CHEMICAL ENGINEERING

Handbook

M.Tech(2018-2020)
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.
The Department of Chemical Engineering at IIT Bombay was started in 1958, with assistance from the Soviet Union under a UNESCO aid scheme. It was initially organized on the basis of specializations with distinct laboratories and academic programmes: Unit Operations (Heat transfer, Mass transfer and Fluid mechanics), Automation in Chemical Industries, and Technologies (Fuel, Silicate, Cellulose and Electrochemical). Over the decades, the department has evolved into a more homogeneous entity, with an emphasis on Chemical Engineering fundamentals. The general academic programme reflects this evolution; however, specialization in particular technologies is possible by research projects and through streamed electives.

Chemical Engineering at IIT Bombay is today recognized as a leading department in India primarily because of its strong focus on excellence in education, large faculty strength and diverse range of research areas. The department offers academic programs leading to B.Tech, Dual Degree (B.Tech & M.Tech), M.Tech and PhD degrees. Several faculty members of the Department also actively participate in teaching and research activities of various interdisciplinary programmes of the Institute.

The Department has built up good experimental and computational facilities, through funding from the Ministry of Human Resources Development and research projects from Government Agencies and Industry. The Department has good interaction with Industry and provides service by way of consultancy projects and continuing education courses in many of areas.

Link to department website - [http://www.che.iitb.ac.in/online](http://www.che.iitb.ac.in/online)
Message from HOD
Message from Faculty Advisors
Hello buddy! Congratulations! It gives me immense pleasure to welcome you to our department. Wondering why??

Well, before I tell you that, Chemical Engineering Department has been one of the prominent departments in the Institute right from its establishment. The technological resources available and the lab facilities are one of its kind in the country. Apart from these, what makes our department stand out from the rest is our professors who are widely known for their research contributions in their respective fields. We have got professors working in wide range of fields starting from molecular simulations to process control and reaction engineering. Whether you want to work on the field of cancer therapy or want to be a simulation geek looking into molecular level thermodynamics or an expert working in CFD, we have got it all covered.

Well, there is more to go. It’s not just academia that places IITB among the top institutes in the country. If you think this is the place meant for nerds alone, well, get rid of that notion right away. Our campus provides top-notch facilities in both indoor and outdoor sports. Be it football, squash, hockey or cricket, you name it, you have it here. Now, not a sports enthusiast but an adventurous person curious to explore the unexplored? Don’t worry! We have that covered too. Last but not the least, the cherry on the cake, the Culturals of the institute. IITB hosts the “Mood Indigo” which is one of the biggest college fests in the entire Asian subcontinent. All you need is a little enthu and who knows where you might end.

Well this isn’t all. The list is endless. So, you have not just secured an admission in the best institute in the country but you are going to experience a whole new life in “The City of Dreams” (did I tell you about Mumbai?). Two years wouldn’t be enough to explore and enjoy what this wonderful city has got for you. The more you explore the deeper you will fall in love with this place and the institute.

So, get ready for the roller coaster ride! Don’t worry! The ISCP team will always be by your side to make your ride smoother and memorable.

“We’re going to do everything not as seniors but as friends to keep you moving”.

Vamsi Krishna Garapati
Dept. Coordinator, ISCP
Hello, Friends!

We hope you are just excited to be a part of IIT Bombay as we are. Hearty congratulations on this incredible feat! Institute Students Companion Program (ISCP) welcomes you to one of the most resourceful campuses in India. The next two or three years are going to be the most memorable, impactful, insightful and life changing years which will fly past. We hope you imbibe as much as you can and more from your peers, seniors, faculty and staff. Here’s to your first glimpse of ISCP, the backbone of your journey through the mecca of learning.

ISCP is a program within IIT Bombay Post Graduate (PG) student community. Its primary objective is to develop an atmosphere of cordial interaction amongst the PG entrants and the PG seniors. It will encourage the flow of information, knowledge, and sharing of experiences among the students.

Life in IIT Bombay can appear a little daunting at times, balancing between the academic workload and the plethora of extra-curricular activities. And that is where ISCP can help you blend in and make the most of it. ISCP strives to provide a senior student companion as a mentor to all newly admitted students. New entrants can contact their assigned companion to discuss their academic and non-academic issues or concerns. Student Companions enable the smooth and gentle transition from the graduation days to post-graduation days. New entrants also feel assured that there is somebody on campus to help them and listen to their concerns. Many a times they find a caring friend in companions.

What to expect from a Student Companion:

- Initial information about the campus, courses, academics and extracurricular activities.
- Support in case of any problem or difficulty.
- Organization of various academic and non-academic activities for student’s development.
- Continuous interaction and feedback from students on their needs and requirements.

In short, this is a program by the students of IIT Bombay, for the new students to ensure their overall development through utilization of all the available resources at IIT Bombay.

Let the learning begin. Feel free to contact us anytime!

Overall Coordinators (ISCP-2018-19)
Anwesha Lahiri | Sumedh Dey | Basudev Behera
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ISCP TEAM 2018-19

Vamsi Krishna Garapati (DC)
- vamsikrishnagarapati@gmail.com
- +91 8500859944
- Hobbies: Travelling, Reading Novels, Movie Freak

Alok Prasad (SC)
- alokprasadbanaras@gmail.com
- +91 9473502417
- Hobbies: Playing Squash

Pranav Kumar (SC)
- pranavkumar108@gmail.com
- +91 8019773370
- Hobbies: Travelling, exploring history, cooking

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- Hobbies: Watching and playing Soccer

Arpita Saha (SC)
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- Hobbies: Singing and Dancing

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- Hobbies: Playing badminton, reading novels, drawing

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- srujanaa1234@gmail.com
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- Hobbies: Sketching and reading

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- Hobbies: Playing badminton, reading novels, drawing

Srujana (SC)
- srujanaa1234@gmail.com
- +91 8019608500
- Hobbies: Sketching and reading
Department Layout and Class Rooms Info
The location of few class rooms in our dept *(direction given assuming you are coming from infinity corridor)*

<table>
<thead>
<tr>
<th>Class Room No</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL 118</td>
<td>Its located in the ground floor, you face it towards your right if you are coming from the infinity corridor</td>
</tr>
<tr>
<td>CL 130</td>
<td>Located in the ground floor at the corner towards left (look in layout)</td>
</tr>
<tr>
<td>CL 149</td>
<td>Located in the ground floor at the corner towards right (look in layout)</td>
</tr>
<tr>
<td>CL 230</td>
<td>Located in first floor, between chea canteen and office</td>
</tr>
<tr>
<td>CL 240</td>
<td>Computer lab, located next to office in first floor</td>
</tr>
</tbody>
</table>

Apart from our dept classes and quizzes do take place in lecture halls as well, a detailed list of classrooms is given in the link below: [http://iitb.ac.in/newacadhome/Classrooms201515Jan.pdf](http://iitb.ac.in/newacadhome/Classrooms201515Jan.pdf)

In between classes, you could grab refreshments from the canteen in your dept commonly called “chea canteen”, located in the first floor and also you could grab a free coffee or a drink from the shiru café located at the first floor of lecture hall complex between -2 & 3, 3 times a day.

*CL indicates chemical engineering*
The faculty members of any department form an integral part of their core academic structure, and we are blessed to have a distinguished set of professors who are at the top of their respective fields. They have worked hard to shape the department as it is today and are definitely the foundation of our strong constitution. They are incredibly kind and generous and every session of interaction with them is a motivation to work even harder.

**Core Faculty**

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**Adjunct Faculty**

5
**Prof. Jayesh Bellare**
Code: JB
Research Interest: Nanotechnology; Electron Microscopy; Healthcare; Medical Devices Soft Nanomatter; Hollow Fibre Membranes; Bone Tissue Engineering; Nanomedicines; Ayurvedic and Homeopathic Medicines; Scaffold Development for Stem Cell Expansion; Patent Ductus Arteriosus Occlusion Device
Room: Che Dept 131
Email: jb@iitb.ac.in
Link to website: [https://www.che.iitb.ac.in/online/faculty/jayesh-bellare](https://www.che.iitb.ac.in/online/faculty/jayesh-bellare)

**Prof. Shard Bhartiya**
Code: SB
Research Interest: Optimal Operation of Simulated Moving Beds; Operation and Control of Fuel Cells; Economic Potential of Algal Bio-Fuels; Modelling, Estimation and Control of Hybrid Dynamic Systems; Systems Biology of Yeast
Room: Che Dept 311
Email: bhartiya@che.iitb.ac.in
Link to website: [https://www.che.iitb.ac.in/online/faculty/sharad-bhartiya](https://www.che.iitb.ac.in/online/faculty/sharad-bhartiya)
Prof. Mani Bhushan
Code: SB
Research Interest: Sensor Network Design and Audit; Non-Linear, Constrained State Estimation; Data Analysis
Room: Che Dept 311
Email: mbhushan@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/mani-bhushan

Prof. Devang V. Khakhar
Code: DVK
Research Interest: Flow and Mixing of Powders; Polymers; Liposomes
Room: Che Dept. 151
Email: khakhar@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/devang-v-khakhar
**Prof. Ratul Das Gupta**  
Code: RTD  
Research Interest: Interfacial Flows; Waves in Fluids and Their Stability; Mechanical Response of Amorphous Materials  
Room: Che Dept. 122  
Email: dasgupta.ratul@gmail.com  
Link to website: [https://www.che.iitb.ac.in/online/faculty/ratul-dasgupta](https://www.che.iitb.ac.in/online/faculty/ratul-dasgupta)

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**Prof. Swati Bhattacharya**  
Code: SB  
Research Interest: Investigation of Protein Dynamics and Mechanism for Application in Genomics, HIV Therapeutics and Enzymatic Catalysis; Single Molecule Manipulation Techniques; Kinetics of DNA Translocation; Theoretical and Computational Methods to Construct Time-dependent Markov State Models  
Room: Che Dept 122  
Email: swaticb@che.iitb.ac.in  
Link to website: [https://www.che.iitb.ac.in/online/faculty/swati-bhattacharya](https://www.che.iitb.ac.in/online/faculty/swati-bhattacharya)
Prof. Partha S. Goswami
Code: ParG
Research Interest: Turbulent Suspensions; Inertial Migration; Particle Image Velocimetry (PIV)
Room: Che Dept 151
Email: psg@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/partha-sarathi-goswami

Prof. Ravindra D. Gudi
Code: RDG
Research Interest: Process Systems Engineering; Process Performance and Energy Audit; Optimization and Control; Green Engineering
Room: Che Dept HOD Office
Email: ravigudi@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/ravindra-d-gudi

Prof. Venkat Gundabala
Code: VENG
Research Interest: Microfluidics; Water-based Coatings; Electrohydrodynamics; Micro and Nano Particles
Room: Che Dept 241
Email: ravigudi@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/venkat-gundabala
Prof. Sameer Jadhav  
Code: VENG  
Research Interest: Cell Mechanics; Microfluidics; Liposomes; Drug Delivery  
Room: Che Dept 112  
Email: srjadhav@che.iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/sameer-jadhav

Prof. Sujit S. Jogwar  
Code: SUJ  
Research Interest: Control, Design and Scheduling of Energy-integrated Process Systems; Integrated Design and Control of Divided Wall Columns; Distributed Control Architecture Synthesis  
Room: CAD Center  
Email: jogwar@iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/sujit-s-jogwar

Prof. Vinay A. Juvekar  
Code: VAJ  
Research Interest: Interfacial Engineering; Electrochemical Engineering; Conducting Polymers; Reaction Engineering  
Room: New PG Lab Annex  
Email: vaj@che.iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/vinay-a-juvekar
Prof. Sanjay M. Mahajani
Code: SMM
Research Interest: Reaction Engineering and Catalysis; Process Intensification; Coal and Biomass
Room: Che Dept. 125
Email: sanjaym@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/sanjay-m-mahajani

Prof. Abhijit Majumdar
Code: AbM
Research Interest: Cell Mechanics; Microfluidics; Soft Mechanics and Biomass
Room: Che Dept. 136
Email: abhijitm@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/abhijit-majumder

Prof. Ateeque Malani
Code: ATQM
Research Interest: Computational Material Science; Wetting and Super-Hydrophobicity; Synthesis of Porous Materials; Interfacial and Confined Fluids
Room: Che Dept. 138
Email: malani@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/ateeque-malani
Prof. Ranjan K. Malik  
Code: RKM  
Research Interest: Process Simulation and Optimization; Energy Analysis and Process Integration; Separation Processes and Process Intensification; Chemical Product Design  
Room: CAD Centre 12  
Email: rkmalik@che.iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/ranjan-kumar-malik

Prof. Anurag Mehra  
Code: AM  
Research Interest: Colloids; Coarse Grain MC Simulations; Anisotropic Nanostructures- Synthesis; Multiphase Reactive Systems; Carbon Capture and Sequestration; Policy Issues in Higher Education, especially Science and Technology Institutions  
Room: Che Dept. 222  
Email: mehra@che.iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/anurag-mehra

Prof. Sarika Mehra  
Code:SMe  
Research Interest: Genomics and Systems Biology; Computational Biology  
Room: Che Dept. 112  
Email: sarika@che.iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/sarika-mehra
Prof. Arun S. Moharir
Code: ASM
Research Interest: Liquid and Gas Phase Adsorptive Separations, Industrial Reactor Modelling and Simulation; Attainable Regions; Process Systems Engineering; Process Plant Engineering and Piping Engineering
Room: CAD Centre
Email: amoharir@iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/arun-s-moharir

Prof. Kannan M. Moudgalaya
Code: KM
Research Interest: Simulation Environments and Simulation Methodologies; Control System Design; Affordable Labs and Virtual Labs; Open Source Software; Technology Assisted Learning; Collaboration in Education; Effectiveness of Novel Pedagogical Methods; Low Cost Devices
Room: Che Dept. 311
Email: kannan@iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/kannan-m-moudgalaya

Prof. Hemant Nanavati
Code: HN
Research Interest: Polymer Physics and Multiscale Modelling; Bio-resourced and Biodegradable Polymer Systems
Room: Che Dept. 242
Email: hnanavati@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/hemant-nanavati
Prof. Supreet Saini
Code: SupS
Research Interest: Microbial Evolution; Dynamics of Biological Systems; Bacterial Pathogenesis
Room: New PG Lab Annex 218
Email: saini@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/supreet-saini

Prof. Arindam Sarkar
Code: AS
Research Interest: Fuel Cells; Electrochemistry; Electrocatalysis; Nanomaterials
Room: Che Dept. 125
Email: asarkar@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/arindam-sarkar

Prof. Jyoti Seth
Code: JS
Research Interest: Soft Matter; Rheology; Suspensions; Bio-refining
Room: Che Dept. 236
Email: jyoti@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/jyoti-seth
Prof. P. Sunthar
Code: PS
Research Interest: Vesicles for Drug Delivery; Computerized Evaluation Systems
Room: Che Dept. 222
Email: sunthar@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/p-sunthar

Prof. Akklhebbai K. Suresh
Code: AKS
Research Interest: Multiphase Reaction Engineering; Interfacial Polycondensation; Transport in Nanofluids; Solid-Solid Reactions
Room: Che Dept. 220
Email: aksuresh@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/akkihebbal-k-suresh

Prof. Rochish M. Thaokar
Code: RMT
Research Interest: Electrohydrodynamics; Biomembranes; Vesicles and Capsules
Room: Che Dept. 123
Email: rochish@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/rochish-madhukar-thaokar
Prof. Mahesh S. Tirumkudulu  
Code: MT  
Research Interest: Fluid Mechanics; Colloids and Interfaces; Biophysics  
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Email: mahesh@che.iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/mahesh-s-tirumkudulu

Prof. Mukta Tripathy  
Code: MUKT  
Research Interest: Soft Matter Systems; Polymer Nano-composites; Self-Assembly  
Room: Che Dept. 222  
Email: tripathy@che.iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/mukta-tripathy

Prof. Chandra Venkataraman  
Code: KVV  
Research Interest: Bio-systems Engineering; Systems and Synthetic Biology; Metabolic Engineering; Modelling of Metabolic Diseases; Network Analysis of Gene Regulatory; Signaling and Metabolic Networks  
Room: Che Dept. 136  
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Link to website: https://www.che.iitb.ac.in/online/faculty/chandra-venkataraman
Prof. Madhu Vinjamur
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Code: GAV
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Room: Che Dept. 125
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Prof. Pramod P. Wangikar
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Room: Che Dept. 136
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Link to website: https://www.che.iitb.ac.in/online/faculty/pramod-p-wangikar
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Code: KVV  
Research Interest: Bio-systems Engineering; Systems and Synthetic Biology; Metabolic Engineering; Modelling of Metabolic Diseases; Network Analysis of Gene Regulatory; Signaling and Metabolic Networks  
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Link to website: https://www.che.iitb.ac.in/online/faculty/abhijit-chatterjee

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Room: Che Dept. 311  
Email: yshastri@iitb.ac.in  
Link to website: https://www.che.iitb.ac.in/online/faculty/yogendra-shastri
Prof. S. Ganeshan
Code: SG
Research Interest: Basic and Detailed Engineering Design of Process and Utility Systems; Process Equipment Design; Energy Systems; Process Safety and Project Execution; Rotating Machinery
Room: Che Dept 236
Email: ganeshan50@gmail.com
Link to website: https://www.che.iitb.ac.in/online/faculty/dr-s-ganeshan

Prof. Y.S. Mayya
Code: MAYYA
Research Interest: Modelling Aerosol Nucleation and Growth; Radiation Physics; Modelling Stochastic Phenomenon
Room: Che Dept 321
Email: mm@che.iitb.ac.in
Link to website:
Prof. Mamata Mukhopadhyay
Code: MAYYA
Research Interest: Thermodynamics of Fluid Phase Equilibria; Extraction and Processing with Supercritical Fluids; Micronisation Using Supercritical and Subcritical CO₂
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Email: mm@che.iitb.ac.in
Link to website: https://www.che.iitb.ac.in/online/faculty/mamata-mukhopadhyay

Prof. Vijay M. Naik
Code: VMN
Research Interest: Soft Matter and Interfacial Engineering; Energy and Renewable Resources; Foods and Specialty Chemicals
Room: Che Dept 145
Email: vm.naik.in@gmail.com
Link to website: https://www.che.iitb.ac.in/online/faculty/vijay-m-naik

Prof. Leja Hattiangadi
Code: LH
Research Interest: Basic and Detailed Engineering Design of Process and Utility Systems; Process Equipment Design; Energy Systems; Process Safety and Project Execution
Room:
Email: leja.hattiangadi@gmail.com
Link to website: https://www.zoominfo.com/p/Leja-Hattiangadi/1532771974
# Research Labs & Equipment

<table>
<thead>
<tr>
<th>Lab</th>
<th>Equipment</th>
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<tbody>
<tr>
<td><strong>Particle and Aerosol</strong></td>
<td><strong>Syringe Pump</strong></td>
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<tr>
<td><strong>Research Lab</strong></td>
<td><strong>Electrostatic Classifier</strong></td>
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<td></td>
<td><strong>Condensation Particle Counter, Model 3775, TSI</strong></td>
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<td><strong>Air-jet Atomizer, Model 3076, TSI</strong></td>
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<td><strong>Cascade Impactor, MOUDI, Model no. 110</strong></td>
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<td></td>
<td><strong>High Pressure Liquid Chromatography, Perkin-Elmer S-200</strong></td>
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<td></td>
<td><strong>Grimm’s Aerosol Laser Particle Spectrometer Model 1.108</strong></td>
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<td></td>
<td><strong>Cyclone Separator</strong></td>
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<td><strong>Hand-held Condensation Particle Counter Model 3007</strong></td>
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<td><strong>Automation Lab</strong></td>
<td><strong>Autotitrator</strong></td>
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<td><strong>Refractometer</strong></td>
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<td><strong>Multi-purpose Distillation Unit</strong></td>
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<td><strong>Gas Liquid Absorption Setup</strong></td>
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<td><strong>CSTR Setup</strong></td>
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<td><strong>TOMLAB Software</strong></td>
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<td><strong>Plug Flow Reactor Setup</strong></td>
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<td><strong>Barometer</strong></td>
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<td><strong>UV Spectrophotometer</strong></td>
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<td><strong>Matlab Software</strong></td>
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<td><strong>BenchTop 3star Conductivity/ Resistivity/ TDS/ Salinity/ Temperature Meter</strong></td>
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<td><strong>Biosystem Engineering</strong></td>
<td><strong>Table-top Refrigerated Centrifuge</strong></td>
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<td><strong>Elisa Reader</strong></td>
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<td><strong>Real-time PCR Machine</strong></td>
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<td><strong>Orbital Refrigerated Shaking Incubator</strong></td>
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<td><strong>Vacuum Centrifugal Concentrator</strong></td>
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<td><strong>PCR Machine</strong></td>
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<td><strong>Refrigerated Centrifuge</strong></td>
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<td><strong>Biosafety Cabinet</strong></td>
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<tr>
<td></td>
<td><strong>Rotary Incubator Shaker</strong></td>
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<tr>
<td></td>
<td><strong>Gas Chromatography Mass Spectrometer</strong></td>
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<tr>
<td></td>
<td><strong>NanoPhotometer TM UV/Vis Spectrophotometer</strong></td>
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<tr>
<td><strong>Biochemical Engineering</strong></td>
<td><strong>Deep Freezer</strong></td>
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<tr>
<td></td>
<td><strong>Hybridization Chamber</strong></td>
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<td></td>
<td><strong>Refrigerated Centrifuge and Micro-centrifuge</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Refrigerator (-86°)</strong></td>
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<tr>
<td></td>
<td><strong>Table-top Refrigerated Centrifuge</strong></td>
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<tr>
<td></td>
<td><strong>Real-time PCR Machine</strong></td>
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<td></td>
<td><strong>DNA SpeedVac</strong></td>
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<td></td>
<td><strong>Micro-array Scanner</strong></td>
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<tr>
<td></td>
<td><strong>Gel Documentation System - Image Resolution Package</strong></td>
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<td><strong>Thermoscientific Model Biocane 20 LV2</strong></td>
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<td><strong>Multi Detection Reader - Spectra Max</strong></td>
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<tr>
<td>Lab</td>
<td>Equipment</td>
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<tr>
<td>Biomolecular</td>
<td>Advanced Inverted Fluorescent Microscope: Nikon Eclipse TE 2000-S</td>
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<tr>
<td>Engineering</td>
<td>Table-top Refrigerated Centrifuge</td>
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<tr>
<td></td>
<td>Carbon Dioxide Incubator</td>
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<tr>
<td>CAD Laboratory</td>
<td>GAMS/BARON</td>
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<tr>
<td>Cellulose Laboratory</td>
<td>Molecular Modelling Software</td>
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<td></td>
<td>Silicon Graphics Fuel Workstation</td>
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<tr>
<td></td>
<td>HP Z400 Workstation</td>
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<td>Intel P4 Server</td>
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<td>Heat Transfer Lab</td>
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<td>Membrane Lab</td>
<td>Micro Annular Gear Pump</td>
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<td>GPC Pump</td>
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<td>Syringe Pump with Static Mixing Unit</td>
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<tr>
<td>Fluid Mechanics Lab</td>
<td>Mini Extruder (Avanti Polar Lipids Inc.)</td>
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<td></td>
<td>Laminar Airflow Workstation</td>
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<td></td>
<td>Orbital Shaker</td>
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<td>Modular Compact Rheometer</td>
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<td>Sieve Shaker</td>
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<td>Surface Profile Measuring System</td>
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<td>Argon Ion Laser System</td>
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<td></td>
<td>Micro Fluidic Cell Plate</td>
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<td>Inverted Fluorescent Microscope, Olympus IX71</td>
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<td>Milli Q Water System</td>
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<td>Handheld Analyzer 2250</td>
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<td>REGLO-Z Digital Gear Pump with LED Display</td>
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<td>Organic Processes</td>
<td>Surface Charge Analyzer</td>
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<tr>
<td>Lab</td>
<td>Stopped Flow Mixer</td>
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<td>Membrane Test Cell</td>
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<td>COMSOL Multiphysics 3.5 Software</td>
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<td>Stereo Zoom Microscope</td>
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<td></td>
<td>Bipotentiostat</td>
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<td>Goniometer: GBX Digidrop (Contact Angle Meter)</td>
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<td>Static Mercury Drop Electrode</td>
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<td></td>
<td>Gas Chromatography Mass Spectrometer DSQ II</td>
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<td>Dynamic Surface Tensiometer</td>
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<td>Quartz Crystal Microbalance</td>
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<tr>
<td></td>
<td>Microtitration Calorimeter 4200</td>
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<tr>
<td></td>
<td>TPDRO 1100</td>
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<tr>
<td>Lab</td>
<td>Equipment</td>
</tr>
<tr>
<td>----------------------</td>
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</tr>
</tbody>
</table>
| Soft Fluids Technology Laboratory | Digital Storage Oscilloscope  
Digital Multimeter  
HSA 4052 High Speed Bipolar Amplifier & WF  
1973 Multi Function Generator  
Stereozoom Microscope (Nikon)  
Stereozoom Microscope  
Function Generator  
Spin Coater (Photo Resist Spinner)  
High Speed Camera  
Dynamic Light Scattering (DLS)  
Vacuum Dessicators, Weighing Balance, Oven  
Inverted Microscope, Nikon Eclipse TE-2000U  
Constant Temperature Circulator - JULABO  
Homogeniser  
Gas Pynomatic ATC  
Mercury Porosimeter |
| Polymer Laboratory   | Gas Chromatography  
NI Hardware  
Gel Documentation System  
UV Double Beam Spectrophotometer  
Bench-top pH Meter  
Deep Freezer  
Bio- Reactor, Bio-engineering Company Switzerland |
| Protein Engineering Lab | Sorption/Desorption Apparatus  
Peristaltic Pump  
Calorimeter  
High Pressure Liquid Chromatography  
Gas Chromatography |
| Reaction Engineering Lab | Small Angle X-Ray Scattering System  
Atomic Force Microscope System (EasyScan 2 STM Version 1.5) |
| Silicate Engineering Lab | Sorption/Desorption Apparatus  
Peristaltic Pump  
Calorimeter  
High Pressure Liquid Chromatography  
Gas Chromatography |
| Thermodynamic Laboratory | Small Angle X-Ray Scattering System  
Atomic Force Microscope System (EasyScan 2 STM Version 1.5) |

For further information, click on the following link - [http://www.che.iitb.ac.in/online/research/research-laboratories](http://www.che.iitb.ac.in/online/research/research-laboratories)
<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>M.Tech Project Topics</th>
<th>Pre-requisites</th>
<th>Gpo mail-id</th>
<th>Student Name</th>
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<tbody>
<tr>
<td>ABM</td>
<td>Development of a cell culture system to facilitate expansion of human Mesenchymal Stem Cells without sacrificing their stemness</td>
<td></td>
<td><a href="mailto:173020032@iitb.ac.in">173020032@iitb.ac.in</a></td>
<td>Malavika Dinarajan</td>
</tr>
<tr>
<td>AC</td>
<td>Accurate prediction of thermodynamic phase diagram for nanostructured materials</td>
<td></td>
<td><a href="mailto:173020045@iitb.ac.in">173020045@iitb.ac.in</a></td>
<td>Irfan Arif</td>
</tr>
<tr>
<td>AS</td>
<td>Development of a redox-mediated metal air rechargeable battery</td>
<td></td>
<td><a href="mailto:173020064@iitb.ac.in">173020064@iitb.ac.in</a></td>
<td>Tushar Mahendrakar</td>
</tr>
<tr>
<td>ASM</td>
<td>Electrochemical management of air quality in isolated chambers for human use</td>
<td></td>
<td><a href="mailto:173020063@iitb.ac.in">173020063@iitb.ac.in</a></td>
<td>Alok Prasad</td>
</tr>
<tr>
<td>ATQM</td>
<td>Role of Asphaltene in Enhanced Oil Recovery</td>
<td>CL701, CL607</td>
<td><a href="mailto:173020052@iitb.ac.in">173020052@iitb.ac.in</a></td>
<td>Bablu Meghwal</td>
</tr>
<tr>
<td>CV</td>
<td>Engineered nanoparticles for inhaled insulin</td>
<td></td>
<td><a href="mailto:173020070@iitb.ac.in">173020070@iitb.ac.in</a></td>
<td>Fozail ahmad</td>
</tr>
<tr>
<td>GAV</td>
<td>Modeling apoptosis and necroptosis during TNFa signaling</td>
<td></td>
<td><a href="mailto:173020046@iitb.ac.in">173020046@iitb.ac.in</a></td>
<td>Aditi bharti</td>
</tr>
<tr>
<td>JB</td>
<td>Liquid propulsion catalyst for spacecraft engine</td>
<td></td>
<td><a href="mailto:173020043@iitb.ac.in">173020043@iitb.ac.in</a></td>
<td>Pravin Bolne</td>
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<tr>
<td>JS</td>
<td>Simulations for structure and hydrodynamic properties of aggregates</td>
<td>CL601, CL607</td>
<td><a href="mailto:173020059@iitb.ac.in">173020059@iitb.ac.in</a></td>
<td>Narayani Kelkar</td>
</tr>
<tr>
<td>KVV</td>
<td>Analyzing whole body metabolic model with clinical data towards predicting life style diseases</td>
<td></td>
<td><a href="mailto:173020048@iitb.ac.in">173020048@iitb.ac.in</a></td>
<td>Arpita Saha</td>
</tr>
<tr>
<td>MB</td>
<td>Efficient Computation and Implementation of Moving Horizon Estimation</td>
<td>CL602, CL701</td>
<td><a href="mailto:173020062@iitb.ac.in">173020062@iitb.ac.in</a></td>
<td>Devavrat Thosar</td>
</tr>
<tr>
<td>Faculty Name</td>
<td>M.Tech Project Topics</td>
<td>Pre-requisites</td>
<td>Gpo mail-id</td>
<td>Student Name</td>
</tr>
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<td>----------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>PS</td>
<td>CFD modelling of a spinning disc microreactor</td>
<td></td>
<td><a href="mailto:173020066@iitb.ac.in">173020066@iitb.ac.in</a></td>
<td>G. Vamsi Krishna</td>
</tr>
<tr>
<td>RATUL</td>
<td>CFD of multiphase flows</td>
<td>CL601, CL 602</td>
<td><a href="mailto:173020023@iitb.ac.in">173020023@iitb.ac.in</a></td>
<td>Saswata Basak</td>
</tr>
<tr>
<td>RB</td>
<td>Detection and removal of pollutants from water</td>
<td></td>
<td><a href="mailto:173020040@iitb.ac.in">173020040@iitb.ac.in</a></td>
<td>Ridham Modi</td>
</tr>
<tr>
<td>RDG</td>
<td>Identification of process dynamics using frugal data</td>
<td></td>
<td><a href="mailto:173020049@iitb.ac.in">173020049@iitb.ac.in</a></td>
<td>Sumit Das</td>
</tr>
<tr>
<td>RT</td>
<td>Development of a three Dimensional Boundary element code for drops and vesicles in shear flow</td>
<td></td>
<td><a href="mailto:173020067@iitb.ac.in">173020067@iitb.ac.in</a></td>
<td>Abhishek Puri</td>
</tr>
<tr>
<td>SBN</td>
<td>Development of a point of use diagnostic</td>
<td></td>
<td><a href="mailto:173020010@iitb.ac.in">173020010@iitb.ac.in</a></td>
<td>Shashank Trivedi</td>
</tr>
<tr>
<td>SCP</td>
<td>Development of Soft Sensors (Bayesian State Estimators) for Distributed Parameter Systems</td>
<td>CL701</td>
<td><a href="mailto:173020015@iitb.ac.in">173020015@iitb.ac.in</a></td>
<td>Giriraj Bagla</td>
</tr>
<tr>
<td>SMM</td>
<td>Process intensification through multifunctional reactors</td>
<td></td>
<td><a href="mailto:173020003@iitb.ac.in">173020003@iitb.ac.in</a></td>
<td>Saurav Chandel</td>
</tr>
<tr>
<td>SR</td>
<td>Development of Framework for Optimization of Process Safety Investment</td>
<td></td>
<td><a href="mailto:173020021@iitb.ac.in">173020021@iitb.ac.in</a></td>
<td>Sushil Kumar</td>
</tr>
<tr>
<td>SRJ</td>
<td>Project Title: Modeling biochemical regulation of calcium signalling related to sperm cell activation</td>
<td></td>
<td><a href="mailto:173020017@iitb.ac.in">173020017@iitb.ac.in</a></td>
<td>Sneha Pandey</td>
</tr>
<tr>
<td>SUJ</td>
<td>Operational aspects of indirectly energy-integrated batch systems</td>
<td></td>
<td><a href="mailto:173020035@iitb.ac.in">173020035@iitb.ac.in</a></td>
<td>Sumit Kumar</td>
</tr>
<tr>
<td>VNG</td>
<td>Film formation studies of nano-composite coatings</td>
<td></td>
<td><a href="mailto:173020034@iitb.ac.in">173020034@iitb.ac.in</a></td>
<td>Srujana Amarapalli</td>
</tr>
<tr>
<td>YS</td>
<td>Designing sustainable rural systems for energy and material self sufficiency</td>
<td></td>
<td><a href="mailto:173020037@iitb.ac.in">173020037@iitb.ac.in</a></td>
<td>Pranav Kumar</td>
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</table>

*project description is provided in the hyperlinks and to know further details please feel free to contact always.*
## Semester wise subjects

### Sem 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>CL 601</td>
<td>Advanced Transport Phenomena</td>
<td>6</td>
<td>C</td>
</tr>
<tr>
<td>CL 602</td>
<td>Mathematical and Statistical Methods in Chemical Engineering</td>
<td>6</td>
<td>C</td>
</tr>
<tr>
<td>CL 605</td>
<td>Advanced Reaction Engineering</td>
<td>6</td>
<td>C</td>
</tr>
<tr>
<td>CL 607</td>
<td>Advanced Thermodynamics</td>
<td>6</td>
<td>C</td>
</tr>
<tr>
<td>CL 701</td>
<td>Computational Methods in Chemical Engineering</td>
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<tr>
<td>CL 702</td>
<td>Lecture Series</td>
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### Sem 2

<table>
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<tr>
<td></td>
<td>Elec Dept</td>
<td>6</td>
<td>C</td>
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<tr>
<td>CL 610</td>
<td>Core (Experimental Methods)</td>
<td>6</td>
<td>C</td>
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<tr>
<td></td>
<td>Elec Dept</td>
<td>6</td>
<td>C</td>
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<tr>
<td>CL 694</td>
<td>Seminar</td>
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<td>CL 704</td>
<td>Lecture Series</td>
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<td>Elec Dept</td>
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<td>C</td>
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<tr>
<td>CL 792</td>
<td>Communication Skills -II</td>
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<tr>
<td>HS 791</td>
<td>Communication Skills -I</td>
<td>2</td>
<td>N</td>
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</table>
Among the five courses displayed in the sem 1, an option is available to drop one of them and do the same back in 3rd semester, but for taking few other courses in the next semester or while choosing projects they might be prerequisites.

A total of three Department Electives and one Institute Elective need to be done during 2nd-4th semesters based on your convenience.

Stage 1 evaluation of project generally takes place in the month of September and stage 2 in the month of June.

Information regarding running courses is available in: [https://portal.iitb.ac.in/asc/Courses](https://portal.iitb.ac.in/asc/Courses)

Insti Electives vary every year few of the insti electives available last year were Philosophy, movie-making, Psychology etc.

M.Tech, projects are generally floated in the month of November and a month will be given for choosing the guide and project, the project allotment is done on the basis of your CGPA in first semester. So a good CGPA will land you in the project of your choice.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>Sem 3</strong></td>
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<tr>
<td><strong>CL 797</strong></td>
<td>Stage I</td>
<td>46</td>
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<td>Insti Elec</td>
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<td>C</td>
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<td><strong>Sem 4</strong></td>
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<tr>
<td><strong>CL 798</strong></td>
<td>Stage II</td>
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<td><strong>Total</strong></td>
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## Department Elective Courses

<table>
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<th>Semester</th>
<th>Elective Group</th>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>Second</td>
<td>2E</td>
<td>CL 659</td>
<td>Bioprocess Principles</td>
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<tr>
<td></td>
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<td>CL 603</td>
<td>Optimization</td>
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<td>CL 708</td>
<td>Granular Mechanics</td>
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<tr>
<td>Second</td>
<td>2B</td>
<td>CL 604</td>
<td>Process Plant Simulation</td>
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<td></td>
<td></td>
<td>CL 618</td>
<td>Catalysis and Surface Chemistry</td>
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<td>CL 662</td>
<td>Introduction to Computational Biology</td>
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<td>2A</td>
<td>CL 625</td>
<td>Process Modelling and Identification</td>
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<td></td>
<td>CL 645</td>
<td>Polymer Dynamics</td>
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<td></td>
<td>CL 608</td>
<td>Fluidization Engineering</td>
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<td></td>
<td></td>
<td>CL 684</td>
<td>Advanced Process Synthesis</td>
</tr>
<tr>
<td>Semester</td>
<td>Elective Group</td>
<td>Course Code</td>
<td>Course Name</td>
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<td>CL 686</td>
<td>Advanced Process Control</td>
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<td>2D</td>
<td>CL 656</td>
<td>Colloid and Interfacial Engg</td>
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<tr>
<td></td>
<td>2F</td>
<td>CL 649</td>
<td>Reaction Engineering in Dispersed Phase Systems</td>
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<tr>
<td></td>
<td></td>
<td>CL 712</td>
<td>Process Data Analysis &amp; Design of Experiments</td>
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<tr>
<td>Third</td>
<td>3A</td>
<td>CL 688</td>
<td>Artificial Intelligence in Process Engineering</td>
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<td>3D</td>
<td>CL 624</td>
<td>Polymer Processing</td>
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<td>CL 609</td>
<td>Pollution Control Systems</td>
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<td>CL 676</td>
<td>Modelling and Simulation</td>
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<td>3E</td>
<td>CL 644</td>
<td>Modelling and Analysis of Bioprocesses</td>
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<td></td>
<td>CL 664</td>
<td>Polymer Thermodynamics</td>
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<tr>
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<td></td>
<td>CL 692</td>
<td>Digital Control</td>
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<tr>
<td></td>
<td>3B</td>
<td>CL 647</td>
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<td></td>
<td></td>
<td>CL 710</td>
<td>Aerosol Technology</td>
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</table>
In general, 1 hour of theory course carries 2 credits while 1 hour in a laboratory course carries 1 credit. Therefore, a 6 credit theory course will run for 3 hours a week while an 8 credit theory course will run for 4 hours a week.

The institute follows a Continuous Evaluation System with considerable freedom being given to the course instructor in deciding the pattern of evaluation. However, a typical theory course will have a mid-semester examination, one or two quizzes and an end-semester examination. The total marks received at the end of semester is converted to a letter grade, based on the relative (and some times absolute) performance of the student. The grades are on a scale of 10 with the grade AA being the best and FF and FR being fail grades. Each letter grade has a grade point associated with it, as follows –

<table>
<thead>
<tr>
<th>Grades</th>
<th>AA</th>
<th>AB</th>
<th>BB</th>
<th>BC</th>
<th>CC</th>
<th>CD</th>
<th>DD</th>
<th>FF</th>
<th>FR</th>
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<tbody>
<tr>
<td>Points</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>(0) Fail Grade, eligible for a re-examination</td>
<td>(0) Fail Grade, must repeat the course</td>
</tr>
</tbody>
</table>

Other grades like P (Passed), NP (Not Passed), Au (Audit Course) do not have any grade points associated with them.

The performance of a student in a particular semester is measured by Semester Performance Index (SPI), which is a weighted average of the grades secured in all the courses taken in a semester and scaled to a maximum 10. For instance, suppose a student is registered for one 8 credit course, four 6 credit courses, and one 4 credit course during the semester, i.e. a total of 36 credits. If he/she secures AB, BB, BC, CC, AA, CD respectively in these courses, the SPI is calculated as:

$$ SPI = \frac{[(9 \times 8) + (8 \times 6) + (7 \times 6) + (6 \times 6) + (10 \times 6) + (5 \times 4)]}{36} = \frac{278}{36} = 7.72 $$

In a very similar manner a Cumulative Performance Index (CPI) of a student is calculated, taking into account the performance in all courses taken by a student upto the semester for which the result is last available.
Placements at a Glance

Along with its worldwide recognition as a leader in the field of research and education in engineering and science, IIT Bombay is also famous for its placement. Around 400 companies visited the campus, hiring 429 M.Tech students out of 573 (total registered) in the year 2017-18. The Placement Office (nodal point for placements at IITB) or the Placement Cell (a body of student representatives) sends invitations to companies/organizations along with relevant information to conduct campus interviews for their requirements.

Hierarchy of Placement Team

- **Placement In Charge**
  - Prof. Tom Mathew

- **Placement Manager**
  - (5 Student Representative)

- **Associate Placement Coordinators (APC)**

  - **Department Placement Coordinator (DPC)**
    - (1-2 representative from each department)

  - **Company Coordinator (CC)**
    - (Team of around 45 Members)

  - **Interview Coordinator (IC)**
The placement session starts from July, 1 to June, 30. But the main process starts from August onwards. There are many preparatory activities organised by placement office at institute as well as department level to help you do well for your placements. These activities include resume making sessions, quizzes, mock interviews, coding tests, buddy talks, etc. The recruitment and interviews start from 1st December and go till 19th December in the 1st phase.
The companies which visit our department for M.Techs are:

For detailed info on placements visit: Placement@iitb.ac.in/blog
Department Activities

**Chemical Engineering Association (ChEA)**
The Chemical Engineering Association (ChEA), established in 1965, aims at promoting awareness and knowledge about chemical engineering to outside masses as well as provides a forum for mutual interaction to students, both past and present, of the Department of Chemical Engineering, IIT Bombay. The association ultimately aims at enabling its members to benefit from its activities.

ChEA looks back with pride with an enviable record of annual seminar organized on a diverse range of topics of current interest to the chemical engineering community. The records becomes even more enviable when considered in the context of the fact that such Seminars are organized almost entirely by students with a remarkably keen participation & generous support from ChEA Team.

[http://www.che.iitb.ac.in/chea/2k16/index.php](http://www.che.iitb.ac.in/chea/2k16/index.php)

**AZeotropy**
AZeotropy is an annual two day Chemical Engineering Symposium organized by students of Chemical Engineering Department, IIT Bombay. It is a non-profit organisation working towards promoting Chemical Engineering, interaction between the students and industries, trying to encourage students with interest for the same. It aims to manifest the very spirit of Chemical Engineering in young students from all corners of India, encouraging a participation of 300+ colleges, 10 corporate houses with 50+ industrialists of the field and an average footfall of 4500. It involves a blend of Chemical Engineering based competitions, lectures, panel discussions, exhibitions, workshops and many fun-with-learning events.

AZeotropy was launched in 2007 and has flipped 11 golden editions till date. It takes place in the month of March, every year. Reaching new heights of success every year, the symposium has seen a growth in active participation of students and professionals.


**Department Valfi**
The Valedictory function organized by the department for the passing out batch is a farewell party. It marks an occasion wherein the Department bids the outgoing students a fond good-bye with loads of wishes.

Tata Centre for Technology and Design at IIT Bombay was established in 2014 with support from the Tata Trusts. The center aims to develop solutions to challenges faced by resource-constrained communities within India and across the world using an end to end innovation approach. Through this process the center aims to develop human resources who are trained in technology, design and entrepreneurship by way of project work, coursework and field practice. The center nurtures next generation leaders in engineering and business fields who deal with pressing problems in society in the context of complex economic, social and environment factors.

The Tata Centre acts as a virtual center for teaching and research that draws faculty members and graduate students from various academic units across IIT Bombay. The center focuses on challenges in the areas of Agriculture and Food, Education, Energy, Healthcare, Housing, Water and Waste Management. It undertakes research projects in these areas by leveraging the expertise of the research community at IIT Bombay Tata Centre for Technology and Design at IIT Bombay closely works with its sister institute at the Massachusetts Institute of Technology, Cambridge, USA and with other partner organizations and stakeholders across India.

For further information, click on the following link - http://www.tatacentre.iitb.ac.in/
At Tata Centre, we look at solving challenges in a holistic way. We take an end to end innovation approach, which has the following steps.
# Tata Center Projects

<table>
<thead>
<tr>
<th>Professor</th>
<th>Project Topic</th>
<th>Student Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. Sanjay Mahajani (CHE)</td>
<td><strong>Gasifier Based Cook-Stoves to Manage Garden Waste</strong></td>
<td>Pawan Kumar</td>
</tr>
<tr>
<td>Prof. Virendra Sethi (CESE) &amp;</td>
<td><strong>Experimental Study to Evaluate Emissions from Cook stoves using Solid Fuels with a Focus on Reduction of Exposure</strong></td>
<td>Pratik Dixit</td>
</tr>
<tr>
<td>Prof. Sanjay Mahajani (CHE)</td>
<td><strong>Conversion of plastic into fuel oil through pyrolysis</strong></td>
<td>Satyam Sahu</td>
</tr>
<tr>
<td>Prof. Sanjay Mahajani (CHE)</td>
<td><strong>Feasibility study of Jaggery making and related products</strong></td>
<td>Rohan Ohri</td>
</tr>
<tr>
<td>Prof. Jayesh Bellare (CHE)</td>
<td><strong>Membrane supported Biofilms for wastewater treatment</strong></td>
<td>Akhil Subramanian</td>
</tr>
</tbody>
</table>
PG Sports at IITB has been established with an aim of providing a platform to all sports enthusiasts of our PG family; a platform to foster and cultivate sportsmanship in each of us. PG sports caters to each and every sports requirement of PG junta with an aim to promote sports as recreational activity and fitness regime amidst rigorous academic schedule. Various activities are carried out across the year to ensure endurance with a balance between academics and extracurricular activities. Beginners and advanced camps of every sport are organized where one can unfurl the hidden sportsperson or can just learn the right techniques of playing a sport. PG sports also ensures a healthy competitive environment for champions by providing a platform in the form of Departmental General Championship and Hostel Championship. Besides this, one also gets a chance to showcase his/her talent in Inter IIT Sports Meet. PG Sports is a fierce battle between 22 departments for the prestigious Overall General Championship Trophy.

Say a game and we have it here. If you are a couch potato, we have board games. For field enthusiasts we have volleyball, basketball, football, cricket etc. We have crossy, triathlon, cycling, etc. for sprinters. So what are you waiting for? Come and play, you never know what you will gain.
The events are spread across 9 genres and 3 performing arts: Dance, Music and Dramatics; and 5 non-performing arts: Fine Arts, Literary Arts, Speaking Arts, Design, Photography and Film & Media. Though the events are interspersed throughout the calendar, PG Cult is mainly divided into 2 phases: Phase-I that takes place after October in Autumn Semester and Phase-II that takes place in the month of March. The PG Cultural Council headed by the PG Cultural Nominee along with the PG Coordinators and Conveners for each genre organizes several workshops to cater to the varied tastes and skills of the multi-talented PG’s of IITB. You will be notified time to time with updates of upcoming events. There are absolutely no pre-requisites. Just be enthusiastic to participate.

PG Cult is the annual cultural festival exclusively for the postgraduate community of IIT Bombay (or PG junta in short). Since its inception in the year 2008, this would be the 11th edition of this cultural extravaganza.

For further information, click on the following link - https://gymkhana.iitb.ac.in/~cultural/index.php?key1=events&key2=pgcult
Institutes Facilities

**Sports:** IIT Bombay has state of the art indoor and outdoor sporting facilities. Every hostel is equipped with Badminton, Basketball, Football, T.T. and Volleyball grounds. Some of the hostels are lucky to have their own GYM. There are three common GYMs, the new one is located in the new SAC second floor, one in the Old SAC (Student Activity Centre) and one on the side of the Inner Badminton Complex.

Buying a pair of gum sole shoes would be helpful for the next two years for using the indoor sporting facilities. A discount sale of sporting equipment is soon held in the campus in Old SAC.

*For further information, click on the following link –* [https://gymkhana.iitb.ac.in/~sports/](https://gymkhana.iitb.ac.in/~sports/)

**IIT Hospital:** All students of the Institute are entitled to free Medical attendance & treatment available in the Institute Hospital in the Campus. Working hours are 8A.M. to 6P.M. on all working days and emergency services are available 24x7.

Vaccination certificate is necessary in order to open your file in the hospital which could be done from outside or in the IITB hospital itself.

*For further information, click on the following link –* [http://www.iitb.ac.in/hospital/](http://www.iitb.ac.in/hospital/)

**Central Library:** It is home to a plethora of books and infinite knowledge (and also the divine air-conditioning). It is open from 9A.M. to 11P.M. On weekends the library closes at 5P.M. There is a 24x7 Reading Room on the backside of the library which is flooded with students during the semester exams. During exams it is extended till 1 pm.

*For further information, click on the following link –* [http://www.library.iitb.ac.in/](http://www.library.iitb.ac.in/)

**FOOD:** Every hostel is equipped with a canteen which runs late till night which comes to the rescue of the students from the mess food. Other than these we have eateries like Brewberry (now known as Brews and Bites), Amul, Sunrise Dhaba, Gulmohar Cafeteria and Campus Hub.

**Cultural:** IIT Bombay has dedicated clubs for every cultural activity you can think of. Every hostel has a well equipped Music room. There are plenty of training activities for grooming the cultural talents of the students.

*For further information, click on the following link –* [https://gymkhana.iitb.ac.in/~cultural/](https://gymkhana.iitb.ac.in/~cultural/)

**PEDL:** In the campus we have a option to rent a bicycle for very minimal cost (Rs. 3 per 30min). The service is provided by zoom car and Lets cycle.

For details visit: [https://pedl.zoomcar.com/](https://pedl.zoomcar.com/) [https://letscycle.in/](https://letscycle.in/)
**Useful Information**

**Attendance:** Attendance for regular classes is generally taken by the concerned professor during lecture hours, either by biometrics or on paper. Attendance for TAship is to be given for every working day biometrically.

**GPO – e-mail:** An official email ID will be provided to everyone having initials as roll number followed by iitb.ac.in. All the communication from the institute and department is done through this mail ID (also known as GPO mail). For checking GPO mail box visit gpo.iitb.ac.in.

**Instimap:** Instimap is an app available in play store for navigation within the campus. From the app, one can easily locate all the hostels, academic sections, residential areas and other infrastructures present in the Institute.

**TA work:** TA duty will begin immediately after joining the course. The faculty advisor will appoint TA duty to all the M.Tech entrants. Once allocated, the students should report to the respective TA supervisor immediately for the assigned work.

**Leave Taking:** For taking a leave, leave application should be submitted to office one week before its commencement. Permission is needed from the TA Guide or faculty advisor. Total official leaves for TAs are 15 days in a year. Key Permission: Key permission is required to use any lab or class-room after office hours. Keys can be issued from the security office.

**Gymkhana:** Gymkhana is an organization to foster and develop all student activities in the institute. Please visit https://gymkhana.iitb.ac.in/ for more information.
Library: The website for the central library offers a search engine for books available in the library. One can check the number of books issued at any given time, renew them and “queue” up for any book already drawn by some other individual. For more information, please visit: http://www.library.iitb.ac.in/

Application Software Centre (asc) – Administration: ASC is the main interactive website for all the administrative requirements of a student. It includes payment of fees, registration and deregistration from courses, checking grades awarded in subjects, brief contents of all the subjects being offered, timetable and a lot more information. For more information, please visit http://asc.iitb.ac.in/

Moodle – Academics: This website provides academic interaction between students and faculty for all courses enrolled by a student. One can download study materials/books/ notes uploaded by a professor/ TA and students can also submit their projects. For more information, please visit http://moodle.iitb.ac.in

Some of the important links, which would be required nearly every day during stay at campus: Official site of IIT Bombay:

http://iitb.ac.in/en/about-iit-bombay ISCP: https://gymkhana.iitb.ac.in/~scp/scp/
All student activities: https://gymkhana.iitb.ac.in/ Sports affairs: https://gymkhana.iitb.ac.in/~sports/
Hostel affairs: https://gymkhana.iitb.ac.in/~hostels/
Cultural: https://gymkhana.iitb.ac.in/~cultural/
Entrepreneurship cell: https://www.ecell.in
SARC : http://www.sarc-iitb.org/#
Software by IITB : http://ftp.iitb.ac.in/
Lost and found: https://gymkhana.iitb.ac.in/~hostels/lostfound.php
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“Coming together is a beginning, staying together is a progress and working together is success” ~ Henry Ford