sum using stochastic Average Gradient Supervisor: Prof. P Balamurugan
			POR and Credentials	Joint secretary ( library and Publication)
Bikram Majumdar	203190028	203190028@iitb.ac.in	MTP	Routing of Bus fleet Supervisor: Prof. Vishnu Narayanan
			Seminar	Truck loading optimization in supply chain Supervisor: Prof. Narayan Rangaraj
			Other	Vehicle detection using SVM, Demand forecasting using ML, pattern minimization in cutting stock
			POR and Credentials	Department sports secretary
Sandesh Gaikwad	203190030	203190030@iitb.ac.in sandeshgaikwad333@gmail.com	MTP	Competition over timelines Supervisor: Prof. Veeraruna Kavitha
			Seminar	Blockchain technology in Supply chain management Supervisor: Prof. Ashutosh Mahajan
			Other	Vehicle Detection for self-driving cars, Airline Crew Scheduling, Global supply chain with transfer pricing, Forecasting Covid-19 recession and recovery
			POR and Credentials	Student companion, team ISCP(2021-2022)
Vidya Shankar	203194001	203194001@iitb.ac.in	MTP	
			Seminar	
			Other	3-year program (To be decided later)
			POR and Credentials	

# PROJECTS OF STUDENTS

## M. TECH. 2ND YEAR STUDENTS

Nayunipati Sai Krishna	203194002	203194002@iitb.ac.in	MTP	ML for IoT networks Supervisor: Prof. Manjesh Hanawal
			Seminar	Combined approach of simulation and ML for supplier selection process Supervisor: Prof. Manjesh Hanawal
			Other	Home Service team sizing, appointment scheduling and route optimization, Emoji Prediction, Sentiment Analysis using Deep Learning
Ankita Prasad	203194003	203194003@iitb.ac.in	MTP	Assembly line balancing optimization Supervisor: Prof. Ashutosh Mahajan
			Seminar	Modulo simplex heuristics for Timetable scheduling Supervisor: Prof. Narayan Rangaraj
Siyote Anand Satpal	203195001	203195001@iitb.ac.in	MTP	Yet to be decided
			Seminar	Med3D Transfer Learning for 3D Medical image analysis Supervisor: Prof. Manjesh Hanawal
			Other	Handwritten Equation Solver using CNN, Best Arm identification in Multi Arm Bandits, Ant Colony Optimization
Saurabh Adhikary	203196002	203196002@iitb.ac.in	MTP	Recommended System Supervisor: Prof. N Hemachandra
			Seminar	Adaptive Inference Time of Neural Networks Supervisor: Prof. Jayendran Venkateswaran
			POR and Credentials	Class representative, Mtech(2020-2022)

# PROJECTS OF STUDENTS

## M. Sc. 3rd YEAR STUDENTS

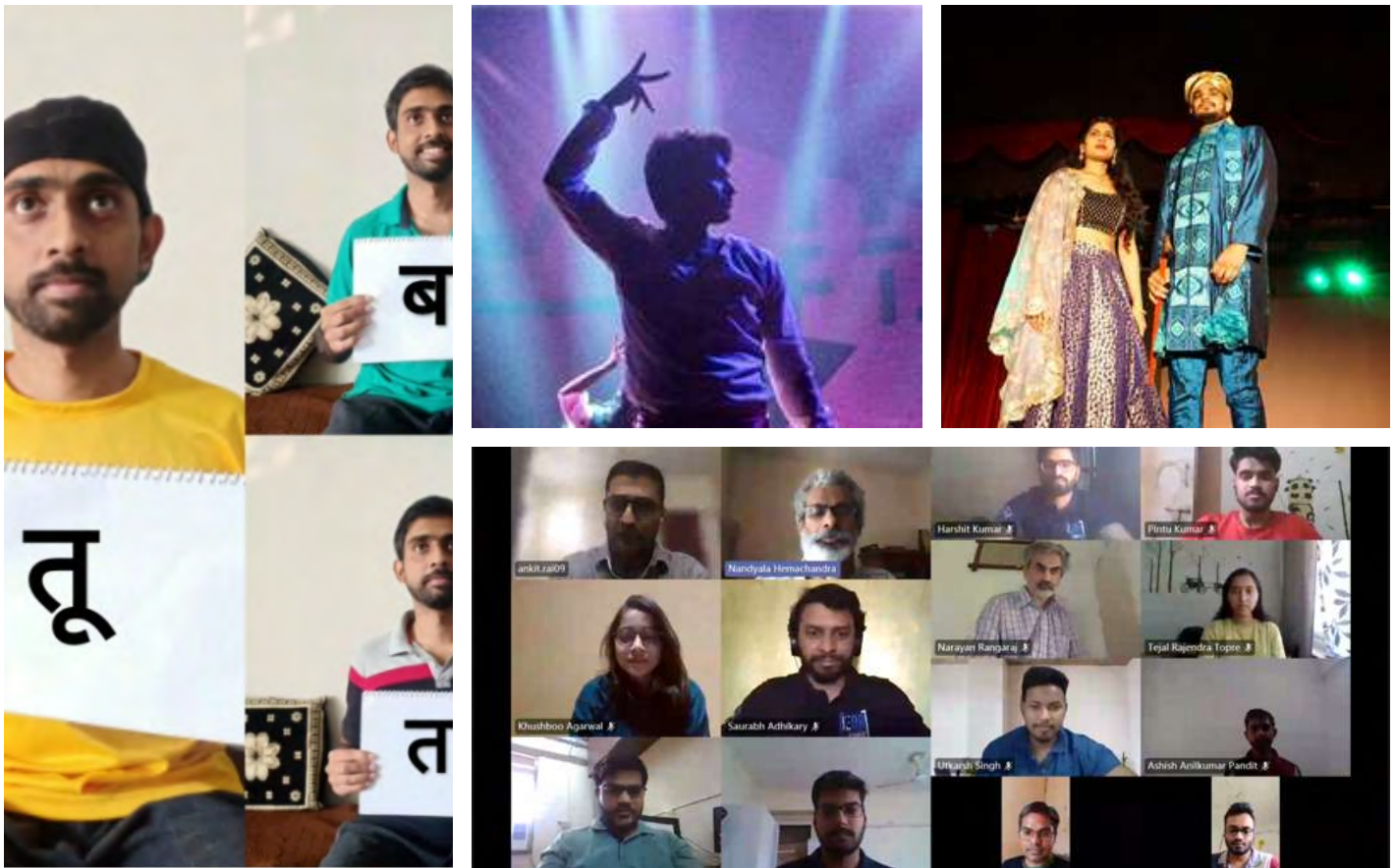
Name	Roll no	Email ID	Projects/seminars	
Tushar Shankar Walunj	19i190001	19i190001@iitb.ac.in	Project - I	Queueing Theory and Game Theory Supervisor: Prof. V. Kavita
			Project - II	Global Optimization for Water Distribution Networks Supervisor: Ashutosh Mahajan
			POR	Student companion, Institute Student Companion Program (Team 2020-2021)
Mahim Katiha	19i190002	19i190002@iitb.ac.in	Project - I	Applications of Game Theory in Operations Managements Supervisor: Prof. Mallikarjuna Rao
			Project - II	Simuheruistics Supervisor: Prof. Jayendran Venkateswaran
Shubham Chaudhary	19i190003	19i190003@iitb.ac.in	Project - I	Optimization of long-haul transportation Supervisor: Prof. Ashutosh Mahajan
			Project - II	Markov Chains Supervisor: Prof. Mallikarjuna Rao
Neeraj Kumar Bhargava	19i190004	19i190004@iitb.ac.in	Project - I	Inventory Effect on the Supply Chain Supervisor: Prof. Jayendran Venkateswaran
			Project - II	Network Optimization Supervisor: Prof. Ashutosh Mahajan
Abhishek Narayan Chaudhary	19i190005	19i190005@iitb.ac.in	Project - I	High Dimensional Statistics Supervisor: Prof. N. Hemachandra
			Project - II	Fake News Propagation and Branching Processes Supervisor: Prof. V. Kavitha



# PROJECTS OF STUDENTS

## M. Sc. 3rd YEAR STUDENTS

Dipanshu Goyal	19i190006	19i190006@iitb.ac.in	Project - I  POR	Stainer Tree Models in Transportation Networks Supervisor: Prof. Jayendran Venkateswaran  Class Representative (MSc - PhD)
Reena Meena	19i190007	19i190007@iitb.ac.in	Project - I  Project - II	Sustainable supply chains Supervisor: Prof. P Balamurugan  Braess Paradox Supervisor: Prof. Narayan Rangaraj
Chesta Pahuja	19i190008	19i190008@iitb.ac.in	Project - I  Project - II	Deep Learning for Computer Vision Applications Supervisor: Prof. P Balamurugan  AI/ML for next generation wireless networks Supervisor: Prof. Manjesh Hanawal
Shubham	19i190009	19i190009@iitb.ac.in	Project - I  Project - II	Bilevel Optimization Supervisor: Prof. Ashutosh Mahajan  Vaccination Games Supervisor: Prof. V. Kavitha
Subhadeep Chaudhuri	19i190010	subhadeepchaudhuri98@gmail.com	Project - I  Project - II  POR	Bandit Algorithms Supervisor: Prof. M. Hanawal  Deep Learning for NLP Supervisor: Prof. P. Balamurugan  Department Coordinator, team ISCP(2020-2021)
Saptarshi Majumdar	19i190011	19i190011@iitb.ac.in	Project - I  Project - II	Decentralized decision making with Block-Chain as an enabler Supervisor: Prof. N Hemchandra  Deep Learning for Audio Analytics Supervisor: Prof. P. Balamurugan



# EXTRACURRICULARS OF STUDENTS

The fun side of IIT Bombay

The students of IEO are actively involved in extracurricular activities as well. They have participated in Sports Events (called General Championships or GCs), Cultural Events, Volunteering among many others. Here's a glimpse of it

# Sports @ IIT B

'Sporting' at IIT Bombay is not merely an activity. It has over the years gained so much ground, as to find itself ingrained in the IITB Culture. The level of enthusiasm this sporting culture generates does not confine itself to the walls of the campus alone – it's a source of adrenalin rush to the other colleges in the city and the country as well. The academic calendar is crowded with sporting events, be it the intra-hostel and inter-hostel events, or the inter-collegiate and inter-IIT tournaments. If you have ever fancied some sport, then surely IITB will not disappoint you. You will find peers to match your expertise no matter which sport you choose. Different Clubs are also present in IIT B, you can see a glimpse of it here.





# <sup>03</sup> Culturals @ IIT B

If you feel that IITB is all work and no play, then you are quite mistaken. IITB takes pride in having clubs that cater to everybody's needs and having fests that are among the biggest in the continent. Students enthusiastic about cultural activities have a lot to look forward to. At IITB with its sprawling infrastructure and numerous clubs for a variety of cultural activities one gets enough exposure to showcase one's talent. Cultural activities are predominant on campus as well with clubs such as InSync dance club, Symphony music club and Style Up fashion club. Apart from all this, we have our own cultural festival explicitly for postgraduates, PGCult.

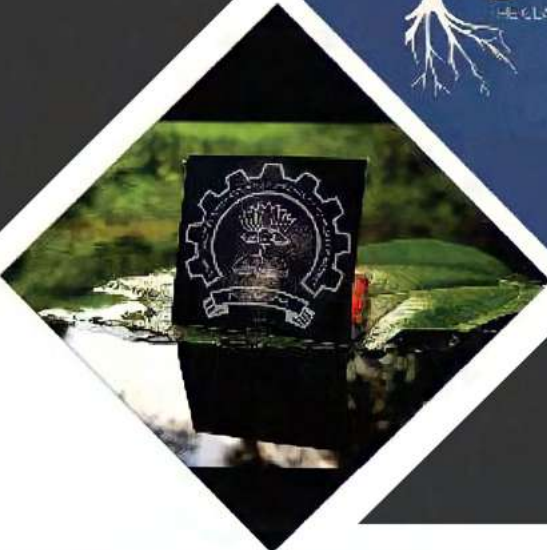
You will get to explore a lot of genres here, be it Film & Media, Drama, Roots (Classical & Folk Arts), Fine Arts, Photography etc. You name it we have it. We have a plethora of talent here on campus that you can learn from. Make the two years you'll be spending here count. With so many cultural opportunities along with academics in one of the best departments IIT B. So keep your expectations high and start exploring!



THE  
DESIGN  
CLUB



SILVERSCREEN



# ACTIVITIES IN THE DEPARTMENT

*Apart from academics we sure know how to have fun. We have a lot of events that will be happening throughout the year.*

## FRESHER'S DAY

Organized by the senior students every year to welcome the newcomers to the IEOR family. The fun-filled gathering starts with the professors addressing the freshers followed by an introduction from the first years. Various short games and events are organized followed by a photoshoot session.

## TEACHER'S DAY

Students of the IEOR Department celebrate Teachers' Day on the 5th of September. Students express their gratitude by presenting each teacher with handmade Greeting Cards.

## DUSSEHRA CELEBRATION

The Festival of Dussehra every year is celebrated at IEOR Department with great enthusiasm. A Puja is organized by the students at the Puja Desk setup on the third floor of the building, followed by refreshments.

## MOVIE SCREENING

Besides the everyday hustle around the IIT Bombay campus, for a little mood refreshment, a special event, known as "Movie Screening" is organized at the Teaching Lab of our Department, where students enjoy the evening and get to watch a movie based on peoples' choice.







## DIWALI CELEBRATION

The festival of Diwali is celebrated every year at the IEOR Department. The celebration evening begins with Rangoli Making Competition and Diya Painting Competition, followed by a Talent showcase.

There're also serving of refreshments and the celebration continues with games being played. The building is decorated with Lightings, Diyas and Marigold flowers.

## DEPARTMENT TRIP

We saved the best for the last. This is probably the most anticipated one over the entire year. Every year, the students of our department go on a trip over a weekend where it's all fun and laughter for those few days.

This year, we went to Goa for the trip and rest assured, one never fails to make memories for a lifetime.



## FAREWELL

Every year farewell is given to passing out students by their fellow juniors which is conducted by IEORSA. All IEOR faculty members join in to spend some time with them.

The graduating students introduce themselves briefly, share their experiences in IEOR and on campus, and share their future plans. They are then presented with gifts by the faculty members. The faculty members share their thoughts and bless the outgoing batch with their advice.



# ISCP IEOR TEAM

## Abijith P Y

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**Email:** abijith.py@gmail.com, 203190024@iitb.ac.in



## Bheeshm Sharma

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## Amit Gadekar

**Student Companion (M.Tech.)**

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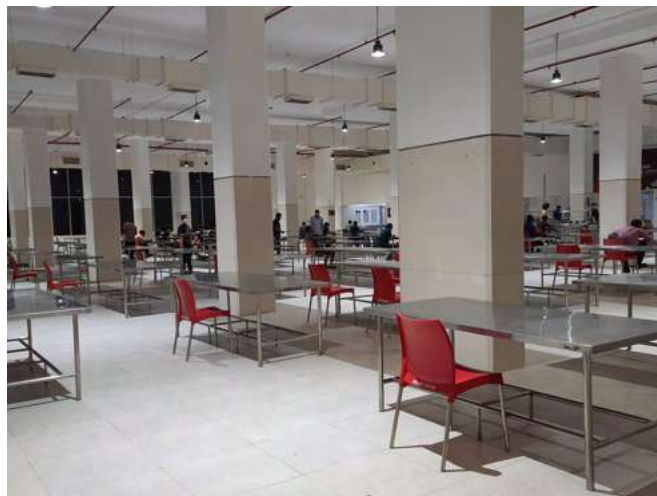
# SNEAK PEEK

A GLIMPSE OF WHAT AWAITS YOU

## Hostel



## Mess



## Lecture Hall



## Library



## Powai Lake



## Convocation Hall





# SNEAK PEEK

A GLIMPSE OF WHAT AWAITS YOU

## Gulmohar Restaurant



## Swimming Pool



## Gymkhana Ground



## Infinity Corridor



## Tennis Court



## Basketball Court





# SNEAK PEEK

A GLIMPSE OF WHAT AWAITS YOU

## Badminton Court



## Boat House Street



## View of Campus from Sameer Hills





# Your Seniors

AND THEIR SHENANIGANS

"Fly, fly away  
Like a bird in the sky  
See the world on my behalf  
To the heavens may you fly"



A blurred night cityscape with a prominent illuminated building in the center. The scene is out of focus, showing various lights and structures against a dark sky. A semi-transparent grey rectangle is overlaid on the lower half of the image, containing the text "WELCOME TO IEOR".

**WELCOME TO IEOR**